



Biology Section Contents

Volume 28 Number 1

| | |
|---|----|
| In this Issue of JPB | 1 |
| New Trends in Photobiology (Invited Review) | |
| Malignancies and atherosclerotic plaque diagnosis—is laser induced fluorescence spectroscopy the ultimate solution? | 3 |
| T.G. Papazoglou (Heraklion, Greece) | |
| Regular Papers | |
| Photosensitization with derivatives of chlorin p ₆ | 13 |
| D. Kessel, K. Woodburn (Detroit, MI, USA), C.J. Gomer (Los Angeles, CA, USA), N. Jagerovic, K.M. Smith (Davis, CA, USA) | |
| Fluorescence spectroscopy of pH in vivo using a dual-emission fluorophore (C-SNAFL-1) | 19 |
| S. Mordon (Lille, France), J.M. Devoisselle, S. Soulié (Montpellier, France) | |
| Correlation between <i>meta</i> (tetrahydroxyphenyl)chlorin (<i>m</i> -THPC) biodistribution and photodynamic effects in mice | 25 |
| L. Morlet, V. Vonarx-Coinssmann (Nantes, France), P. Lenz (Lyon, France), M.-T. Foulquier, L. Xavier de Brito (Nantes, France), C. Stewart (Guildford, UK), T. Patrice (Nantes, France) | |
| Molecular dosimetry by flow cytometric detection of thymine dimers in mononuclear cells from extracorporeally UV-irradiated blood | 33 |
| S.A. Snopov, R.J.W. Berg, H. van Weelden (Utrecht, Netherlands), K.A. Samoilova (St. Petersburg, Russia), J.C. van der Leun, F.R. de Gruyijl (Utrecht, Netherlands) | |
| A novel procedure to isolate the chromoproteins in the paraflagellar body of the flagellate <i>Euglena gracilis</i> | 39 |
| B. Brodhun, D.-P. Häder (Erlangen, Germany) | |
| Fluorescence and photochemical characterization of phytochrome in de-etiolated pea mutant <i>lip</i> | 47 |
| V.A. Sineshchekov (Moscow, Russia), S. Frances (Raleigh, NC, USA), M.J. White (Halifax, N.S., Canada) | |
| Evidence for the existence of two phytochrome A populations | 53 |
| V.A. Sineshchekov (Moscow, Russia) | |
| Fluorescence and absorption spectroscopic properties of RNA 5'-cap analogues derived from 7-methyl-, <i>N</i> ² ,7-dimethyl- and <i>N</i> ² , <i>N</i> ² ,7-trimethyl-guanosines | 57 |
| Z. Wieczorek (Olsztyn, Poland), J. Stepinski, M. Jankowska (Warsaw, Poland), H. Lönnberg (Turku, Finland) | |
| Characterization of the reactive intermediates in laser flash photolysis of adenine, adenosine and dAMP using acetone as photosensitizer | 65 |
| H. Li, S. Yao, Z. Zuo, W. Wang, J. Zhang, N. Lin (Shanghai, People's Republic of China) | |
| Modulation of a proteolytic enzyme activity by means of a photochromic inhibitor | 71 |
| C. Amato, A. Fissi, L. Vaccari, E. Balestreri, O. Pieroni, R. Felicioli (Pisa, Italy) | |
| Effects of vacuum UV and UVC radiation on dry <i>E. coli</i> plasmid pUC19 | |
| I. Inactivation, <i>lacZ</i> ⁻ mutation induction and strand breaks | 77 |
| J. Wehner, G. Horneck (Köln, Germany) | |
| Evidence of photoenzymatic repair due to the <i>phrA</i> gene in a <i>phrB</i> mutant of <i>Escherichia coli</i> K-12 | 87 |
| N. Dorrell, D.J.G. Davies, S.H. Moss (Bath, UK) | |
| Flow cytometric determination of absolute membrane potential of cells | 93 |
| Z. Krasznai, T. Márián, L. Balkay, M. Emri, L. Trón (Debrecen, Hungary) | |

News and Views

| | |
|---|------------|
| In vivo action spectra, absorption and fluorescence excitation spectra of photosensitizers for photodynamic therapy | 101 |
| W.M. Star (Rotterdam, Netherlands) | |
| ESP Newsletter | 103 |

Volume 27 Number 2

| | |
|-----------------------------------|------------|
| In this Issue of JPB | 113 |
|-----------------------------------|------------|

New Trends in Photobiology (Invited Review)

| | |
|---|-----|
| The specificity of p53 mutation spectra in sunlight induced human cancers | 115 |
| L. Daya-Grosjean, N. Dumaz and A. Sarasin (Villejuif, France) | |

Regular Papers

| | |
|--|------------|
| Chronic UVB- and all-trans retinoic-acid-induced qualitative and quantitative changes in hairless mouse skin | 125 |
| B. Chaqour (Reims, France), S. Seite, K. Coutant, A. Fourtanier (Clichy, France), J.-P. Borel and G. Bellon (Reims, France) | |
| Variations in UV radiation in Chile | 137 |
| S. Cabrera, S. Bozzo and H. Fuenzalida (Santiago, Chile) | |
| Influence of cell culture medium on the photosensitizing effectiveness of bacteriochlorin <i>a</i> | 143 |
| J.J. Schuitmaker, J.E. Jannink and T.M.A.R. Dubbelman (Leiden, Netherlands) | |
| Correlation between UVA-induced changes in microviscosity, permeability and malondialdehyde formation in liposomal membrane | 149 |
| B. Bose and S.N. Chatterjee (Calcutta, India) | |
| Intracellular fluorescence behaviour of <i>meso</i> -tetra(4-sulphonatophenyl)porphyrin during photodynamic treatment at various growth phases of cultured cells | 155 |
| W.S.L. Strauss, M.H. Gschwend, R. Sailer, H. Schneckenburger, R. Steiner and A. Rück (Ulm, Germany) | |
| The detection of cyclobutane thymine dimers, (6-4) photolesions and the Dewar photoisomers in sections of UV-irradiated human skin using specific antibodies, and the demonstration of depth penetration effects | 163 |
| C.A. Chadwick, C.S. Potten (Manchester, UK), O. Nikaido, T. Matsunaga (Kanazawa, Japan), C. Proby and A.R. Young (London, UK) | |
| Relationship between oxygen-evolution and hydrogen-evolution in a <i>Chlorococcum</i> strain with high CO ₂ -tolerance | 171 |
| J. Schnackenberg, H. Ikemoto and S. Miyachi (Iwate, Japan) | |
| Book Reviews | 175 |
| ESP Newsletter | 177 |
| Chemistry Section Contents | 185 |

Volume 27 Number 3

| | |
|-----------------------------------|------------|
| In this Issue of JPB | 187 |
|-----------------------------------|------------|

New Trends in Photobiology (Invited Review)

| | |
|---|-----|
| The importance of liposomes as models and tools in the understanding of photosensitization mechanisms | 189 |
| M. Hoebke (Liege, Belgium) | |

Regular Papers

| | |
|--|-----|
| Non-specific systemic immune suppression induced by photodynamic treatment of lymph node cells with bacteriochlorin <i>a</i> | 197 |
| H. Peter van Iperen, H.J. Schuitmaker, G.M.J. Beijersbergen van Henegouwen (Leiden, Netherlands) | |
| Molecular cloning of the human gene <i>SUVCC2</i> associated with mutagenesis following the induction of non-dimer DNA damages by solar UV radiation | 203 |
| B.S. Rosenstein (New York, NY, USA), C.A. Vaslet (Providence, RI, USA) | |
| Topical application of 5-aminolevulinic acid, DMSO and EDTA: protoporphyrin IX accumulation in skin and tumours of mice | 213 |
| Z. Malik (Ramat Gan, Israel), G. Kostenich (Tel Hashomer, Israel), L. Roitman, B. Ehrenberg (Ramat Gan, Israel), A. Orenstein (Tel Hashomer, Israel) | |

| | |
|--|-----|
| Modes of photodynamic vs. sonodynamic cytotoxicity | 219 |
| D. Kessel, J. Lo (Detroit, MI, USA), R. Jeffers, J. Brian Fowlkes, C. Cain (Ann Arbor, MI, USA) | |
| Blue light signal transmission to 15 kDa proteins in the crude membrane fraction from the stem section of etiolated pea seedlings | 223 |
| K. Ito, T. Hamada, K. Hasunuma (Yokohama, Japan) | |
| Photochemistry of dibenzoyl methane UVA filters | |
| Part 1 | 229 |
| W. Schwack, T. Rudolph (Stuttgart, Germany) | |
| Influence of polyamine inhibitors on light-independent and light-dependent chlorophyll biosynthesis and on the photosynthetic rate .. | 235 |
| A. Beigbeder, M. Vavadakis, E. Navakoudis, K. Kotzabasis (Heraklion, Crete, Greece) | |
| Author Index | 243 |
| Subject Index | 245 |
| Chemistry Section Contents | 249 |