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UNIVERSITÄT WIEN

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Institut für Theoretische Chemie und Strahlenchemie  
Währingerstrasse 38

A-1090 WIEN

TELEPHONE: (0222) 34 73 17

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RESEARCH INTERESTS: PO/SE;PK ..... A-10 GE

RESEARCH TEAM HEAD(S)

N Getoff (prof)

STAFF MEMBERS

G Grabner (dr)(\*); K-J Hartig (dr)(\*); G Köhler (dr)(\*); J Lichtscheidl (dr)(\*); S Solar (dr); J Zechner (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence equipment with possibility for excitation in the vacuum UV
- flash photolysis with kinetic spectrophotometry and photoconductivity
- electron accelerator for pulse radiolysis (Febetron 708, 0.8 MeV electrons, 3 ns pulse duration)

RESEARCH TOPICS

- photophysical and photochemical processes in simple aromatic compounds in solution, in particular of fluorescence and electron ejection
- kinetics of reactive intermediates in the photochemistry of aromatic compounds in solution
- utilization of solar energy
  - photostability of sensitizing dyes
  - photoelectrochemical systems
- pulse radiolysis of various organic compounds (dyes, metal organic compounds, substances of biological interest, etc)

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UNIVERSITÄT WIEN

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Institut für Organische Chemie  
Währingerstrasse 38

A-1090 WIEN

TELEPHONE: (0222) 34 46 30

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RESEARCH INTERESTS: CO/CR;SP ..... A-10 HA

RESEARCH TEAM HEAD(S)

E Haslinger

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- CIDNP WM250 NMR spectrometer

RESEARCH TOPICS

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UNIVERSITÄT INNSBRUCK

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Institut für Organische und Pharmazeutische Chemie  
Innrain 52a

A-6020 INNSBRUCK

TELEPHONE: (05222) 336 01

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RESEARCH INTERESTS: CO/CR ..... A-60 SC

RESEARCH TEAM HEAD(S)

J Schandtl (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of azo-compounds

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INSTITUT FUER ORGANISCHE CHEMIE DER UNIVERSITÄT

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Heinrichstrasse 28

A-8010 GRAZ

TELEPHONE: (0316) 31-5-81 OR 32-5-81

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RESEARCH INTERESTS: PO/PE;SP ..... A-80 WO

RESEARCH TEAM HEAD(S)

O S Wolfbeis (dr)(\*)

STAFF MEMBERS

R Schipfer (dr); E Furlinger; E Urbane

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Aminco SPF-500 spectrofluorometer, fully corrected spectra by using a HP 9815S table computer, software for correcting, storing, integrating, differentiating spectra; polarisation measurement equipment including software for calculations.

RESEARCH TOPICS

- pH-dependent fluorimetry on organic compounds (dyes, laser dyes, natural products, indicators, fluorescent probes)

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UNIVERSITE LIBRE DE BRUXELLES

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Laboratoire de Chimie Physique Moléculaire  
Faculté des Sciences CP.160  
50, ave F D Roosevelt

B-1050 BRUXELLES

TELEPHONE: (02) 649 00 30

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RESEARCH INTERESTS: CP;CT/SP;LS;PK;AP;AT;ET ..... B-10 CORESEARCH TEAM HEAD(S)

R Colin (prof)(\*)(cp/sp,ls)  
G De Maré (dr)(\*)(cp/pk,ap)  
J Olbregts (dr)(cp/pk,at)  
G Verhaegen (prof)(ct/sp,et)

STAFF MEMBERS

M Carleer (dr); M Godefroid (dr); M Herman (dr); J Lievin (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- conventional absorption (time resolved flash discharge) and emission (cathode) spectroscopy
- fluorescence induced by tunable lasers (CW and pulsed) in molecular beams
- IR laser Stark spectroscopy

RESEARCH TOPICS

- laser detection and study of atmospheric pollutants
- laser selection of isotopes of U and Li
- oxydation of freons
- the photopolymerization of benzaldehyde
- properties of benzaldehyde photopolymer: photosensitization in the visible
- effect of oxygen and nitric oxide on photochemical reactions of hydrocarbons
- mercury photosensitization of hydrocarbons
- theoretical and experimental studies of the photolysis and photosensitization of oxiranes
- computation of oscillator strengths in atoms and molecules

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UNIVERSITE LIBRE DE BRUXELLES

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Faculté des Sciences  
Laboratoire de Chimie Organique et de Chimie Organique Physique  
Ave F D Roosevelt, 50

B-1050 BRUXELLES

TELEPHONE: (02) 649 00 30

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RESEARCH INTERESTS: PO/PL;SE ..... B-10 NARESEARCH TEAM HEAD(S)

J Naselski (\*)(prof)  
A Kirsch-De Mesmaeker (\*)

STAFF MEMBERS

R Dewitt; P Josseaux; A Fripiat

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Molelectron 1 MW tunable dye laser
- microsecond flash photolysis
- potentiostats for photoelectrochemistry
- electrochemical equipment

RESEARCH TOPICS

- photochemistry of organic dyes at semiconducting electrodes
- stabilization of semiconducting photoelectrodes with organic redox couples
- flash photoelectrochemistry

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UNIVERSITE LIBRE DE BRUXELLES

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Faculté des Sciences/Collectif de Chimie Organique Physique  
50, ave F D Roosevelt

B-1050 BRUXELLES

TELEPHONE: (02) 649 00 30

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RESEARCH INTERESTS: CP/PN;SE ..... B-10 VA

RESEARCH TEAM HEAD(S)

E Vander Donckt (prof)(\*)  
S G Boué (dr)(\*)

STAFF MEMBERS

J Kanicki (dr); J-M Dohan (dr); R Vanderloise (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photoacoustic spectrometer (under construction)

RESEARCH TOPICS

- photovoltaic applications of organic semiconductors (light to electricity conversion)
- electrical properties of doped and undoped organic polymers (in darkness and under irradiation), e g formation and study of Schottky barriers and n-p-junctions

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J K LASERS LTD

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Marketing Division  
Avenue Slegers 180

B-1200 BRUSSELS

TELEPHONE: (02) 762 79 46

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RESEARCH INTERESTS: OT/LS ..... B-12 WR

RESEARCH TEAM HEAD(S)

J K Wright (dr; technical director)

STAFF MEMBERS

J F Higgins (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- mode locked, Q switched lasers with ruby, Nd-YAG and Nd-glass as active media plus harmonic generation systems for UV

RESEARCH TOPICS

- lasers

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UNIVERSITE CATHOLIQUE DE LOUVAIN

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Laboratoire de Chimie Générale et Organique  
Batiment Lavoisier  
1, place Louis Pasteur

B-1348 LOUVAIN LA NEUVE

TELEPHONE: (010) 41 81 81

RESEARCH INTERESTS: CO;PO/CR;CE;PK ..... B-13 BR

RESEARCH TEAM HEAD(S)

A Bruylants (prof)  
J P Soumilion (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- spectrofluorimeter (Aminco Bowman)

RESEARCH TOPICS

- photoreductive dehalogenation of haloaromatics  
- photocyclizations  
- aromatic photosubstitutions

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AGFA-GEVAERT N.V.

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Research & Development  
Septestraat

B-2510 MORTSEL

TELEPHONE: (031) 401940

RESEARCH INTERESTS: OT/PG;RG ..... B-25 LE

RESEARCH TEAM HEAD(S)

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STAFF MEMBERS

G Delzenne (\*)  
L Leenders (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser beam recording unit (Ar laser, diode laser)

RESEARCH TOPICS

- photography (silver and non-silver)

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K U LEUVEN

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Dept. Scheikunde  
Celestijnenlaan 200 F

B-3030 HEVERLEE

TELEPHONE: (016) 23 58 21

RESEARCH INTERESTS: PO/PE;CC;PK;PM;BP;MI ..... B-30 SC

RESEARCH TEAM HEAD(S)

F C de Schryver (prof)(\*)

STAFF MEMBERS

N Boens (dr)(\*); M Vanderauweraer (dr)(\*); E Gelade (\*);  
C Windels-Palmans (\*); J P Palmans (\*); K de Meyer (\*); L Moens (\*);  
V Croonen (\*); E Quanten (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- single photon counting  
- laser flash photolysis (nitrogen; neodymium)  
- phase shift apparatus  
- CW laser

RESEARCH TOPICS

- photochemistry and photophysics of bi- and multichromophore systems  
- excited state complex formation  
- photochemistry and photophysics in non-homogeneous systems (micells, membranes, microemulsion)  
- fluorescence probing  
- photochemistry and photophysics of biologically important molecules

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K U LEUVEN

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Laboratorium voor Macromoleculaire en Organische Scheikunde  
200F, Celestijnenlaan

B-3030 HEVERLEE

TELEPHONE: (016) 23 58 21

RESEARCH INTERESTS: CO/CY;CC;PC;RG ..... B-30 SM

RESEARCH TEAM HEAD(S)

G Smets (prof)(\*)

STAFF MEMBERS

M Schmitz (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical dissociation of heterocyclic compounds into free radicals and polymerization inhibition
- photochemical cationic polymerization
- photochemical mechanochemical processes
- photochemical crosslinking by electron exchanges

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K U LEUVEN

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Depr Scheikunde  
Laboratorium voor quantumchemie  
Celestijnenlaan 200F

B-3030 HEVERLEE

TELEPHONE: (016) 23 58 21

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RESEARCH INTERESTS: CI/SE;SP ..... B-30 VA

RESEARCH TEAM HEAD(S)

L Vanquickenborne (prof)

STAFF MEMBERS

A Ceulemans (dr); D Beyens (drs)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- theoretical study of photochemical reactions of transition metal complexes

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LIMBURGS UNIVERSITAIR CENTRUM

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Dpt SBM  
Universitaire Campus

B-3610 DIEPENBEEK

TELEPHONE: (011) 22 99 61

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RESEARCH INTERESTS: PO/PK;MI ..... B-36 PU

RESEARCH TEAM HEAD(S)

J Put (prof)  
 J Gelan (prof)  
 H Martens (prof)

STAFF MEMBERS

R Todesco (\*); M Van Bockstaele (dr)(\*); D Van Bockstaele (\*); E Onkelinx (dr); M E Box; M Kelchtermans

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- fluorescence probing of micelles, vesicles and membranes
- kinetics of intramolecular complex formation and photoreaction; effect of ground state conformations
- study of hormone-receptor interaction and antigen-antibody interaction by fluorescence probing and by NMR

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UNIVERSITE DE LIEGE


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Institut de Chimie, Laboratoire des Etats Ionisés  
 Bât. B6, Sart Tilman

B-4000 LIEGE

TELEPHONE: (041) 56 14 15

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RESEARCH INTERESTS: CP;PP/AT;PK;LS;PI;SP ..... B-40 CO

RESEARCH TEAM HEAD(S)

J E Collin (prof)

STAFF MEMBERS

P Natalis (dr); G Caprace (dr); J Delwiche (dr); M-J Hubin-Franskin (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- high resolution P E spectrometer
- angular resolved P E spectrometer
- low energy electron spectrometer
- use of synchrotron radiation

RESEARCH TOPICS

- fundamentals of photoexcitation and photoionization of small molecules
- study of preionization processes and resonance processes
- isotopic effects on photoionization and photodissociation
- study of laser induced excitation effects on photoionization



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STATE UNIVERSITY OF GHENT

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Department of Organic Chemistry  
Krijgslaan 271 (S.4)

B-9000 GENT

TELEPHONE: (091) 22 57 15

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RESEARCH INTERESTS: CO/CR;CE ..... B-90 KERESEARCH TEAM HEAD(S)

D De Keukeleire (\*) (dr)

STAFF MEMBERS

G M A Blondeel (grd); K Bruneel (grd)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photocycloaddition reactions as key steps in the preparation of synthons for natural products
  - photochemistry of cyclic hydroxyenones
  - photooxidation of organic compounds in the environment
  - photoisomerisation, photooxidation and photodegradation reactions of hop bitter acids
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BULGARIAN ACADEMY OF SCIENCES

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Institute of Organic Chemistry/Laboratory of Quantum Chemistry

BG-1113 SOFIA

TELEPHONE: 7131

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RESEARCH INTERESTS: PO/CD;PE ..... BG-11 FRRESEARCH TEAM HEAD(S)

F Fratev (dr)(\*)

STAFF MEMBERS

P Nikolov; V Monev; I Timcheva

SPECIAL PHOTOCHEMICAL TECHNIQUES

- kinetic spectrophotometer (Applied Photophysics KN-100)
- multichannel analyzer (ICA-70, Budapest)

RESEARCH TOPICS

- electronic structure of low-lying excited states and luminescence of organic molecules and dyes; electron delocalization in excited state and fluorescence; application of the Hammett-Taft equation in emission spectroscopy
- fluorescence, phosphorescence, and flash photolysis of azopyrazolone dyes
- fluorescence of dimers of beta-dicarbonyl compounds
- photochemistry of 2-phenyl-1,3-indandiones

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UNIVERSITY OF SOFIA

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Department of Organic Chemistry  
1, A Ivanov Avenue

BG-1126 SOFIA

TELEPHONE: (6-25-61) 665

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RESEARCH INTERESTS: PO/CM ..... BG-11 MARESEARCH TEAM HEAD(S)

P Markov (\*)

STAFF MEMBERS

I Petkov; K Roumian

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photoinduced tautomeric transformations (prototropic and metallotropic)
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ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE (EPFL)

Département de Chimie  
Institut de chimie physique  
Ecublens

CH-1015 LAUSANNE

TELEPHONE: (021) 47 31 13

RESEARCH INTERESTS: PO/CR;SE;MI ..... CH-10 BR

RESEARCH TEAM HEAD(S)

A M Braun (dr)

STAFF MEMBERS

M Krieg (\*); M-T Maurette (dr, CNRS Toulouse)(\*); E Oliveros (dr, CNRS Toulouse)(\*); C Pfenninger (e)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- preparative photochemistry in heterogeneous systems (micelles, microemulsions, insoluble sensitizers etc)
- advanced designs of photoreactors (up to 5000 W)

RESEARCH TOPICS

- up-scaling of water splitting reactions (in cooperation with M Grätzel)
- development of insoluble sensitizers for continuous flow photochemical reactions
- photooxidations (mechanisms, differentiation between superoxide and singlet oxygen reactions)

INSTRUMATIC SA

5-7, rue du Clos

CH-1207 GENEVE

TELEPHONE: (022) 36 08 30

RESEARCH INTERESTS: CP/SP;LS ..... CH-12 JA

RESEARCH TEAM HEAD(S)

R Jankow (dr)(\*)

STAFF MEMBERS

J Salom (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- picosecond lasers
- nanosecond flash lamps

RESEARCH TOPICS

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UNIVERSITY OF FRIBOURG

Physical-Chemical Institute  
Pérolles

CH-1700 FRIBOURG

TELEPHONE: (037) 82 64 82

RESEARCH INTERESTS: CP;PO/SP;LS;PE;PI;RC ..... CH-17 HA

RESEARCH TEAM HEAD(S)

E Haselbach (prof)(\*)

STAFF MEMBERS

T Bally (dr); M Allan (dr); W Hug (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser flash photolysis
- matrix isolation equipment
- X irradiation facilities for production of ionized species whose photochemistry is investigated
- photoelectron spectroscopy

RESEARCH TOPICS

(WH:)

- Raman circular differential scattering
- chiroptical properties in vibrational region of spectrum
- theoretical analysis of vibrational motions
- development of approximate quantum mechanical procedures

(TH:)

- matrix isolation of transient species, including molecular cations
- laser flash photolysis of charge transfer systems
- spectroscopy, reactivity of open shell ions (thermal and photo-chemistry) (MA; within Yale-Fribourg Cooperation Program on Electron Collisions:)
- states of negative molecular ions
- triplet states obtained through electron collision
- doubly excited states
- photoelectron spectroscopy

UNIVERSITY OF BERNE

Institute of Inorganic and Physical Chemistry  
Freiestrasse 3

CH-3012 BERNE

TELEPHONE: (031) 65 42 29

RESEARCH INTERESTS: CP;CI/SE;PK;PL ..... CH-30 CA

RESEARCH TEAM HEAD(S)

G Calzaferri (\*) (dr)

STAFF MEMBERS

H Gugger; B Sulzberger; M Gori; J Baumann; W Spahni; R Bühler

SPECIAL PHOTOCHEMICAL TECHNIQUES

- transient digitizer Tektronix R 7912
- picosecond equipment for luminescence decay
- krypton ion gas laser Spectra Physics 171
- OMA 2 system (PAR)

RESEARCH TOPICS

- development of picosecond time resolution technique by CW laser amplitude modulation
- charge redistribution in inorganic photoredox systems

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UNIVERSITÄT BASEL

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Institut für Farbenchemie  
St. Johanssvorstadt 10/12

CH-4056 BASEL

TELEPHONE: (061) 25 98 84

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RESEARCH INTERESTS: PO/CD;PC ..... CH-40 BA

RESEARCH TEAM HEAD(S)

H Balli (prof)(\*)

STAFF MEMBERS

R Naef (dr); B Hellrung (dr); A Luttringer; T Eichenberger; W Kirsch (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochromic compounds
- photochemistry of azidinium salts
- photochemistry of cyanine dyes

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UNIVERSITÄT BASEL

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Physikalisch-chemisches Institut  
Klingelbergstrasse 80

CH-4056 BASEL

TELEPHONE: (061) 44 40 14

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RESEARCH INTERESTS: CT/PI;SP ..... CH-40 HE

RESEARCH TEAM HEAD(S)

E Heilbronner (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- photoion-photoelectron coincidence

RESEARCH TOPICS

- photoelectron spectroscopy

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F HOFFMANN-LA ROCHE & CO, AG

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ZFE (Central Research Units)  
Grenzacherstrasse 124

CH-4002 BASEL

TELEPHONE: (061) 27 22 45

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RESEARCH INTERESTS: CO/CR;PK ..... CH-40 PF

RESEARCH TEAM HEAD(S)

K H Pfoertner (dr)

STAFF MEMBERS

J Foricher (e); F Montavon (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- strong lamps, e g 10 kW high pressure Hg, 1.5 kW low pressure Hg  
(developed by BBC/Baden, Switzerland), 2.5 kW Xe

RESEARCH TOPICS

- scaling up of organic photochemical reactions for industrial purposes, photoreactor design, development of new liquid filters for strong lamps
- preparative/synthetic photochemistry and its application for the search of new pharmaceuticals/agrochemicals
- search of new photoreactions
- mechanistic and kinetic studies with the scaling up of photochemical reactions

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UNIVERSITÄT BASEL

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Physikalisches-chemisches Institut  
Klingelbergstrasse 80

CH-4056 BASEL

TELEPHONE: (061) 44 40 14

---

RESEARCH INTERESTS: PO/PK;SE ..... CH-40 WI

RESEARCH TEAM HEAD(S)

J Wirz (\*)

STAFF MEMBERS

P Haspra; E Hasler; M Hangarter; E Rommel

SPECIAL PHOTOCHEMICAL TECHNIQUES

- microsecond and nanosecond flash spectroscopy

RESEARCH TOPICS

- photoinduced electron transfer
- adiabatic photoreactions
- low temperature photolysis
- spectroscopic and kinetic investigations of biradical intermediates

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UNIVERSITÄT ZÜRICH-IRCHEL

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Physikalisch-Chemisches Institut  
Winterthurerstrasse 190

CH-8057 ZÜRICH

TELEPHONE: (01) 257 44 20

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RESEARCH INTERESTS: PO/PK;SP ..... CH-80 FI

RESEARCH TEAM HEAD(S)

H Fischer (prof)(\*)

STAFF MEMBERS

H Paul (dr)(\*); C Huggenberger; H R Dütsch; M Lehni; J Lipscher; P Vesel;  
K Münger; R Baer; J Vollenweider

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photochemically initiated CIDNP
- steady state and kinetic EPR
- modulation spectroscopy for optical absorption, fluorescence, and phosphorescence of transients
- setup for measuring diffusion coefficients in liquids

RESEARCH TOPICS

- photochemical initiation, structure, reaction mechanisms, and reaction kinetics of radicals in solution

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EDIGENÖSSISCHE TECHNISCHE HOCHSCHULE

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Laboratorium für Organische Chemie  
Universitätstrasse 16, ETH-Zentrum

CH-8092 ZÜRICH

TELEPHONE: (01) 256 47 76/256 28 95

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RESEARCH INTERESTS: CO/CR;OT ..... CH-80 FR

RESEARCH TEAM HEAD(S)

O Jeger (prof)(\*)  
B Frei (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of carbonyl and olefinic compounds, e g unsaturated ketones, epoxy ketones, enones and dienes, and cyclopropyl ketones and enones

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UNIVERSITÄT ZUERICH

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Physikalisches-Chemisches Institut  
Winterthurerstrasse 190

CH-8057 ZUERICH

TELEPHONE: (01) 257 44 61

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RESEARCH INTERESTS: CP/PK;SP ..... CH-80 HURESEARCH TEAM HEAD(S)

J R Huber (prof)  
U Brühlmann (dr)  
H Stafast (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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UNIVERSITY OF ZUERICH

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Institute of Inorganic Chemistry  
Winterthurer Strasse 190

CH-8057 ZUERICH

TELEPHONE: (01) 257 46 51

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RESEARCH INTERESTS: CP;CI/CY;SE;PE ..... CH-80 VERESEARCH TEAM HEAD(S)

S Veprek (dr)(\*)

STAFF MEMBERS

(students and postdoctoral fellows)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- low pressure plasma chemistry

RESEARCH TOPICS

- preparation of thin films; amorphous semiconductors; ESCA; mass spectroscopy; kinetics; surface chemistry under plasma conditions



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FEDERAL INSTITUTE OF TECHNOLOGY

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Physical Chemistry  
Universitätstrasse 22 (ETH-Zentrum)

CH-8092 ZUERICH

TELEPHONE: (01) 256 43 81

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RESEARCH INTERESTS: PP/PK;SP ..... CH-80 WI

RESEARCH TEAM HEAD(S)

U P Wild (prof) (\*)

STAFF MEMBERS

M Chabr (dr); G Suter (\*); F Burkhalter (\*); S Canonica (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- synchronisly pumped frequency doubbel dye laser apparatus to measure sub-nano second fluorescence lifetime
- computer controlled fluorescence spectrometer (Spex double monochromator 0.75 m focal length)
- single frequency dye laser

RESEARCH TOPICS

- fluorescence lifetime spectroscopy
- viscosity dependence of the radiationless decay of molecules with rotating groups
- high resolution fluorescence-polarization spectra using single site spectroscopy in glasses
- energy selection spectroscopy
- hole burning spectroscopy
- photochemical and photophysical studies on isobacteriochlorine

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INSTRUMATIC AG

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Weingartenstrasse 9

CH-8803 RUSCHLIKON

TELEX: 566 05

TELEPHONE: (01) 724 14 10

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RESEARCH INTERESTS: CA/PK;RC ..... CH-88 LA

RESEARCH TEAM HEAD(S)

M S Lattmann (dr)(\*)

STAFF MEMBERS

H Stanzer; R Jankow (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- picosecond lasers
- 100 MHz and 500 MHz transient recorders
- nanosecond fluorescence decay systems

RESEARCH TOPICS  
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UNIVERSITY OF CHEMICAL TECHNOLOGY

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Department of Organic Technology/Photochemistry Group  
Leninovo nám. 565

CS-53210 PARDUBICE

TELEPHONE: 41011

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RESEARCH INTERESTS: PO/CD;PK ..... CS-53 RE

RESEARCH TEAM HEAD(S)

V Řehák (dr-ing)

STAFF MEMBERS

J Majer (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- apparatus for photochemical kinetics and quantum yield measurements
- flash photolysis (milli and micro second regions)
- laser flash photolysis (nano second region, ruby and N2 lasers)
- spontaneous and stimulated emission spectra and decay measurements

RESEARCH TOPICS

- photophysical and photochemical properties of quinone diazides, polymethine, cyclobutenediolic and thiazine dyes
  - quantum mechanical calculations
  - electronic absorption spectra, influence of solvent
  - detection and characterization of transients
  - relaxation processes (intramolecular)
  - electron and energy transfer
-

FREIE UNIVERSITÄT BERLIN

Kinderklinik (Kaiserin Auguste Victoria Haus)  
Heubnerweg 6

D-1000 BERLIN

TELEPHONE: (030) 320 31

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RESEARCH INTERESTS: PB/PM ..... D-10 BA

RESEARCH TEAM HEAD(S)

L Ballowitz (prof)  
G Wiese (prof)

SAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- phototherapy in hyperbilirubinaemia in infants as well as in jaundiced  
gunn rats
- dose-response-relationships, effective irradiance, mathematical  
derivations of efficacy, side-effects and so on

FRITZ-HABER-INSTITUT DER MAX-PLANCK-GESELLSCHAFT

Faradayweg 4-6

D-1000 BERLIN 33

TELEPHONE: (030) 832 75 95 OR 830 52 40

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RESEARCH INTERESTS: CP;CI/PL;SE ..... D-10 GE

RESEARCH TEAM HEAD(S)

H Gerischer (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- solar energy conversion with semiconductor electrodes
- photodecomposition of solids
- sensitized charge injection into solids
- photocatalysis at interfaces

TECHNISCHE UNIVERSITÄT BERLIN

Institut für Lichttechnik  
Einsteinufer 19

D-1000 BERLIN 10

TELEPHONE: (030) 314 24 01

RESEARCH INTERESTS: PP;PB/BP;PS;PM;VS ..... D-10 KR

RESEARCH TEAM HEAD(S)

J Krochmann (prof)

STAFF MEMBERS

G Geutler (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- correction of the relative spectral responsivity of detectors to special photobiological weighting functions

RESEARCH TOPICS

- development of measuring equipment for different photobiological quantities including vision, photosynthesis, direct pigmentation, uv-erythema, bilirubin-dissociation, killing of bacteria

TECHNISCHE UNIVERSITÄT BERLIN

Iwan N Stranski-Institut für Physikalische und Theoretische Chemie  
Strasse des 17. Juni 112

D-1000 BERLIN

TELEPHONE: (030) 314-4171(EL), -4936(WR)

RESEARCH INTERESTS: PP/PK;SP ..... D-10 LI

RESEARCH TEAM HEAD(S)

E Lippert (prof)

W Rettig (dr)

STAFF MEMBERS

A A Ayuk; B Dewald; G Insinger; E P Resewitz (dr); G Wermuth

SPECIAL PHOTOCHEMICAL TECHNIQUES

- time resolved fluorescence spectra (15 pico sec) by a mode locked laser device  
- phase fluorimeter (0.1.....200 n sec)  
- photochemical reactor (merry-go-round)  
- dual spectra region device still under construction (the time structure of the BESSY synchrotron radiation will be used for excitation and activation with a time delay in the nanosecond region)

RESEARCH TOPICS

- investigation of mechanisms of photochemical reactions by means of fluorescence spectroscopy, especially for solutions of dual fluorescing aromatic compounds
- coumarine dyes
- para-substituted N,N-dialkylanilines and related compounds

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TECHNISCHE UNIVERSITÄT BERLIN

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Institut für Organische Chemie  
Strasse des 17. Juni 135

D-1000 BERLIN 12

TELEPHONE: (030) 314 42 98 OR /38

---

RESEARCH INTERESTS: CO/CR;CM ..... D-10 PR

RESEARCH TEAM HEAD(S)

K Praefcke (prof)

STAFF MEMBERS

K Beelitz (dr); M Dankowski; Lüdersdorf (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- heterocycles by phototransformation of esters
- photochemistry of organophosphorus compounds
- photochemistry of 2H-thiopyrane derivatives
- photochemistry of 1,2-thiazine derivatives
- photochemistry of organoselenium and -tellurium compounds

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TECHNISCHE UNIVERSITÄT BERLIN

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Max Volmer Institut

D-1000 BERLIN 12

TELEPHONE: (030) 314 41 28

---

RESEARCH INTERESTS: PB/PS ..... D-10 RU

RESEARCH TEAM HEAD(S)

B Rumberg (prof)

STAFF MEMBERS

U Siggel (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- measurements of small light-induced absorption changes

RESEARCH TOPICS

- primary processes of photosynthesis

HAHN-MEITNER-INSTITUT FUER KERNFORSCHUNG

Bereich Strahlenchemie  
Glienicker Strasse 100

D-1000 BERLIN

TELEPHONE: (030) 800 923 26

-----  
RESEARCH INTERESTS: PO/CY;CC;PK;RC ..... D-10 SC

RESEARCH TEAM HEAD(S)

W Schnabel

STAFF MEMBERS

R F Frings; A Amirzadeh; A Salmassi

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis for ns range (ruby and Nd)

RESEARCH TOPICS

- photodegradation and photocrosslinking of polymers
- photoinitiation of radical and ionic polymerization
- application of photochemical methods to problems in polymer chemistry and polymer physics

LMT LICHTMESSTECHNIK BERLIN

Helmholtzstrasse 9

D-1000 BERLIN 10

TELEPHONE: (030) 393 40 28

-----  
RESEARCH INTERESTS: PP;PB/BP;PS;PM;VS ..... D-10 UL

RESEARCH TEAM HEAD(S)

- Ulrich (dr)

STAFF MEMBERS

R Rattunde (dipl-ing);K Reissmann (dipl-ing)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- development and production of detectors with relative spectral responsivities corrected to different photobiological weighting functions by partial filtering and full filtering, development of photometer heads for the measurement of photobiologically weight irradiance, spherical irradiance and cylindrical irradiance

RESEARCH TOPICS

- research in the field of relative spectral weighting functions for different photobiological effects, development of high precise digital instrumentation for the measurement of photobiologically weighted irradiance, spherical and cylindrical irradiance and their time integral

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ANSTALT FUER HYGIENE

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Abteilung Lufthygiene  
Neuer Kamp 25

D-2000 HAMBURG 6

TELEPHONE: (040) 3497 3962

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RESEARCH INTERESTS: PP/BP ..... D-20 GR

RESEARCH TEAM HEAD(S)

- Gräfe (dr)

STAFF MEMBERS

- Schrader

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- effect of air pollution on global solar radiation

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UNIVERSITÄT HAMBURG

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Institut für Organische Chemie und Biochemie  
M L King Platz 6

D-2000 HAMBURG 13

TELEPHONE: (040) 4123-4316

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RESEARCH INTERESTS: PO;CO/CR;SE;PK ..... D-20 MA

RESEARCH TEAM HEAD(S)

P Margaretha (prof)

STAFF MEMBERS

R Kilger; H Homberger; K Reinholdt; R Ghaffari; C Schröder; C Semisch;  
W Schömig

SPECIAL PHOTOCHEMICAL TECHNIQUES

- merry-go-round photochemical reactor  
- optical bench (quantum yield reactor)

RESEARCH TOPICS

- inter- and intramolecular photocycloadditions  
- photoreductions  
- photorearrangements

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PHILIPS GMBH

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Forchninglaboratorium Hamburg  
Vogt-Kölln-Str. 30

D-2000 HAMBURG 54

TELEPHONE: (040) 549 31

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RESEARCH INTERESTS: CP/PK;PL;SE ..... D-20 ME

RESEARCH TEAM HEAD(S)

R Memming (dr)(\*)

STAFF MEMBERS

K Kobs (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- nitrogen-nanosecond laser
- picosecond laser

RESEARCH TOPICS

- solar energy conversion (investigation of semiconductor/liquid junctions for production of electrical energy and/or chemical fuels)
- optical information storage (investigation on photoisomerization of thioindigos)

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UNIVERSITÄT KIEL

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Institut für Organische Chemie  
Olshausenstrasse 40-60

D-2300 KIEL

TELEPHONE: (0431) 880-2443/2453

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RESEARCH INTERESTS: CO/CR ..... D-23 FR

RESEARCH TEAM HEAD(S)

W Friedrichsen (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical cycloadditions
- photochemistry of mesoionic compounds



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UNIVERSITÄT KIEL

---

Institut für Organische Chemie  
Olshausenstrasse 40 - 60

D-2300 KIEL

TELEPHONE: (0431) 880 20 67

---

RESEARCH INTERESTS: CO/CR;OT ..... D-23 MORESEARCH TEAM HEAD(S)

S Mohr (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- organic solid state photochemistry
- asymmetric dimerizations in crystalline oxazolones
- new types of topochemical reactions

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CHRISTIAN-ALBRECHTS-UNIVERSITÄT KIEL

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Institut für Organische Chemie  
Olshausenstrasse 40/60

D-2300 KIEL 1

TELEPHONE: (0431) 880 24 40

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RESEARCH INTERESTS: CO/CR ..... D-23 TORESEARCH TEAM HEAD(S)

W Tochtermann (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical cycloadditions
- transposition of groups in ring systems

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TECHNISCHE UNIVERSITÄT BRAUNSCHWEIG

---

Lehrstuhl B für Physikalische Chemie  
Hans-Sommer Strasse 10

D-3300 BRAUNSCHWEIG

TELEPHONE: (0531) 391-5341/5342

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RESEARCH INTERESTS: PP/PK;SP ..... D-33 DR

RESEARCH TEAM HEAD(S)

H Dreeskamp (prof)

STAFF MEMBERS

J Pabst (dr)(\*); B Jahn

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence/phosphorescence spectrophotometer with corrected spectra and variable temperature assessor
- mono-photon fluorescence decay-time apparatus
- excimer-laser flash apparatus

RESEARCH TOPICS

- mechanism of fluorescence quenching by heavy-atoms or electron transfer
- photochemical isomerization
- photo-CIDNP

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TECHNISCHE UNIVERSITÄT BRAUNSCHWEIG

---

Institut für Organische Chemie  
Schleinitzstrasse

D-3300 BRAUNSCHWEIG

TELEPHONE: (0531) 391-2879

---

RESEARCH INTERESTS: CO/CR;CL ..... D-33 HO

RESEARCH TEAM HEAD(S)

H Hopf (prof)(\*)

STAFF MEMBERS

- Ph.D. students; post-doctoral associates

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of alkynes, allenes, and cumulenes
- photochemistry of retinoid molecules
- chemiluminescence studies on phane molecules

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UNIVERSITÄT GÖTTINGEN

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Institut für Organische Chemie  
Tammannstrasse 2

D-3400 GÖTTINGEN

TELEPHONE: (0551) 39 32 01

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RESEARCH INTERESTS: PO/CD;LS ..... D-34 LU

RESEARCH TEAM HEAD(S)

W Lüttke (prof)

STAFF MEMBERS

B Knieriem (dr); G Kunz

SPECIAL PHOTOCHEMICAL TECHNIQUES

- N2 laser
- computer controlled absorption and fluorescence spectrophotometer

RESEARCH TOPICS

- synthesis of new laser dyes
- excitation energy transfer

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MAX-PLANCK-INSTITUT FUER STRÖMUNGSFORSCHUN

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Abteilung Molekulare Wechselwirkungen  
Böttingerstrasse 6-8

D-3400 GÖTTINGEN

TELEPHONE: (0551) 709-2600

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RESEARCH INTERESTS: CP/SP;CL ..... D-34 TO

RESEARCH TEAM HEAD(S)

J P Toennies (prof)

STAFF MEMBERS

D Brandt (dr); E Hulpke (dr); C Ottinger (dr); I Büttner; M Wilde;  
D Neuschäfer; M Fuchs; J Reichmuth; H Zühlke (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser excitation of nozzle beams
- mass spectrometer/optical spectrometer combination
- mass spectrometer/laser combination

RESEARCH TOPICS

- spectroscopy and reactions of dimer molecules and of molecules in high vibrational states under molecular beam conditions
- chemiluminescent reactions of mass and energy selected ions with gases

MAX-PLANCK-INSTITUT FUER BIOPHYSIKALISCHE CHEMI

Abteilung Spektroskopie  
Am Fassberg 2

D-3400 GÖTTINGEN

TELEPHONE: (0551) 20 12 62

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RESEARCH INTERESTS: PO/PK;BP;SP;LS;PE;CL ..... D-34 WE

RESEARCH TEAM HEAD(S)

A Weller (prof)(\*)  
A Stier (prof)

STAFF MEMBERS

K H Grellmann (dr)(\*); W Kühnle (dr); D Marsh (dr); B Nickel (dr)(\*);  
H Staerk (dr)(\*); M Stockburger (dr); E Tauer (dr); K Zachariasse (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- microsecond flashes with low temperature cells and transient recorder as recording system
- ns flashes (N<sub>2</sub><sup>-</sup>, exciplex-, and frequency quadrupled Nd-lasers with transient digitizers as recording system), partly equipped for low temperature work
- ps pulse lasers (Nd/YAG and glass) with streak camera
- single photon counting
- rapid recording luminescence spectrophotometer (home made)
- high resolution gas phase luminescence spectrophotometer (with conventional and dye laser excitation)
- Raman spectrometer with CW and pulsed laser excitation
- apparatus for the measurement of diffusion coefficients of molecules in the triplet state
- preparation of radical ions in solution
- ESR spectrometer with illumination accessories for work down to liquid He temperatures

RESEARCH TOPICS

- electron and charge transfer reactions in the excited state (in solution and in the gas phase); solvent dynamics; photochemical ring closure reactions; photodissociation of photodimers
- cis-trans isomerizations; recombination reactions of radical ions and magnetic field effects; diffusion coefficients of molecules in the triplet state; fluorescence studies of higher excited singlet states; light induced reactions of cytochrome P450; rotational diffusion of macromolecules
- high resolution resonance spectroscopy and study of photophysical primary processes from single vibronic levels; investigation of excited triplet states in liquid crystal matrices
- resonance Raman studies of biological systems

MEDICEF

(International Center for Medical Environmental Sciences and Future Research)  
Department of Radiobiology and Environmental Research  
Körnerstrasse 36

D-3550 MARBURG/LAHN

TELEPHONE: (06421) 28 29 66

-----  
RESEARCH INTERESTS: PB/RC;PM ..... D-35 GR

RESEARCH TEAM HEAD(S)

E H Graul (prof)

STAFF MEMBERS

P Rüter (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser, UV-spectrograph, thermography, etc

RESEARCH TOPICS

- liquid crystals  
- influence of UV B and C on the skin

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PHILIPPS UNIVERSITÄT

FB Biologie-Botanik  
Lahnberge

D-3550 MARBURG/LAHN

TELEPHONE: (06421) 28 20 68

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RESEARCH INTERESTS: PB/BC;BP ..... D-35 HA

RESEARCH TEAM HEAD(S)

D P Häder (dr)

STAFF MEMBERS

K Wenderoth (dr); U Burkart

SPECIAL PHOTOCHEMICAL TECHNIQUES

- micro-video system with time lapse recorder  
- irradiation of microorganisms  
- electrophysiology of microorganisms  
- inhibitor studies

RESEARCH TOPICS

- phototaxis, photophobic response and photokinesis in microorganisms  
(blue-green algae, desmids, slime molds, ciliates)  
- measurements of movement in population and single organism systems  
- analysis of photoreception and sensory transduction in photomovement

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UNIVERSITÄT MARBURG

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Organische Chemie  
Hans-Meerwein-Strasse

D-3550 MARBURG/LAHN

TELEPHONE: (06421) 28 55 71

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RESEARCH INTERESTS: CO/CR ..... D-35 HO

RESEARCH TEAM HEAD(S)

R W Hoffmann (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- preparation of tetracycloheptane derivatives as synthetic equivalents for bicycloheptadiene derivatives

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PHILIPPS-UNIVERSITÄT MARBURG

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Fachbereich Chemie  
Hans-Meerwein-Strasse  
Lahnberge

D-3550 MARBURG 1

TELEPHONE: (06421) 28 5584

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RESEARCH INTERESTS: CO/CR ..... D-35 PE

RESEARCH TEAM HEAD(S)

H Perst (prof)(\*)

STAFF MEMBERS

H Hanciogullari; D Hege; W Rau; U Schwiedop; W Steinhoff

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemically induced rearrangements (enones, dienones and nitrogen analogues)
- mechanistic substituent effects

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UNIVERSITÄT DUESSELDORF

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Institut für Physikalische Chemie, Lehrstuhl I  
Universitätsstrasse, Geb. 26.43.o2

D-4000 DUESSELDORF 1

TELEPHONE: (0211) 311-2100

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RESEARCH INTERESTS: PO/PK;SP;PN ..... D-40 PE

RESEARCH TEAM HEAD(S)

H-H Perkampus (prof)  
G Petermann (dr)

STAFF MEMBERS

H Bettermann; D Hein; J Sauerwein; K Müller

SPECIAL PHOTOCHEMICAL TECHNIQUES

- luminescence apparatuses (home made) with different sources of light:  
Hg (low and high pressure), lasers, Xe lamp
- apparatuses for measurement of APF, APPh, FP and PhP spectra
- apparatuses for measurement of photoconductivity
- ESR spectrometer (Bruker-ER 200 D-A)
- laser systems (Ar ion, Spectra Physics 171-18, and dye laser,  
Spectra Physics 375)

RESEARCH TOPICS

- fluorescence and phosphorescence spectra and life-times of aromatic  
and aza-aromatic compounds (solution and solid state)
- trans-cis-isomerization and photocyclization of di- and tri-aza-  
stilbenes
- photoconductivity of aromatic and aza-aromatic compounds of thin films
- photosensitized photolysis of solvents by triplet states
- luminescence spectra and hydrogen bridges

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UNIVERSITÄT DUESSELDORF

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Institut für Theoretische Chemie  
Universitätsstrasse 1

D-4000 DUESSELDORF

TELEPHONE: (0211) 311 32 09

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RESEARCH INTERESTS: CT;CI/SP ..... D-40 SC

RESEARCH TEAM HEAD(S)

H-H Schmidtke (prof)

STAFF MEMBERS

T Schönherr (dr); H Kupka (dr)(RP)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- luminescence apparatus: double monochromator, Ar laser, He closed-cycle cryostat
- absorption spectroscopy: spectrophotometer, flow cryostat, liquid He cryostat
- IR spectroscopy: spectrophotometer, far IR Fourier spectrometer

RESEARCH TOPICS

- luminescence spectra of coordination compounds of metal ions (pure or doped in host lattices) down to very low temperature (2 K)
- theory of vibronic coupling, assignment of vibrational finestructure of electronic transitions, temperature dependence of oscillator strengths, radiationless transitions

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UNIVERSITÄT DUISBURG

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Fachbereich 6 - Fachgebiet Organische Chemie  
Bismarckstrasse 90, Postfach 101629

D-4100 DUISBURG 1

TELEPHONE: (0203) 3053304

RESEARCH INTERESTS: CO;PO/CR;CE;OT ..... D-41 DO

RESEARCH TEAM HEAD(S)

D Döpp (\*)

STAFF MEMBERS

B Gerding (ra); J Gündel (e); J Heufer; M Henseleit (rt); U Langer (ra);  
H Libera; G Rehmer; W von Hoof (e)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- equipment for solid phase irradiations and simulation of environmental conditions under development

RESEARCH TOPICS

- photochemistry of aromatic nitro compounds in general
- photochemistry of five membered heterocyclic N-oxides
- photochemistry of technically important aromatic nitro compounds under conditions similar to environmental photolysis
- solid phase photolysis of aromatic azoxy compounds
- base induced photodealkylations
- preparation and investigation of the formal 1,3-photoadduct of benzene and carbon dioxide
- photolysis of 1-acyl-7,7a-dihydro-1H-azirino-indoles

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UNIVERSITÄT DUISBURG

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Fachbereich 6, Angewandte Chemie  
Lotharstrasse 65

D-4100 DUISBURG

TELEPHONE: (0203) 30 55 57



RESEARCH INTERESTS: CO;CI/CR;CM;RC;OT ..... D-41 SA

RESEARCH TEAM HEAD(S)

A Saus (prof)

STAFF MEMBERS

M F Mirbach (dr)(\*); M J Mirbach (dr)(\*); W Laarz (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- high pressure photochemical equipment (1-1000 ml, 1 to 300 bar pressure, 50 to 200 C)
- low or medium pressure Hg or Hg/Xe-lamp
- determination of quantum yields at high pressure

RESEARCH TOPICS

- photocatalysis at elevated pressure (photochemical transition metal carbonyl catalyzed hydrogenation, hydroformalation and hydrocarboxylation of olefins and dienes)
- photochemical epoxidation of olefins
- photochemical and radiation chemical telomerisation of ethylene
- chemical conversion and storage of radiation energy
- photocatalytic activation of small molecules like CO, CO<sub>2</sub>, N<sub>2</sub>

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MAX-PLANCK-INSTITUT FUER KOHLENFORSCHUNG/INSTITUT FUER STRAHLENCHEMIE

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Stiftstrasse 34-36

D-4330 MUELHEIM/RUHR

TELEPHONE: (0208) 310 73

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RESEARCH INTERESTS: PO;PB/CR;BP;CM;PE ..... D-43 SCHA

RESEARCH TEAM HEAD(S)

K Schaffner (prof)(\*)  
S E Braslavsky (prof)(\*)  
M Demuth (dr)(\*)  
F-W Grevels (dr)(\*)  
A R Holzwarth (dr)(\*)  
H Kisch (dr)(\*)

STAFF MEMBERS

H Hermann (dr); W E Klotzbücher (dr)(\*); H J Kuhn (dr)(\*); A Ritter (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- dye laser flash techniques (ns, ps)
- UV-flash photolysis with UV and IR detection
- photo-CIDNP
- high-resolution and high-intensity emission spectroscopy
- time-resolved photoacoustic spectroscopy
- electronically integrating actinometry
- low-temperature matrix isolation techniques

RESEARCH TOPICS

- mechanistic and preparative organic photochemistry
- mechanistic and preparative organometallic photochemistry
- photochemistry and photophysics of biological systems (bilirubin, phytochrome)
- photochemistry and photophysics of higher excited states

RESEARCH INTERESTS: CI/CM;SE ..... D-43 KI

RESEARCH TEAM HEAD(S)

H Kisch (\*)

STAFF MEMBERS

N Zeug; J Bücheler; A Fernandez; G Grünbein; W Schlamann (e); B Ulbrich (t) U Pieper (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

cf. K Schaffner

RESEARCH TOPICS

- photochemistry of diazene and dinitrogen complexes
- metal catalyzed, photochemical hydrogen generation from water
- photoelectrochemistry
- role of transition metals in thermal and photochemical catalytic cycloadditions

RESEARCH INTERESTS: PO/RC;LS;BC;PL ..... D-43 SCHU

RESEARCH TEAM HEAD(S)

D Schulte-Frohlinde (prof)(\*)  
 H Görner (dr)(\*)  
 E Bothe (dr)  
 S Steenken (dr)(\*)

STAFF MEMBERS

F Schwörer; G Koltzenburg (dr); R Schrank; G Behrens (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser-flash technique (ns and ps)
- UV-flash photolysis with conductivity device
- UV - in situ - ESR-apparatus

RESEARCH TOPICS

- cis-trans isomerization of stilbene
- photoionization of phenol and ethers
- photochemical generation of radicals and radical cations
- radiation chemistry of DNS and components of DNS in solution

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RESEARCH INTERESTS: PO/PK;RC ..... D-43 SO

RESEARCH TEAM HEAD(S)

C v Sonntag (prof)(\*)

STAFF MEMBERS

H-P Schuchmann (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry in the near vacuum-UV
- photochemistry of carbohydrates
- radiation chemistry of carbohydrates and nucleic acids
- chemistry of peroxy radicals

MAX-PLANCK-INSTITUT FUER KOHLENFORSCHUNG/INSTITUT FUER STRAHLENCHEMIE

Abteilung Kryokinetik  
Stiftstrasse 34-36

D-4330 MUELHEIM/RUHR

TELEPHONE: (0208) 310 73

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RESEARCH INTERESTS: CP/PK;OT;SP ..... D-43 PO

RESEARCH TEAM HEAD(S)

O E Polansky (prof)(\*)

STAFF MEMBERS

E Koch (\*); G Mummerz (t); G Lindner (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- UV/vis-reaction spectroscopy during constant temperature increase (77-320 K) after intermediate-generating illumination
- kinetic steady-state-calorimetry during illumination
- differential thermal analysis (DTA), 77-400 K, after illumination
- simultaneous DTA and UV/vis spectroscopy after illumination (5-300 K; in preparation)
- gas-volumetric recording of low-temperature photoreactions in solution (isothermal; range 90-300 K)

RESEARCH TOPICS

- fundamentals of temperature-programmed reaction kinetics
  - oscillating reactions
  - autocatalytic reactions of H<sub>2</sub>O<sub>2</sub>, KMnO<sub>4</sub> etc
  - thermal behaviour of thermally or photochemically formed unstable species, e.g. peroxides, trioxides, ozonides, imines

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UNIVERSITÄT ESSEN - GHS

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Institut für Organische Chemie  
Universitätsstrasse 5

D-4300 ESSEN

TELEPHONE: (0201) 183 24 04

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RESEARCH INTERESTS: PO/PL;PI ..... D-43 RA

RESEARCH TEAM HEAD(S)

P Rademacher (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- UV - photoelectron spectrometer (Leybold-Heraeus UPG 200)

RESEARCH TOPICS

- electronic structure, conformation, and reactivity of organic molecules

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UNIVERSITÄT DORTMUND

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Lehrstuhl für Organische Chemie II  
Otto-Hahn-Strasse  
Postfach 500500

D-4600 DORTMUND 50

TELEPHONE: (0231) 755 38 82

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RESEARCH INTERESTS: CR/OT ..... D-46 GR

RESEARCH TEAM HEAD(S)

T Eicher (prof)  
R Graf (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence spectrophotometer  
- photolysis apparatus for liquid and frozen solutions

RESEARCH TOPICS

- photochemistry of triafulvenes and related systems  
- photochemical cycloaddition  
- photochemical dimerisation

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MAX-PLANCK-INSTITUT FUER ERNÄHRUNGSPHYSIOLOGIE

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Rheinlanddamm 201

D-4600 DORTMUND 1

TELEPHONE: (0231) 120 6380

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RESEARCH INTERESTS: BC;BP/OT ..... D-46 HERESEARCH TEAM HEAD(S)

B Hess (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- rhodopsin

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UNIVERSITÄT DORTMUND

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Lehrstuhl für Organische Chemie I  
Otto-Hahn-Strasse  
Postfach 500500

D-4600 DORTMUND 50

TELEPHONE: (0231) 755 38 58

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RESEARCH INTERESTS: CO/CM ..... D-46 NERESEARCH TEAM HEAD(S)

W P Neumann (prof)

STAFF MEMBERS

H Hillgärtner (dr); M Lehnig (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- ESR apparatus with in situ irradiation
- FT-NMR apparatus with in situ irradiation

RESEARCH TOPICS

- metal centered organic radicals, e g R3Sn
- long-lived photoexcited states of organometallic molecules and their reactions
- reaction mechanisms
- syntheses, especially with organometallic molecules
- reactions of photochemically generated stannyl radicals and stannylenes
- preparative applications in the organic chemistry of Si, Ge, and Sn
- photo-CIDNP

RUHR-UNIVERSITÄT BOCHUM

Physikalische Chemie I  
P.O.B. 10 21 48

D-4630 BOCHUM

TELEPHONE: (0234) 700 67 13

RESEARCH INTERESTS: CP/PK;AT ..... D-46 ST

RESEARCH TEAM HEAD(S)

F Stuhl

STAFF MEMBERS

C Zetzsch (dr); K Shibuya (dr); I Hansen; H-K Haak; A Hofzumahaus;  
A Wahner; M Schieferstein; M Braun; A Wiedelmann

SPECIAL PHOTOCHEMICAL TECHNIQUES

- vacuum UV flash photolysis
- vacuum UV laser photolysis
- flow system
- kinetic absorption spectroscopy
- resonance fluorescence detection
- chemiluminescence detection

RESEARCH TOPICS

- VUV-photolysis
- multiple photon processes
- kinetics of elementary reactions of atmospheric interest
- physical and chemical properties of excited states

RUHR-UNIVERSITÄT BOCHUM

Lehrstuhl für Biochemie der Pflanzen  
Postfach 10 21 48

D-4630 BOCHUM

TELEPHONE: (0234) 700 36 34

RESEARCH INTERESTS: PB/PS;BC ..... D-46 TR

RESEARCH TEAM HEAD(S)

A Trebst (prof)  
R Berzborn (prof)  
G Wildner (dr)

STAFF MEMBERS

W Haehnel; W Oettmeier; H J Schwenn; D Godde

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fast flash light spectroscopy
- EPR

RESEARCH TOPICS

- biochemistry of the mechanisms of photosynthesis (photosynthetic electron flow and photophosphorylation in isolated membranes from chloroplasts and algae), including herbicide action
- photosynthetic hydrogen evolution and mechanism of carbon and sulfur assimilation
- bioconversion of solar energy

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UNIVERSITÄT PADERBORN

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Institut für Physikalische Chemie  
Warburgerstrasse 100

D-4790 PADERBORN

TELEPHONE: (05251) 60 21 56

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RESEARCH INTERESTS: CP/PK;SP ..... D-47 ST

RESEARCH TEAM HEAD(S)

H Stegemeyer (prof)

STAFF MEMBERS

K Hiltrop (dr); W Stille

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence spectrometer (Perkin-Elmer MPF-4)
- nanosecond fluorescence spectrometer (Ortec)

RESEARCH TOPICS

- fluorescence spectroscopy in liquid crystals
- circularly polarized fluorescence in cholesteric liquid crystals
- reversible photochemical processes in liquid crystals

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UNIVERSITÄT PADERBORN

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Laboratorium für Organische Chemie  
Warburger Strasse 100

D-4790 PADERBORN

TELEPHONE: (495251) 60 21 72/73/74

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RESEARCH INTERESTS: CO/CR ..... D-47 SU

RESEARCH TEAM HEAD(S)

W Sucrow (prof)

STAFF MEMBERS

W Hillebrand

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photolysis of tetrazines from oxidation of enehydrazines

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UNIVERSITÄT KÖLN

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Institut für Anorganische Chemie  
Greinstrasse 6

D-5000 KÖLN

TELEPHONE: (0221) 470-3269

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RESEARCH INTERESTS: CI/PK ..... D-50 WARESEARCH TEAM HEAD(S)

F Wasgestian (prof)(\*)

STAFF MEMBERS

H Krause (dr)(\*); A Ditze (\*); R Heucher (\*); E Gowin

SPECIAL PHOTOCHEMICAL TECHNIQUES

- equipment for determination of photochemical quantum yields, phosphorescence spectra, and phosphorescence decay times

RESEARCH TOPICS

- mechanisms of photosubstitution reactions, phosphorescence and radiationless deactivation of Cr(III) complexes

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RHEINISCH-WESTFÄLISCHE TECHNISCHE HOCHSCHULE AACHEN

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Deutsches Wollforschungsinstitut/Insulinabteilung  
Veltmanplatz 8

D-5100 AACHEN

TELEPHONE: (0241) 399 21

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RESEARCH INTERESTS: PO;PB/PK;BC;OT ..... D-51 BRRESEARCH TEAM HEAD(S)

D Brandenburg (dr)

STAFF MEMBERSD Saunders (dr); P M Thamm (dr); J Uschkoreit (dr); C Diaconescu;  
G Klotz; K Freude (rt)SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photoaffinity labelling of insulin receptors
  - synthesis of photoreactive insulin analogues
  - characterization of photoreactive insulin analogues (analytical chemistry, UV/IR spectroscopy)
  - radioactive labelling of photoreactive insulin analogues
  - photo-crosslinking in model systems
  - analytical insulin receptor labelling
  - functional response of photoaffinity-labelled adipocytes

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RHEINISCH-WESTFÄLISCHE TECHNISCHE HOCHSCHULE

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Institut für Organische Chemie  
Prof.-Pirlet-Strasse 1

D-5100 AACHEN

TELEPHONE: (0241) 80 4675

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RESEARCH INTERESTS: CO;PO/CR;CD;SE;PK ..... D-51 SC

RESEARCH TEAM HEAD(S)

H-D Scharf (prof)(\*)  
H Leismann (dr)(\*)

STAFF MEMBERS

J Mattay (dr)(\*); H Koch; P Fey; I Ressler

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence spectrophotometer (Hitachi-Perkin-Elmer MPF-3L) with phosphorescence accessory, corrected spectra accessory, digital integrator
- flash photolysis equipment (Applied Photophysics 10); kinetic and spectroscopic apparatus with low temperature cell, microdensitometer
- photon counting system (ns range)
- quantum yield photoreactor

RESEARCH TOPICS

- photochemical cycloadditions
- energy transfer
- mechanistic and spectroscopic substituent effects
- photochemistry of exciplexes

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RHEINISCH-WESTFÄLISCHE TECHNISCHE HOCHSCHULE

---

Institut für Physikalische Chemie  
Templergraben 59

D-5100 AACHEN

TELEPHONE: (0241) 80 47 12 OR 21

---

RESEARCH INTERESTS: CP/PS;BP ..... D-51 ZE

RESEARCH TEAM HEAD(S)

M Zeidler (prof)

STAFF MEMBERS

H Arenz (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Langmuir balance for monolayer preparation

RESEARCH TOPICS

- mechanism of Chl a fluorescence quenching
- photochemical reaction of Chl a with quinones
- both in solution and in monolayer assemblies

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UNIVERSITÄT BONN

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Abteilung für Experimentelle Ökologie am Botanischen Institut  
Kirschallee 1

D-5300 BONN 1

TELEPHONE: ---  
-----RESEARCH INTERESTS: PB/BC;BP ..... D-53 BRRESEARCH TEAM HEAD(S)

K Brinkmann (prof)

STAFF MEMBERS

W Martin (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- general equipment of photophysiology

RESEARCH TOPICS

- investigations on microalgae
  - mechanism of synchronization by L-D-cycles
  - variation of phototactic reactions

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UNIVERSITÄT BONN

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Institut für Organische Chemie und Biochemie  
Gerhard-Domagk-Strasse 1

D-5300 BONN

TELEPHONE: (0228) 73-2651  
-----RESEARCH INTERESTS: CO/-- ..... D-53 WARESEARCH TEAM HEAD(S)

H Wamhoff (prof)

STAFF MEMBERSW Luce; H A Thiemig; M Ertas; G Kunz; M Zayed (dr);  
G Szilagyí, Budapest (permanent foreign cooperater)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Rayonet Griffin-Srinivasan photoreactor
- Gräntzel photoreactor

RESEARCH TOPICS

- preparative and mechanistic organic photochemistry
- photochemistry of heterocyclic compounds
- through-space pi-pi-interactions of bridged heterocycles
- photochemistry of pesticides and herbicides with heterocyclic nuclei
- model compounds and -reactions in the field of photochemotherapy

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UNIVERSITÄT-GESAMTHOCHSCHULE WUPPERTAL

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Fachbereich 9 - Naturwissenschaften II  
Gauss-Strasse 20

D-5600 WUPPERTAL 1

TELEPHONE: (0202) 439 26 66

-----  
RESEARCH INTERESTS: CP/AT;SP ..... D-56 FI

RESEARCH TEAM HEAD(S)

E H Fink (prof)  
K H Becker (prof)

STAFF MEMBERS

I Barnes (dr); D Haaks (dr); C Hubrich (dr); A Ionescu (dr); J Wildt (dr); F Zabel (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Fourier-transform IR spectrometer
- pulsed and CW dye laser systems
- excimer lasers
- mass spectrometer with molecular beam and photoionisation ion sources

RESEARCH TOPICS

- gas phase reaction kinetics
- atmospheric chemistry
- spectroscopy of free radicals
- energy transfer processes
- photochemistry of small molecules

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UNIVERSITÄT - GESAMTHOCHSCHULE WUPPERTAL

---

Fachbereich 9 - Lehrstuhl für Organische Chemie  
Gauss-Strasse 20

D-5600 WUPPERTAL 1

TELEPHONE: (0202) 439-2647

-----  
RESEARCH INTERESTS: CO/CR ..... D-56 GO

RESEARCH TEAM HEAD(S)

H Gotthardt (prof)(\*)

STAFF MEMBERS

C M Weissshuhn (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser EMG 500

RESEARCH TOPICS

- synthetic and mechanistic photochemistry of heterocyclic compounds
- photochemistry of the C=S chromophore
- far UV photochemistry

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UNIVERSITÄT-GESAMTHOCHSCHULE SIEGEN

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Institut für Physikalische Chemie  
Adolf-Reichwein-Strasse 3  
Postfach 210209

D-5900 SIEGEN 21

TELEPHONE: (0271) 740 41 87

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RESEARCH INTERESTS: PP/PE;CD ..... D-59 DRRESEARCH TEAM HEAD(S)

G von Büнау (prof)(\*)  
K H Drexhage (prof)(\*)

STAFF MEMBERS

H-J Buschmann (dr); H Knepe (dr); D Leutloff (dr); T Wolff (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis apparatus (microsecond range)
- excimer laser (nanosecond range)
- Kr-ion laser

RESEARCH TOPICS

- energy transfer in heterogeneous solutions
- chemiluminescence of gaseous systems
- mechanistic studies in inorganic and organic photochemistry
- radiationless processes
- photochemistry of dyes
- laser dyes
- intramolecular energy transfer

BATTELLE-INSTITUT E.V.

Department of Physics  
Postfach 900160

D-6000 FRANKFURT AM MAIN

TELEPHONE: (0611) 79 08 27 45

RESEARCH INTERESTS: CI/SE;PL ..... D-60 BE

RESEARCH TEAM HEAD(S)

H Behret (dr)  
H Binder (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- photoelectrochemical equipment

RESEARCH TOPICS

- photoelectrochemical hydrogen production by photolysis of water at  
inorganic semiconductor oxide electrodes

BATTELLE-INSTITUT E.V.

Department of Lasers and Optics  
Am Römerhof 35

D-6000 FRANKFURT AM MAIN

TELEPHONE: (0611) 79 08 24 65

RESEARCH INTERESTS: CO/LS;CR ..... D-60 HO

RESEARCH TEAM HEAD(S)

H Hoffmann (dr)  
G Schäfer (dr)

STAFF MEMBERS

W D Petersen (e); F Haag (e)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- IR high power TEA lasers (CO<sub>2</sub>, CO, HF, DF)  
- IR spectrophotometers, gas chromatographs, mass spectrometers, fast  
IR detectors, gas phase reaction cells, IR/GC/MS analysis of laser  
induced reaction products

RESEARCH TOPICS

- high power IR laser-induced reactions of organic molecules in the  
gas phase; emphasis on multiphoton dissociation processes  
- search for selectivity in laser-induced reactions, comparison to  
thermal reactions  
- study of intramolecular and intermolecular energy transfer processes  
- laser purification processes and stable isotope separation

BATTELLE-INSTITUT E.V.

Department of Chemistry and Biology  
Am Römerhof 35

D-6000 FRANKFURT AM MAIN

TELEPHONE: (0611) 7908-2537

RESEARCH INTERESTS: CP/CY;CC;CE;AT ..... D-60 KL

RESEARCH TEAM HEAD(S)

W Klöpffer (prof)(\*)  
G Rippen (dr)

STAFF MEMBERS

G Kaufmann (t); E G Kohl (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- 500 l photon counting device for measuring the chemiluminescence of liquids and solids

RESEARCH TOPICS

- energy transfer in polymers (films and solutions)
- photodegradation of chemicals in the atmosphere
- early detection of aging processes (e g in plastics) by chemiluminescence

DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT E.V.

Abteilung Biophysik  
Kennedyallee 97

D-6000 FRANKFURT/MAIN

TELEPHONE: (0611) 63-7010

RESEARCH INTERESTS: PB/ET;BC;BP;RC ..... D-60 BU

RESEARCH TEAM HEAD(S)

H Bucker (prof)

STAFF MEMBERS

G Horneck (dr); G Reitz (rp); H Requardt (rp); P Weber (rb)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- sun simulator
- UV-irradiation equipment
- space vacuum chambers
- UV-photomicroscope

RESEARCH TOPICS

- photochemistry and photobiology of bacteriae under reduced water content
- repair processes of UV induced damage
- praebiotic photochemistry

DU PONT DE NEMOURS (DEUTSHLAND) GMBH

Photo Products Department  
Schleussnerstrasse 2 , Postfach 325

D-6078 NEU-ISENBURG

TELEPHONE: (06102) 24 01

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RESEARCH INTERESTS: OT/PG;CY ..... D-60 LA

RESEARCH TEAM HEAD(S)

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STAFF MEMBERS

H S Laver (dr)(\*) and others

SPECIAL PHOTOCHEMICAL TECHNIQUES

- silver halide emulsion preparation facilities
- silver halide film coating equipment
- photopolymer film coating equipment
- various types of particle size analysers
- scanning electron microscope
- apparatus for measuring various physical properties of film and surface coatings

RESEARCH TOPICS

- silver halide photographic systems
- photopolymer research
- film coating technology

J W GOETHE-UNIVERSITÄT

Institut für Mikrobiologie  
Theodor-Stern-Kai 7, Haus 75 A

D-6000 FRANKFURT AM MAIN

TELEPHONE: (0611) 63 01 60 32 OR /20

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RESEARCH INTERESTS: PB/BC ..... D-60 ME

RESEARCH TEAM HEAD(S)

H-P Mennigmann (prof)

STAFF MEMBERS

E M Boltz; G Krauss; D Roczen; K Wahab; A Dietz

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- inducible repair mechanisms
  - cellular consequences of UV irradiation and of DNA replication inhibiting products and their interaction
  - consequences of UV irradiation of bacteriophage and of bacteria and their interaction
- photoreactivation
  - substrate specificity of the photoreactivating enzyme
  - influence of physiological conditions on photoreactivation

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JUSTUS-LIEBIG-UNIVERSITÄT

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Department of Physiology  
Aulweg 129

D-6300 GIESSEN

TELEPHONE: (0641) 702-4561

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RESEARCH INTERESTS: PB/VS;BC ..... D-63 BA

RESEARCH TEAM HEAD(S)

G Baumann (dr)

STAFF MEMBERS

W Ehrhardt; W S Jagger (dr); G Nöll (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- xenon flash gun
- Q-switched laser
- rapid spectrophotometry
- electrophysiological equipment

RESEARCH TOPICS

- visual pigments (photolysis and resynthesis)
- photoreceptors (mechanism of transduction; electrical properties)

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JUSTUS-LIEBIG-UNIVERSITÄT

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Institut für Organische Chemie  
Heinrich-Buff-Ring 58

D-6300 GIESSEN

TELEPHONE: (0641) 702 57 10

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RESEARCH INTERESTS: CO/CR;SP ..... D-63 MA

RESEARCH TEAM HEAD(S)

G Maier (prof)

STAFF MEMBERS

H P Reisenauer



SPECIAL PHOTOCHEMICAL TECHNIQUES

- matrix isolation

RESEARCH TOPICS

- photochemistry in rare gas matrices and organic glasses
- reactive intermediates

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MAX-PLANCK-INSTITUT FUER CHEMIE (OTTO-HAHN-INSTITUT)

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Abteilung Luftchemie  
Saarstrasse 23

D-6500 MAINZ

TELEPHONE: (06131) 305(1)218

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RESEARCH INTERESTS: PO/AT;PK ..... D-65 CR

RESEARCH TEAM HEAD(S)

P Crutzen (prof)

STAFF MEMBERS

G Moortgat (dr); D Griffith (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Fourier-transform interferometry
- matrix isolation
- GC/MS

RESEARCH TOPICS

- product analysis of photochemical reactions of atmospheric interest
- photochemical breakdown of hydrocarbons emitted from vegetation in clean air
- matrix isolation as a tool to measure atmospheric composition

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JOHANN GUTENBERG UNIVERSITÄT

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Institut für Biochemie  
J J Becher Weg 30

D-6500 MAINZ

TELEPHONE: (06131) 39 57 19

-----  
RESEARCH INTERESTS: PB/BC;PS ..... D-65 DO

RESEARCH TEAM HEAD(S)

K Dose (prof)(\*)

STAFF MEMBERS

S Risi (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- effect of light of different wavelengths on the proton transport and phosphorylation in membranes from photosynthetic microorganisms

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JOHANN GUTENBERG UNIVERSITÄT

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Institut für Biochemie  
J J Becher Weg 30

D-6500 MAINZ

TELEPHONE: (06131) 39-5720

-----  
RESEARCH INTERESTS: PB;CO/BC;CR;OT ..... D-65 SCRESEARCH TEAM HEAD(S)

H J Schäfer (dr)

STAFF MEMBERS

G Rathgeber (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- synthesis of photolabile nucleotides
- photoaffinity labeling of nucleotide-binding proteins with azido-nucleotides
- photoaffinity cross-linking of nucleotide-binding proteins

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UNIVERSITÄT DES SAARLANDES

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Fachbereich 14 Organische Chemie  
im Stadwald

D-6600 SAARBRUECKEN

TELEPHONE: (0681) 302 32 19

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RESEARCH INTERESTS: CO;PO/-- ..... D-66 DURESEARCH TEAM HEAD(S)

H Dürr (prof)(\*)

STAFF MEMBERS

Hauck; Albert; Frölich; Hackenberger; Fuchs; Brück; Golpashin; Klauck;  
Gross; Dorweiler; Minn

SPECIAL PHOTOCHEMICAL TECHNIQUES

- standard photochemical equipment, quanta count absorption and emission spectrometers

RESEARCH TOPICS

- photorearrangements and -fragmentations / chemistry of spirocompounds
- three different classes of organic compounds are studied (unsaturated hydrocarbons (spirenes), cyclic azocompounds (spiropyrazoleps spiroindazoles) and carbonyl and hydroxy olefins

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UNIVERSITÄT DES SAARLANDES

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Fachrichtung Physiologische Chemie

D-6650 HOMBURG/SAAR

TELEPHONE: (06841) 16 22 62

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RESEARCH INTERESTS: PB/PM ..... D-66 HA

RESEARCH TEAM HEAD(S)

H J Haas (prof)

STAFF MEMBERS

J Nickolay (dr); K Bach (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- phototoxicity and photoallergy by sulfanilamide and other sulfonamides

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UNIVERSITÄT DES SAARLANDES

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Fachbereich Biologie, Fachrichtung Mikrobiologie  
Universität-Bau 2

D-6600 SAARBRUECKEN

TELEPHONE: (0681) 302-3405

-----  
RESEARCH INTERESTS: PB/BP;PS ..... D-66 WA

RESEARCH TEAM HEAD(S)

A Wartenberg (prof)

STAFF MEMBERS

V Brand; H Schumacher

SPECIAL PHOTOCHEMICAL TECHNIQUES

- absorption microspectrophotometry of single living cells (Zeiss Axiomat UV-NDPC-Scan)
- on-line microcomputer (Nova 2/10, Data General)

RESEARCH TOPICS

- computer analysis of in-vivo spectra of algal chloroplasts
- orientation of chlorophyll molecules in chloroplast lamellae
- Shannon-information flow in the pigment system of chloroplasts

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BASF AG

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Kunststofflaboratorium

D-6700 LUDWIGSHAFEN

TELEPHONE: (0621) 60 85 37

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RESEARCH INTERESTS: PO/RG ..... D-67 DORESEARCH TEAM HEAD(S)

H Doerfel (dr)

STAFF MEMBERS

Barzynski (dr)(\*); Huloch (dr); Sanger (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- non-silver imaging systems based on photoinitiated polymerization
- photoreaction on macromolecular compounds

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BASF AG

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Hauptlabor

D-6700 LUDWIGSHAFEN

TELEPHONE: (0621) 602 03 91

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RESEARCH INTERESTS: CO/CR;CY ..... D-67 FIRESEARCH TEAM HEAD(S)

M Fischer (\*)

STAFF MEMBERS

A Henne (\*); W Trautmann; R Kropp (e); K Menig

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- investigation of known photochemical syntheses with the aim of industrial exploitation
- scale-up of useful light reactions
- search for photoinitiators

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UNIVERSITÄT KAISERSLAUTERN

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Fachbereich Chemie/Organische Chemie  
Paul-Ehrlich-Strasse

D-6750 KAISERSLAUTERN

TELEPHONE: (0631) 854 2431

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RESEARCH INTERESTS: CO/CR ..... D-67 RE

RESEARCH TEAM HEAD(S)

M Regitz (prof)

STAFF MEMBERS

H Heydt (dr); B Weber (dr); W Bethäuser; H Schubert; P Eisenbarth; K Urgast

SPECIAL PHOTOCHEMICAL TECHNIQUES

- matrix isolation of photochemically generated, short-living species in combination with Fourier-IR-spectroscopy

RESEARCH TOPICS

- photochemistry of diazoalkanes (generation and reactivity of carbenes)
- photochemical generation of short-living intermediates (phosphaheterocumulenes, 1-azirines, etc)

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UNIVERSITÄT HEIDELBERG

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Fakultät für Klinische Medizin Mannheim  
Hautklinik  
Postfach 23

D-6800 MANNHEIM 1

TELEPHONE: (0621) 383-2280

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RESEARCH INTERESTS: PB/PM;LS ..... D-68 JU

RESEARCH TEAM HEAD(S)

E G Jung (prof)

STAFF MEMBERS

E Bohnert (dr); E Fischer (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- phototesting
- phototherapy
- photochemotherapy

RESEARCH TOPICS

- photoallergies
- photo- and photochemotherapy
- photoimmunology
- photocarcinogenesis

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UNIVERSITÄT HEIDELBERG

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Physikalisch-Chemisches Institut  
Im Neuenheimer Feld 253

D-6900 HEIDELBERG 1

TELEPHONE: (06221) 56 24 63

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RESEARCH INTERESTS: PO/LS ..... D-69 AH

RESEARCH TEAM HEAD(S)

R Ahrens-Botzong (Dr)(\*)

STAFF MEMBERS

G Hoffmann

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- searching for new methods to induce chemical reactions in liquids (or starting from liquid substrate) by laser pulses
- examining the kinetic and thermodynamic framework for such reactions

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UNIVERSITÄT HEIDELBERG

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Organisch-Chemisches Institut  
Im Neuenheimer Feld 270

D-6900 HEIDELBERG 1

TELEPHONE: (06221) 56 24 17

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RESEARCH INTERESTS: CO/CR ..... D-69 EG

RESEARCH TEAM HEAD(S)

G Ege (prof)

STAFF MEMBERS

K Gilbert; R Heck; R Schmieg

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical fragmentations of azo-containing heterocyclic compounds
- synthesis of aceno-azetionones (aceno-beta-lactams)

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UNIVERSITÄT HEIDELBERG

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Organisch-Chemisches Institut  
Im Neuenheimer Feld 270

D-6900 HEIDELBERG

TELEPHONE: (06221) 56 24 00

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RESEARCH INTERESTS: PO/PC;CR ..... D-69 GL

RESEARCH TEAM HEAD(S)

R Gleiter (prof)

STAFF MEMBERS

K-H Knauer (dr); H Christ

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis equipment (Applied Photophysics), kinetic and spectroscopic apparatus
- low temperature device to irradiate at -196 C in Cary

RESEARCH TOPICS

- photochromic substances
  - photochemical ring closure
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UNIVERSITÄT STUTTGART

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Institut für Physikalische Chemie  
Pfaffenwaldring 55

D-7000 STUTTGART 80

TELEPHONE: (0711) 784 4491

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RESEARCH INTERESTS: PO;CP/CD;PK;SP ..... D-70 KR

RESEARCH TEAM HEAD(S)

H E A Kramer (prof)(\*)  
M Hauser (prof)(\*)  
U Steiner (dr)(\*)  
U K A Klein (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- pulsed lasers: Nd, ruby, N2
- automatically recording laser-flash spectrometer including flash lamp pumped dye laser
- conventional flash photolysis apparatus (home made)
- CW-lasers: Ar ion laser, Kr laser in use with ps-multifrequency phase fluorometer (home made)
- single photon counting apparatus (Ortec) shock tube with equipment for time resolved spectroscopy

RESEARCH TOPICS

- excited singlet state kinetics in homogeneous and micellar solution (MH)
- fast gas phase reactions (MH)
- ps-time resolved fluorescence depolarization with reactions in the excited state (UK)
- dye photochemistry (including flavins) (HK, US)
- UV stabilizers (HK, US)
- radiationless processes in combination with photoinduced electron transfer (US, HK)
- magnetic field effects in photochemistry (US)

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UNIVERSITÄT TUEBINGEN

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Institut für Organische Chemie I  
Auf der Morgenstelle 18

D-7400 TUEBINGEN 1

TELEPHONE: (07071) 29 24 37

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RESEARCH INTERESTS: CO/CR;VS ..... D-74 BA

RESEARCH TEAM HEAD(S)

E Bayer (prof)

STAFF MEMBERS

B Hemmasi (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photolabile protecting groups in liquid phase peptide synthesis
- poly-oxyethylene-peptides as model compounds for the primary process in vision (cis-trans isomerization of polymeric retinalimines); work done jointly with R S Becker, Houston

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UNIVERSITÄT TUEBINGEN

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Institut für Physikalische Chemie  
Auf der Morgenstelle 8

D-7400 TUEBINGEN

TELEPHONE: (07071) 29-6927

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RESEARCH INTERESTS: PO/PK;SP;LS;CD ..... D-74 GA

RESEARCH TEAM HEAD(S)

G Gauglitz (dr)(\*)  
H Mauser (prof)(\*)  
D Oelkrug (prof)



STAFF MEMBERS

T Klink; S Hubig; E Fritz; R Goes (prof); G Krabichler; S Uhl

SPECIAL PHOTOCHEMICAL TECHNIQUES

- single photon counting
- spectrofluorimeter (with data acquisition)
- microprocessor-controlled kinetic absorption spectrometer
- combined irradiation and spectra (emission or absorption) measuring devices with data acquisition and minicomputer evaluation
- optical multi channel analyzer

RESEARCH TOPICS

- photostability of laser dyes
- use of derivative spectroscopy in kinetics
- actinometry
- fast kinetics

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UNIVERSITÄT TUEBINGEN

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Institut für Chemische Pflanzenphysiologie  
Corrensstrasse 41

D-7400 TUEBINGEN

TELEPHONE: ---

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RESEARCH INTERESTS: PB/BC;PS ..... D-74 NI

RESEARCH TEAM HEAD(S)

H Ninnemann (prof)

STAFF MEMBERS

D Siefermann-Harms (dr); L Scheideler; G Hahne

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence spectrophotometer and computer
- computerized single beam spectrophotometer for dense samples and low temperature

RESEARCH TOPICS

- blue light photoreceptors and absorption-response transduction mechanisms
- flavin-cytochrome redox reactions
- development of photosynthetic apparatus/2 evolving system

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KERNFORSCHUNGSZENTRUM KARLSRUHE

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Institut für Radiochemie

D-7500 KARLSRUHE

TELEPHONE: (07247) 82 32 43

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RESEARCH INTERESTS: PO/CE;PE ..... D-75 GU

RESEARCH TEAM HEAD(S)

H Güsten (dr) (\*)

STAFF MEMBERS

G Heinrich (dr); G W Filby (dr); S Schoof (dr); M Rinke

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- heterogeneous photocatalytic degradation on non-volatile organic pollutants on aerosols (e.g. polynuclear aromatic hydrocarbons, pesticides)
- homogeneous photooxidation of atmospheric pollutants (specific environmental organic contaminants) in photosmog chambers
- photophysics of new potential organic laser dyes

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UNIVERSITÄT KARLSRUHE

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Lehrstuhl für Biochemie  
Richard-Willstätter-Allee

D-7500 KARLSRUHE

TELEPHONE: (0721) 608 20 92

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RESEARCH INTERESTS: PB/-- ..... D-75 RE

RESEARCH TEAM HEAD(S)

J Rétey (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photolysis of alkylcobaloximes and alkylcobalamins
- photoreactivation of the enzyme urocanase

UNIVERSITÄT KONSTANZ

Lehrstuhl für Physiologie und Biochemie der Pflanzen

D-7750 KONSTANZ

TELEPHONE: (07531) 88 21 01 OR /88 21 16

RESEARCH INTERESTS: PB/SE;PS ..... D-77 BO

RESEARCH TEAM HEAD(S)

P Böger (prof)

STAFF MEMBERS

H Böhme (dr); E Stürzl (dr); G Sandmann (dr); W Thiel (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- high resolution spectrophotometry of turbid solution (dual wavelength mode, signal averaging)

RESEARCH TOPICS

- photosynthetic electron transport
- plant energetics
- action of herbicides within the photosynthetic apparatus
- light-induced hydrogen formation in blue-green algae

UNIVERSITÄT KONSTANZ

Fakultät für Chemie  
Postfach 5560

D-7750 KONSTANZ

TELEPHONE: (07531) 88-2028

RESEARCH INTERESTS: PO/CD;SP ..... D-77 DA

RESEARCH TEAM HEAD(S)

E Daltrozzo (prof)

STAFF MEMBERS

H Kiesele (dr); G Kollmannsberger-von Nell (dr); W Sulger;  
W Brandau; M Mayer; W Sowoidnich; A Kiesinger; M Neureiter (t);  
N Burger (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- spectrometer for polarization degree measurements (+ fluorescence/ phosphorescence measurements; home made)
- ns fluorescence spectrometer (Ortec 9200)

RESEARCH TOPICS

- structure and properties of polymethines and derivated H and metal chelates (emission properties, ring closure reactions)
- synthesis and properties of new laser dyes
- steroid chelates (synthesis, spectroscopic and biological properties; development of specific radiopharmaka)
- studies on spiro and homo-conjugation (influence of spiro-conjugation on the emission properties)

UNIVERSITÄT KONSTANZ

Fakultät für Biologie  
Postfach 5560

D-7750 KONSTANZ

TELEPHONE: (07531) 88 28 81

RESEARCH INTERESTS: PO/CL;CD;SP;PE;BC;BP ..... D-77 HE

RESEARCH TEAM HEAD(S)

P Hemmerich (prof)(\*)

STAFF MEMBERS

W Schmidt (dr); H Michel

SPECIAL PHOTOCHEMICAL TECHNIQUES

- dual wavelength spectroscopy
- on-line computer - single beam, end-on multiplier, frozen, non-glassy samples
- absolut fluorimeter, on-line with a minicomputer; calculations of continuous polarization spectra, Perrin "angle spectra"

RESEARCH TOPICS

- anisotropic flavin chemistry as studied by amphiphilic flavins, bound to artificial membrane vesicles
- primary reactions of physiological blue light action
- chemistry of the excited flavin (triplet)
- transport of redox equivalents across artificial membranes (vesicle membranes), as mediated or assayed by the flavin nucleus

FREIBURG UNIVERSITY

Medical School  
Department of Dermatology  
7 Haupt Strasse

D-7800 FREIBURG I.BR.

TELEPHONE: (0761) 27 07 74 40

RESEARCH INTERESTS: PB/PM;BP ..... D-78 BO

RESEARCH TEAM HEAD(S)

W Born (prof)

STAFF MEMBERS

A L Born (MD)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- histoautoradiography

RESEARCH TOPICS

- skin reactions to balneophotochemical influences
- promotion of DNA repair after UV radiation damage
- electron spin resonance changes in UV irradiated skin tissue
- pharmacogenetics of UV reaction in men
- fractionation effects in UV erythema dose

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ALBERT-LUDWIGS-UNIVERSITÄT

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Fachbereich Organische Chemie  
Albertstrasse 21

D-7800 FREIBURG

TELEPHONE: (0761) 203-2771

RESEARCH INTERESTS: CO;PO/CR;PC;PK;SP;PE;CL ..... D-78 KA

RESEARCH TEAM HEAD(S)

G Kaupp (prof)(\*)

STAFF MEMBERS

M Stark (dr); E Teufel; H-W Grüter (rt); D Schmidt (rt); E Jostkleigrewe

SPECIAL PHOTOCHEMICAL TECHNIQUES

- matrix isolation, 77K; 15K
- fluorescence, phosphorescence, corrected spectra

RESEARCH TOPICS

- multicenter reactions in organic syntheses (alkenes, arenes)
- steric and electrostatic effects in additions and cleavages
- diradicals (kinetic and spectroscopic detection, luminescence)
- excimers, exciplexes (luminescence, relevance in photosynthesis)
- stilbenes, styrenes, cinnamates
- spirocompounds, propellanes
- new reaction types (verification and use in syntheses)

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UNIVERSITY OF FREIBURG IM BREISGAU

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Institut für Biophysik und Strahlenbiologie  
Albertstrasse 23

D-7800 FREIBURG IM BREISGAU

TELEPHONE: (203) 25 30

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RESEARCH INTERESTS: BP;PK/PS;VS ..... D-78 KR

RESEARCH TEAM HEAD(S)

W Kreutz (prof)

STAFF MEMBERS

K P Hofmann (dr); F Siebert (dr); W Mäntele; J Reichert; D Emeis;  
K Bartel

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash induced kinetic IR spectroscopy
- flash induced kinetic light scattering spectroscopy
- flash induced kinetic visible range spectroscopy

RESEARCH TOPICS

- primary reactions in photosynthesis, especially water splitting reactions
- photophosphorylation
- proton translocation
- bacteriorhodopsin reactions
- primary transduction processes in vision

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ALBERT-LUDWIGS-UNIVERSITÄT

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Chemisches Laboratorium  
Albertstrasse 21

D-7800 FREIBURG I.BR.

TELEPHONE: (0761) 203-2833

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RESEARCH INTERESTS: CO/BC;OT ..... D-78 KU

RESEARCH TEAM HEAD(S)

G Kurz (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence spectrophotometer
- photoreactor

RESEARCH TOPICS

- photoaffinity labelling

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ALBERT-LUDWIGS-UNIVERSITÄT

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Chemisches Laboratorium  
Albertstrasse 21

D-7800 FREIBURG I.BR.

TELEPHONE: (0761) 203-2800

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RESEARCH INTERESTS: CO;PO/-- ..... D-78 RU

RESEARCH TEAM HEAD(S)

G Rüchardt (prof)

STAFF MEMBERS

H-D Beckhaus (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- generation of free radicals by photochemical techniques
- photochemistry of aliphatic azo compounds

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ALBERT-LUDWIG-UNIVERSITÄT FREIBURG

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Institut für Makromolekulare Chemie  
Stefan-Meier-Strasse 31

D-7800 FREIBURG I.BR.

TELEPHONE: (0761) 203 46 18

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RESEARCH INTERESTS: PO/CC;PC ..... D-78 WE

RESEARCH TEAM HEAD(S)

G Wegner (prof)  
C D Eisenbach (dr)  
V Enkelmann (dr)

STAFF MEMBERS

C Kröhnke (dr); F Gutzler (dr); G Wenz; J Eiffler; V Weiss (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- nanosecond UV-Laser (Lambda-Physics)
- dye-laser
- fluorescence and phosphorescence spectrometer (time resolving) Spex

RESEARCH TOPICS

- organic solid state photochemistry
- photochemistry in LB-monolayers and multilayers
- photochromism in polymer matrices
- photoresist-chemistry

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FRAUNHOFER-GESELLSCHAFT

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Arbeitsgruppe Solare Energiesysteme  
Oltmannsstrasse 22

D-7800 FREIBURG I.BR.

TELEPHONE: (0761) 40 50 46

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RESEARCH INTERESTS: PP/SE ..... D-78 WI

RESEARCH TEAM HEAD(S)

V Wittwer (dr)(\*)

STAFF MEMBERS

A Zastrow

SPECIAL PHOTOCHEMICAL TECHNIQUES

- absolut measurement of quantum efficiency
- photodegradation of dyes

RESEARCH TOPICS

- improvement of fluorescent collectors for solar energy conversion:
  - quantum efficiency of dyes
  - overlap between absorption and emission
  - long time stability of dyes
  - energy transfer

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UNIVERSITÄT ULM

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Lehrstuhl für Organische Chemie I  
Oberer Eselsberg

D-7900 ULM/DONAU

TELEPHONE: (0731) 176 2230

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RESEARCH INTERESTS: PO/CM;PK ..... D-79 BR

RESEARCH TEAM HEAD(S)

H A Brune (prof)(\*)

STAFF MEMBERS

R Hemmer (dr); D Graf1

SPECIAL PHOTOCHEMICAL TECHNIQUES

- ESR with in situ irradiation technique
- apparatus for measuring quantum yields
- apparatus for irradiation with circular polarized light of variable wavelength

RESEARCH TOPICS

- mechanisms of photochemically induced rearrangements
- effect of circular polarized light on photoreactions of chiral molecules



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UNIVERSITÄT ULM

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Abteilung Chemische Physik  
Postfach 4066

D-7900 ULM

TELEPHONE: (0731) 176/2282, 2452

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RESEARCH INTERESTS: PP/PK;SP ..... D-79 LE

RESEARCH TEAM HEAD(S)

H E Lessing (prof)

STAFF MEMBERS

D Richardt

SPECIAL PHOTOCHEMICAL TECHNIQUES

- registering picosecond absorption and diffraction relaxation
- fluorescence photon correlation

RESEARCH TOPICS

- photophysical and transport processes of dyes

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UNIVERSITÄT ULM

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Abteilung Allgemeine Botanik (Bio II)  
Oberer Eselsberg

D-7900 ULM/DONAU

TELEPHONE: (0731) 176 2610/2611

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RESEARCH INTERESTS: PB/-- ..... D-79 SC

RESEARCH TEAM HEAD(S)

H Schraudolf (prof)

STAFF MEMBERS

R Grill (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photomorphogenesis

TECHNISCHE UNIVERSITÄT MUENCHEN

Institut für Physikalische und Theoretische Chemie  
 Lehrstuhl 2f, Physikalische Chemie  
 Lichtenbergstrasse 4

D-8046 GARCHING

TELEPHONE: (089) 3209-3421

RESEARCH INTERESTS: PO/PK;LS ..... D-80 DO

RESEARCH TEAM HEAD(S)

F Dörr (prof)  
 S Schneider (dr)

STAFF MEMBERS

S Friedrich; W Hub; J Vogel; M Melzig

SPECIAL PHOTOCHEMICAL TECHNIQUES

- time resolved resonance Raman spectroscopy
- picosecond-transient-absorption
- picosecond-emission-spectroscopy (streak camera)
- FT-NMR with illumination

RESEARCH TOPICS

- structural identification of photoinduced transients by means of time resolved resonance Raman spectroscopy
- the influence of solute-solvent interaction on the radiationless desactivation processes and photochemical yield
- kinetics of photoinduced and thermal isomerization; determination of conformation by means of NMR-spectroscopy
- energy transfer in molecular crystals and rigid lattices (Shpol'ski-matrices)

GESELLSCHAFT FUER STRAHLEN- UND UMWELTFORSCHUNG

Institut für Biologie  
 Ingolstädter Landstrasse 1

D-8042 NEUHERBERG BEI MUENCHEN

TELEPHONE: (089) 3874-2276/2279

RESEARCH INTERESTS: CO/CR;RC ..... D-80 EH

RESEARCH TEAM HEAD(S)

A Ehrl (dr)(\*)

STAFF MEMBERS

G Alschner (rt); M Bittner (rt); E Kurtkaya; M Michailov (MD);  
 L Schachinger (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- a special Zeiss-Oberkochen equipment is being applied to thin-layer chromatography (TLC) by means of measuring the UV reflectance spectra obtained from both the photoproducts and the corresponding standard substances upon the TLC plates after separation

RESEARCH TOPICS

- photoinduced intramolecular and selective rearrangements of aromatics
- X- and Co(60)-gamma-irradiation induced racemization of D-mandelic acid and aromatic L-amino acids in aqueous solution
- photo- and irradiation induced selective elimination of iodine from thyroid hormones and related model compounds in consequence of quantum energy conversion and transfer from aromatic solvents under Co(60)-gamma-radiolysis

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UNIVERSITÄT MUENCHE

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Institut für Organische Chemie  
Karl-Strasse 23

D-8000 MUENCHEN

TELEPHONE: (089) 59 021

RESEARCH INTERESTS: CO/PK;CR ..... D-80 GO

RESEARCH TEAM HEAD(S)

K Gollnick (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- singlet oxygen:
  - mechanisms of generation etc
  - mechanisms of reactions
  - preparative aspects
- organosulfur compounds:
  - preparative aspects
  - mechanisms

TECHNISCHE UNIVERSITÄT MUENCHEN

Institut für Wissenschaftlichen Photographie  
Lichtenbergstrasse 4

D-8046 GARCHING

TELEPHONE: ---

RESEARCH INTERESTS: --/-- ..... D-80 HA

RESEARCH TEAM HEAD(S)

G Haase (prof)

STAFF MEMBERS

M Schlesinger (dr); F Zörgiebel (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- special equipment (home made) for measuring smallest absorption values in latent images of photographic processes
- equipment for growing single crystals of high purity Ag halides

RESEARCH TOPICS

- properties of the latent images of photographic processes
- properties of single crystal AgBr- and AgCl-optical fibers

TECHNISCHE UNIVERSITÄT MUENCHEN

Institut für Radiochemie

D-8046 GARCHING

TELEPHONE: (089) 3209-2208

RESEARCH INTERESTS: PO/RC;CC ..... D-80 HE

RESEARCH TEAM HEAD(S)

H Heusinger (prof)

STAFF MEMBERS

A Tiesler; W Fürst; T Kudo; H Kochs

SPECIAL PHOTOCHEMICAL TECHNIQUES

- ESR
- 60 Co-source

RESEARCH TOPICS

- radiation- and photochemistry of macromolecules

GESELLSCHAFT FUER STRAHLEN- UND UMWELTFORSCHUNG MBH MUENCHEN

Institut für Ökologische Chemie  
Schulstrasse 10

D-8050 FREISING-ATTACHING

TELEPHONE: (08161) 84582/84021

RESEARCH INTERESTS: CD/CE;AT ..... D-80 KO

RESEARCH TEAM HEAD(S)

F Korte (prof)  
H Parlar (dr)(\*)

STAFF MEMBERS

S Gäb (dr); K Hustert (dr); D Kotzias (dr); M Mansour (dr); G Pfister (dr);  
H Seltzer (dr); W Turner (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- facilities for high precision quantum yield measurements
- devices for direct and indirect photochemical degradation and mineralization research in solid and gaseous phases

RESEARCH TOPICS

- degradation pathways of organic chemicals on natural surfaces
- degradation of organic chemicals in vapour phase
- development of relevant simulation models for atmospheric degradation
- degradation of organic chemicals
- ozonolysis of organic chemicals

UNIVERSITÄT MUENCHEN

Strahlenbiologisches Institut  
Schillerstrasse 42

D-8000 MUENCHEN 2

TELEPHONE: (089) 599 64 56

RESEARCH INTERESTS: PB/PM;BP ..... D-80 MA

RESEARCH TEAM HEAD(S)

K Martignoni (dr)

STAFF MEMBERS

H Samra

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- studies about the interactions between UV-light, X-rays and the chemicals on survival and mutagenesis of micro-organisms, especially E.coli and bacteriophages
- repair mechanisms

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UNIVERSITÄT MUENCHEN

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Institut für Anorganische Chemie  
Meiserstrasse 1

D-8000 MUENCHEN

TELEPHONE: (089) 590 23 96

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RESEARCH INTERESTS: CI;CO/CR;LS ..... D-80 NO

RESEARCH TEAM HEAD(S)

H Nöth (prof)

STAFF MEMBERS

F Bachmann; H Fussfetter (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- CO2 laser (Apollo)
- MS detection system

RESEARCH TOPICS

- IR laser induced reactions
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UNIVERSITÄT MUENCHEN

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Department of Dermatology/Photobiology Unit  
Frauenlobstrasse 9-11

D-8000 MUENCHEN

TELEPHONE: (089) 539 76 87

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RESEARCH INTERESTS: PB/PM;LS ..... D-80 PL

RESEARCH TEAM HEAD(S)

G Plewig (dr)  
E Hölzle (dr)  
C Hofmann (dr)  
D Galosi (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- UV-A and UV-B sources
- etc

RESEARCH TOPICS

- phototherapy
- photodermatology
- photoallergy
- photo patch tests

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UNIVERSITÄT MUENCHEN

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Botanisches Institut  
Menzinger Strasse 67

D-8000 MUENCHEN 19

TELEPHONE: (089) 179 22 25

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RESEARCH INTERESTS: PB/BC;OT ..... D-80 RA

RESEARCH TEAM HEAD(S)

W Rau (prof)

STAFF MEMBERS

E L Schrott; E Warm; U Mitzka-Schnabel

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- mechanism of photoinduced carotenoid biosynthesis in fungi  
(photoreceptor, signal transduction, level of photoregulation,  
photoprotection)
- photoperiodic regulation of flowering (photoreceptor, primary events)

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UNIVERSITÄT MUENCHEN

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Botanisches Institut  
Menzingerstrasse 67

D-8000 MUENCHEN 1

TELEPHONE: (089) 179 22 95

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RESEARCH INTERESTS: PB/PC;SP;BC;BP;PS ..... D-80 SC

RESEARCH TEAM HEAD(S)

H Scheer (prof)(\*)

STAFF MEMBERS

W Kufer (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- difference-derivative spectroscopy
- fluorescence

RESEARCH TOPICS

- cyanobacteriae and photosynthetic bacteriae
- photosynthetic reaction centers
- bile pigment photochemistry
- phytochrome
- phycobiliproteins

TECHNISCHE UNIVERSITÄT MUENCHEN

Institut für Physikalische und Theoretische Chemie  
Lichtenbergstrasse 4

D-8046 GARCHING

TELEPHONE: (089) 32 09 33 91

RESEARCH INTERESTS: CP/PK;PE;SP;PI;LS ..... D-80 SE

RESEARCH TEAM HEAD(S)

H Selzle (dr)  
H J Neusser (prof)  
R Frey (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser spectroscopy
- ion spectroscopy and kinetics with synchrotron radiation
- radiationless transitions
- jet spectra

RESEARCH TOPICS

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UNIVERSITÄT REGENSBURG

Institut Physik II  
Fakultät für Physik  
Universitätsstrasse 31

D-8400 REGENSBURG

TELEPHONE: (0941) 2081 / 2080

RESEARCH INTERESTS: CP/SP;LS;PS ..... D-84 GE

RESEARCH TEAM HEAD(S)

W Gebhardt (prof)(\*)  
M Creuzburg (prof)  
V Gerhardt (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- two Ar ion lasers, excimer laser, N2 laser
- VUV spectrometer with X-ray source
- time resolved emission spectroscopic equipment (for decay times from nanoseconds to seconds)
- equipment to study living algae cells

RESEARCH TOPICS

- energy transfer in inorganic crystals and in rare gas matrices
- photochemistry of matrix isolated simple molecules
- photosynthesis activity of living cells



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UNIVERSITÄT REGENSBURG

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Institut für Physikalische und Theoretische Chemie

D-8400 REGENSBURG

TELEPHONE: (0941) 943 44 87

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RESEARCH INTERESTS: CP/SP;PE ..... D-84 GLRESEARCH TEAM HEAD(S)

G Gliemann (prof)(\*)

STAFF MEMBERSH Yersin (dr); W Holzapfel (dr); G Herzog (dr); W von Ammon; I Hidvegi;  
W Daniels; A EngmüllerSPECIAL PHOTOCHEMICAL TECHNIQUES

- apparatus for polarized emission and absorption from small single crystals
- apparatus for time resolved spectroscopy (sub-nano to micro second range)
- apparatus for Zeeman spectroscopy ( $\approx 6$  T)
- apparatus for high pressure spectroscopy ( 80 kbar)

RESEARCH TOPICS

- properties of crystalline transition metal and rare earth complexes
- life times of excited states
- energy transfer inside the crystals
- variation of optical properties by external fields (pressure, magnetism)

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UNIVERSITÄT REGENSBURG

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Fakultät für Physik, Institut Physik III - Angewandte Physik  
Universitätsstrasse 31

D-8400 REGENSBURG

TELEPHONE: (0941) 943-2106

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RESEARCH INTERESTS: PP/SP;LS ..... D-84 MARESEARCH TEAM HEAD(S)M Maier (prof)  
A Penzkofer (prof)STAFF MEMBERS

U Bogner (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- dye lasers, solid state lasers, picosecond lasers
- low temperature equipment

RESEARCH TOPICS

- vibrational and electronic relaxation of simple molecules in gases and liquids
- excitation and detection of phonons in solids
- fluorescence of matrix-isolated dye molecules
- excited state absorption
- two-photon absorption
- amplified spontaneous emission

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UNIVERSITÄT REGENSBURG

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Institut für Organische Chemie  
Universitätsstrasse 31

D-8400 REGENSBURG

TELEPHONE: (0941) 943-4575

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RESEARCH INTERESTS: CO;PO/CR;PK ..... D-84 SA

RESEARCH TEAM HEAD(S)

J Sauer (prof)

STAFF MEMBERS

W Braig; E Eibler; F X Huber; H Mayer

SPECIAL PHOTOCHEMICAL TECHNIQUES

- normal photochemical equipment for preparative work (also at low temperatures)
- apparatus for measuring quantum yields

RESEARCH TOPICS

- photochemical cycloadditions
- photochemical cycloeliminations
- photochemical generation of reactive intermediates
- photochemical rearrangement reactions

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UNIVERSITÄT BAYREUTH

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Laboratorium für Anorganische Chemie  
Universitätsstrasse 30, Postfach 3008

D-8580 BAYREUTH

TELEPHONE: (0921) 552555

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RESEARCH INTERESTS: CI/CM ..... D-85 AL

RESEARCH TEAM HEAD(S)

H G Alt (dr)

STAFF MEMBERS

M E Eichner

SPECIAL PHOTOCHEMICAL TECHNIQUES

- 2 falling film reactors
- 3 mercury high pressure lamps

RESEARCH TOPICS

- photolysis reactions with transition metal-organyl complexes

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UNIVERSITÄT ERLANGEN-NUERNBER

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Institut für Botanik  
Schlossgarten 4

D-8520 ERLANGEN

TELEPHONE: (09131) 852655

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RESEARCH INTERESTS: PB/BP;OT ..... D-85 HA

RESEARCH TEAM HEAD(S)

W Haupt

STAFF MEMBERS

K M Hartmann; M Kraml; R Scheuerlein; K Seitz

SPECIAL PHOTOCHEMICAL TECHNIQUES

- microbeam irradiation, microspectrophotometer

RESEARCH TOPICS

- photomorphogenesis
- early events in phytochrome action
- phytochrome-membrane interaction
- high-intensity phenomena in phytochrome responses
- photocontrol of intracellular movement

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UNIVERSITÄT BAYREUTH

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Physikalisches Institut  
Lehrstuhl Experimentalphysik III  
Universitätsstrasse 30

D-8580 BAYREUTH

TELEPHONE: (0921) 55 27 10

-----  
RESEARCH INTERESTS: PP;CP/SP;LS;PK ..... D-85 LA

RESEARCH TEAM HEAD(S)

A Laubereau (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- solid state lasers
- picosecond spectrometers in the visible and IR

RESEARCH TOPICS

- vibrational dephasing and energy transfer processes in liquids and gases
- rotational motion of liquid molecules
- vibronic relaxation of dyes
- stimulated scattering processes

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UNIVERSITÄT BAYREUTH

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Experimentalphysik II  
Postfach 3008

D-8580 BAYREUTH

TELEPHONE: (0921) 55 26 00

RESEARCH INTERESTS: PO;CA/CC;PK ..... D-85 SC

RESEARCH TEAM HEAD(S)

M Schwoerer (prof)

STAFF MEMBERS

H Eichele (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- excimer and other Lasers
- low temperature ESR and ENDOR spectrometer

RESEARCH TOPICS

- solid state photopolymerisation of macroscopic diacetylene crystals

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UNIVERSITÄT WUERZBURG

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Institut für Organische Chemie  
Am Hubland

D-8700 WUERZBURG

TELEPHONE: (0931) 88 83 40

RESEARCH INTERESTS: CO/CL;CR ..... D-87 AD

RESEARCH TEAM HEAD(S)

W Adam (prof)

STAFF MEMBERS

O Cueto (dr); O de Lucchi (dr); L A Arias (dr); K Zinner (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- 18 W Ar ion laser
- 185 nm photochemistry
- chemiluminescence

RESEARCH TOPICS

- 'high energy' molecules as sources of excited states
  - chemiluminescence
  - bioluminescence
  - chemo-energization
  - singlet oxygen in synthesis
  - CINDP
  - azoalkanes (bicyclic, cyclic, acyclic)
  - cyclic peroxides (dioxethanes, endoperoxides, diacyl peroxides)
  - photomechanistic problems
  - bioorganic problems
-

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HUMBOLDT-UNIVERSITÄT ZU BERLIN

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Sektion Chemie - Wissenschaftsbereich Organische Chemie  
Hessische Strasse 1-2

DDR-1040 BERLIN

TELEPHONE: ---

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RESEARCH INTERESTS: CO;PO;PP;PB/CR;CC;PK;SP;PE;PC;PL;PT;PN;RG ... DDR-10 KR

RESEARCH TEAM HEAD(S)

D Kreysig (prof)  
C Tomaszewski (prof)

STAFF MEMBERS

J Bendig (dr); W Abraham (dr); C Csongár (dr); G Geissler (dr); H Otto

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis
- fluorescence lifetimes (ns range; sub-ns is planned)
- triplet spectroscopy (triplet spectroscopy in magnetic field is planned)

RESEARCH TOPICS

- photophysical deactivation behaviour and photochemistry of arenes, N-heteroarenes and their related cations
- photoinitiated reactions of such compounds, valence isomerization of heterocycles, 1,3-dipolaric addition, cycloaddition reactions, photooxidation, oligomerization and polymerization reactions in liquid and solid media
- photochemistry of aryl substituted cycloheptatrienes and related tropylium salts and endocyclic substituted derivatives like azepines, diazepines
- photokinetics and thermodynamics of the deactivation processes of the photoexcited species, including phenomena like energy transfer processes, formation of ground-state complexes, excimers and exciplexes

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AKADEMIE DER WISSENSCHAFTEN DER DDR

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Institut für Biochemie der Pflanzen  
Weinberg PF250

DDR-4010 HALLE/SAALE

TELEPHONE: 60 13 12

---

RESEARCH INTERESTS: CO;PO;PB/CR;CC;BC;PM;PS;SE ..... DDR-40 AD

RESEARCH TEAM HEAD(S)

G Adam (prof)

STAFF MEMBERS

B Voigt (dr); M Lischewski (dr); A Schierhorn (dc)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photochemical reactors

RESEARCH TOPICS

- synthetic photochemistry of natural products, e.g. gibberellins,  
terpenoids, steroidal alkaloids, steroids  
- topophotochemistry

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TECHNISCHE HOCHSCHULE 'CARL SCHORLEMMER' LEUNA-MERSEBURG

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Sektion Chemie  
Geusaer Strasse

DDR-4200 MERSEBURG

TELEPHONE: 460

-----  
RESEARCH INTERESTS: PQ/CD;PK ..... DDR-42 BE

RESEARCH TEAM HEAD(S)

H G O Becker (prof)  
E Fanghänel (prof)  
H-J Timpe (prof)  
K Schiller (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- sensitization of organic photoreactions  
- photochemistry of arene diazonium salts  
- photopolymerization  
- z/e photoisomerization of diazo compounds

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VEB FILMFABRIK WOLFEN

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Forschungsabteilung  
Puschkinplatz

DDR-4440 WOLFEN

TELEPHONE: ( ) 63-6914

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RESEARCH INTERESTS: PO/PG;RG;PT ..... DDR-44 PI

RESEARCH TEAM HEAD(S)

H Pietsch (prof)

STAFF MEMBERS

Keddi (dr); Böttcher (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- new equipment for macro and micro sensitometry of silver and non-silver layers
- methods for investigation of lattice dislocation in silver halides

RESEARCH TOPICS

- theory of the latent image
- chemical sensitization
- spectral sensitization of silver- and non-silver imaging systems
- novel photoregistering systems
- model investigation of new diazonium compounds
- sensitization of diazonium materials
- optical information recording by systems of polymers
- electrophotographic processes
- photophysical and photochemical reactions to make use of photographic image
- photolithography in the technology of micron size
- development of the resist processing techniques in microelectronics
- possibilities for photoimaging on evaporated layers

FRIEDRICH-SCHILLER UNIVERSITÄT JENA

Sektion Chemie und Zentrum für Optische Spektroskopie  
Philosophenweg 14

DDR-6900 JENA

TELEPHONE: 82-22201, -22203

RESEARCH INTERESTS: CP/SP;CD ..... DDR-69 FA

RESEARCH TEAM HEAD(S)

D Fassler (prof)

STAFF MEMBERS

D Bätzold (dr); K Feller (dr); M Friedrich (dr); R Gade (dr);  
W Günther (dr); G Graness (dr); K Kneipp (dr); S Vettermann (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- computerized UV-VIS spectrometer (Carl Zeiss Jena)
- ruby laser flash photolysis for reflectance measurements
- laser impuls fluorimeter (ZWG Berlin LIF 200); resolution to 100 ps
- laser impuls fluorimeter (Nd-YAG laser, streak camera Agat/USSSR), resolution to some tenth of a picosecond; in cooperation with Department of Physics
- laser Raman spectrometer (Ar ion laser, CW dye laser, lock in)
- apparatus for photo-ESR, rapid response and rapid scan with N2 laser (ZWG Berlin)

RESEARCH TOPICS

- spectroscopy and photophysical chemistry of cyanine dyes
- photochemistry of adsorbed dyes and spectral sensitization
- photoredox systems and their use for photochemical conversion of solar energy



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FRIEDRICH-SCHILLER UNIVERSITÄT JENA

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Sektion Chemie  
Philosophenweg 14

DDR-6900 JENA

TELEPHONE: 82-22204

---

RESEARCH INTERESTS: CT/SP;PE ..... DDR-69 GU

RESEARCH TEAM HEAD(S)

K Gustav (dr)

STAFF MEMBERS

J Sühnel (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- molecular geometry in excited electronic states
- radiative and non-radiative processes in organic compounds

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FRIEDRICH-SCHILLER UNIVERSITÄT JENA

---

Sektion Chemie  
Philosophenweg 14

DDR-6900 JENA

TELEPHONE: 82-22201, -22202

---

RESEARCH INTERESTS: PO/PK;PC ..... DDR-69 PA

RESEARCH TEAM HEAD(S)

R Paetzold (prof)

STAFF MEMBERS

E Birckner (dr); U-W Grummt (dr); B Kirchhof (dr); H Langbein (dr);  
F Lux (dr); M Reichenbacher (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis (conventional and ruby laser)
- fluorescence spectra (Fica 55 MK II) and time resolved fluorescence down to 0.5 ns

RESEARCH TOPICS

- mechanism of photochromic reactions, e g spirooxazines, fulgides, thioindigoids
- mechanism of the photooxidation of leuco dyes, e g triphenylmethane-, xanthene-, thiazine-, and indigo-derivatives
- mechanism of proton transfer reactions in aprotic solvents

FRIEDRICH-SCHILLER-UNIVERSITÄT JENA

Sektion Physik  
Max-Wien-Platz 1

DDR-6900 JENA

TELEPHONE: ( ) 82 25625

-----  
RESEARCH INTERESTS: PP/LS;SP ..... DDR-69 WI

RESEARCH TEAM HEAD(S)

B Wilhelmi (prof)

STAFF MEMBERS

R Gase (dr); A Graness (dr); E Heumann (dr); J Kleinschmidt (dr);  
S Rentsch (dr); D Schubert (dr); W Triebel (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- ps scetrosopy (ruby, Nd-glass, Nd-YAG, CW mode locked dye lasers,  
excite-and-probe spectrometers, phase-fluorometers)

RESEARCH TOPICS

- ps processes in dye molecules:  
-- internal conversion  
-- intersystem crossing  
-- conformation changes  
-- proton transfer  
-- dimerization  
-- aggregation

KARL-MARX-UNIVERSITÄT LEIPZIG

Sektion Chemie  
Liebigstrasse 18

DDR-7010 LEIPZIG

TELEPHONE: (03) 7165-284

-----  
RESEARCH INTERESTS: CI/CR;PK;SP;RG ..... DDR-70 HE

RESEARCH TEAM HEAD(S)

H Hennig (prof)

STAFF MEMBERS

P Thomas (dr); D Rehorek (dr); R Wagener (dr); R Benedix (dr);  
J Salvetter (dr); M Benedix (dr); D Schmidt; A Rehorek; I Burckhardt;  
A Scholz; G Bär

SPECIAL PHOTOCHEMICAL TECHNIQUES

- spin trapping ESR technique

RESEARCH TOPICS

- photocatalytic systems with light-sensitive coordination compounds  
- spectral sensitization of light-sensitive coordination compounds  
- photochemistry of coordination compounds

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KARL-MARX-UNIVERSITÄT LEIPZIG

---

Sektion Chemie  
Liebigstrasse 18

DDR-7010 LEIPZIG

TELEPHONE: (03) 7165-383

---

RESEARCH INTERESTS: CI/PG;RG ..... DDR-70 HO

RESEARCH TEAM HEAD(S)

E Hoyer (prof)

STAFF MEMBERS

R Kirmse (dr); W Dietzsch (dr); J Lerchner (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photoacoustic spectroscopic equipment
- EPR-spectrometer, spin-trapping

RESEARCH TOPICS

- photochemistry and photographic application of sulphur-containing ligand systems and its complexes esp. dithiolenes
- interaction of emulsion additives with AgX-surfaces

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KARL-MARX-UNIVERSITÄT LEIPZIG

---

Sektion Physik/Angewandte Molekulare Physik  
Linnéstrasse 5

DDR-7010 LEIPZIG

TELEPHONE: (03) 6858-268

---

RESEARCH INTERESTS: PP/CY;PK ..... DDR-70 RO

RESEARCH TEAM HEAD(S)

H-K Roth (dr)  
P Wünsche (dr)

STAFF MEMBERS

H Kasperski (dr); K Lüders (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- time-resolved ESR technique (microsecond region)

RESEARCH TOPICS

- mechanism of radical formation by UV light in solutions in dependence on solvent properties, CIDEP(chemical induced dynamic electron spin polarization)
  - structure, kinetic, dynamic and intermolecular interactions of initial, monomer and polymer radicals in the liquid state
  - structure and decay of polymer radicals in gamma irradiated solid polymers
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UNIVERSITY OF COPENHAGEN

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The H C Ørsted Institute / Chemistry Laboratory II  
Universitetsparken 5

DK-2100 KØBENHAVN

TELEPHONE: (1) 35 31 33

---

RESEARCH INTERESTS: CO/OT ..... DK-21 BU

RESEARCH TEAM HEAD(S)

O Buchardt (prof)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photoaffinity labeling

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RISO NATIONAL LABORATORY

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Chemistry Department

DK-4000 ROSKILDE

TELEPHONE: (03) 37 12 12

---

RESEARCH INTERESTS: CP/BP;AT ..... DK-40 PA

RESEARCH TEAM HEAD(S)

P B Pagsberg (dr)

STAFF MEMBERS

A Sillesen (dr); R Wilbrandt (dr)(\*); N-H Jensen (dr)(\*);  
O J Nielsen (dr); E Floyran (dr); E Bjarnov (dr);  
A Nielsen (rt); J Munk (rt); P Genske (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- time-resolved resonance Raman spectroscopy
- pulse radiolysis of solutions and gases (Febetron 705B electron accelerator)
- pulsed dye laser (home made)
- Nd/YAG laser (Quantel)
- 1 m Hilger monochromator
- streak camera (TRW)
- image intensifier, computerized data handling

RESEARCH TOPICS

- radical ions and excited states of pigments involved in photosynthesis and vision (chlorophylls, polyenes)
  - time-resolved Raman spectroscopy
  - kinetics of charge and energy transfer
- resonance Raman spectroscopy of polyenes
- radical reactions of atmospheric pollutants (halocarbons, pan, etc)

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ODENSE UNIVERSITY

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Department of Chemistry  
Campusvej 55

DK-5230 ODENSE

TELEPHONE: (09) 15 86 00

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RESEARCH INTERESTS: PO/PK;SP ..... DK-52 PE

RESEARCH TEAM HEAD(S)

C Pedersen (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- emission spectroscopy
- low temperature UV
- conventional flash photolysis

RESEARCH TOPICS

- photolysis of pesticides and heterocyclic systems
  - detection and characterization of short-lived intermediates
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INSTITUTO QUIMICO DE SARRIA

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Departemento Química Orgánica

BARCELONA-17, SPAIN

TELEPHONE: (093) 203 89 00

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RESEARCH INTERESTS: CO/CR;ET ..... E-BA BORESEARCH TEAM HEAD(S)

J J Bonet (prof)(\*)

R Carbó (prof)(\*)

P Victory (prof)(\*)

L Condal (prof)(\*)

STAFF MEMBERSJ Gómez (dr)(\*); J Piniella (\*); P Lupón (\*); T Ravenós; L Domingo;  
C Córdoba; R Nomen; J SempereSPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photooxidation of steroidal enamides
- photorearrangements of heterocyclic steroids
- ab initio calculations on excited states
- photooxidation of heterocyclic compounds
- digital colour matching

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UNIVERSIDAD DE BARCELONA

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Facultad de Química  
Departamento de Química Técnica  
Diagonal 647

BARCELONA, SPAIN

TELEPHONE: 3.3.73.11

---

RESEARCH INTERESTS: OT/PK;OT ..... E-BA CORESEARCH TEAM HEAD(S)

J Costa-Lopez (prof)(\*)

S Esplugas-Vidal (prof)(\*)

STAFF MEMBERS

C Parejo Farell (\*); A Ibarz Ribas (\*); M Vicente Buil (\*); C Prat Vilaró

SPECIAL PHOTOCHEMICAL TECHNIQUES

- elliptic photoreactor
- annular photoreactor
- liquid-gas photoreactor

RESEARCH TOPICS

- photodecomposition of organic pollutants
- photochlorination of hydrocarbons
- design of photoreactors

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UNIVERSIDAD AUTONOMA DE BARCELONA

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Departemento de Chimica Organica

E BELLATERRA-BARCELONA

TELEPHONE: (00343) 692 02 00

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RESEARCH INTERESTS: CO/CR;CY ..... E-BA FORESEARCH TEAM HEAD(S)

J Font (\*)

STAFF MEMBERS

F Sanchez-Fernando; L Vilamajo (\*); J L Bourdelande (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- preparative photochemistry related with the synthesis of alfa, beta-butenolides
- photochemical reactions on insoluble polymeric supports

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INSTITUTO DE QUIMICA FISICA "ROCASOLANO"/CSIC

---

Department of Photophysics and Photobiology  
Serrano 119

MADRID-6, SPAIN

TELEPHONE: 261 94 00

---

RESEARCH INTERESTS: PP;PB/BC;BP;VS;PS;PK ..... E-MA ACRESEARCH TEAM HEAD(S)

A U Acuna (dr)(\*)

J González (dr)

STAFF MEMBERS

J Catalán (dr)(\*); F Toribio; J Safz (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser and conventional flash-photolysis 260-1000 nm
- time resolved fluorescence (photon counting)
- emission and absorption polarization techniques

RESEARCH TOPICS

- intra- and inter-molecular proton transfer in electronically excited states
- photochemistry of bacteriorhodopsin
- photophysics of indole, tryptophan and low MW proteins
- spectroscopic techniques applied to membrane proteins

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INSTITUTE DE QUIMICA FISICA, CSIC

---

Department of Photochemistry  
Serrano 119

MADRID-6, SPAIN

TELEPHONE: 261 94 00

---

RESEARCH INTERESTS: CP/PK ..... E-MA FI

RESEARCH TEAM HEAD(S)

J M Figuera (dr)(\*)

STAFF MEMBERS

V Menéndez (dr); M Martín (dr); A Costela (dr); R Becerra (dr); M Casado (t); M Catillejo; T Crespo; V Acena

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- gas phase photochemistry and photophysics of diazirines and diazo compounds
- photochemistry of lasers (iodine)
- determination of working parameters of lasers (cross-sections, gain)

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INSTITUTE DE QUIMICA ORGANICA

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Departemento de Síntesis  
Juan de la Cierva no. 3

MADRID-6, SPAIN

TELEPHONE: 262 29 00

---

RESEARCH INTERESTS: CO/CR ..... E-MA MA

RESEARCH TEAM HEAD(S)

R Martínez-Utrilla

STAFF MEMBERS

F Farina (\*); F Amat (\*); C Paredes (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photo-Fries rearrangements
- photochemistry of lactones
- photooxidation

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INSTITUTO DE PLASTICOS

---

Department of Macromolecular chemistry  
Juan de la Cierva 3

MADRID-6, SPAIN

TELEPHONE: (91) 262 29 00

---

RESEARCH INTERESTS: CO/CC;SE ..... E-MA SA

RESEARCH TEAM HEAD(S)

R Sastre (dr)(\*)

STAFF MEMBERS

F Gonzalez (dr)(\*); J L Acosta (dr)(\*); J Penaranda (\*); P Herranz (dr);  
F Catalina (\*); J A Belinchon; J Rios (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- automatic system to follow the molecular weight evolution under irradiation

RESEARCH TOPICS

- polymer photodegradation
- polymer bound photosensitizers

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FACULTAD DE CIENCIAS

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Departamento de Química Organica  
Ciudad Universitaria

ZARAGOZA, SPAIN

TELEPHONE: (34-76) 25 65 09

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RESEARCH INTERESTS: CO/CR ..... E-ZA ME

RESEARCH TEAM HEAD(S)

E Melendez (\*)

STAFF MEMBERS

F Merchan; C Catiuela; J L Serrano; F Gavina

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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CENTRE INTERNATIONAL DE RECHERCHES DERMATOLOGIQUES (CIRD)

Sophia Antipolis

F-06565 VALBONNE CEDEX

TELEPHONE: (93) 74 12 00

RESEARCH INTERESTS: PB/PM;LS ..... F-06 SCRESEARCH TEAM HEAD(S)

H Schaefer

STAFF MEMBERS

5 biochemists; 1 analytical chemist; 2 pharmacologists; 3 pharmacists;  
2 biophysicists; 2 cell biologists; 2 dermatologists

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser irradiation in the UV region of the skin in vivo, of cell  
components and of defined macromolecules

RESEARCH TOPICS

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UNIVERSITE DE BRETAGNE OCCIDENTALE

Laboratoire de Photochimie Organique (ERA 822)  
6, avenue le Gorgeu

F-29283 BREST

TELEPHONE: (98) 03 16 94

RESEARCH INTERESTS: CO/CM;PK ..... F-29 CORESEARCH TEAM HEAD(S)

P Courtot (prof)(\*)  
R Rumin (dr)(\*)

STAFF MEMBERS

J Le Saint (dr); R Pichon (dr); J Y Salaun (dr); J Auffret

SPECIAL PHOTOCHEMICAL TECHNIQUES

- conventional flash-photolysis equipment (microsecond)  
- low temperature cell

RESEARCH TOPICS

- photochemistry of polyenes; influence of ground state conformation;  
Woodward-Hoffmann rules  
- photochemistry of (olefin)(amine) Pt(II) Cl<sub>2</sub> coordination complexes  
-- stereospecificity  
-- photodimerization  
-- application to photocatalysis (olefin isomerizations)  
- photochemistry of enolized polycarbonyl and carbonyl-imino compounds

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UNIVERSITE PAUL SABATIER

---

UER de Physique-Chimie-Automatique  
118 Route de Narbonne

F-31062 TOULOUSE CEDEX

TELEPHONE: (61) 53 11 20

---

RESEARCH INTERESTS: CO;PO/CR;RC;MI;OT ..... F-31 LA

RESEARCH TEAM HEAD(S)

A Lattes (prof)(\*)

STAFF MEMBERS

M Rivière (prof)(\*); N Paillous (dr)(\*); M-T Maurette (dr)(\*); E Oliveros (dr); J C Micheau (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence, phosphorescence
- quantum yield measurements

RESEARCH TOPICS

- photoreduction of carbonyl compounds
- photocyclization of ethylenic amines
- photo-Beckmann
- photostabilization of polymers
- energy storage
- photochemistry in micellar medium and microemulsion

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UNIVERITE DE BORDEAUX I

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Equipe de Recherche associée No 167  
351 Cours de la Libération

F-33405 TALENCE

TELEPHONE: (56) 80 84 50 OR 80 78 01

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RESEARCH INTERESTS: PO/SP;PK;MI ..... F-33 JO

RESEARCH TEAM HEAD(S)

J Joussot-Dubien (prof)(\*)

STAFF MEMBERS

O Bagno; R Bonneau (\*); H Bouas-Laurent (prof)(\*); A Castellan (\*);  
M Daney; J P Desvergne (\*); M Evald (\*); R Fournier de Violet (\*);  
M Lamotte (\*); R Lapouyade (\*); R Lesclaux (\*); A M Merle; J P Morand (\*);  
J Pereyre (\*); Pham Van Khe (e); J C Soullignac (e); B Veyret

SPECIAL PHOTOCHEMICAL TECHNIQUES

- nanosecond laser flash photolysis (Nd, excimers)
- low temperature in alkane and inert matrix
- gas phase flash photolysis with laser resonance absorption and fluorescence detection
- single photon counting
- photoacoustic spectroscopy

RESEARCH TOPICS

- photolysis of polynuclear aromatic hydrocarbons in rigid matrices at low temperature
- photocyclisation mechanism of aryl ethylene
- photochemical synthesis of polynuclear hydrocarbons
- non-conjugated bichromophoric systems
- photoreaction in micellar systems
- studies of free radical kinetics in the gas phase
- identification of aromatic geochemical markers in marine sediments by quasilinear Shpol'skii fluorescence
- spectrofluorimetry of humic acids
- laser and ultrafast spectroscopy
- study of the orthogonal triplet state

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COMMISSARIAT A L'ENERGIE ATOMIQUE


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Centre d'Etudes Nucléaires de Grenoble  
 Département de Recherche Fondamentale, Laboratoire d'Electrochimie  
 Organique et Analytique  
 85X

F-38041 GRENOBLE CEDEX

TELEPHONE: (76) 97 41 11

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RESEARCH INTERESTS: CO;CI/CR;CM;SE;OT ..... F-38 CA

RESEARCH TEAM HEAD(S)

G Cauquis (prof)

STAFF MEMBERS

G Reverdy (\*); J C Moutet; B Divisia (\*); M Paltrier; A Deronzier (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- set up for photolysis of species generated by electrochemical way
- set up for electrochemical detection of species generated by irradiation
- flash photolysis (conventional) and kinetic treatment
- access to Ar ion and dye CW lasers, tunable flash lamp pumped dye laser, Hitachi Perkin Elmer MPF-2 fluorescence spectrophotometer

RESEARCH TOPICS

- photoinduced electron-transfer reactions:
  - by transition metal complexes and organometallic compounds
  - by organic ion-radicals
- photoassisted electrochemical catalysis

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UNIVERSITE DE GRENOBLE

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Laboratoire de Spectrometrie Physique  
B.P. 53 X

F-38041 GRENOBLE CEDEX

TELEPHONE: (76) 54 81 52

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RESEARCH INTERESTS: PP/SP ..... F-38 TR

RESEARCH TEAM HEAD(S)

H P Trommsdorff (\*)

STAFF MEMBERS

J Kahane; J P Blanchi; M Pierre; J P Galaup

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- linear and non-linear spectroscopic investigations of excited states of pure and mixed organic solids
- band structure, dynamics, energy transfer, vibronic interactions

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CENTRE DE RECHERCHES EN PHYSIQUE DE L'ENVIRONNEMENT TERRESTRE ET PLANETAIRE

---

Equipe "Physico-Chimie des Atmospheres"  
3A Avenue de la Recherche Scientifique

F-45045 ORLEANS CEDEX

TELEPHONE: (33)(38) 63 03 03 OR 63 00 86

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RESEARCH INTERESTS: CP/AT;PK ..... F-45 BU

RESEARCH TEAM HEAD(S)

R R Burke (\*)  
A Barassin

STAFF MEMBERS

J Barassin; I McLaren; R Thomas

SPECIAL PHOTOCHEMICAL TECHNIQUES

- supersonic flowing afterglow
- selected ion drift tube

RESEARCH TOPICS

- chemical kinetics of ion-molecule reactions with terrestrial, planetary or astrophysical applications

CENTRE DE RECHERCHE SUR LES SOLIDES A ORGANISATION CRISTALLINE IMPARFAITE

1b, Rue de la Ferrollerie

F-45045 ORLEANS CEDEX

TELEPHONE: (16 38) 63 39 37

RESEARCH INTERESTS: OT/SE ..... F-45 FRRESEARCH TEAM HEAD(S)

J Fripiat

STAFF MEMBERS

J J Fripiat (\*); M Cruz; H van Damme

SPECIAL PHOTOCHEMICAL TECHNIQUES

- spectroscopy equipment of various kinds

RESEARCH TOPICS

- solar conversion

UNIVERSITE DE REIMS

Chimie-Physique

Faculté des Sciences, Moulin de la Housse, B.P. 347

F-51062 REIMS CEDEX

TELEPHONE: (26) 85 23 24

RESEARCH INTERESTS: CP;CT;CA;PP/AT;SP;LS;CL ..... F-51 GURESEARCH TEAM HEAD(S)

H Guenebaut (prof)

STAFF MEMBERSJ M Berthou; J Brion; B Coquart; D Daumont; A Jenouvrier; J Malicet;  
M F Merienne; Ngo Tuan Anh; J C Prudhomme; J J Plateaux; J Charbonnier;  
J P Lux (rt)SPECIAL PHOTOCHEMICAL TECHNIQUES

- lasers (Ar ion: CR12 UV and SP 5 W; pulsed N2)
- dye lasers
- flash photolysis apparatus
- set-up for lifetime measurements from 5 ns up to very large time
- set-up for high resolution emission and absorption spectroscopy from 120 nm to 1100 nm (microprocessor assisted Jobin Yvon Monochromator; 3 m Ebert Spectrograph; Reosc UVGR Spectrograph; 1 m vacuum RSV Spectrograph)

RESEARCH TOPICS

- electronic emission-absorption spectroscopy of di- or triatomic molecules and free radicals:
  - rovibronic structure
  - Rydberg states
  - coupling states (perturbations, predissociations, Renner-Teller effect)
  - laser fluorescence
  - study of molecules or free radicals related to the atmosphere

UNIVERSITE DE REIMS/FACULTE DES SCIENCES

Laboratoire de Photochimie

F-51062 REIMS CEDEX

TELEPHONE: (26) 85 23 24

RESEARCH INTERESTS: CO/CR;CM ..... F-51 PERESEARCH TEAM HEAD(S)

J Pete (\*)

STAFF MEMBERS

J Cossy (\*); H Deshayes; A Feigenbaum (\*); F Henin; J Muzart (\*);  
C Portella (\*); D Scholler

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical reactivity of alpha-substituted enones
- photochemistry of pi allylic complexes
- photoreactivity of esters and amides

INSTITUTE NATIONAL POLYTECHNIQUE DE LORRAINE ET UNIVERSITE DE NANCY I

Département de Chimie Physique des Réactions (ERA 136 CNRS)  
1, rue Grandville

F-54042 NANCY CEDEX

TELEPHONE: (8) 335 51 53

RESEARCH INTERESTS: PP;PO/CR;PK;PE;BP;SE;MI ..... F-54 NIRESEARCH TEAM HEAD(S)

M Niclaude (prof)(\*)  
J C André (dr)(\*)  
X Deglise (prof)(\*)  
M Bouchy (dr)(\*)  
M L Viriot (dr)(\*)  
J Y Jezequel (dr)

STAFF MEMBERS

A Tournier; J F Matte; J Molinari (e); A Samoun (e); S Gaillard;  
D Bazard (e)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- steady state fluorescence apparatus
- single photon counting apparatus
- time resolved anisotropy of fluorescence emission
- photochemical reactors
- high pressure cell
- flashes (1 to 1000 J)

RESEARCH TOPICS

- partly diffusion controlled reactions: fluorescence quenching, cage effect, excimers and exciplexes, reactions in homogeneous media and in membranes
- instrumentation in molecular fluorescence and deconvolution techniques in single photon counting
- photochemistry of ketones and diketones
- industrial photochemistry
- application of fluorescence: hydrology, medicine, etc

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UNIVERSITE DES SCIENCES ET TECHNIQUES DE LILLE

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Department of chemistry  
Laboratoire de Chimie Organique Physique

F-59655 VILLENEUVE DASCQ CEDEX

TELEPHONE: (20) 91 92 22

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RESEARCH INTERESTS: CO/CR;CY ..... F-59 CO

RESEARCH TEAM HEAD(S)

A Couture (dr)(\*)  
J-P Catteau (dr)(\*)

STAFF MEMBERS

S Caplain (dr); A Castellano (dr)(\*); J Marko (dr)(\*); A Pollet (dr);  
C Roucoux (dr); G Vermeersch (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- CIDNP- H1 on JEOL C 60 HL (belongs to prof. Febvay, Faculty of Pharmacy University of Lille II)
- CIDNP- H1, C13, P31 on Bruker WP 80
- low temperature equipment for irradiation and for flash thermolysis
- ESR Varian E-9 Equipped for UV irradiation

RESEARCH TOPICS

- study of the mechanism of photochemical reactions by CIDNP, ESR, emission spectroscopy
- photoreactions of sulfurated compounds
- photoreticulations of polymers



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LABORATOIRE DES SURFACES ET INTERFACES CNRS

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Laboratoire de Chimie Physique  
13, Rue de Toul

F-59046 LILLE CEDEX

TELEPHONE: (33 20) 30 83 14

---

RESEARCH INTERESTS: PO/SE;PK;SP ..... F-59 LE

RESEARCH TEAM HEAD(S)

G Lepoutre (prof)

STAFF MEMBERS

M G De Backer; F Sauvage (\*); F Leclercq

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of phthalocyanines and related compounds

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UNIVERSITE DE CLERMONT II

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U.E.R. Recherche Scientifique et Technique  
Laboratoire de Chimie et Biochimie des Substances Naturelles  
BP 45

F-63170 AUBIERE

TELEPHONE: (73) 26 41 10

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RESEARCH INTERESTS: CO/CR ..... F-63 GR

RESEARCH TEAM HEAD(S)

J-C Gramain (prof)(\*)

STAFF MEMBERS

R Remuson (\*); Y Troin (\*); M Dufour; D Vallee (e)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- synthesis of heterocyclic nitrogen compounds (alcaloids and models) by  
photochemical reactions

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UNIVERSITE DE CLERMONT II

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Laboratoire de Photochimie  
BP 45, Ensemble Universitaire des Cézeaux

F-63170 AUBIERE-CLERMONT-FERRAND

TELEPHONE: (73) 26 41 40

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RESEARCH INTERESTS: PO/CY;PK;CM;BC ..... F-63 LE

RESEARCH TEAM HEAD(S)

J Lemaire (prof)(\*)

STAFF MEMBERS

R Arnaud (dr)(\*); M Bolte (dr)(\*); G Bonhomme (dr)(\*); P Boule (dr)(\*);  
J L Gardette (dr)(\*); G Guyot (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- computerized spectrofluorimeter (Jobin Yvon JY3C)
- microsecond flash photolysis
- monochromatic and polychromatic devices for the study of photooxidation of polymers

RESEARCH TOPICS

- aqueous ionic photochemistry: phenolic, quinonoid compounds, diphenylamine and derivatives, xanthenic dyes
- coordination photochemistry: Cu(I) and Cu(II) - nitriles systems; Cu - cinnamic and derivatives systems
- photochemistry of molecules with biological interest:
  - skin photosensitizers (furocoumarines)
  - dyes for ophthalmology
  - chemical and photochemical perturbations of the vision mechanism
- photothermal and photocatalytic oxidation of polymers: polyolefins, polyamides, polyurethanes, polymethacrylates, polycarbonates

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ATO-CHIMIE

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Industrial Photochemistry Process Development  
Usine de Mont

F-64300 ORTHEZ

TELEPHONE: (59) 68 98 26

---

RESEARCH INTERESTS: CO;CI/PS ..... F-64 MI

RESEARCH TEAM HEAD(S)

J C Michel (e)  
P Potin (e)  
J Jousot-Dubien (consulting)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- industrial photosynthesis plant

RESEARCH TOPICS

- photonitrosation  
- photosulphoxydation

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UNIVERSITE DE PAU

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Departement de Chimie, Laboratoire de Chimie Structurale  
Avenue Philippon

F-64000 PAU

TELEPHONE: (59) 02 88 64

---

RESEARCH INTERESTS: CT/AP;PK ..... F-64 PORESEARCH TEAM HEAD(S)

M Chaillet  
E Poquet (\*)  
A Dargelos

STAFF MEMBERS

H Cardy (\*); M Chevaldonnet; C Dacie (rt); C Larrieu (e); D Liotard;  
C Pouchan; R Sainte-Cluque

SPECIAL PHOTOCHEMICAL TECHNIQUES

- vacuum UV

RESEARCH TOPICS

- theoretical aspects of photoreactivity  
-- photofragmentations (photolysis of HNO<sub>2</sub>; photochemical hydration of acetylene)  
-- hydrogen abstraction (by carbonyl compounds; by radicals: OH, NH<sub>2</sub>, O<sub>2</sub>H)

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UNIVERSITE DE PERPIGNAN

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Laboratoire de Chimie-Physique  
Avenue de Villeneuve

F-66025 PERPIGNAN CEDEX

TELEPHONE: (68) 51 00 51

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RESEARCH INTERESTS: CP/BP;MI;SP ..... F-66 VIRESEARCH TEAM HEAD(S)

P Viallet (prof)

STAFF MEMBERS

H Agrammunt (t); M Boiret (dr); M Deumié (dr); A Marty (dr); M Pagnon;  
J-M Salmon (dr); J Vigo (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- microspectrofluorimetry and nanosecond fluorescence lifetime capabilities (designed to perform fluorescence spectroscopy analysis on simple solutions and single living cells or membrane units)
- inverted microscope and computer treatment of experimental data

RESEARCH TOPICS

- photophysics and photochemistry of fluorescent probes in various mediums: solutions, vesicles and liposomes, living cells
- metabolism studies of different carcinogens (BaP, DBA, etc) in living cells, penetration kinetics and detoxification process
- selective quenching of pesticides and carcinogens on biological membranes, microviscosity approach of lipoprotein serums and organized assemblies

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CENTRE DE RECHERCHES SUR LES MACROMOLECULES (CNRS)

---

6, Rue Boussingault

F-67083 STRASBOURG CEDEX

TELEPHONE: (88) 61 19 19

-----  
RESEARCH INTERESTS: PO/CY;CM;MI ..... F-67 KN

RESEARCH TEAM HEAD(S)

R Knoesel (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- primary photochemical processes in polymers (excited states, energy transfer, emission spectroscopy)
- photocrosslinking of polymers
- photochemistry and photophysics in organized media (e.g. micelles)
- photochemical fractionation of isotopes

---

UNIVERSITE LOUIS PASTEUR STRASBOURG/FACULTE DE PHARMACIE

---

Laboratoire de Physique (ERA CNRS No 551)  
B.P. 10

F-67048 STRASBOURG CEDEX

TELEPHONE: (88) 66 90 77

---

RESEARCH INTERESTS: PO;PP/BC;BP;MI ..... F-67 LA

RESEARCH TEAM HEAD(S)

G Laustriat (\*) (prof)  
H Lami (prof)  
D Gerard (prof)

STAFF MEMBERS

---

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence decay curves by monophoton technique
- linear polarization of luminescence
- circular polarization of luminescence
- ionized argon pumped dye laser, frequency doubled
- high intensity monochromatic irradiation device

RESEARCH TOPICS

- fluorescence of aromatic acids and proteins
- photochemistry of indole, tryptophan and proteins
- fluorescence study of protein conformations and interactions
- membrane fluidity by fluorescent probes

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UNIVERSITE LOUIS PASTEUR/INSTITUT DE CHIMIE

---

Laboratoire de Chimie Organique Appliquée  
1, rue Blaise Pascal

F-67008 STRASBOURG

TELEPHONE: 61 48 02

-----  
RESEARCH INTERESTS: CO;PP/CY;CD;PK;CM ..... F-67 TA

RESEARCH TEAM HEAD(S)

C Tanielian (prof) (\*)

STAFF MEMBERS

J Ralarosy; L Golder (\*); R Mechin (\*); A Ulrich; A Harfouch; C Wolff

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photooxygenation
- formation and reactions of singlet oxygen
- sensitized photooxidation and photodegradation of polymers
- photoassisted reactions and photocatalysis

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LABORATOIRE DE PHOTOCHEMIE GENERALE

---

Equipe de Recherches Associée au CNRS No. 386  
ENSCMu, 3 rue A Werner

F-68093 MULHOUSE CEDEX

TELEPHONE: (89) 42 70 20

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RESEARCH INTERESTS: CP/CY;CC;CD;PK;SP;LS;PC;MI ..... F-68 FO

RESEARCH TEAM HEAD(S)

J P Fouassier (prof)(\*)

STAFF MEMBERS

C Decker (dr)(\*); A Coursot (dr)(\*); P Jacques (dr)(\*); D J Loughnot (dr)(\*);  
E Penigault (dr)(\*); R Salvin (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- mode locked ruby laser spectroscopy
- Raman laser spectroscopy
- CW dye laser

RESEARCH TOPICS

- quantum chemistry of coordination compounds
- electronic structure/photochemical properties relationships in complexes
- photochromism
- excited states of laser dyes
- primary processes in photoinitiators of polymerization
- photochemistry in micelles
- photochemical and photophysical processes in oligomers and macromolecules
- polymer photochemistry: photodegradation, photooxidation, photopolymerization, photo-crosslinking, photografting

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INSTITUT NATIONAL DES SCIENCES APPLIQUEES DE LYON

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Laboratoire de Cinétique et Genie Chimiques  
20, avenue Albert Einstein

F-69621 VILLEURBANNE

TELEPHONE: (7) 893 81 12

---

RESEARCH INTERESTS: CP/PK;CE ..... F-69 CLA

RESEARCH TEAM HEAD(S)

B Claudel (prof)(\*)

STAFF MEMBERS

M Bideau (dr)(\*); L Faure (dr); M Otterbein (dr); J P Puaux (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- simultaneous measurements of luminescence and reflectivity of solids
- mass spectrometry of gases evolved during photoreactions
- photocatalytic slurry reactor

RESEARCH TOPICS

- phototransformations of solids
- photocatalytic oxidation of impurities in waste water

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ECOLE CENTRALE DE LYON

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Laboratoire de Physicochimie des Interfaces  
B.P. 163

F-69130 ECULLY

TELEPHONE: (7) 837 27 00

-----  
RESEARCH INTERESTS: CP/PL;SE;PT ..... F-69 CLE

RESEARCH TEAM HEAD(S)

P Clechet (prof)(\*)

STAFF MEMBERS

J Curran (prof); A Gagnaire (dr); J Joseph (dr); C Martelet (dr);  
J R Martin (dr); R Olier (dr); R Philippe (dr); G Eschalier (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- ellipsometry
- photoelectrochemical bench for s.c./electrolyte interface studies

RESEARCH TOPICS

- photoelectrochemical study of thin layers metal oxide electrodes
- photosensitization of large band-gap semi-conductors
- low band-gap semi-conductors elaboration (chalcogenides, phosphides)
- photoelectrocatalysis and synthesis at the surface of thin layers of semi-conductors
- optical studies of s.c./electrolyte by ellipsometry and electroreflectance
- selective photodissolution of low band-gap semi-conductors

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UNIVERSITE CLAUDE-BERNARD LYON I

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Laboratoire de Photochimie II  
43, Boulevard du 11 Novembre 1918

F-69621 VILLEURBANNE CEDEX

TELEPHONE: (7) 889 81 24

-----  
RESEARCH INTERESTS: PO/CE ..... F-69 ME

RESEARCH TEAM HEAD(S)

P Meallier (\*)

STAFF MEMBERS

Y Marguin; S Aldine

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis apparatus
- gas chromatograph with electron capture detector

RESEARCH TOPICS

- photochemical properties of pesticides
  - the relation structure-activity (by spectroscopic measurements)
  - the photodegradation in solution (water) and adsorbed phases (soil)
- research is made in collaboration with laboratories of physiology and toxicology; member of the Groupe Francais de Pesticides

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INSTITUT DE RECHERCHES SUR LA CATALYSE - CNRS

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2, Avenue Albert Einstein

F-69626 VILLEURBANNE CEDEX

TELEPHONE: (7) 893 34 71

-----  
RESEARCH INTERESTS: CP;CI/SE;PN;OT ..... F-69 PIRESEARCH TEAM HEAD(S)

P Pichat (dr)(\*)

STAFF MEMBERS

J M Herrmann (dr); H Courbon (e); J Disdier (rt); M-N Mozzanega (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photocatalytic reactors
- photoconductivity cell

RESEARCH TOPICS

- heterogeneous catalysis: syntheses, mechanisms

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MUSEUM NATIONAL D'HISTOIRE NATURELLE

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Laboratoire de Physico-chimie de l'Adaption Biologique  
43, rue Cuvier

F-75231 PARIS CEDEX 05

TELEPHONE: 16-1-587 38 98

-----  
RESEARCH INTERESTS: PB;CP/CC;LS;BC;BP;PM ..... F-73 SA



RESEARCH TEAM HEAD(S)

R Santus (\*)  
A Momzikoff  
L Dubertret

STAFF MEMBERS

M Bazin (dr); M Aubailly (dr); C Chahidi; J Pierre; J Haigle (t);  
J Rainasse (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser flash photolysis set-up

RESEARCH TOPICS

- photochemistry and photophysics of molecules or macromolecules of biological interest (AM)  
- applied photochemistry in phototherapy and phototoxicity studies (LD)

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MUSEUM NATIONAL D'HISTOIRE NATURELLE

---

Laboratoire de Biophysique - INSERM U 201  
61 Rue Buffon

F-75005 PARIS

TELEPHONE: (1) 535 23 89

-----  
RESEARCH INTERESTS: PB/BP;BC;PM;SE ..... F-75 HE

RESEARCH TEAM HEAD(S)

C Helene (prof)  
T Montenay-Garnestier (prof)  
R Bensasson (dr)  
M Rougee (prof)  
G Moreno (dr)  
R Santus (prof)

STAFF MEMBERS

C Salet (dr); J J Toulme (dr); D Brault (dr); C Bizet (dr); T Alev-Behmoaras (dr); R Bazin (dr); T Ledoan (dr); J R Ronfard Haret (dr); M Aubailly (dr); T Ebbesen (dr); F Ghetti (dr); T Sa e Melo (dr); B Bertaud  
T Ebbesen (dr); F Ghetti (dr); T Sa e Melo(dr); B Bertaud

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser flash photolysis  
- differential spectrofluorimeter

RESEARCH TOPICS

- photochemical reactions as probes of protein-nucleic acid associations  
- photophysics and photochemistry of psoralenes  
- photoreactions of psoralenes in skin (photochemotherapy)  
- photophysics and photochemistry of porphyrins and phthalocyanines and their use in solar energy conversion  
- photophysics of photosynthetic pigments  
- photophysics and photochemistry of carbonyl compounds

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E S P C I

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Laboratoire de Recherches Organiques  
10 rue Vauquelin

F-75231 PARIS CEDEX 05

TELEPHONE: (1) 707 88 36

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RESEARCH INTERESTS: CO/CR ..... F-75 PF

RESEARCH TEAM HEAD(S)

M Pfau (dr)(\*)

STAFF MEMBERS

J Ughetto-Monfrin

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photoenolization
- photoaddition

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UNIVERSITE DE PARIS VI

---

Ecole Supérieure de Physique et de Chimie Industrielles  
Laboratoire de Recherches Organiques  
10, rue Vauquelin

F-75231 PARIS CEDEX 05

TELEPHONE: (1) 707 88 36

---

RESEARCH INTERESTS: CO/CR ..... F-75 RIG

RESEARCH TEAM HEAD(S)

J Rigaudy (prof)(\*)

STAFF MEMBERS

Nguyen Kim Cuong (dr); A Defoin (dr); J Barcelo (dr); C Amsterdamsky;  
J M Aubry; M Maumy (dr); P Capdevielle (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photosensitized oxygenation:
  - mechanism of photosensitized oxygenation of olefins
  - reactivity of aromatic compounds vs photosensitized oxygenation
- thermal and photochemical transformations of hydro- and endo-peroxides
- photolysis of polycyclic aromatic azides; photochemical synthesis of azepines

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COLLEGE DE FRANCE

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Place Marcellin Berthelot

F-75231 PARIS CEDEX 05

TELEPHONE: (1) 329 12 11

---

RESEARCH INTERESTS: CO/CR ..... F-75 RIORESEARCH TEAM HEAD(S)

G Rio (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- singlet oxygen photooxygenation of organic compounds
- chemistry of photoperoxides

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THOMSON C S F

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Laboratoire Central de Recherches  
Domaine de Corbeville

F-91401 ORSAY CEDEX

TELEPHONE: 941 82 40

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RESEARCH INTERESTS: PO/CY;RC;PT;RG ..... F-91 DURESEARCH TEAM HEAD(S)

J C Dubois

STAFF MEMBERS

A Eranian (\*); A Zann; P Le Barny; M Gazard

SPECIAL PHOTOCHEMICAL TECHNIQUES

- scanning electron microscope
- soft X-ray irradiation device

RESEARCH TOPICS

- radiation sensitive polymers (including photoresists)(AE)
- liquid crystals (AZ, PLB)
- polymers for dielectric applications (MG)

C.N.R.S./LABORATOIRE DE PHOTOPHYSIQUE MOLECULAIRE

Bât 213  
 Université Paris-Sud

F-91405 ORSAY

TELEPHONE: (6) 941 79 09

RESEARCH INTERESTS: CP;PP/SP;PI;PK;LS;BP;AT ..... F-91 LE

RESEARCH TEAM HEAD(S)

S Leach (dr, laboratory director)(\*)  
 C Jungen (dr)  
 R Lefebvre (prof)  
 H Lefebvre-Brion (dr)  
 F Legay (dr)  
 L Lindqvist (dr)(\*)  
 R Lopez-Delgado (dr)  
 E Migirdicyan (dr)(\*)  
 J Rostas (dr)  
 G Taieb (prof)  
 A Tramer (dr)

STAFF MEMBERS

L Abouaf-Marguin (dr); C Alamichel (dr); O Atabek (dr); O Benoit d'Azy;  
 J Beswick (dr); P Bréchnac (dr); E Bréhéret; R Charneau; D Cossart (dr);  
 D Cossart-Magos (dr); A Desprès (dr); H Dubost (dr); G Dujardin (dr);  
 M C Duval (dr); B Fourmann; B Gauthier-Roy (dr); D Gauyacq (dr);  
 A Guisti (dr); A Kellmann (dr)(\*); F Lahmani (dr)(\*); C Larcher (dr);  
 C Lardeux (dr); M Lavollée (dr); G Lefèvre (e); N Legay-Sommaire (dr);  
 V Lejeune (dr); H Lerouzo (dr); A Lopez-Campillo (dr); M Martin (dr)(\*);  
 C Michel (dr); A Picard-Barsellini (dr); M Raoult (dr); A L Roche (dr);  
 B Soep (dr); F Tfibel (dr); M Velghe (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Ar ion CW laser pumped dye laser
- mode-locked, frequency doubled Ar ion laser
- Nd-YAG laser
- laser flash photolysis apparatus (1 ns Nd-glass laser)
- IR molecular lasers
- equipment for
  - matrix isolation studies
  - high resolution excitation and emission spectroscopy (Jobin-Yvon THR monochromator)
  - ODMR
  - measurements of fluorescence quantum yields and lifetimes of gas phase molecular ions
- cryostats for spectroscopic studies down to 4 K
- supersonic beam apparatus
- access to synchrotron radiation facility (LURE at Orsay)

RESEARCH TOPICS

- theoretical models for photodissociation
- autoionization and general theory of photoionization
- photodissociation in the far UV of polyatomic molecules, studied by measurement of photofragment fluorescence;
- two-photon photochemistry
- very low temperature photochemistry of durene single crystals doped with aromatics
- IR laser photochemistry in low-temperature matrix
- exciplex photochemistry and photophysics
- emission and excitation spectroscopy of aromatic molecules and radicals -n molecular crystals (durene-h14 and -d14, tetrachlorobenzene)
- zero-field splittings of methyl substituted benzaldehydes in durene single crystals
- spin-orbit and vibronic interactions between the two close-lying n-pi-\* and pi-pi-\* triplet states in aromatic carbonyl compounds
- radiative and non-radiative transitions in gas phase molecules, radicals, and ions
- state-to-state reactions involving metastable excited atoms
- fragmentation of molecules induced by rare gas metastable atoms
- study of Van der Waals' molecules in supersonic beams
- dynamics of ligand-hemoprotein complexes; hemoprotein fluorescence
- development of free electron laser

INSTITUT CURIE

Biologie

Bât 112, Centre Universitaire

F-91405 ORSAY

TELEPHONE: ( ) 907 6467

RESEARCH INTERESTS: PB/CL;BC ..... F-91 MURESEARCH TEAM HEAD(S)

B Muel (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- large double quartz monochromator
- high pressure liquid chromatography with spectrofluorimetric detection

RESEARCH TOPICS

- psoralen photochemistry
- action spectra for UV inactivation of Scrapie, Kuru and Kreuzfeld-Jacob diseases
- action spectra for photocarcinogenesis, mutagenesis and killing of cultured mouse cells
- detection of polycyclic aromatic hydrocarbons in parisian atmosphere, photolysis of these pollutants by sunlight

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C.N.R.S./INSTITUTE DE CHIMIE DE SUBSTANCES NATURELLES

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F-91190 GIF-SUR-YVETTES

TELEPHONE: (6) 907 78 28

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RESEARCH INTERESTS: PC;PB/OT ..... F-91 OURESEARCH TEAM HEAD(S)

C Ouannes (dr)(\*)

STAFF MEMBERS

---

SPECIAL PHOTOCHEMICAL TECHNIQUES

- picosecond laser equipment (with the help of the Laboratoire de Physico-Chimie des Rayonnements, Orsay)

RESEARCH TOPICS

- study of the phenomenon of transport of pheromones through the membrane of the olfactive cell in antennas of insects

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CEA

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Département de Physico-Chimie/Section Photophysique  
C E N Saclay

F-91191 GIF SUR YVETTE CEDEX

TELEPHONE: ( ) 941 80 00

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RESEARCH INTERESTS: PP/IR ..... F-91 RIRESEARCH TEAM HEAD(S)P Rigny  
R BotterSTAFF MEMBERS

J P LeRoux

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser photochemistry (IR, visible, UV)
- gas or matrix
- mass spectra
- micro sublimation and GC

RESEARCH TOPICS

- IR photochemistry (multiphoton absorption; isotopic separation; selective activation of bimolecular reactions)
- isotope separation (IR + UV; IR' + IR'')

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C.N.R.S.

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Laboratoire de Photochimie Solaire  
2-8, rue Henry Dunant

F-94320 THIAIS

TELEPHONE: (1) 687 33 55

---

RESEARCH INTERESTS: CD/SE;PL ..... F-94 KO

RESEARCH TEAM HEAD(S)

J Kossanyi (dr)(\*)  
F Garnier (dr)(\*)

STAFF MEMBERS

I Kawenoki (dr)(\*); P Chaquin (dr)(\*); B Furth (dr)(\*); C Villiers (dr)(\*);  
G Tourillon (dr)(\*); M Amara

SPECIAL PHOTOCHEMICAL TECHNIQUES

- conventional flash-photolysis apparatus
- JK Rubis laser and Jobin-Yvon dye laser
- merry-go-round

RESEARCH TOPICS

- synthesis of organic and organometallic dyes (cyanines, indigos, anthraquinones, phthalocyanines)
  - photochemistry and photophysics of organic dyes
  - photoelectrochemistry with dyes adsorbed and bonded to semiconductors
  - photoconductivity of monocrystalline organic dyes
-

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IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY

---

Department of Chemistry  
South Kensington

LONDON SW7 2AY, G B

TELEPHONE: (01) 589 5111

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RESEARCH INTERESTS: CP/PL;SE ..... GB-LO AL

RESEARCH TEAM HEAD(S)

W J Albery (prof)

STAFF MEMBERS

---

SPECIAL PHOTOCHEMICAL TECHNIQUES

- rotating transparent disc electrode and modulated photoelectrochemistry with ring disc detection

RESEARCH TOPICS

- development of photogalvanic cells for solar energy conversion
- kinetics of photogenerated minority carriers at semiconductor electrodes

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BIRKBECK COLLEGE

---

Department of Chemistry  
Malet Street

LONDON WC1E 7HX, U K

TELEPHONE: (01) 580 6622

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RESEARCH INTERESTS: CO/CR;PK ..... GB-LO CA

RESEARCH TEAM HEAD(S)

H A J Carless (dr)(\*)

STAFF MEMBERS

D J Haywood (dr)(\*); G K Fekarurhobo (ra)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- organic synthesis, using photochemical reactions of carbonyl compounds
- photocycloaddition reactions, especially oxetan formation
- photooxidation of alkenes and alkadienes
- mechanistic organic photochemistry of aldehydes and ketones



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THE CITY UNIVERSITY

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Department of Organic Chemistry  
Northampton Square

LONDON EC10 OHB, U K

TELEPHONE: (01) 253 43 99

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RESEARCH INTERESTS: CO;PO/PL;OT ..... GB-LO DA

RESEARCH TEAM HEAD(S)

R S Davidson (dr)

STAFF MEMBERS

D Goodwin (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser flash photolysis (nanosecond ruby and excimer laser)
- fluorescence lifetime (single photon counting)
- photoacoustic spectroscopy

RESEARCH TOPICS

- bichromophoric systems
- photooxidation reactions
- photoelectrochemistry (semiconductors in powder form)
- polymer degradation
- photophysics

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UNIVERSITY OF LONDON

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King's College  
Department of Plant Sciences  
68 Half Moon Lane

LONDON SE24 9JF, U K

TELEPHONE: (01) 733 5666

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RESEARCH INTERESTS: PB/SE;PS;BC ..... GB-LO HAL

RESEARCH TEAM HEAD(S)

D O Hall (prof)(\*)  
K K Rao (dr)

STAFF MEMBERS

A Muallem (dr); R Rieder (dr); D L Bruce; P E Gisby; C P Santos; J Bryce

SPECIAL PHOTOCHEMICAL TECHNIQUES

- combined H<sub>2</sub>:O<sub>2</sub> electrode
- immobilization of cells, enzymes and photosynthetic organelles

RESEARCH TOPICS

- biophotolysis of water for H<sub>2</sub> production using biological and synthetic catalysts
- isolation and characterization of hydrogenases
- stabilization of hydrogenases and electron transfer catalysts by immobilization on solid supports
- determination of factors causing photodecay of chloroplasts and other photosynthetic organelles - stabilization of chloroplasts and other photosynthetic membranes
- synthesis of electron transfer catalysts and use of these catalysts in photosynthetic electron transport reactions
- immobilization of plant and algal cells and use of these immobilized cells for the production of "high value" compounds such as H<sub>2</sub>, NH<sub>3</sub>, NADPH<sub>2</sub>, etc

THE ROYAL INSTITUTION OF GREAT BRITAIN

Davy Faraday Research Laboratory  
21 Albemarle Street

LONDON W1X 4BS, U K

TELEPHONE: (01) 409 29 92

RESEARCH INTERESTS: AL/SE;LS;PS;OT ..... GB-LO PO

RESEARCH TEAM HEAD(S)

G Porter (prof, director)(\*)

STAFF MEMBERS

G S Beddard (dr); A Harriman (dr); M A West (dr)(\*); A D Osborne (dr);  
C D Tran (dr); N Carnieri; J R Darwent; T A M Doust; P Douglas;  
J T Handman; A Mills; M-C Richoux; P C Walters; M J Westby; A C Winkworth

SPECIAL PHOTOCHEMICAL TECHNIQUES

- for picosecond flash photolysis arrangements

RESEARCH TOPICS

- picosecond studies of rotational relaxation, internal conversion, energy transfer, concentration quenching and primary processes of photosynthesis
- photochemical conversion of solar energy; water photolysis and oxygen evolution

RESEARCH INTERESTS: PP/LS;PE ..... GB-LO PH

RESEARCH TEAM HEAD(S)

D Phillips (prof)(\*)

STAFF MEMBERS

D V O'Connor (dr); A J Roberts (dr); S R Meech; L Chewter; M E McBeath (dr); R A Lampert; G Rumbles; I McCubbin

SPECIAL PHOTOCHEMICAL TECHNIQUES

- synchronously-pumped dye-lasers with single photon counting detection
- conventional ns spark-discharge source and time-correlated single photon counting detection
- conventional microsecond flash photolysis system

RESEARCH TOPICS

- kinetics and thermodynamics of gas-phase exciplexes
- electronic energy migration and formation in synthetic polymers
- photophysics of simple amines
- time-resolved fluorescence spectroscopy of fluorescence probes used in membranology
- photophysics and chemistry of phthalocyanines and oxyanions of halogens
- time-resolved fluorescence anisotropy in biological, synthetic polymer and liquid crystal media

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THE ROYAL INSTITUTION OF GREAT BRITAIN

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Davy Faraday Research Laboratory (Solar Energy Group)  
21 Albemarle Street

LONDON W1X 4BS, U K

TELEPHONE: (01) 409 29 92

---

RESEARCH INTERESTS: CP/SE;PK ..... GB-LO HAR

RESEARCH TEAM HEAD(S)

A Harriman (dr)(\*)

STAFF MEMBERS

J R Darwent; P Douglas; J Handman; A Mills; M-C Richoux; P Walters;  
N Carnieri

SPECIAL PHOTOCHEMICAL TECHNIQUES

- nanosecond and microsecond flash photolysis
- sensitive analytical methods for detection of H<sub>2</sub> and O<sub>2</sub>
- millisecond stopped flow

RESEARCH TOPICS

- development of photochemical redox systems capable of the photodissociation of water into H<sub>2</sub> and O<sub>2</sub> using visible light excitation
- development of analytical methods for detection of low concentrations of H<sub>2</sub> and O<sub>2</sub> produced in photoreactions
- photochemistry of semiconductor materials
- design of organic structural units to mimic the natural photosynthetic reaction centre complex
- photophysics of metalloporphyrins

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UNIVERSITY OF ASTON

---

Department of Chemistry  
Gosta Green

BIRMINGHAM B4 7ET, U K

TELEPHONE: (021) 359 3611

---

RESEARCH INTERESTS: PO;CO/CY;CE ..... GB-B4 SC

RESEARCH TEAM HEAD(S)

G Scott (prof)

STAFF MEMBERS

S Al-Malaika; K B Chakraborty; C Sadomohagheh; P Huczkwosky;  
L M K Tillekeratne

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- mechanisms of photostabilisation of polymers
- photochemical reactions of antioxidants with polymers
- behaviour of chemically bonded UV stabilizers in polymers

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UNIVERSITY OF BRADFORD

---

School of Chemistry  
Richmond Road

BRADFORD BD7 1DP, U K

TELEPHONE: 334 66

---

RESEARCH INTERESTS: CP/OT ..... GB-BD BI

RESEARCH TEAM HEAD(S)

R I Bickley (dr)

SAFF MEMBERS

---

SPECIAL PHOTOCHEMICAL TECHNIQUES

- high vacuum apparatus linked to mass spectrometer, gas/liquid chromatograph, and ESR spectrometer
- examination of the adsorbed states of molecules with visible/near UV radiation by temperature programmed desorption

RESEARCH TOPICS

- investigations of the role of adsorbed water in the photoadsorption of oxygen on rutile by near UV radiation
- photocatalytically induced fixation of molecular nitrogen on inorganic oxides
- photooxidation of organic substances adsorbed on inorganic oxides

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NEW UNIVERSITY OF ULSTER

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School of Physical Sciences

COLERAINE BT52 1SA, U K

TELEPHONE: (0265) 41 41

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RESEARCH INTERESTS: PO/PK;CD;MI ..... GB-BT CORESEARCH TEAM HEAD(S)

D J Cowley (dr)(\*)

STAFF MEMBERS

I Pasha (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorimeters with variable temperature (- 150 to + 60 C) accessory
- phase sensitive detection of triplet-triplet absorption

RESEARCH TOPICS

- photophysical and photochemical properties of intramolecular charge transfer organic systems, especially aromatic hydrocarbons substituted by amine, nitro, and 1,3,5-triazinyl moieties
- triplet-triplet absorption spectroscopy of such systems
- photoreduction of bipyridylium salts in aqueous and in micellar solutions

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UNIVERSITY OF CAMBRIDGE

---

Department of Physical Chemistry  
Lensfield Road

CAMBRIDGE CB2 1EP, U K

TELEPHONE: (0223) 66499

---

RESEARCH INTERESTS: CP/AT;CL ..... GB-CB THRESEARCH TEAM HEAD(S)

B A Thrush (prof)

STAFF MEMBERS

J P T Wilkinson (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser magnetic resonance spectroscopy
- diode laser spectroscopy
- laser induced fluorescence

RESEARCH TOPICS

- reactions of HO<sub>2</sub> radicals over a wide pressure range
  - reactions of polyatomic radicals studied by LIF
  - mechanism of oxygen afterglow
  - reactions of peroxy species
  - noble gas exciplexes
-

RESEARCH INTERESTS: CP/SE;PL ..... GB-CB AR

RESEARCH TEAM HEAD(S)

M D Archer (dr)

STAFF MEMBERS

graduate students

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photogalvanic cells
- photoelectrochemistry of semiconductors

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RESEARCH INTERESTS: CP;PP/PK;SP;CL;LS ..... GB-CB CA

RESEARCH TEAM HEAD(S)

A B Callear (\*)

STAFF MEMBERS

D R Kendall; K L Lai; C Devonport

SPECIAL PHOTOCHEMICAL TECHNIQUES

- resonance flash photolysis

RESEARCH TOPICS

- spectroscopy and luminescence of excited mercury complexes

-----  
RESEARCH INTERESTS: CP/PK;LS ..... GB-CB SM

RESEARCH TEAM HEAD(S)

I W M Smith (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- rare gas halide laser
- flash lamp pumped dye laser
- Nd YAG pumped dye laser with stimulated Raman shifting
- optical parametric oscillator
- CW CO laser
- pulsed chemical and CO<sub>2</sub> lasers
- equipment for monitoring excited species (with microsecond time resolution) by laser induced and resonance fluorescence, resonance absorption, IR emission and laser absorption

RESEARCH TOPICS

- laser-induced chemistry: the kinetics of unimolecular and bimolecular reactions of species internally excited by the absorption of single or multiple laser photons
- vibrational relaxation of small polyatomic molecules and of diatomic molecules in high vibrational levels
- kinetics of important atmospheric reactions, especially radical-radical reactions
- kinetics and dynamics of hydrogen-bonded species in the gas phase
- energy transfer and chemical reactions of species trapped in low temperature matrices

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UNIVERSITY COLLEGE CARDIFF

---

Department of Chemistry  
Cathays Park

CARDIFF CF1 1XL, U K

TELEPHONE: (0222) 442 11

-----  
RESEARCH INTERESTS: CP/CY;CD ..... GB-CF OW

RESEARCH TEAM HEAD(S)

E D Owen (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- polymer degradation (in particular PVC)
- dye photochemistry

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RESEARCH INTERESTS: PO/PK;AT;AP ..... GB-CF WH

RESEARCH TEAM HEAD(S)

E Whittle (prof)(\*)

STAFF MEMBERS

P Taylor; C A Macadam; R Tuckerman

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry and photooxidation of freons, in the vapour phase, particularly those containing bromine
- photochemistry of organic fluorine compounds
  - photochemistry of fluorinated anhydrides in the vapour phase
  - photochemistry of fluorinated ketones in the vapour phase
- kinetics and thermodynamics of halogenation reactions initiated photochemically in the vapour phase

ELECTRICAL COUNCIL RESEARCH CENTRE

Chemistry Section  
Capenhurst

CHESTER CH1 6ES, U K

TELEPHONE: (051) 339 41 81

RESEARCH INTERESTS: CO/CR;CE ..... GB-CH HU

RESEARCH TEAM HEAD(S)

R Barker (dr)  
P D Francis  
J Hutchison (dr)  
R Redford

STAFF MEMBERS

A D Aldridge (rt); M Taylor (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- atmospheric and nitrogen-inerted UV curing equipment
- microwave powered UV sources
- high intensity, low pressure UV sources

RESEARCH TOPICS

- exploring the industrial potential of photochemical synthetic processes
- extending the scope of UV curing of surface coatings
- photochemical destruction of pollutants and odours (gas and liquid phases)

KELSTERTON COLLEGE, NORTH E. WALES INSTITUTE

Research Division, School of Natural Sciences  
Connah's Quay

CLWYD CH5 4BR, U K

TELEPHONE: DEESIDE 81 75 31

RESEARCH INTERESTS: PO;PB/CD;BC ..... GB-CH PH

RESEARCH TEAM HEAD(S)

G O Phillips (dr)(\*)  
B J Parsons (dr)

STAFF MEMBERS

S Navaratnam (dr)(\*); P F Heelis (dr)(\*); P C Beaumont (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- nanosecond flash photolysis



RESEARCH TOPICS

- laser flash photolysis studies of furocoumanins, flavins and drugs in solution
  - interaction of excited states of furocoumarines with DNA in solution
  - photoreduction of flavins by amino acids, EDTA, ascorbic acid
  - photodegradation of flavins in solution
  - photodegradation and photoionization of ephedrine in solution
  - interaction of semiquinone free radicals with melanin

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UNIVERSITY OF KENT AT CANTERBURY

---

University Chemical Laboratory

CANTERBURY CT2 7NH, U K

TELEPHONE: (0227) 668 22

-----  
RESEARCH INTERESTS: CO/CR ..... GB-CT RE

RESEARCH TEAM HEAD(S)

S T Reid (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of nitroalkanes, nitroalkenes and alpha-beta-unsaturated sulfones
- photorearrangements and photocycloaddition reactions of heterocycles
- photochemical synthesis of medium ring heterocycles

---

UNIVERSITY OF WARWICK

---

Department of Chemistry and Molecular Sciences

COVENTRY CV4 7AL, U K

TELEPHONE: (0203) 240 11

-----  
RESEARCH INTERESTS: CO;PO;CI/CR;PK ..... GB-CV KE

RESEARCH TEAM HEAD(S)

T J Kemp (\*) (prof)

A Cox

C J Samuel

STAFF MEMBERS

---

SPECIAL PHOTOCHEMICAL TECHNIQUES

- ns laser flash photolysis
- x-band EPR
- matrix isolation

RESEARCH TOPICS

- photophysics of metal complexes
- electron- and energy-transfer
- photochemistry of diazonium salts
- EPR of matrix-isolated species
- biradicals and triplet states
- photochemical synthesis

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UNIVERSITY OF DUNDEE

---

Department of Chemistry

DUNDEE DD1 4HN, U K

TELEPHONE: (0382) 231 81

-----  
RESEARCH INTERESTS: CO/CR ..... GB-DD HORESEARCH TEAM HEAD(S)

W M Horspool (dr)

STAFF MEMBERS  
---SPECIAL PHOTOCHEMICAL TECHNIQUES  
---RESEARCH TOPICS  
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EDINBURGH INSTRUMENTS LTD

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Riccarton  
Currie

EDINBURGH EH14 4AP, U K

TELEPHONE: (031) 449 6671

-----  
RESEARCH INTERESTS: MA/LS ..... GB-EH DERESEARCH TEAM HEAD(S)M Bennet (dr)  
R B Dennis (dr)STAFF MEMBERS

D J S Birch (dr)(\*); R E Imhof (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence lifetime spectrometer manufacturer
- nanosecond flashlamp manufacturer

RESEARCH TOPICS

- laser sources from UV to FIR

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UNIVERSITY OF EDINBURGH

---

Department of Chemistry  
West Mains Road

EDINBURGH EH9 3JJ, U K

TELEPHONE: (031) 667 10 81

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RESEARCH INTERESTS: CP/PK;LS ..... GB-EH DO

RESEARCH TEAM HEAD(S)

R J Donovan (prof)

STAFF MEMBERS

C Fotakis (dr); M Martin (dr); A Hopkirk; C Copestick

SPECIAL PHOTOCHEMICAL TECHNIQUES

- excimer laser
- VUV monochromators
- mass spectrometers
- midi computer for data capture and processing
- specialized photomultipliers and atomic lamps for use in VUV

RESEARCH TOPICS

- multiphoton excitation (UV)
- laser photochemistry (UV)
- excited state kinetics of atoms and small molecules
- energy transfer
- chemical laser development
- atmospheric chemistry (atomic and free-radical reactions of the stratosphere)
- spectroscopy of small transient species
- photoionization

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HERIOT-WATT UNIVERSITY

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Chemistry Department  
Riccarton  
Currie

EDINBURGH EH14 4AS, U K

TELEPHONE: (031) 449 5111

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RESEARCH INTERESTS: PP/CY;CC;CA ..... GB-EH SO

RESEARCH TEAM HEAD(S)

I Soutar

STAFF MEMBERS

A A Abdulla; K Davidson; M A Neish; D Service; C Graham (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- macromolecular photophysics
  - relaxations in polymers
  - oil spill identification
  - plastic scintillators
- 

RESEARCH INTERESTS: CP;PO/SP;LS ..... GB-EH PF

RESEARCH TEAM HEAD(S)

J Pfab (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry and electronic absorption, emission, and photoelectron spectra of C-nitroso compounds and other small polyaromatic molecules

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UNIVERSITY OF EXETER

---

Department of Chemistry

EXETER EX4 4QD, UK

TELEPHONE: (0392) 779 11

---

RESEARCH INTERESTS: CP/SE;PL ..... GB-EX RO

RESEARCH TEAM HEAD(S)

D R Rosseinsky  
A G Osborne

STAFF MEMBERS

P Kathirgamanathan (dr); A Blake (dr); F R Mayers

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photoelectrochemistry of electrocrystallized thin solid films

RESEARCH TOPICS

- prediction of thermal electron transfer rate from charge-transfer spectral data
- novel photovoltaic materials of organic and inorganic origin
- derivatisation of inorganic semiconductors for photovoltaic/electrolyte systems

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UNIVERSITY OF STRATHCLYDE

---

Department of Pure and Applied Chemistry

GLASGOW G1 1XL, U K

TELEPHONE: (041) 552 44 00

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RESEARCH INTERESTS: CP/CY;PC ..... GB-G1 NORESEARCH TEAM HEAD(S)

A M North (prof)

STAFF MEMBERS

R A Pethrick (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- conventional nanosecond and CW emission spectrometers

RESEARCH TOPICS

- exciton migration and trapping at excimer sites in macromolecular systems

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UNIVERSITY OF STRATHCLYDE

---

Department of Applied Physics  
John Anderson Building, 107 Rottenrow

GLASGOW G4 ONG, U K

TELEPHONE: (041) 552 44 00

---

RESEARCH INTERESTS: PP/SP;PK;BP ..... GB-G4 BIRESEARCH TEAM HEAD(S)

D J S Birch (dr)(\*)

R E Imhof (dr)(\*)

STAFF MEMBERS

S Alawi; K Davidson

SPECIAL PHOTOCHEMICAL TECHNIQUES- single photon counting spectrometer using Edinburgh Instruments coaxial flashlamp and convolution analysis giving sub-nanosecond resolution  
- scintillation decay time spectrometer  
- non-radiative spectrometerRESEARCH TOPICS- photophysics of polyenes  
- plastic scintillator studies  
- fluorescent biological probes  
- development of novel photophysical instrumentation

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KODAK LTD

---

Research Division, Chemistry Research Department  
Headstone Drive

HARROW, MIDDLESEX HA1 4TY, U K

TELEPHONE: (01) 427 4380

---

RESEARCH INTERESTS: CP;PO/CY;CD;PT;RG ..... GB-HA RE

RESEARCH TEAM HEAD(S)

A Reiser (\*)  
T R Wright (\*)

STAFF MEMBERS

P L Egerton (\*); H E Graves; M Graley; M V Mijovic; F W Willets;  
P Levin (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of polymeric systems
- photochemistry of photographic dyes

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KINGSTON POLYTECHNIC

---

Chemical and Physical Sciences  
Penrhyn Road

KINGSTON-UPON-THAMES KT1 2EE, U K

TELEPHONE: (01-549) 13 66

---

RESEARCH INTERESTS: PO/CE;PK ..... GB-KT WE

RESEARCH TEAM HEAD(S)

C H J Wells (dr)

STAFF MEMBERS

---

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of pyrimidine-based pesticides

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UNIVERSITY OF LIVERPOOL

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Department of Inorganic, Physical and Industrial Chemistry  
P O Box 147

LIVERPOOL L69 3BX, U K

TELEPHONE: (051) 709 60 22

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RESEARCH INTERESTS: CP;CO;PO/CY;CC;CR;RG;PN;PC ..... GB-L6 LE

RESEARCH TEAM HEAD(S)

A Ledwith (prof)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- exciplex interactions
- photo-crosslinking
- photo induced electron transfer
- photo-initiated polymerisation

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LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

---

Department of Chemistry

LOUGHBOROUGH LE11 3TU, U K

TELEPHONE: (0509) 631 71

---

RESEARCH INTERESTS: CP/PK;LS;SE ..... GB-LE WI

RESEARCH TEAM HEAD(S)

F Wilkinson (prof)(\*)

STAFF MEMBERS

W P Hagan (dr); C J Willsher (dr); M S Thacker; S L Collins

SPECIAL PHOTOCHEMICAL TECHNIQUES

- tunable nanosecond laser flash photolysis
- diffuse reflectance flash photolysis
- nanosecond-fluorescence lifetime and spectra

RESEARCH TOPICS

- laser flash photolysis of organic molecules adsorbed on catalytic surfaces and semiconductor electrodes; application to solar energy and photocatalysis
- electronic energy transfer from organic molecules to coordination complexes
- quenching of triplet states by quinones due to charge-transfer interaction
- physical and chemical properties of singlet oxygen in fluid solvents
- photodegradation and stabilisation of polymers
- intermolecular energy transfer in rigid matrices

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UNIVERSITY OF LEEDS

---

Department of Physical Chemistry

LEEDS LS2 9JT, U K

TELEPHONE: (0532) 75 51 74

---

RESEARCH INTERESTS: CP;PO/AT;AP;PK ..... GB-LS BARESEARCH TEAM HEAD(S)

D Baulch (dr)(\*)

I M Campbell (dr)

STAFF MEMBERS

G Ashurst (rt); R J B Craven (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- kinetics and mechanism of gas phase reactions of free radicals

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MANCHESTER POLYTECHNIC

---

John Dalton Faculty of Technology/Department of Chemistry

MANCHESTER M1 5GD, U K

TELEPHONE: (061) 228 61 71

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RESEARCH INTERESTS: PO;CA/CY;CC;CO ..... GB-M1 ALRESEARCH TEAM HEAD(S)

N S Allen (dr)

STAFF MEMBERS

K Fatinikun; E Collinson; J Binkley

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Baird-Atomic Fluorospec
- phosphorimeter (Aminco-Bowman)
- UV-vis absorption derivative spectrophotometer
- X-ray fluorescence

RESEARCH TOPICS

- photochemistry of anthraquinone dyes
- photochemistry of basic dyes
- photochemistry of nylon polymers
- photochemistry of epoxy resin-dye systems
- development of visible light dosimeters
- photooxidation and stabilization of new process polyolefins
- photostabilization mechanisms in polymers



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UNIVERSITY OF SALFORD

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Department of Biochemistry

SALFORD M5 4WT, U K

TELEPHONE: (061) 736 5843

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RESEARCH INTERESTS: CP;PP;PB/CD;PK;SP;CL;BP;RC ..... GB-M5 CURESEARCH TEAM HEAD(S)

R B Cundall

STAFF MEMBERSA K Davies (dr); R H Bisby (dr); C G Morgan (dr); M W Jones (dr);  
J T Richards (dr); D A Duddell (dr)SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorimetry
- fluorometry (phase shift as well as pulse methods)
- laser flash photolysis
- pulse radiolysis

RESEARCH TOPICS

- basic photophysics of systems of biochemical interest
- anisotropy measurements of biochemical systems
- photoinitiation and photocuring

---

UNIVERSITY OF SALFORD

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The Ramage Laboratories/Department of Chemistry and Applied Chemistry

SALFORD M5 4WT, U K

TELEPHONE: (061) 736 5843

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RESEARCH INTERESTS: CO/CR ..... GB-M5 HIRESEARCH TEAM HEAD(S)

J Hill (dr)(\*)

STAFF MEMBERS

J Deodhar; S A Ashraf

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- preparative photochemistry of alpha-substituted carbonyl compounds, in particular, beta-ketosulfides and alpha-N-aryl-N-alkylaminoketones

THE OPEN UNIVERSITY

Department of Chemistry  
Walton Hall

MILTON KEYNES MK7 6AA, U K

TELEPHONE: (0908) 65 33 58

RESEARCH INTERESTS: CO/CR;PK ..... GB-MK CO

RESEARCH TEAM HEAD(S)

J D Coyle (dr)(\*)  
R R Hill (dr)

STAFF MEMBERS

L R B Bryant; D Randall (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- heterocyclic compounds by photocyclization
- photochemistry of imides and amides
- luminescence of imides and amides
- photochemistry of diketopiperazines

UNIVERSITY OF NOTTINGHAM

Department of Chemistry

NOTTINGHAM NG7 2RD, U K

TELEPHONE: (0632) 561 01

RESEARCH INTERESTS: CI/CM;LS ..... GB-NG TU

RESEARCH TEAM HEAD(S)

J J Turner (prof)(\*)  
M Poliakoff (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- matrix isolation
- IR laser photochemistry

RESEARCH TOPICS

- photochemistry in liquid noble gases
- matrix photochemistry of metal carbonyls and related species
- IR laser photochemistry in matrices
- gas phase IR laser photochemistry

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UNIVERSITY OF EAST ANGLIA

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School of Chemical Sciences

NORWICH NR4 7TJ, U K

TELEPHONE: (0603) 56161

---

RESEARCH INTERESTS: CP;PP/PK ..... GB-NR HURESEARCH TEAM HEAD(S)

T F Hunter (dr)

STAFF MEMBERS

P Lyon; C White

SPECIAL PHOTOCHEMICAL TECHNIQUES

- optoacoustic technique

RESEARCH TOPICS

- radiationless process in aromatic and aza-aromatic compounds (vapour phase)
  - vibrational-vibrational relaxation
  - spectra of vibrational overtone spectra in the visible
  - specific vibrations excited in halogen intermolecular relaxation
  - optoacoustic aspects of unimolecular decay studies
- 

RESEARCH INTERESTS: CP;PP/AT;SP;LS ..... GB-NR SORESEARCH TEAM HEAD(S)

J R Sodeau (dr)(\*)

D L Andrews (dr)(\*)

STAFF MEMBERS

R Withnall; W A Ghoul

SPECIAL PHOTOCHEMICAL TECHNIQUES

- liquid He closed-cycle cryogenic equipment for matrix photochemistry studies; analysis by FTS-IR

RESEARCH TOPICS

- investigations of intermediates involved in some small molecule photoreactions at low temperatures
- photooxidation of fluorocarbons
- photochemistry of simple sugars

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OXFORD UNIVERSITY

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Physical Chemistry Laboratory  
South Parks Road

OXFORD OX1 3QZ, U K

TELEPHONE: (0865) 533 22

RESEARCH INTERESTS: CP;PP/PK;SP;LS ..... GB-OX HA

RESEARCH TEAM HEAD(S)

G Hancock (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- single mode CO2 laser with pulse shaping facilities
- single mode narrow bandwidth CW dye laser

RESEARCH TOPICS

- IR multiple photon dissociation studies of gas phase molecules, with time resolved detection of radical fragments using laser induced fluorescence (intensity dependences of product yields; internal state distribution of fragments)
  - kinetics of small gas phase free radicals produced by IR multiple photon dissociation and detected by laser induced fluorescence: CH2, CHF, and CF2 radicals
  - Doppler free polarization spectroscopy of free radicals, particularly for measurements of predissociation linewidths
- 

RESEARCH INTERESTS: CP/PC;RC ..... GB-OX PI

RESEARCH TEAM HEAD(S)

M J Pilling

STAFF MEMBERS

----

SPECIAL PHOTOCHEMICAL TECHNIQUES

- excimer laser (Lumonics TE-861S)
- excimer laser (Oxford Lasers KX2)
- time-correlated single photon counting

RESEARCH TOPICS

- kinetics of free radical reactions in the gas phase: reactions of CH3, allyl, t-butyl and HO2 radicals at temperatures from 200 to 1000 K
- kinetics of atom + radical reactions using absorption spectroscopy coupled with resonance fluorescence
- non-resonant energy transfer from excited states of aromatic molecules in the vapour phase
- temperature dependence of electrons transfer reactions in the liquid phase; reactions of excited states of transition metal ions (Ru(II) complexes) and of excited states of aromatic molecules
- modelling of the kinetics of radiation induced spurs using stochastic methods

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OXFORD UNIVERSITY

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Inorganic Chemistry Laboratory  
South Parks Road

OXFORD OX1 3QR, U K

TELEPHONE: (0865) 573 87

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RESEARCH INTERESTS: CI/CR;PE;PL ..... GB-OX SE

RESEARCH TEAM HEAD(S)

K R Seddon (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photoelectrochemical decomposition of water
- luminescence of ruthenium-diimine complexes
- photoinduced template synthesis

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UNIVERSITY OF OXFORD

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Physical Chemistry Laboratory  
South Parks Road

OXFORD OX1 3QZ, U K

TELEPHONE: (0865) 590 54

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RESEARCH INTERESTS: CP/AT;PK ..... GB-OX WA

RESEARCH TEAM HEAD(S)

R P Wayne (dr)(\*)

STAFF MEMBERS

D Ralph; M Fowles; T Wallington

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- kinetics and spectroscopy of atoms and small radicals
- reactions of electronically excited species (singlet O, O<sub>2</sub> etc)
- photochemistry of the atmosphere of earth and other planets
- pollution of the troposphere and the stratosphere
- ion-molecule reactions of ionospheric importance
- reactions of metal atoms and metal ions in relation to possible ionospheric processes

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METAL BOX LTD

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Research and Development Division  
Denchworth Road

WANTAGE OX12 9BP, U K

TELEPHONE: (WANTAGE) 29 29

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RESEARCH INTERESTS: CP;CO;PP/CY;CD;PK;SP;LS;PC;PT;PG;RG ..... GB-OX LO

RESEARCH TEAM HEAD(S)

A D Lott

STAFF MEMBERS

R E Munn; J Maitland (dr); R Phillips (dr); N S Gerrard

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- non-silver imaging systems
- photosensitive coatings for printing plates
- UV radiation sources
- photopolymerization of organic surface coatings
- spectral radiometry

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READING UNIVERSITY

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Chemistry Department  
Whiteknights

READING RG6 2AD, U K

TELEPHONE: (0734) 851 23

---

RESEARCH INTERESTS: CO/CR;PK ..... GB-RG BR

RESEARCH TEAM HEAD(S)

D Bryce-Smith (prof)(\*)  
A Gilbert (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of aromatic systems, in particular inter- and intra-molecular photoaddition reactions to the benzene and naphthalene rings

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RESEARCH INTERESTS: CP/PK;LS;AT ..... GB-RG FR

RESEARCH TEAM HEAD(S)

H M Frey (prof)(\*)  
R Walsh (dr)(\*)

STAFF MEMBERS

C E Canosa-Mas (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- exciplex and carbon dioxide (TEA) lasers

RESEARCH TOPICS

- photochemistry of ketene and the reactions of methylene
- multiphoton laser induced photochemistry of small ring compounds and alkyl fluorides
- rates of unimolecular radical isomerisation using photochemical initiation

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UNIVERSITY OF SOUTHAMPTON  
-----

Department of Chemistry

SOUTHAMPTON SO9 5NH, U K

TELEPHONE: (0703) 55 91 22  
-----

RESEARCH INTERESTS: CI;CO;CP/CM;CR;CD;CY;PL;PN ..... GB-SO RE

RESEARCH TEAM HEAD(S)

A J Rest (dr)(\*)  
J M Mellor (dr)  
L M Peter (dr)

STAFF MEMBERS

----

SPECIAL PHOTOCHEMICAL TECHNIQUES

- (AJR)
- photochemistry and photophysics in low temperature matrices
- portable 12 K closed-cycle He cryostats interfaced with infrared, UV/visible and emission spectrometers and also with nanosecond single photon counter (LMP)
- photocurrent spectroscopy of semiconductor/electrolyte systems
- photochemical system based on semiconductor powders

RESEARCH TOPICS

(AJR)

- matrix isolation spectroscopy as a means of characterising unstable species proposed as intermediates in organometallic chemistry and photochemistry
- spectroscopy and photophysics in low temperature matrices
- comparative studies of photoprocesses in matrices in relation to those occurring in gas and solution phases (LMP)
- examination of semiconductors by photocurrent spectroscopy
- study of the growth of dielectric and semiconducting layers on electrodes
- characterisation of photoelectrodes for electrochemical solar energy conversion
- comparative studies of semiconductor dispersions for photocatalysis and photoelectrocatalysis

UNIVERSITY OF KEELE

Department of Chemistry

KEELE ST5 5BG, UK

TELEPHONE: (0782) 62 11 11

-----  
RESEARCH INTERESTS: CP/PK;SP ..... GB-ST BORESEARCH TEAM HEAD(S)

P Borrell (dr)

STAFF MEMBERS

---

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- application of synchrotron radiation in photochemistry
- photochemical cis/trans isomerisation
- discharge flow/shock tube studies of excited state molecules

UNIVERSITY COLLEGE OF WALES

Edward Davies Chemical Laboratories

ABERYSTWYTH SY23 1NE, U K

TELEPHONE: (0970) 61 76 45

-----  
RESEARCH INTERESTS: CO/PC;CR ..... GB-SY HERESEARCH TEAM HEAD(S)

H G Heller (prof)(\*)

STAFF MEMBERS

P Darcy (dr)(\*); S Oliver (dr)(\*)



SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- studies of thermally stable photochemically fatigue-resistant photochromic compounds suitable for optical information storage, actinometry, etc
- photopolychromic and inverse photochromic compounds

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ROFIN LTD

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Winslade House  
Egham Hill

EGHAM, SURREY TW20 OAZ, U K

TELEPHONE: (0784) 375 41/4

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RESEARCH INTERESTS: --/-- ..... GB-TW KE

RESEARCH TEAM HEAD(S)

D R Kemp (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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I C I

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Corporate Lab/Group Cramp  
P O Box 11  
The Heath

RUNCORN, CHESHIRE WA7 4QE, U K

TELEPHONE: (09285) 734 56

-----  
RESEARCH INTERESTS: CP;CO/LS;CE;OT ..... GB-WA CR

RESEARCH TEAM HEAD(S)

J H W Cramp (dr)

STAFF MEMBERS

T J Noakes (dr); R M Glen (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- 100 Hz pulsed IR laser
- continuous IR laser

RESEARCH TOPICS

- IR laser chemistry
- UV laser chemistry
- laser atmospheric monitoring

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RESEARCH INTERESTS: CP/SE;PE ..... GB-WA HA

RESEARCH TEAM HEAD(S)

R A Hann (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- continuous fluorescence polarisation

RESEARCH TOPICS

- water photolysis
- biomembrane investigation with fluorescent probes

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DARESBURY LABORATORY


---

WARRINGTON WA4 4AD, U K

TELEPHONE: (0925) 650 00

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RESEARCH INTERESTS: PP/PK;SP ..... GB-WA MU

RESEARCH TEAM HEAD(S)

I H Munro (dr)

STAFF MEMBERS

M Kelly (dr); C Morgan (dr); G Diakun (dr); G Mant (dr); V Sieber (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- synchrotron radiation source (the Davesbury S.R.S.)
- picosecond anisotropy apparatus
- high frequency (500 MHz) phase shift apparatus
- high resolution (0.01 Å) spectrometer
- streak camera

RESEARCH TOPICS

- fluorescent probes to study protein and membrane dynamics
  - general radiation damage studies using radiation in the range from UV to X-rays
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NUCLEAR RESEARCH CENTER "DEMOKRITOS"

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Department of Chemistry

AGHIA PARASKEVI (ATTIKI), GREECE

TELEPHONE: (01) 6513111

---

RESEARCH INTERESTS: PO/PC;SE ..... GR-AG HARESEARCH TEAM HEAD(S)

E Hadjoudis (\*)

D Gegiou (\*)

STAFF MEMBERS

I Mavridis; I Argyroglou; S Filippakopoulou (t); S Mallerou (t);

D Tsiipi; P Mastrantonis; I Ragazos; J Kexakis; G Bersos

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis apparatus (Hivotronic)
- flash photolysis apparatus (Xenon)
- pulse sampling fluorometer (Applied Photophysics)

RESEARCH TOPICS

- electronic absorption and emission properties of organic compounds and their photochemistry, with emphasis on reversible photochromic and thermochromic systems in crystalline state, rigid glasses and solutions
- photochemical storage of solar energy

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ARISTOTELIAN UNIVERSITY

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Department of Chemistry/School of Physics and Mathematics

THESSALONIKI, GREECE

TELEPHONE: (031) 991 24 74

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RESEARCH INTERESTS: CI/CM;PK;SP ..... GR-TH MARESEARCH TEAM HEAD(S)

G Manoussakis (prof)

STAFF MEMBERS

C Tsiamis (dr)(\*); E Bakalbassis; E Tsorlinis (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- microsecond flash photolysis
- xenon arc lamp
- fluorimeter

RESEARCH TOPICS

- energy transfer to transition metal complexes
- quenching of luminescence of complexes
- photoinduced ligand substitution reactions

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HUNGARIAN ACADEMY OF SCIENCES

---

Central Research Institute for Chemistry  
Department of Homogeneous Reaction Kinetics  
Pusztaszeri ut 59/67

H-1025 BUDAPEST

TELEPHONE: (361) 353-539

---

RESEARCH INTERESTS: CP/PK;AT ..... H-10 BERESEARCH TEAM HEAD(S)

T Bérces (prof)

STAFF MEMBERS

S Förgeteg (dr); S Dóbbé (dr); L Biczók; B László; G Lendvai

SPECIAL PHOTOCHEMICAL TECHNIQUES

- nanosecond spectrometer

RESEARCH TOPICS

- photolysis of aliphatic carbonyl compounds
- primary and secondary processes in carbonyl compound photolysis under atmospheric conditions
- photoreduction reactions of carbonyl compounds
- kinetics of transients produced by laser or flash photolysis

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INSTITUTE FOR DRUG RESEARCH

---

Szabadsagharcosok utja 47-49

H-1045 BUDAPEST

TELEPHONE: (0036-1) 690-203, -011

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RESEARCH INTERESTS: CO/CR;BC ..... H-10 FARESEARCH TEAM HEAD(S)

L Farkas (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of heterocyclic compounds
- photochemical reactions of uracil derivatives with different compounds (mostly heterocyclic)

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HUNGARIAN ACADEMY OF SCIENCES

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Central Research Institute for Chemistry  
Department of Oxidation Processes  
Pusztaszeri u. 59-67

H-1025 BUDAPEST

TELEPHONE: (361) 151-641

---

RESEARCH INTERESTS: PO/PK;CL;LS ..... H-10 GARESEARCH TEAM HEAD(S)

D Gal (prof)(\*)

STAFF MEMBERS

G Irinyi (dr); A Kessler; J Lukács (dr); G Mőger (dr); G Vasvári (dr);  
T Vidóczy (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- chemiluminescence apparatus for very low-intensity measurements
- flashlamp pumped tunable dye laser induced flash photolysis

RESEARCH TOPICS

- fundamental studies on the mechanism and kinetics of liquid phase hydrocarbon oxidation systems, including elementary steps and characteristics of transient species formed in ground and excited states; singlet oxygen studies

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SEMELWEISS UNIVERSITY OF MEDICINE

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Institute of Biophysics / Laboratory of Nucleoproteid Photochemistry  
P O B 263

H-1444 BUDAPEST

TELEPHONE: 341-132

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RESEARCH INTERESTS: PO;CT;PB/CC;SP;CD;PK;BP ..... H-14 TARESEARCH TEAM HEAD(S)

I Tarján (prof)  
G Rontó (prof)

STAFF MEMBERS

S Dobos (dr); A Fekete (dr); J Fidy (dr); S Gáspár; L Herényi; Z Laczkó  
(dr); K Módos; K Raksányi; K Tóth (dr); K Pataki

SPECIAL PHOTOCHEMICAL TECHNIQUES

- optical and fluorescence melting
- nanosecond techniques
- fluorescence labels
- computer assisted absorption and fluorescence spectroscopy

RESEARCH TOPICS

- UV photochemistry of nucleoproteids:
  - effect of conformation, wavelength dependence
  - comparison of conventional and laser sources
- photochemistry and photobiology of furocoumarins
- study of nucleic acid structure by fluorescent labels
- photochemistry of nucleotide bases in crystalline state
- CD
- IR and UV absorption spectroscopy of nucleic acids and their components
- quantum mechanical interpretation of the photoreactivity of nucleic acid bases
- theoretical interpretation of radiation kinetics

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HUNGARIAN ACADEMY OF SCIENCES

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Institute of Isotopes  
 Department of Physical Chemistry/Radiation Chemistry Group  
 P O Box 77

H-1525 BUDAPEST

TELEPHONE: (361) 166-440/238

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RESEARCH INTERESTS: PO/RC;OT ..... H-15 FORESEARCH TEAM HEAD(S)

G Földiák (prof)(\*)

STAFF MEMBERS

L Wojnárovits (dr); C Keszei (dr); L Kozári (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- VUV photolysis (bromine lamp, 7.6 eV; nitrogen lamp, 7.1 eV)
- nitrogen laser

RESEARCH TOPICS

- photochemical reactions of alkanes (especially the decomposition processes and kinetics)

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TECHNICAL UNIVERSITY OF BUDAPEST

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Department of Organic Chemistry  
 Gellért tér 4

H-1521 BUDAPEST XI

TELEPHONE: (361) 452-178

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RESEARCH INTERESTS: CO/CR ..... H-15 LE

RESEARCH TEAM HEAD(S)

K Lempert (prof)(\*)

STAFF MEMBERS

J Nyitrai (dr); J Fetter (dr); G Hornyák (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of nitrogen heterocyclic compounds with special interest in the photochemistry of heteroaromatic ammonioamidates
-

UNIVERSITA DI PERUGIA

Dipartimento de Chimica  
Laboratorio di Fotochimia  
Via Elce di Sotto 8

I-06100 PERUGIA

TELEPHONE: (075) 416 19 OR /86

-----  
RESEARCH INTERESTS: PO/CD ..... I-06 MARESEARCH TEAM HEAD(S)

U Mazzucato (prof)(\*)

STAFF MEMBERS

C G Aloisi (dr)(\*); G Bartocci (dr)(\*); G Favaro Mazzucato (dr)(\*);  
F Masetti (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- fluorescence spectrophotometer with phosphorescence and spectrum correction accessories (Perkin Elmer MPF-44)
- apparatus for phosphorescence decay measurements (home made)
- single photon fluorescence decay equipment (home made)
- continuous flow cryostat for absorption and luminescence measurements (Oxford Instruments CF-204)
- conventional flash photolysis apparatus (home made)
- ruby laser flash photolysis apparatus (Applied Photophysics)

RESEARCH TOPICS

- photochemical and photophysical studies on organic compounds in solution:
- photoreaction mechanism of stilbene-like molecules (trans-cis photoisomerization, photocyclization, conformational equilibria, aggregation, luminescence)
- exciplexes of aromatic molecules with electron donors and acceptors and their role in photoreactions
- acid-base equilibria of aza-aromatics in excited states
- photophysical behaviour of aromatic molecules (luminescence quantum yield and lifetime, radiationless transitions)
- energy transfer and other bimolecular interactions of aryl-ketones studied by intensity and lifetime phosphorescence quenching and phosphorescence sensitization

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RESEARCH INTERESTS: PO/CD;MI ..... I-06 PORESEARCH TEAM HEAD(S)

A Poletti (dr)(\*)

STAFF MEMBERS

S M Murgia (dr)(\*)



SPECIAL PHOTOCHEMICAL TECHNIQUES

cf. Mazzucato

RESEARCH TOPICS

- photophysical studies of methylene blue in different micellar phases and of hematoporphyrine IX - beta carotene system and pyrene in sodium deoxycholate micelles
- photophysics of dyes in solution and immobilized on polymers

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UNIVERSITA DI PERUGIA

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Dipartimento di Chimica  
Laboratorio di Fotochimica Inorganica  
Via Elce di Sotto, 8

I-06100 PERUGIA

TELEPHONE: (075) 443 32, 412 36

-----  
RESEARCH INTERESTS: CI/PK ..... I-06 ZIRESEARCH TEAM HEAD(S)

E Zinato (prof)(\*)  
P Riccieri (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of coordination compounds, with special emphasis on the stereochemistry and mechanisms of photosubstitution in Cr(III) complexes

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UNIVERSITA DI MILANO

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Cattedra di Chimica  
via C Saldini, 50

I-20133 MILANO

TELEPHONE: (02)29 52 29

-----  
RESEARCH INTERESTS: PO/CC;CD;PL;SE ..... I-20 BERESEARCH TEAM HEAD(S)

I R Bellobono (prof)(\*)

STAFF MEMBERS

E Dubini Paglia (prof); L Zanderighi (prof); E Selli (dr)(\*); B Marcandalli (dr); M C Leonardi (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical grafting and graft-polymerization of dyes onto polymeric surfaces
- kinetic and mechanism of photodegradation of dyes
- coupling of photochemical reactions and charge transfer processes (both at photoactive and non-photoactive electrodes), with particular reference to energy conversion

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ISTITUTO DI CHIMICA DEL POLITECNICO

---

P.za Leonardo da Vinci 32

I-20133 MILANO

TELEPHONE: (02) 23 08 45

---

RESEARCH INTERESTS: CO/CR ..... I-20 CA

RESEARCH TEAM HEAD(S)

T Caronna (\*)  
S Morrocchi (\*)

STAFF MEMBERS

D Coggiola

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of heteroaromatic bases in neutral or acidic medium

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UNIVERSITA DEGLI STUDI DI MILANO

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Istituto di Chimica Industriale  
Via C Golli 19

I-20133 MILANO

TELEPHONE: (02) 29 33 54

---

RESEARCH INTERESTS: CO/CR ..... I-20 MA

RESEARCH TEAM HEAD(S)

A Marchessini (prof)(\*)

STAFF MEMBERS

E M Beccalli (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical behaviour of 3-azido-2-cycloocten-1-one, isoxadophanes, 5-aminoisoxazoles, (3,5)polymethylene-2-cyclohexen-1-ones

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UNIVERSITA DI PAVIA

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Istituto di Chimica Organica  
viale Taramelli 10

I-27100 PAVIA

TELEPHONE: (02) 272 26

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RESEARCH INTERESTS: CO/CR;PK ..... I-27 PIRESEARCH TEAM HEAD(S)

S Pietra (prof)

STAFF MEMBERSA Albini (dr)(\*); G F Bettinetti (dr)(\*); E Fasani (dr)(\*);  
G Minoli (dr)(\*)SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of nitrogen containing compounds: photoisomerization; photosubstitution and photooxidation of nitrogen containing heterocyclics
- chemistry of photochemically or thermally generated nitrenes
- synthesis and photochemical studies of metal carbonyl complexes of azo derivatives
- photochemistry of azo dyes
- photochemistry of cyano and nitro substituted aromatics, with particular regard to exciplex formation and electron transfer to the excited states

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UNIVERSITA DI PADOVA

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Istituto Chimica Organica  
Via Marzolo, 1

I-35100 PADOVA

TELEPHONE: 664-522

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RESEARCH INTERESTS: PO/CR;PK ..... I-35 GA

RESEARCH TEAM HEAD(S)

G Galiazzo (dr)(\*)  
G Gennari (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical behaviour of stilbene and azanalogs, photoisomerization, photocyclization and photodimerization

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UNIVERSITA DI PADOVA

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Istituto di Biologia Animale  
Via Loredan 10

I-35100 PADOVA

TELEPHONE: (049) 66 2900

RESEARCH INTERESTS: PB/BC;PM ..... I-35 JO

RESEARCH TEAM HEAD(S)

G Jori (dr)(\*)  
F Rubaltelli (dr)

STAFF MEMBERS

B Salvato; E Reddi; E Rossi; I Cozzani; L Tomio; P Zorat

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photosensitized reactions of amino acids and proteins
  - mechanism of the photoreactions
  - effects on the functional and conformational properties
  - photosensitized reactions as tools for mapping the three-dimensional structure of proteins and metalloproteins
- photobiology of porphyrins
  - relationships between chemical structure and photosensitizing efficiency
  - effect of the microenvironment on the photosensitizing efficiency
  - physico-chemical properties of the porphyrin excited states
- phototherapy
  - phototherapy of neonatal jaundice (hyperbilirubinemia): mechanisms of blue-light-induced photodegradation of bilirubin; photophysical properties of bilirubin and related bile pigments; etiology of undesired side effects of phototherapy at the molecular level
  - early diagnosis of neoplasias by porphyrin fluorescence analysis
  - experimental therapy of several types of neoplasias by visible light irradiation in the presence of porphyrins

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UNIVERSITA DI PADOVA

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Institute of Pharmaceutical Chemistry  
Via F. Marzolo no 5

I-35100 PADOVA

TELEPHONE: (049) 66 35 00

---

RESEARCH INTERESTS: PB/PM ..... I-35 RO

RESEARCH TEAM HEAD(S)

G Rodighiero (prof)  
F Dall'Acqua (prof)(\*)

STAFF MEMBERS

D Vedaldi; F Bordin; F Baccichetti; F Carlassare; A Guiotto; P Rodighiero;  
G Pastorini; M Peron; S Marciari Magno; A Cipriano; O Gia

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- study of the photoreactions between DNA and the furocoumarins
- isolation and characterization of the adducts formed in these photoreactions
- preparations of new furocoumarins having peculiar properties (e.g. monofunctional behaviour towards DNA) as potential agents for phototherapy
- study of the photochemical interactions of these compounds with DNA

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UNIVERSITA DI BOLOGNA

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Instituto Chimico "G Ciamician"  
Via Selmi 2

I-40127 BOLOGNA

TELEPHONE: (051) 22 78 69

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RESEARCH INTERESTS: CI/SE;PK ..... I-40 BA

RESEARCH TEAM HEAD(S)

V Balzani (prof)(\*)

STAFF MEMBERS

F Boletta (\*); M T Gandolfi (\*); A Juris (\*); M Maestri (\*); M F Manfrin (\*); L Moggi (\*); N Sabbatini (\*); D Sandrini (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- single photon counter for lifetime measurements

RESEARCH TOPICS

- catalytic cycles for photochemical splitting of water
- general models for energy and electron transfer
- photocatalytic processes
- chemiluminescence
- low temperature emission spectra

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LABORATORIO DI FOTOCHIMICA E RADIAZIONI D'ALTA ENERGIA (FRAE)/C.N.R.

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Via de' Castagnioli, 1

I-40126 BOLOGNA

TELEPHONE: (051) 51 95 93

-----  
RESEARCH INTERESTS: CT;PD;CO/PN;CD;CY;US;PG ..... I-40 BORESEARCH TEAM HEAD(S)

V Balzani (director)(\*)  
 P Bortolus (\*)  
 P G Di Marco (\*)  
 M Gleria (\*)  
 G Orlandi (\*)  
 G Pasini

STAFF MEMBERS

F Barigelletti (\*); S Dellonte (\*); G Beggiato (\*); G Giro (\*); L Flamigni (\*); S Monti (\*); G Marconi (\*); S Lora (\*); B Righetti; A Geri (rt); G Mancini (rt); R Degli Esposti (rt); V Fattori

SPECIAL PHOTOCHEMICAL TECHNIQUES

- single photon apparatus
- N<sub>2</sub> laser flash photolysis equipped with transient digitizer
- pulse radiolysis (Febetron 706)

RESEARCH TOPICS

- photochemical and photophysical properties of non-rigid molecules
- photophysical properties of polymers
- coordination compounds
- photoconductivity of polymers and organic crystals
- photooxidation of piperidines
- properties of photographic materials under short irradiation
- photoinduced modification of monomolecular absorbed layers

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UNIVERSITA DI MODENA

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Istituto di Chimica Fisica  
Via Campi 183

I-41100 MODENA

TELEPHONE: (059) 36 41 58

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RESEARCH INTERESTS: CP/SP;PE ..... I-41 MO

RESEARCH TEAM HEAD(S)

F Momicchioli (prof)(\*)

STAFF MEMBERS

I Baraldi (ass prof)(\*); M C Bruni (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- steady state and nanosecond fluorescence spectrometry

RESEARCH TOPICS

- quantum mechanical and spectroscopic studies of conjugated molecules (organic dyes, scintillators, etc)

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C.N.R./UNIVERSITA DI FERRARA

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Centro di Studio sulla Fotochimica e Reattività degli Stati Eccitati dei  
Composti di Coordinazione/Istituto Chimico  
Via L. Borsari, 46

I-44100 FERRARA

TELEPHONE: (0532) 342 18

-----  
RESEARCH INTERESTS: CP;CI/CM;AT;SE;PK ..... I-44 CARESEARCH TEAM HEAD(S)

V Carassiti (prof)(\*)

C Bartocci (dr)(\*)

F Scandola (prof)(\*)

O Traverso (prof)(\*)

STAFF MEMBERSR Ballardini (dr)(\*); C A Bignozzi (dr)(\*); C Chiorboli (dr)(\*);  
M T Indelli (dr)(\*); A Maldotti (dr)(\*); M A Rampi Scandola (dr)(\*);  
L Righetti (rt); S Sostero Traverso (dr)(\*); G Varani (dr)(\*);  
O Zerlotin (t)SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser (ruby, dye) flash photolysis

RESEARCH TOPICS

- excited state electron transfer processes (kinetics, free energy correlations, product yields, thermal back reactions)
- chemical conversion of solar energy (new metal chelates as photosensitizers, sacrificial cycles for water splitting)
- photochemistry of Pt and Pd complexes (stereochemistry, kinetics and mechanism of photochemical reactions of MA<sub>2</sub>X<sub>2</sub> complexes)
- photochemistry of metal porphyrin complexes (photoredox and photodegradation processes of water-soluble Fe porphyrin complexes)
- photochemistry of organometallic compounds (preparative and catalytic aspects of photochemistry of organometallic complexes of the d-block elements)
- atmospheric photochemistry (kinetics and mechanism of photochemical smog formation, determination of rate constants for elementary reaction steps)

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UNIVERSITA DEGLI STUDI

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Instituto di Chimica Organica  
Piano dei Mantellini 44

I-53100 SIENA

TELEPHONE: (0577) 470 54

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RESEARCH INTERESTS: CO/CR;PK ..... I-53 AD

RESEARCH TEAM HEAD(S)

G Adembri (prof)

STAFF MEMBERS

D Donati (dr); F Ponticelli (dr)(\*); M Scotton (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of isoxazoles and isoxazolopyridines
- photochemistry of dihydropyridines

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UNIVERSITY OF PISA

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Institute of Physical Chemistry  
Via Risorgimento 35

I-56100 PISA

TELEPHONE: 502147

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RESEARCH INTERESTS: CP;CT/SP ..... I-56 SA

RESEARCH TEAM HEAD(S)

O Salvetti (prof)

STAFF MEMBERS

R Colle (dr); R Montagnani (dr); C Petrongolo (dr)(\*); V Riani (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- theoretical research on
  - excited electronic states
  - multi channel quantum defect theory of predissociation
  - adiabatic and non-adiabatic molecular states
  - time evolution of excited states



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UNIVERSITA DI CATANIA

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Istituto Dipartimentale di Chimica

I-95125 CATANIA

TELEPHONE: (095) 33 05 33

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RESEARCH INTERESTS: CO;CI/PK ..... I-95 CORESEARCH TEAM HEAD(S)

G Condorelli (prof)(\*)

L L Costanzo (dr)(\*)

STAFF MEMBERS

S Pistarà (dr); S Giuffrida (dr)(\*); U Chiacchio (dr); A Corsaro (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Hitachi-Perkin Elmer fluorescence spectrophotometer with accessories for phosphorescence measurements
- equipment for low temperature photolysis

RESEARCH TOPICS

- studies of the photochemical reaction mechanisms:
    - syn-anti photoisomerization of azomethyne compounds (hydrazones)
    - cis-trans photoisomerization of ethylenic compounds (styrylthiophenes and arylvinylethioamides)
    - linkage and geometric isomerization of Pt and Pd coordination compounds
    - charge transfer in coordination compounds
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TECHNION-ISRAEL INSTITUTE OF TECHNOLOGY

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Department of Chemistry

HAIFA 32000, ISRAEL

TELEPHONE: (04) 225-111

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RESEARCH INTERESTS: CO;PO/CR;PK ..... IL-32 RURESEARCH TEAM HEAD(S)

M B Rubin (prof)

STAFF MEMBERS

graduate students

SPECIAL PHOTOCHEMICAL TECHNIQUES

- standard light sources, spectrophotometers, fluorescence, phosphorescence equipment
- low temperature apparatus

RESEARCH TOPICS

- photochemistry of di- and polycarbonyl compounds
  - energy transfer in bichromophoric systems
  - light intensity effects in photoreactions
  - photocycloadditions
- 

RESEARCH INTERESTS: PP;PC/LS;SP;PK;SE;CP ..... IL-32 SPRESEARCH TEAM HEAD(S)

S Speiser (\*)

STAFF MEMBERS

N Shakur; S Hasson; H Richter-Lustig

SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser induced fluorescence utilizing Molelectron N2 laser pumped dye laser, boxcar averager, low temperature equipment
- Electro-Optic Industries CO2 TEA laser

RESEARCH TOPICS

- photophysical processes in organic molecules in solution and in the gas phase
- inter- and intra-molecular energy transfer processes
- multiphoton IR photochemistry and photophysics
- mechanisms of photochemical processes

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WEIZMANN INSTITUTE OF SCIENCE

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Departments of Structural Chemistry and Plastics Research

REHOVOT 76100, ISRAEL

TELEPHONE: (054) 82246/82590

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RESEARCH INTERESTS: CP/SE;PL ..... IL-76 CARESEARCH TEAM HEAD(S)

D Cahen (dr)  
G Hodes (dr)  
J Manassen (prof)

STAFF MEMBERS

R Tenne (dr); U Lachish (dr); B Vainas; Y Mirovsky; G Djemal; S Licht

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photoelectrochemical solar cells:
  - stabilization of Cd-chalcogenide/polysulfide systems
  - thin film, polycrystalline photoelectrodes
  - theoretical models
  - photoelectrochemical storage cells (with in situ storage)
  - total development of practical systems

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WEIZMANN INSTITUTE OF SCIENCE

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Isotope Department

REHOVOT 76100, ISRAEL

TELEPHONE: (054) 831 40

---

RESEARCH INTERESTS: PO/SE;PL ..... IL-76 HARESEARCH TEAM HEAD(S)

M M Halman (\*)

STAFF MEMBERS

M Zafrir (dr); K Zuckerman (rt); B Aurian-Blajeni; M Ulman

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photochemical solar energy collector

RESEARCH TOPICS

- photochemical solar energy conversion

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THE WEIZMANN INSTITUTE OF SCIENCE

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Biochemistry Department  
POB 26

REHOVOT 76100, ISRAEL

TELEPHONE: (054) 83111 OR 82975

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RESEARCH INTERESTS: PB;CP/PS;OT ..... IL-76 MA

RESEARCH TEAM HEAD(S)

S Malkin (\*)

STAFF MEMBERS

D Farkas; G Bults; S Gershon (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photoacoustic methods
- fast-kinetics fluorimeter

RESEARCH TOPICS

- photoacoustic study of photosynthesis
- delayed luminescence of photosynthetic systems
- measurements of photosynthetic unit sizes in correlation to photosynthetic activities
- effect of strong electric field on the photochemical and photophysical properties of the photosynthetic membrane

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THE WEIZMANN INSTITUTE OF SCIENCE

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Department of Structural Chemistry

REHOVOT 76100, ISRAEL

TELEPHONE: (054) 833 61

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RESEARCH INTERESTS: CP;PO/OT ..... IL-76 MU

RESEARCH TEAM HEAD(S)

K A Muszkat (\*)

STAFF MEMBERS

I Khait; I Sofer; A Finkels

SPECIAL PHOTOCHEMICAL TECHNIQUES

- <sup>1</sup>H, <sup>2</sup>H, <sup>13</sup>C, <sup>19</sup>F, and <sup>15</sup>N photoCIDNP on 80, 90, and 270 MHz spectrometers, with computer control of all experimental parameters
- high resolution studies of photoprocesses and photo intermediates by 4 K emission and absorption spectrometry

RESEARCH TOPICS

- photoCIDNP studies of H atom or electron transfer in dyes, nitrocompounds, phenols, amines, thioethers, amino acids, and proteins
- photoCIDNP studies of bond cleavage processes in sulfoxides, thioethers, nitrocompounds
- photoCIDNP study of photodecarboxylation; excited states of thioethers and sulfoxides
- potential barriers to photoprocesses at low temperatures; single vibrational level photoprocesses
- low temperature study of planar conformations in essentially non-planar systems

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BEN-GURION UNIVERSITY OF THE NEGEV

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Department of Chemistry

BEER-SHEVA 84120, ISRAEL

TELEPHONE: (057) 64398, 64391

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RESEARCH INTERESTS: CO/CR;OT ..... IL-84 SHRESEARCH TEAM HEAD(S)

A Shani (dr)(\*)

STAFF MEMBERS

R Idesis; I Shapira

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- intramolecular cyclization of molecules by photochemical reactions, which occur due to either special conformations in solutions, the structural arrangements of functional groups or the molecular organization in the crystal
- photochemical oxidations and stability of biologically active chemicals (such as pheromones) under field conditions as sunlight, air, humidity

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THE HEBREW UNIVERSITY OF JERUSALEM

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Department of Physical Chemistry  
Givat Ram Campus

JERUSALEM 91000, ISRAEL

TELEPHONE: (02) 58 53 24

---

RESEARCH INTERESTS: PP/SP;OT ..... IL-91 FERESEARCH TEAM HEAD(S)

J L Feitelson

STAFF MEMBERS

Barboy, N

SPECIAL PHOTOCHEMICAL TECHNIQUES

- photon counting for lifetime and steady state fluorescence measurements
- Nd laser, dye laser for nsec to msec work

RESEARCH TOPICS

- excited state (S1 and T1) reactions, proton transfer and electron transfer
- dynamics of protein structure
- inherent fluorescent probes in proteins

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HEBREW UNIVERSITY OF JERUSALEM

---

Department of Physical Chemistry and Energy Research Center

JERUSALEM 91000, ISRAEL

TELEPHONE: (02) 58 52 92

---

RESEARCH INTERESTS: CP/SP;PS ..... IL-91 LERESEARCH TEAM HEAD(S)

H Levanon (prof)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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RESEARCH INTERESTS: CP/PK;SE ..... IL-91 RARESEARCH TEAM HEAD(S)

J Rabani (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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RESEARCH INTERESTS: CP/SP;PI;CI ..... IL-91 TR

RESEARCH TEAM HEAD(S)

A Treinin (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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HEBREW UNIVERSITY OF JERUSALEM

Department of Physical Chemistry

JERUSALEM 91000, ISRAEL

TELEPHONE: (02) 58 53 35

-----  
RESEARCH INTERESTS: CP;PB/LS;BC;PS ..... IL-91 OT

RESEARCH TEAM HEAD(S)

M Ottolenghi (\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser photolysis

RESEARCH TOPICS

- photochemistry of vision
- photochemistry of bacteriorhodopsin
- charge-transfer photochemistry

-----  
HEBREW UNIVERSITY OF JERUSALEM

Inorganic and Analytical Chemistry and Energy Center

JERUSALEM 91190, ISRAEL

TELEPHONE: 58 53 23

-----  
RESEARCH INTERESTS: CI/SE;SP ..... IL-91 RE

RESEARCH TEAM HEAD(S)

R Reisfeld (prof)

STAFF MEMBERS

G Katz (dr); H Tzeheval (dr); H Mack; A Kisilev; E Greenberg; R Zussman;  
N Manor; S Neuman

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- fluorescent solar concentrators
  - photovoltaic cells
  - spectroscopy in glasses
-



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UNIVERSITY OF DUBLIN, TRINITY COLLEGE

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Department of Chemistry

DUBLIN 2, IRELAND

TELEPHONE: (01) 77 29 41

---

RESEARCH INTERESTS: CP;CO;CI/-- ..... IRL-DU KERESEARCH TEAM HEAD(S)

J M Kelly (dr)(\*)

T B H McMury (prof)(\*)

STAFF MEMBERS

J G Vos (dr); S N Rao (dr); C L Long ; C M O'Connell; I D Cunningham

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis
- CIDNP
- fluorescence lifetime equipment

RESEARCH TOPICS

- photochemistry of metal carbonyls, metal alkyl compounds, bipyridyl complexes and porphyrins
- photochemistry of polymer-bound complexes
- photochemistry of organic carbonyl compounds

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UNIVERSITY COLLEGE

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Department of Chemistry

GALWAY, IRELAND

TELEPHONE: 7611

---

RESEARCH INTERESTS: PO/OT ..... IRL-GA SPRESEARCH TEAM HEAD(S)

W J Spillane (\*)

STAFF MEMBERS

S McDermott

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photosubstitution reactions, particularly electrophilic aromatic
  - photorearrangements in sulfur systems
-

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UNIVERSITY OF ICELAND

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Science Institute  
Dunhaga 3

IS-107 REYKJAVIK

TELEPHONE: (91) 213 40

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RESEARCH INTERESTS: CP/SP;CL ..... IS-10 KV

RESEARCH TEAM HEAD(S)

A Kvaran (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- for gas phase chemiluminescence experiments:
  - discharge flow system (vacuum line) connected to the entrance slit of a vacuum monochromator, to the exit slit of which a photomultiplier (either used in photon counting or direct current mode) is connected
  - computers (VAX 11/780 and PDP 11/23) and computer programs for spectral simulation

RESEARCH TOPICS

- spectra from excited state product species for reactions of metastable noble gas atoms and halogen- and oxygen-containing reagents are recorded, analyzed and simulated
  - search for new chemiluminescence spectra due to bound-free electronic transitions for diatomic molecules
  - analysis of spectra for information on energy distribution in the excited states, potential curves and transition moments
-

NORSK HYDRO'S INSTITUTE FOR CANCER RESEARCH

Department for Biophysics  
Montebello

OSLO 3, NORWAY

TELEPHONE: ( ) 55 40 80

RESEARCH INTERESTS: OT/CD;BP;BC ..... N-OS MO

RESEARCH TEAM HEAD(S)

J Moan (dr)(\*)

STAFF MEMBERS

T Christensen (e); J F Evensen; J McGhie (rt); S Elander

SPECIAL PHOTOCHEMICAL TECHNIQUES

- morphologic studies by fluorescence, transmission and electron microscopy
- ESR measurements of radical yields

RESEARCH TOPICS

- dye sensitized inactivation of cells and tissues
- measurements of singlet oxygen yields

UNIVERSITY OF TROMSØ

IMR-Section for Chemistry  
P O Box 953

N-9001 TROMSØ

TELEPHONE: (083) 816 88

RESEARCH INTERESTS: CO/CR ..... N-90 SY

RESEARCH TEAM HEAD(S)

L Sydnes (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- applications of photochemical reactions in organic syntheses

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UNIVERSITY OF AMSTERDAM

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Laboratory of Organic Chemistry  
Nieuwe Achtergracht 129

NL-1018 WS AMSTERDAM

TELEPHONE: (020) 522 26 76

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RESEARCH INTERESTS: PO/PK;SP;CR ..... NL-10 CE

RESEARCH TEAM HEAD(S)

H Cerfontain (prof)(\*)

STAFF MEMBERS

J A J Geenevasen (t); T S V Buys; R H van der Veen; C P Visser

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Rayonette reactors
- Spex spectrofluorimeter
- excimer laser

RESEARCH TOPICS

- photochemistry of bi- and polyfunctional organic carbonyl compounds:
  - alpha-diketones
  - beta,gamma-enones and beta,gamma-delta,epsilon-dienones
  - ionones and analogous compounds
  - alpha-oxo oxime ethers
  - carbonyl compounds and lactones containing a three membered ring

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UNIVERSITY OF AMSTERDAM

---

Laboratory of Organic Chemistry  
Nieuwe Achtergracht 129

NL-1018 WS AMSTERDAM

TELEPHONE: (020) 5222676

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RESEARCH INTERESTS: PO/SE ..... NL-10 VE

RESEARCH TEAM HEAD(S)

J W Verhoeven (prof)(\*)

STAFF MEMBERS

F M Martens (dr); H J van Ramesdonk (rt); G F Mes (dr); F Rob (dr);  
W van Gerresheim (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

SPEX Fluorolog emission spectrometer

RESEARCH TOPICS

- photoinduced electron transfer in organic systems (through-bond and through-space electron donor-acceptor interaction; /photo/redox systems related to biological /photo/redox processes; conversion of solar energy via photoinduced electron transfer
- photoinduced electron transfer

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UNIVERSITY OF LEIDEN

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Department of Organic Chemistry  
Gorleus Laboratories  
P O B 9502

NL-2300 RA LEIDEN

TELEPHONE: (071) 14 83 33

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RESEARCH INTERESTS: CO/CR;PK ..... NL-23 CORESEARCH TEAM HEAD(S)

J Cornelisse (prof)(\*)  
H J C Jacobs (dr)(\*)  
G Lodder (dr)(\*)  
J Lugtenburg (dr)(\*)

STAFF MEMBERS

C Tintel (\*); A H W Jans (\*); S Jongsmā; P A Maessen; F I M Van Ginkel;  
M Murradin; A D Broek; J A Pardon; J J Van Dijk-Knepper (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of aromatic compounds
- photochemistry of dienes and trienes, particularly Vitamin D and related compounds
- bio-organic photochemistry

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TECHNOLOGICAL UNIVERSITY OF DELFT

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Biochemical and Biophysical Laboratory  
Julianalaan 67

NL-2628 BC DELFT

TELEPHONE: (015) 78 50 51

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RESEARCH INTERESTS: CO;PB/CL;BC;BP ..... NL-26 BERESEARCH TEAM HEAD(S)

W Berends (prof)(\*)

STAFF MEMBERS

H I X Mager (dr); R Addink; A P M Eker; R R Duren

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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RIJKSUNIVERSITEIT UTRECHT

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Organisch Chemisch Laboratorium  
Croesestraat 79

NL-3522 AD UTRECHT

TELEPHONE: (030) 88 23 11

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RESEARCH INTERESTS: CO/CR;PK ..... NL-35 BO

RESEARCH TEAM HEAD(S)

H J T Bos (prof)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical addition reactions with acetylenes, allenes, cumulenes and related compounds
- study of reactivity: preparative, reaction mechanisms, substituent effects, quantum yields, regioselectivity and rates of addition
- (cyclo)isomerization of conjugated systems of 6 pi electrons with heteroatoms

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OCI-TNO

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Institute for Organic Chemistry  
P O Box 5009

NL-3502 JA UTRECHT

TELEPHONE: (030) 88 27 21

-----  
RESEARCH INTERESTS: CO;CI;PI/CM;CR;CD;SE;PL ..... NL-35 MA

RESEARCH TEAM HEAD(S)

A Mackor (dr)(\*)

STAFF MEMBERS

A H A Tinnemans (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photoelectrochemical production of fuels: H<sub>2</sub>O cleavage, CO<sub>2</sub> reduction
- photocatalysis: light induced reactions of (cyclo)olefins under the influence of transition metal ions (mainly Cu(I))
- photochemical storage of solar energy (in the model system norbornadiene - quadricyclene)

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CHEMCO, INC.

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R & D Department  
Postbus 2

NL-3760 AA SOEST

TELEPHONE: (02155) 19844

-----  
RESEARCH INTERESTS: CI/PG;RG ..... NL-37 PERESEARCH TEAM HEAD(S)

A C H van Peski (dr)(\*)

STAFF MEMBERS

D J Stevens (dr); A M P Doesborgh (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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UNIVERSITY OF LEIDEN

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Gorlaeus Laboratories  
Department of Organic Chemistry  
P O Box 9502

NL-2300 RA LEIDEN

TELEPHONE: (071) 14 83 33

-----  
RESEARCH INTERESTS: CO/PK;BC ..... NL-95 HARESEARCH TEAM HEAD(S)

E Havinga (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- aromatic photosubstitutions
- vitamin D, dienes and trienes

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UNIVERSITY OF GRONINGEN

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Physical Chemistry Department  
Nijenborgh 16

NL-9747 AG GRONINGEN

TELEPHONE: (050) 119111

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RESEARCH INTERESTS: CP;PP;PB/SP;LS;BC;BP;OT ..... NL-97 KA

RESEARCH TEAM HEAD(S)

R Kaptein (dr)(\*  
W A Wiersma (dr)  
J Kommandeur (prof)  
P Zandstra (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- laser photo-CINDP at 360 MHz and 100 MHz
- picosecond laser equipment
- magnetic circular dichroism (MCD)
- supersonic beam spectroscopy

RESEARCH TOPICS

- CINDP theory
  - biradical-CINDP
  - photo-CINDP of biological molecules
  - picosecond laser spectroscopy
  - photon echos
  - spectroscopy in molecular beams
  - magnetic circular dichroism
-



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UNIVERSIDADE DE COIMBRA

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Departamento de Química da Faculdade de Ciências e Tecnologia

P-3000 COIMBRA

TELEPHONE: 228 26

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RESEARCH INTERESTS: CP/AP;PL;PK ..... P-30 FORESEARCH TEAM HEAD(S)

S J Formosinho (\*)

STAFF MEMBERS

A M Da Silva (\*); M G M Miguel (\*); L M Do Rosário (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- N2 laser
- single photon counting

RESEARCH TOPICS

- photochemistry of aromatic hydrocarbon aerosols
- photochemistry of micells
- photoelectrosynthetic cells with transparent semiconductor electrodes

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UNIVERSITY OF EVEIRO

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Department of Chemistry

P-3800 AVEIRO

TELEPHONE: 26511

---

RESEARCH INTERESTS: CI/CR;CE;SE ..... P-38 PERESEARCH TEAM HEAD(S)

J D Pedrosa de Jesus (\*)

STAFF MEMBERS

M D S Farropas; L A T P Neves

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of Mo(VI) complexes with carboxylic acids
  - photochemistry of Cr(VII) complexes containing NO<sub>2</sub><sup>-</sup> as a ligand
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POLISH ACADEMY OF SCIENCES

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Institute of Physical Chemistry  
Department of Photochemistry and Spectroscopy  
ul Kasprzaka 44

PL-01-224 WARSZAWA

TELEPHONE: 32 72 69

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RESEARCH INTERESTS: PP/SP;PK ..... PL-01 GR

RESEARCH TEAM HEAD(S)

Z R Grabowski (prof)(\*)  
A Grabowska (dr)(\*)  
J Jasny (dr)(\*)

STAFF MEMBERS

H Bulska (dr)(\*); A Chodkowska (dr)(\*); J Herbich (dr)(\*); R Kołos;  
P Kucza (e); A Łach (t); H Malec (t); J Mokrzycki (t); A Mordziński (\*);  
G Orzanowska (t); B Osieńska (t); B Pakuła; E Przybysz (dr);  
K Rotkiewicz (dr)(\*); W Rubaszewska (dr)(\*); J Sepioł (dr)(\*);  
A Siemiarczuk(dr)(\*); J Waluk (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- multifunctional spectrofluorimeters (according to Jasny)
- time-resolved (1 ns) fluorescence spectrometer and pulse fluorometer with N2 laser excitation
- time-resolved (1 ns) excited state absorption spectrometer, with N2 laser excitation and synchronized tuned dye laser probe
- ESR, especially for in-cavity irradiations and ESR of the triplet state with He cryostats and optical detection of the triplets

RESEARCH TOPICS

- "twisted" intramolecular CT excited states /TICT/ - as e.g. in p-cyano-N,N-dimethylaniline (kinetics, spectroscopy, reactivity, structure)
- aza- and diaza-aromatics (normal and anomalous behaviour in excited states with respect to protonation, hydrogen bonding, structural changes)
- proton transfer kinetics in hydrogen bonds in excited molecules, problems of tunnelling, cooperativity
- application of thermodynamics to elementary photochemical reactions
- ESR and the structure and elementary processes in excited triplet states of aromatic molecules and ions, also in doped single crystals
- development and construction of time-resolved spectrometric techniques in absorption and luminescence, for nano- and picosecond time ranges
- development and construction of advanced instrumentation for luminescence research

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WARSAW UNIVERSITY

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Department of Chemistry  
Zwirki i Wigury 101

PL-02-089 WARSZAWA

TELEPHONE: 22 48 81

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RESEARCH INTERESTS: CP/PK;RC ..... PL-02 GA

RESEARCH TEAM HEAD(S)

J Gawłowski (dr)  
J Niedzielski (dr)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- vacuum UV photolysis of gaseous unsaturated hydrocarbons
- kinetics of reactions of photochemically generated hot hydrogen atoms with olefins
- radiolysis of gaseous olefins

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AGRICULTURAL AND TEACHERS UNIVERSITY AT SIEDLCE

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Department of Chemistry  
ul. 3 Maja 54

PL-08-110 SIEDLCE

TELEPHONE: 37-06

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RESEARCH INTERESTS: CP/PK;RC ..... PL-08 FO

RESEARCH TEAM HEAD(S)

M Foryś (dr)(\*)

STAFF MEMBERS

A J6wko; R Krupa; I Szamrej; K Wojciechowski; H Baj; A Pawelec

SPECIAL PHOTOCHEMICAL TECHNIQUES

- rare gas resonance lamps
- MW generator Microtron Mark III
- monochromators

RESEARCH TOPICS

- VUV and rare gas sensitized photochemistry of simple molecules
- rare gas sensitized radiation chemistry of simple molecules

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JAGIELLONIAN UNIVERSITY

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Institute of Chemistry/Department of Inorganic Chemistry  
ul. M Karasia 3

PL-30-060 KRAKOW

TELEPHONE: 363-77

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RESEARCH INTERESTS: CI/PK;SP ..... PL-30 SA

RESEARCH TEAM HEAD(S)

A Samotus (dr)(\*)

STAFF MEMBERS

A Kanas (dr); B Sieklucka (dr); J Sosin (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of coordination compounds
- kinetics of photochemical and secondary thermal reactions
- structure and reactivity of initial, intermediate and final products of photolysis
- mechanisms of photochemical and secondary thermal reactions
- substitutional and charge-transfer photochemistry of octa cyano complexes of transition metals

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TECHNICAL UNIVERSITY WROCLAW

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Institute of Organic and Physical Chemistry  
Wybrzeze Wyspianskiego 27

PL-50-370 WROCLAW

TELEPHONE: 20-32-27

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RESEARCH INTERESTS: PP;CP/SP;OT ..... PL-50 RU

RESEARCH TEAM HEAD(S)

Z Ruziewicz (prof)(\*)

STAFF MEMBERS

H Basara (dr)(\*); K Brenner (dr)(\*); A Olszowski (dr)(\*); A Lewanowicz (dr); J Lipiński (dr); K Palewska; H Zawadzka (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- low-temperature matrix isolation technique /electronic spectra/

RESEARCH TOPICS

- excited electronic states and vibronic structure of electronic spectra of polycyclic azines
- highly resolved electronic spectra of polycyclic hydrocarbons /including non-planar and non-benzoid molecules/ in low-temperature matrices
- anomalous fluorescence and electronic spectra of pseudoazulenes
- optical site-selection spectroscopy

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POZNAN TECHNICAL UNIVERSITY

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Institute of Physics  
Piotrowo 3

PL-60965 POZNAN

TELEPHONE: 782-324

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RESEARCH INTERESTS: PB;PP/PB;PS ..... PL-60 FRRESEARCH TEAM HEAD(S)

D Frąckowiak (prof)(\*)

STAFF MEMBERS

D Wróbel (dr); G Białek (dr); H Manikowski (dr); C Jadżyn; K Fiksiński

SPECIAL PHOTOCHEMICAL TECHNIQUES

- spectrophotometers equipped with polarization optics and temperature controlled cell to measure polarized absorption and emission
- phase spectrofluorimeter
- pulse subnanosecond tau-meter

RESEARCH TOPICS

- molecular spectroscopy of pigments and pigment-protein complexes occurring in photosynthetic organisms
  - artificially oriented model systems containing such pigments
  - excitation energy transfer
  - intermolecular interactions
  - photovoltaic effect
  - EPR
- 

RESEARCH INTERESTS: PB;PP/PB;PS ..... PL-60 SARESEARCH TEAM HEAD(S)

Z Salamon (doc)

STAFF MEMBERS

D Bauman; A Skibiński; T Martynski; J Fiz

SPECIAL PHOTOCHEMICAL TECHNIQUES

(see PL-60 Fr)

RESEARCH TOPICS

- effect of dye orientation in liquid crystalline media:
  - spectral characteristics of the pleochroic dyes
  - molecular interactions between a liquid crystal and dye molecules and their influence on structure of liquid crystal matrix
- ultrafast molecular processes:
  - dynamics of solvation, complexation or aggregation
  - orientational relaxation processes of dye molecules

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ACADEMY OF ECONOMICS

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Department of Instrumental Economics  
ul. Marchlewskiego 146/150

PL-60-967 POZNAŃ

TELEPHONE: 699-261

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RESEARCH INTERESTS: PO/BP;PC ..... PL-60 KO

RESEARCH TEAM HEAD(S)

J Kozioł (prof)(\*)

STAFF MEMBERS

A Koziołowa (dr); V Szczesna (dr); B Tyrakowska; D Panek-Janc

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- studies on photochemical behaviour of riboflavin, formyl methyl isoalloxazine and other isalloxazines in solvents of different polarity
- studies on photolytical behaviour of different derivatives of alloxazines in solvents of different polarity

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A MICKIEWICZ UNIVERSITY

---

Institute of Chemistry / Chemical Physics Laboratory  
ul Grunwaldzka 6

PL-60-780 POZNAŃ

TELEPHONE: 699-181

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RESEARCH INTERESTS: PO/PK;PE ..... PL-60 PA

RESEARCH TEAM HEAD(S)

S Paszyc (prof)

STAFF MEMBERS

H Kozubek; B Marciniak (\*); M Rafalska; B Skalski; G Wenska; T Sułek (rt);  
J Brzezińska (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- spectrofluorimeter (home made)
- spectrofluorimeter (Perkin Elmer MPF 3)
- dichrograph (Mark III Jobin-Yvon)

RESEARCH TOPICS

- spectroscopic and photochemical properties of nitro and nitroso alkanes in solution
- identification and mechanism of the photoproducts formation upon irradiation with UV light
- photochemistry and photoluminescence of some purine - pyrimidine analogs of nucleic acids

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AGRICULTURAL UNIVERSITY

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Institute of Physics and Chemistry  
ul. Wojska Polskiego 38/42

PL-60-637 POZNAN

TELEPHONE: 22-45-81

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RESEARCH INTERESTS: CP/CL;CC ..... PL-60 SLRESEARCH TEAM HEAD(S)

D Sławinska  
J Sławinski (\*)

STAFF MEMBERS

W Pukacki; K Polewski; L Ciesla; J Wierzchowski (dr); W Puzyna (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- single photon counting technique
- singlet oxygen detection by means of CL, chemical traps, quenching and kinetics assay

RESEARCH TOPICS

- photo- and chemi-induced chemiluminescence of model reactions, mainly:
  - UV-photolysis and photooxidation (aromatic amino acids, melanins, proteins, cyt c, haemoglobin)
  - auto- and per-oxidation of polyphenols and quinones with particular interest to singlet oxygen formation
- ultraweak photon emission from living tissues and enzymatic reactions
- analytical applications of CL

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TECHNICAL AND AGRICULTURAL ACADEMY

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Department of Technology and Chemical Engineering  
ul. Seminaryjna 3

PL-85326 BYDGOSZCZ

TELEPHONE: 344-84

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RESEARCH INTERESTS: PO/CY;CC;CR ..... PL-85 SIRESEARCH TEAM HEAD(S)

M Sierocka (dr)(\*)

STAFF MEMBERS

J Pączkowski (dr); A Wrzyszczyński (dr); A Zakrzewski (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- spectrofluorophosphorimeter (Cobrabid, Warszawa)
- spectralsensitograph (homemade)

RESEARCH TOPICS

- photosensitivity of polymers
- photocrosslinking
- photosensibilization of polymers

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NICOLAS COPERNICUS UNIVERSITY

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Institute of Physics/Photoluminescence Group  
Grudziadzka 5

PL-87-100 TORUN

TELEPHONE: 210-65

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RESEARCH INTERESTS: PP/PK;SP ..... PL-87 BA

RESEARCH TEAM HEAD(S)

R Bauer (prof)(\*)

STAFF MEMBERS

H Cherek (dr); A Kowalczyk(dr); A Balter (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- high resolution polarimeter
- phase- and pulse fluorometers

RESEARCH TOPICS

- mechanism of excitation energy transfer
  - thermal motions of dye molecules in solutions (excitation energy surplus relaxation)
  - kinetics of photochemical reactions
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POLYTECHNICAL INSTITUTE OF BUCHAREST

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Department of Physical Chemistry  
Bd. Republicii 13

R-70031 BUCHAREST

TELEPHONE: (90) 15 79 80

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RESEARCH INTERESTS: PO;CI/PK;SE;PC;PL ..... R-70 ONRESEARCH TEAM HEAD(S)

T Oncescu (prof)(\*)

STAFF MEMBERS

M Comtineanu (dr); S G Ionescu (dr); C Bendic (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- ESR, flash photolysis

RESEARCH TOPICS

- photochemistry of some diazocompounds (ex. diphenyldiazomethane, azibenzil)
  - kinetics and mechanism photolysis of some oxalate complexes (Mn(III), Fe(III), Cr(III))
  - photochromism of some redox system in solution
  - photochemistry of some dyes in aqueous solution
-

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KAROLINSKA SJUKHUSET

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Department of Dermatology  
The Photodermatological Laboratory

S-10401 STOCKHOLM

TELEPHONE: (08) 736 10 00

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RESEARCH INTERESTS: OT/OT ..... S-10 WEN

RESEARCH TEAM HEAD(S)

G Wennersten (dr)

STAFF MEMBERS

I Rystedt (dr); A-M Ros (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photosensitization
- photochemotherapy

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ROYAL INSTITUTE OF TECHNOLOGY

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Department of Organic Chemistry

S-10044 STOCKHOLM

TELEPHONE: (08) 78 78 125

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RESEARCH INTERESTS: CO/CM;SE ..... S-10 AK

RESEARCH TEAM HEAD(S)

B Åkermark (prof)(\*)

STAFF MEMBERS

B Krakenberger (dr)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- Zimmerman "Black Box" photoreactor

RESEARCH TOPICS

- photo-induced electrontransfer

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ROYAL INSTITUTE OF TECHNOLOGY

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Department of Organic Chemistry

S-10044 STOCKHOLM

TELEPHONE: (08) 787 81 27

-----  
RESEARCH INTERESTS: CO/CR ..... S-10 BARESEARCH TEAM HEAD(S)

P Baeckström (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemical rearrangements
- photooxygenation reactions

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THE ROYAL INSTITUTE OF TECHNOLOGY

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Department of Polymer Technology

S-10044 STOCKHOLM

TELEPHONE: (08) 787 82 65 OR /66

-----  
RESEARCH INTERESTS: PO/CY;CC ..... S-10 RARESEARCH TEAM HEAD(S)

B Rånby (prof)(\*)

J P Rabek (dr)(\*)

J Lucki (dr)

STAFF MEMBERS

D Lala; S Göthe; A Hult; G Broodh (rt); L Göthe (t)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- RF singlet oxygen generator
- UV atomic oxygen generator
- two ESR spectrometers (Jeolco, Bruker)

RESEARCH TOPICS

- photodegradation and photostabilization of synthetic polymers
- singlet oxygen reactions with polymers
- photopolymerization and photocrosslinking of surface coatings

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ROYAL INSTITUTE OF TECHNOLOGY

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Department of Physical Chemistry

S-10044 STOCKHOLM

TELEPHONE: (08) 78 78 125

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RESEARCH INTERESTS: --/-- ..... S-10 WETRESEARCH TEAM HEAD(S)

G Wettermark (prof)(\*)

STAFF MEMBERS

B Carlsson (dr)(\*); H Stymne (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

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UNIVERSITY OF STOCKHOLM

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Institute of Physics  
Vanadisvägen 9

S-11346 STOCKHOLM

TELEPHONE: (08) 22 81 60

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RESEARCH INTERESTS: PP/SP;LS;CL ..... S-11 LARESEARCH TEAM HEAD(S)

A Lagerqvist (prof)

STAFF MEMBERS

R Scullman; B Lindgren; L Klynning

SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis, flash discharge, laser spectroscopy, matrix isolation

RESEARCH TOPICS

- diatomic molecules

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UNIVERSITY OF LUND

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Chemical Center/Physical Chemistry I  
P O B 740

S-22007 LUND

TELEPHONE: (046) 10 70 00

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RESEARCH INTERESTS: CP/PK;OT;MI ..... S-22 AL

RESEARCH TEAM HEAD(S)

M Almgren (dr)(\*)

STAFF MEMBERS

S Swarup; U Ohlsson

SPECIAL PHOTOCHEMICAL TECHNIQUES

- synchrotron radiation source (under development)

RESEARCH TOPICS

- photochemical effects in organized amphiphilic systems
- solar energy conversion

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UNIVERSITY OF LUND

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Department of Plant Physiology  
Box 7007

S-22007 LUND

TELEPHONE: (046) 12 46 20

---

RESEARCH INTERESTS: PB/PC;BP ..... S-22 BJ

RESEARCH TEAM HEAD(S)

L O Björn (prof)

STAFF MEMBERS

C Sundqvist (dr); G S Björn (dr); S Widell (dr); Ke-Cheng Hsiao;  
L Carlsson (rt); T Vogelmann (dr); J F Bornman

SPECIAL PHOTOCHEMICAL TECHNIQUES

- 'phytoluminography' for imaging luminescence
- polychromator (to irradiate at several wavelengths simultaneously)

RESEARCH TOPICS

- photochromic pigments as biological regulators in plants and cyanobacteriae
- perception of blue light in plants
- effects of ultraviolet B radiation on plants

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UNIVERSITY OF LUND

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Department of Inorganic Chemistry I  
Chemical Center  
P O Box 740

S-22007 LUND

TELEPHONE: (046) 10 81 13

---

RESEARCH INTERESTS: CI;CP/CM;SE ..... S-22 LA

RESEARCH TEAM HEAD(S)

R Larsson (dr)(\*)  
Å Davidsson (dr)

STAFF MEMBERS

B Folkesson (dr); K Trankell (rt); S Flato (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUES

- rebuilt JASCO J 40 circular dichroism spectrometer for studies of electrochromism

RESEARCH TOPICS

- inorganic photo redox processes for storing energy, e g
  - the reaction  $\text{HgCl}_2 + \text{FeCl}_2$
  - coordination compounds for production of hydrogen
- physical study of excited state of photochemically active coordination compounds such as porphyrins and phthalocyanines; with an electrochromism-measuring device the symmetry and electron distribution of the excited state states are characterized

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UNIVERSITY OF LUND

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Department of Dermatology  
Lasarettet

S-22185 LUND

TELEPHONE: (046) 10 22 61

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RESEARCH INTERESTS: PB/PM ..... S-22 RO

RESEARCH TEAM HEAD(S)

H Rorsman (prof)

STAFF MEMBERS

E Tegner (dr)(\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- treating psoriasis patients with 8-methoxypsoralene and UVA light

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VOLVO

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Department 6100, Applied Physics

S-40508 GÖTEBORG

TELEPHONE: (031) 59 70 24

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RESEARCH INTERESTS: CA/LS;SP ..... S-40 HORESEARCH TEAM HEAD(S)

T Högberg (prof)

STAFF MEMBERS

J Olsson (dr)(\*); L G Rosengren; H Lundberg; E Max

SPECIAL PHOTOCHEMICAL TECHNIQUES

- saturated laser induced fluorescence
- excimer laser (autumn 1981)
- dye laser/YAG laser system

RESEARCH TOPICS

- laser induced chemical reactions
- combustion processes in flat flames and engines, studied with laser techniques

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CHALMERS UNIVERSITY OF TECHNOLOGY AND UNIVERSITY OF GÖTEBORG

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Department of Organic Chemistry

S-412 96 GÖTEBORG

TELEPHONE: (031) 81 01 00

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RESEARCH INTERESTS: CO;PO/PE;CR;SE ..... S-41 BERESEARCH TEAM HEAD(S)

H D Becker (dr)(\*)

STAFF MEMBERS

K Andersson; T Elebring; C Järnvik; G Svensson (rt)

SPECIAL PHOTOCHEMICAL TECHNIQUESRESEARCH TOPICS

- intramolecular cycloaddition reactions
- photochemical rearrangements
- relationships between fluorescence and molecular geometry
- adiabatic photochemical retro Diels-Alder reactions

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CHALMERS UNIVERSITY OF TECHNOLOGY AND UNIVERSITY OF GÖTEBORG

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Department of Physical Chemistry

S-412 96 GÖTEBORG

TELEPHONE: (031) 81 01 00

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RESEARCH INTERESTS: CP/PK ..... S-41 AQRESEARCH TEAM HEAD(S)

C Åquist (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photoautoxidation

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RESEARCH INTERESTS: PP/CY;CC;MI ..... S-41 BIRESEARCH TEAM HEAD(S)

D Biddle (dr)

STAFF MEMBERS

J E Löfroth (\*)

SPECIAL PHOTOCHEMICAL TECHNIQUES- excited state decay measurements with single photon counting technique  
- fluorescence depolarizationRESEARCH TOPICS

- studies of macromolecules and micelles, vesicles and membranes by means of photophysical processes (fluorescence, energy transfer, rotational depolarization)

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RESEARCH INTERESTS: CP;PP/PK;PL;SE ..... S-41 HORESEARCH TEAM HEAD(S)

B Holmström (\*) (dr)

STAFF MEMBERS

S Bergström (\*); P Carlsson (\*)



SPECIAL PHOTOCHEMICAL TECHNIQUES

- spectrophotofluorimetry with computerized data handling
- photoelectrochemical equipment

RESEARCH TOPICS

- kinetics of fluorescence transformation in alloxazines
- photoelectrochemistry at semiconductor electrodes

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RESEARCH INTERESTS: CP/PK ..... S-41 SA

RESEARCH TEAM HEAD(S)

K Sandros (dr)(\*)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- absorption and fluorescence spectrometers

RESEARCH TOPICS

- photophysics of intramolecular excimers and exciplexes

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CHALMERS UNIVERSITY OF TECHNOLOGY AND UNIVERSITY OF GÖTEBORG

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Department of Physical Chemistry

S-412 96 GÖTEBORG

TELEPHONE: (031) 81 01 00

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RESEARCH INTERESTS: PB/BP;DC ..... S-41 VA

RESEARCH TEAM HEAD(S)

T Vänngård (prof)(\*)

B Malmström (prof)

STAFF MEMBERS

R Aasa (dr); L E Andreasson (dr); R Brändén (dr); T Arnesson; J Bergström;  
T Nilsson; S Styring; L G Franzén; Ö Hansson

SPECIAL PHOTOCHEMICAL TECHNIQUES

- EPR (X, Q band)
- Xe flash lamp, coupled to a rapid-freeze apparatus, both controlled by a computer
- dual-wavelength low-temperature spectrophotometer

RESEARCH TOPICS

- primary processes in photosynthesis, especially cytochromes and water-splitting system in green plants
- fundamental mechanisms of photorespiration

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UNIVERSITY OF GÖTEBORG

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Department of Plant Physiology  
Carl Skottsbergs gata 22  
S-41319 Göteborg

S-413 19 GÖTEBORG

TELEPHONE: (031) 41 87 00

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RESEARCH INTERESTS: PB/-- ..... S-41 VI

RESEARCH TEAM HEAD(S)

H Egneus (prof)  
H Virgin (prof)  
B Klockare (dr)

STAFF MEMBERS

(HE:) L Andersson; H Blanck; G Björndahl; C Klingberg; M Röntfors; C Selldén  
(dr); N Ilénius;  
(HV:) L Axelsson (dr); A-M Holst; C Melin; H Ryberg; K-O Widell

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- (HE:)  
- control and regulation of energy metabolism of plants  
(HV:)  
- effects of carotenoid inhibiting herbicides on morphogenesis  
- phytochrome governed reactions  
- photo-bleaching of chlorophylls

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SAHLGRENSKA SJUKHUSET

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Department of Dermatology

S-41345 GÖTEBORG

TELEPHONE: (031) 60 10 00

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RESEARCH INTERESTS: PB/PM ..... S-41 SW

RESEARCH TEAM HEAD(S)

G Swanbeck (prof)

STAFF MEMBERS

M Hök; I Rosdahl; O Larkö

SPECIAL PHOTOCHEMICAL TECHNIQUES

- environmental UV dosimetry

RESEARCH TOPICS

- photomedicine

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UNIVERSITY HOSPITAL

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Department of Dermatology

S-58185 LINKÖPING

TELEPHONE: (013) 19 10 00

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RESEARCH INTERESTS: PB/PM ..... S-58 SKRESEARCH TEAM HEAD(S)

M Skogh

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- evaluation of phototherapy (ultraviolet) and photochemotherapy in dermatology
- effects of ultraviolet radiation in the skin, normal and pathological reactions
- measurements of UV-radiation by physical and microbiological methods

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UNIVERSITY OF UPPSALA

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Institute of Physical Chemistry  
Box 532

S-75121 UPPSALA

TELEPHONE: (018) 13 94 60

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RESEARCH INTERESTS: CP/CD;SE;PK ..... S-75 CLRESEARCH TEAM HEAD(S)S Claesson (prof)(\*)  
B Finnström (dr)(\*)  
L Tegnér (dr)(\*)  
H Elmgren (dr)STAFF MEMBERSJ Alsins (\*); J-Å Andersson; R Pettersson; G Rämme (dr)(\*);  
S-E Lindquist (dr)(\*); L Fornstedt (dr); I Moring (dr)(\*)SPECIAL PHOTOCHEMICAL TECHNIQUES

- flash photolysis
- picosecond dye laser
- flash photolysis with time-of-flight mass spectrometer analysis
- high temperature gas phase systems for flash photolysis
- fluorescence depolarization microscopy

RESEARCH TOPICS

- photoelectrochemistry
- photoprocesses at semiconductors and in photogalvanic cells in solar energy utilization
- photoisomerization at double bonds in aromatic compounds
- photoredox processes of dyes
- photochemistry of aromatic amino acids
- fluorescence depolarization as analytical tool for structure determination in polymeric systems

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UNIVERSITY HOSPITAL

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Department of Dermatology

S-75014 UPPSALA

TELEPHONE: (018) 16 72 45

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RESEARCH INTERESTS: PB/BP;PM ..... S-75 FIRESEARCH TEAM HEAD(S)

T Fischer (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- psoriasis
- photosensitivity
- industrial photobiological hazards

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UNIVERSITY OF UMEÅ

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Department of Medical Genetics

S-90185 UMEÅ

TELEPHONE: (090) 10 17 81

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RESEARCH INTERESTS: PB/RC;PM ..... S-90 BERESEARCH TEAM HEAD(S)L Beckman  
G BeckmanSTAFF MEMBERS

I Nordensson; A Sweins

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- radiation induced chromosome damage and protection by radical scavengers as superoxide dismutase and catalase

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UNIVERSITY OF UMEÅ

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Department of Physical Chemistry

S-90187 UMEÅ

TELEPHONE: (090) 16 53 68

---

RESEARCH INTERESTS: CP/PK ..... S-90 GIRESEARCH TEAM HEAD(S)

T Gillbro (dr)(\*)

STAFF MEMBERS

V Sundström (dr)(\*); H Bergström; Å Sandström

SPECIAL PHOTOCHEMICAL TECHNIQUES

- picosecond absorption measurements
- picosecond spectrometer based on a cavity dumped dye laser pumped by a mode locked Ar ion laser
- sample techniques include low temperature cryostat and flow cells

RESEARCH TOPICS

- viscosity dependent excited state relaxation of cyanine and aryl methane dyes
- temperature and viscosity dependent electronic relaxation and proton transfer in biliverdin dimethyl ester
- dynamics of electron solvation after photoejection
- primary processes in biologically interesting systems, e g bacteriorhodopsin and plant pigments
- rotational relaxation

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UNIVERSITY OF UMEÅ

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Department of Plant Physiology

S-90187 UMEÅ

TELEPHONE: (090) 16 50 00

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RESEARCH INTERESTS: PB/PS;SE;AP;PE;CL;BC;SP ..... S-90 OQRESEARCH TEAM HEAD(S)

G Öquist (dr)

J E Hällgren (dr)

STAFF MEMBERS

B Martin; Ö Taube; E Sundbom; G Samuelsson

SPECIAL PHOTOCHEMICAL TECHNIQUES

- chlorophyll fluorescence apparatuses
- special Ulbricht sphere (for plants)
- light induced absorbance changes

RESEARCH TOPICS

- the quantum yields of plants (GÖ,JH)
  - plant adaptation on chloroplast level to environmental stress (GÖ,JEH,BM)
  - productivity of algae in environments stressed by heavy metals (GÖ,GS)
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HELSINKI UNIVERSITY

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Physical Chemistry Laboratory  
Meritullinkatu 1 C

SF-00170 HELSINKI 17

TELEPHONE: (90) 65 02 11

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RESEARCH INTERESTS: CP/OT ..... SF-00 KO

RESEARCH TEAM HEAD(S)

J Koskikallio (prof)(\*)

STAFF MEMBERS

E Hassinen; H Lemmetyinen; J Hyömäki; R Timonen; K Blomqwist

SPECIAL PHOTOCHEMICAL TECHNIQUES

- discharge flash equipment

RESEARCH TOPICS

- rate constant measurements of radicals (CH<sub>3</sub>, CH<sub>3</sub>O, CH<sub>3</sub>CO, etc) produced in gas phase by flash light
  - nucleophilic photochemical oxidative substitution reactions of aromatic hydrocarbons with CN<sup>-</sup> in aprotic solvents using crown ether complexes
  - heterolytic and homolytic photochemical bond dissociation reactions of polar organic molecules in polar solvents
-

ACADEMY OF SCIENCES U S S R

Vernadsky Institute of Geochemistry and Analytical Chemistry  
Vorobjevskoe Schosse 47 A

MOSKVA B-334, U S S R

TELEPHONE: ---

RESEARCH INTERESTS: CA/CD;PK ..... SU-MO CH

RESEARCH TEAM HEAD(S)

A K Chibisov

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- triplet state of pigments (photosynthetic) and dyes
- triplet state reactivity
- electron transfer mechanisms
- analytical applications of flash-photolysis and photochemistry
- photochemistry of metal-ligand complexes
- photochromism

ACADEMY OF SCIENCES U S S R

Zelinsky Institute of Organic Chemistry  
I N Nazarov Laboratory of Fine Organic Synthesis  
Leninsky Prospect, 47

MOSKVA 117913, U S S R

TELEPHONE: ---

RESEARCH INTERESTS: CO/CR;PO ..... SU-MO SE

RESEARCH TEAM HEAD(S)

E P Serebryakov (dr)

STAFF MEMBERS

I M Vol'pin

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- photochemistry of alkynes and of alkenes (synthetic and mechanistic)
- photochemistry of gibberellins (synthetic)



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UNIVERSITY OF ZAGREB

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Faculty of Technology  
Department of Organic Chemistry  
Marulićev trg 20

YU-41000 ZAGREB

TELEPHONE: 446-431

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RESEARCH INTERESTS: CO;CT;PB/CR;CE;AT;SE;PL;BC;PS;PM ..... YU-41 KARESEARCH TEAM HEAD(S)

G Karminski-Zamola (dr)

STAFF MEMBERS

L Fiser-Jakić

SPECIAL PHOTOCHEMICAL TECHNIQUES

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RESEARCH TOPICS

- synthetic organic photochemistry of furan compounds (photooxidation, with and without singlet oxygen, photodehydrocyclization, photodimerization, photorearrangement)
  - photochemistry of pyrene compounds (photoisomerization, dimerization and rearrangement)
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AUSTRALIAN NATIONAL UNIVERSITY

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Research School of Chemistry  
POB 4

CANBERRA ACT 2600, AUSTRALIA

TELEPHONE: (062) 49 4328

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RESEARCH INTERESTS: CT/SP ..... AUS-26 OG

RESEARCH TEAM HEAD(S)

J F Ogilvie (prof)

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- matrix isolation spectroscopy with photochemical methods

RESEARCH TOPICS

- quantum mechanics of radiative processes including mechanisms of radiative and non-radiative transfers
- photochemical oxidation mechanisms

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AUSTRALIAN NATIONAL UNIVERSITY

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Department of Chemistry/Faculty of Science  
POB 4

CANBERRA 2600, AUSTRALIA

TELEPHONE: (062) 49 29 29

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RESEARCH INTERESTS: PP/SP;SE ..... AUS-26 SE

RESEARCH TEAM HEAD(S)

B Selinger (dr)(\* )

STAFF MEMBERS

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SPECIAL PHOTOCHEMICAL TECHNIQUES

- single photon counting fluorescence spectroscopy
- selected state tuned laser low pressure spectroscopy
- microprocessor control

RESEARCH TOPICS

- photon counting technology
- photophysics in micellar media
- consumer products involving photochemistry