

NEWS

Calendar

5-17 April 1992

Sintra, Portugal

NATO ASI Conference on multifunctional Mesoporous Inorganic Solids

Prof. C. A. C. Sequeira
 Instituto Superior Técnico
 Av. Rovisco Pais
 1096 Lisboa Codex
 Portugal
 Tel: 783594
 Fax: 351-1-899242
 Telex: 63423 IST UTL/P

7-9 April 1992

Loughborough, UK

Electrochemical Engineering and the Environment (SCI/EFCE/DECHEMA/GFGP)

Dr. R. J. Mortimer
 Chemistry Department
 University of Technology
 Loughborough
 Leicestershire LE11 3TU, UK

7-9 April 1992

Dortmund, Germany

New Generation Technologies for Efficient Energy End Uses and Fuel Switching

GVD
 Gesellschaft für Veranstaltungs-Dienste mbH
 Degerstrasse 38
 D-4000 Dusseldorf 1
 Germany

21-25 April 1992

Wiesbaden, Germany

8th Euchem Conference on Electrochemistry

Prof. Dr. H. J. Schäfer
 Organisch-Chemisches Institut
 Universität Münster
 Correns Strasse 40
 W-4400 Münster
 Germany
 Fax: 02 51 839772

5-8 May 1992

Knokke, Belgium

5th European Workshop on the Electrodeposition of Metals – "Electroless Plating"

Dr. J.-L. Delpiancke
 Métallurgie-Electrochimie – CP 165
 Université Libre de Bruxelles
 50 avenue F.D. Roosevelt
 B-1050 Bruxelles
 Belgium

Tel: 32-2-650 36 48
 Fax: 32-2-650 36 53
 Telex: Unilib-b 23069

10-15 May 1992

Münster, Germany

6th International Meeting on Lithium Batteries

Prof. Dr. J. O. Besenhard
 Anorganisch-Chemisches Institut
 Westfälische Wilhelms Universität Münster
 Wilhelm-Klemm-Strasse 8
 D-4400 Münster
 Germany
 Tel: 02 51 83 31 15
 Fax: 02 51 83 21 69

17-22 May 1992

St. Louis, USA

Electrochemical Society Meeting

Battery/Energy Technology/Physical Electrochemistry
 – Direct Electrochemical Oxidation of Methanol Small Organic Molecules; Joint General Session
Corrosion – General Session
 – Cathodic Protection Systems
 High T_c Superconductor Technology V.
 Fractiles in Electrochemistry.
 Electrochemical Characterization of Thin Solid Films.
 Stability of Refractory Materials
High Temperature Materials/Dielectric Science and Technology/Energy Technology/Electronics
 – New Materials and Processing for the Year 2000.
 High Temperature Sensors
Industrial Electrolysis and Electrochemical Engineering
 – Electrochemistry in Mineral and Metal Processing III; Industrial Electro-Organic Processes; General Session
Organic and Biological Electrochemistry
 – Electrochemistry and Neuroscience; Mediators in Electrochemical Synthesis; General Session
Physical Electrochemistry
 – Electrochemistry of High T_c Superconductors; Electrolytic Reduction of CO₂; The Electrical Double Layer; General Session.
Physical Electrochemistry/Electrodeposition
 – Micromorphology in electrocrystallization
Physical Electrochemistry/High Temperature Materials
 – 8th International Symposium on Molten Salts
Sensor
 – Minuturization of Macroelectrochemical Sensors (Modern Solid State Technology); Sensors in Medical Science.
New Technology Subcommittee/Electronics/Dielectric Science and Technology
 – Micromachining and Microstructures; Quantum Confinement

Electrochemical Society Inc
 10 South Main St
 Pennington
 New Jersey 08534-2896,
 USA

25–27 May 1992

Tokyo, Japan

1st West Pacific Electrochemistry Symposium

Professor Akira Fujishima
1st WPES Chairperson
c/o Department of Synthetic Chemistry
Faculty of Engineering
The University of Tokyo
7-3-1, Hongo, Bunkyo-ku, Tokyo 113
Japan
Tel: +81-(0)3-3812-2111 Ext 7245
Fax: +81-(0)3-3812-6227

31 May–3 June 1992

Noordwijkerhout, The Netherlands

4th European Conference on Electroanalysis

- electrochemical detection in FIA/CFA/HPLC
- stripping analysis
- pharmaceutical and biomedical applications
- (bio)sensors and chemically modified electrodes
- new electroanalytical techniques and applications
- environmental applications

ESEAC'92
W. P. van Bennekom
P.O. Box 80.082
3508 TB Utrecht
The Netherlands

1–5 June 1992

Trondheim, Norway

11th International Course on the Process Metallurgy of Aluminium

Course Secretariat
Institute of Inorganic Chemistry
The Norwegian Institute of Technology
N-7034 Trondheim
Norway
Tel: +47 7 59 39 79
Fax: +47 7 59 39 92

14–17 June 1992

Vancouver, Canada

Ernest Peters International Symposium on Hydrometallurgy Theory and Practice

Dr. D. Dreisinger
Dept. of Metals and Materials Engineering
University of British Columbia
309-6350 Stores Road
Vancouver, B.C., Canada V6T 1W5

22–25 June 1992

Paris, France

9th World Hydrogen Energy Conference

Hydrogen 92 – Paris
MCI-6, Rue de l'Isly
75008 Paris, France
Tel: 33 (1) 42 94 27 67
Fax: 33 (1) 42 93 29 67

28 June–3 July 1992

Manchester, UK

Advances in Corrosion and Protection

Conference Secretary (ACP)
Corrosion and Protection Centre
UMIST
P.O. Box 88
Manchester M60 1QD
Tel: 061 200 4848
Fax: 061 200 4865

5–10 July 1992

Southampton, UK

Instrumental Methods in Electrochemistry – Summer School

Mrs. C. Chatley
Department of Chemistry
University of Southampton
Southampton SO9 5NH, UK
Tel: 0703-593519
Fax: 0703-676960

6–8 July 1992

Rouen, France

International Symposium on Control of Copper Oxidation

- mechanisms of dry oxidation
- atmospheric corrosion
- methodology of corrosion studies
- influence of additives and technologies of fabrication
- inhibition of copper corrosion and oxidation

Pr. M. Lenglet
Laboratoire de Physicochimie des Matériaux
B.P. 08
76131 Mont Saint Aignan Cedex
France
Tel: 35 14 62 45
Fax: 35 70 52 97

12–17 July 1992

Santa Barbara, CA, USA

2nd International Symposium on Electrochemical Impedance Spectroscopy

Professor D. D. MacDonald
Centre for Advanced Materials
517 Deike Building
The Pennsylvania State University
University Park
PA 16802 USA
Fax: (814) 863-4718

14–16 July 1992

Newcastle-upon-Tyne, UK

Development of Electrochemical Processes – Course

- Principles
- Aspects of system design
- Applications

Dr. K. Scott

or

Dr. J. Backhurst
Dept. of Chemical & Process Engineering
University of Newcastle-upon-Tyne
Merz Court
Claremont Road
Newcastle-upon-Tyne NE1 7RU, UK

16–21 August 1992

Utah, USA

12th IUPAC Conference on Chemical Thermodynamics

Chemistry Dept: ICCT
226 ESC
Brigham Young University
Provo, Utah 84602
USA

17–21 August 1992

Abo, Finland

Summer Course on Surface Electrochemistry

Dr. Mikael Wasberg
Abo Akademi
Laboratory of Analytical Chemistry
Biskopsgatan 8
SF-20500 Abo
Finland

23–27 August 1992

Edmonton, Alberta, Canada

31st CIMMP Annual Conference of Metallurgists

Dr. G. L. Bolton
Sherritt Gordon Ltd
Fort Saskatchewan
Alberta, Canada T8L 3W4
Tel: (403) 992 5003
Fax: (403) 992 5110

23–28 August 1992

Beijing, China

9th International Conference on Photochemical Conversion and Storage of Solar Energy

Professor Zhaowu Tian
Conference Chairman
Chemistry Department
Xiamen University
Xiamen, China

or

Professor Shengmin Cai
Chemistry Department
Peking University
Beijing, China

7–9 September 1992

Newcastle-upon-Tyne, UK

Solution/Liquid Interfaces at High Resolution (RSC Faraday Division)

Professor A. Hamnett
Chemistry Department
Bedson Building

University of Newcastle-upon-Tyne
Newcastle-upon-Tyne NE1 7RU
UK

10–13 September 1992

Oxford, UK

Electrified Interfaces

Professor John Albery FRS
The Masters Lodgings
University College
Oxford OX1 4BH

13–17 September 1992

Tokyo, Japan

4th International Meeting on Chemical Sensors

Prof. Dr. Noboru Yamazoe
Graduate School of Engineering Sciences
Kyushu University 39
Kasuga-shi
Fukuoka 816
Japan

14–18 September 1992

Cleveland, Ohio, USA

Electrochemical Measurement Workshop

Prof. Eliezer Gileadi
Case Centre for Electrochemical Sciences
Case Western Reserve University
10900 Euclid Avenue
Cleveland
Ohio 44106-7218
USA
Tel: 216-368-6525
Fax: 216-368-3016

20–25 September 1992

Cordoba, Argentina

43rd ISE Meeting

– Electrochemistry and the Environment

- *Use of waste materials and recycling*
 - Environmental contaminants
 - Detection of intermediates and products
 - Photodegradation of wastes by illuminated semiconductors
 - New electrode materials and processes
 - Modelling
- *Electroanalytical Methods*
 - Electrochemical sensing – microelectrodes
 - Modified electrodes
 - Selective membranes
 - High speed techniques
 - Waste water analysis

– Electrochemical Engineering for Cleaner Processing

- Transport phenomena, current distribution
- New electrodes and cells
- Modelling
- Heavy metal extraction, refining and recovering
- Electrometallurgy

– Electrochemical Energy Conversion and Storage

- Design of electrode surfaces, electrocatalysts
- New electrode materials and electrode processes

Advanced fuel cells
Advanced water electrolyzers

- *Corrosion Protection by Electrochemical Procedures*
- Inhibition and inhibitors
- Cathodic protection
- Generation of protective films
- Characterisation of protective films

Dr. V. A. Macagno
Depto. de Fisico Quimica
Fac. de Ciencias Quimicas
Universidad Nacional de Cordoba
Succursal 16, C.C. 61
5016 Cordoba
Argentina
Tel: +54 51 60-6373/8778
Fax: +54 51 69-4724
Telex: 51822 BUCOR AR

21-25 September 1992

Warsaw, Poland

**Conducting Polymers: Transport Properties
- International Autumn School**

Electronic Conducting Polymers
Ionic Conducting Polymers
Composites
Chemical and Electrochemical Synthesis of C.P.
Structure
Hopping Conductivity
Percolation
Sensors
Electrochemical Devices
General Applications

Dr. Janusz Plochanski
Department of Chemistry
Warsaw University of Technology
ul. Noakowskiego 3
Pl 00-664 Warszawa
Poland
Fax: xx48-22-292962
Telex: 813307 pw pl

21-26 September 1992

Taranto, Italy

**8th International Congress on Marine
Corrosion and Fouling**

Organizing Secretariat
Studio Marzo Associati
Viale Magna Grecia
468-74100 Taranto
Italy

11-16 October 1992

Toronto, Canada

Electrochemical Society Meeting

Battery

- Battery Sensors, End of Charge and State of Charge Indicators; Environmental Aspects of Batteries; Lithium Batteries

Battery/Energy Technology

- High Temperature Molten Salt and Solid Oxide Batteries and Fuel Cells; Joint General Session

Corrosion

- Corrosion of Electronic Materials and Devices; General Session

Corrosion/Dielectric Science and Technology

- Anodic Oxide Films on Metals and Alloys

Corrosion/Physical Electrochemistry

- Microscopic Models of Electrode/Electrolyte Interfaces and Corrosion Processes; Oscillatory and Chaotic Phenomena in Corrosion and Electrochemistry

Electrodeposition

- Autocatalytic Deposition; Electrodeposition of Contacts and Connectors; Structure and Properties of Electrodeposited Protective Coatings; General Session

Electrodeposition/Industrial Electrolysis and

Electrochemical Engineering

- Simulation of Electrodeposition Processes

Energy Technology

- Environment, Health and Safety Systems; General Session

Energy Technology/Industrial Electrolysis and

Electrochemical Engineering

- Hydrogen Energy Systems

High Temperature Materials

- High Temperature Intermetallics; Interfacial Chemistry

Organic and Biological Electrochemistry

- General Session

Physical Electrochemistry

- Hydrogen Adsorption and Absorption; Liquid-Liquid Interfaces; Scanning Tunneling and Atomic Force Microscopy; Solid Electrolytes; Stochastic Processes and Fractals in Electrochemistry; General Session

Sensor

- Electrochemical Sensors; General Session

New Technology Subcommittee

- Electrorheological Fluids.

Recycling and Recovery

Electrochemical Society Inc
10 South Main Street,
Pennington
New Jersey 08534-2896
USA

8-12 November 1992

Fort Lauderdale, Florida, USA

**Environmental Applications of Electrochemical
Technology**

Dr. N. L. Weinberg
The Electrosynthesis Co. Inc.
P.O. Box 430
East Amherst
NY 14051-0430
USA
Tel: (716) 684 0513
Fax: (716) 684 0511

or

Dr. D. Pletcher
Department of Chemistry
The University of Southampton
Southampton SO9 5NH
Tel: +44 703 593519
Fax: +44 703 676960

16-21 May 1993

Honolulu, Hawaii

Electrochemical Society Meeting

Electrochemical Society Inc

10 South Main St
Pennington
New Jersey 08534-2896
USA

Professor S. Trasatti
Dept. of Physical Chemistry & Electrochemistry
Via Venezian 21
20133 Milan
Italy

July 1993

Newcastle-on-Tyne, UK

Electrosynthesis '93 (SCI/RSC)

Dr. K. Scott
Department of Chemical & Process Engineering
University of Newcastle-upon-Tyne
Merz Court
Claremont Road
Newcastle-upon-Tyne NE1 7RU, UK

22-24 May 1995

Sendai, Japan

Zinc & Lead '95

- mineral processing
- hydrometallurgy
- pyrometallurgy
- recycling
- secondary materials
- applications
- environmental challenges

5-10 September 1993

Berlin, Germany

44th ISE Meeting

Prof. W. Plieth
Institut of Physical & Theoretical Chemistry
Free University of Berlin
Takustrasse, 3
D-1000 Berlin 33
Germany

M. Hino

Department of Metallurgy
Faculty of Engineering
Tohoku University
Aoba, Aramaki, Sendai
Japan 980
Fax: 81-22-268-2949

or

J. E. Dutrizac
CANMET
555 Booth Street
Ottawa
Ontario
Canada K1A 0G1
Tel: (613) 995-4823
Fax: (613) 995-9041

12-15 September 1993

Ferrara, Italy

**Progress in Electrocatalysis – Theory
and Practice**

Please send details of relevant meetings and other worthy news to the News Editor.

Book Reviews

'Fuel Cells', D. G. Lovering (Ed.), *Proceedings of the Grove Anniversary Fuel Cell Symposium, Royal Institution, London, 18-21 September 1989*. Reprinted from *J. Power Sources* **29**
280 pp. ISBN 1-85166-816-0, £59.00

According to the symposium committee, the main purpose of the meeting was for scientists from research institutions and industries to discuss the contemporary developments in fuel cells and their potential role in an increasingly environmentally-aware society.

The first two chapters cover the 'Background', 'Context of Application' and 'Commercialization' of fuel cells. These lectures offer an introduction and an overview especially for industrial colleagues new to the field. The content of chapter 3, 'European Fuel Cell Interest', can also be included in this group of presentations. Starting with a good description of the development of fuel cells during the last 150 years, the importance of fuel cells in respect to the global warming problem, the market of fuel cells for public power systems (3-10 MW at ~1000 \$/kW), and in more detail the Westinghouse phosphoric acid fuel cell are

discussed. The strategy of fuel cell R&D is presented for Europe, Italy and Japan, mainly from the economic and application point of view. There are only a few remarks on subjects like electrochemical reactions or electrocatalysis.

In the last two chapters (nine contributors spanning 110 pages), four authors offer more than just a survey. B. Riley from Combustion Engineering (Windsor USA) explains in detail the new planar concept of Solid Oxide Fuel Cells and the problems ahead. K. Prater from BALLARD (Canada) presents the unique features of the modern Solid Polymer Fuel Cell with great possibilities for mobile applications, now ready for commercialization. In this respect, the paper by R. Lemons (Los Alamos) also has something to say.

Last, but not least, the closing remarks of J. Appleby (Texas A&M) not only summarize the discussion of the symposium but list a series of comments, interesting for everyone working in fuel cell research and development.

W. VIELSTICH
Universität Bonn, Germany