three **2008**

Serving Electrochemical Science, Technology and Engineering
within the catchment of
The Royal Society of Chemistry
and
The Society of Chemical Industry

Where science meets business
an environment to advance knowledge exchange

RSC | Advancing the Chemical Sciences

Alvatek

Alvatek is proud to be selected by Ivium Technologies to distribute its leading-edge and innovative range of electro-chemical research solutions. The Ivium range includes:

⇒ CompactStat™

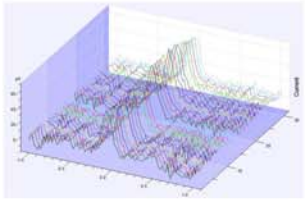
Potentiostat,Galvanostat & FRA in a portable integrated unit.

⇒ IviumStat.XR™

Potentiostat, Galvanostat, Bipotentiostat & FRA. Up to 20V, 5A

⇒ IviumBoost™

Extends IviumStat to 10V/40A or 20V/20A



⇒ MultiChannel Testing using MultiWE32™ or HiMUX™

Ivium equipment integrates swept dc and ac impedance/FRA in a range of innovative designs. IviumSoft™, Ivium's comprehensive and intuitive electrochemical test software suite is provided free of charge. Call Alvatek for more information.

- Potentiostat/Galvanostat
- Impedance Analyser
- 100Khz sampling
- 10kV/Sec
- True Linear Sweep
- Auxilliary I/O & triggering

Call 01666 500991 or email steve.fryatt@alvatek.co.uk for more information or to request a demo/evaluation.

windsorscientific

AUTOLAB

- AUTOLAB/PGSTAT302N
- ADC10M - ULTRA FAST SAMPLING MODULE
  Shortest interval time 100 ns /1 Million points
- SCAN250 - TRUE LINEAR SCAN GENERATOR
  Scan rates up to 250 kV/s
- FRA2 - FREQUENCY RESPONSE ANALYZER
  10 µHz - 1 MHz / Single and multiple sine
- BA - DUAL MODE BIPOTENTIOSTAT
  7 Current ranges10 nA -10 mA/Maximum current 50

NOVA

Electrochemical

Software

Windsor Scientific Ltd., 264 Argyll Avenue, Slough Trading Estate, Slough, Berkshire SL1 4E
Tel: +44 (0)1753 822522 Fax: +44 (0)1753 822002
Email: sales@windsorscientific.co.uk Web: www.windsorscientific.co.uk

Editorial

Wow! It would appear (*q.v.* pages 7-8) that 2008 has been a year in which the huge impact that electrochemistry plays in UK chemistry has been recognised. This is a boost and a benefit to us all, especially in the light of the forthcoming EPSRC chemistry assessment, and the outcome of RAE2008. One marker of the health of a sub-discipline within a geo-economic region is the flux of talented young researchers engaged in its study (normalised by the cost of funding their research). We are fortunate since there have been many appointments to academic positions of young researchers in our field over the past seven years. To give some of these appointees *an opportunity to present themselves* to Electrochemistry UK, thereby hoping and anticipating a strengthening of the strategic position of our subject within British, European and International chemical science, this issue sees the launch of a *freshEYES* portal (*q.v.* pages 14-16; I am reminded of Chateaubriand's *Mémoires d'outre tombe*: "Personal fame only increases; the location of the Nile's source is only known to a few, but who does not know of its mouth?" [volume 19, chapter 3]).

I thank all those who have so generously provided materials for this issue, in particular the sponsors of this magazine, and all those who have provided feedback on this publication. It remains for me to wish you all a pleasant and an enjoyable time over Christmas and New Year.

Sincerely,

Editor

If you wish to notify the editor with your view on the material or the content of any item in this issue, or your wish to contribute to the newsletter, please write to the editor at:

electrochemistry.newsletter@googlemail.com

A change in colours for RSC Electrochemistry Group

A warm THANK YOU to Professor Patrick UNWIN who stepped down as Chair of the RSC Electrochemistry Group after Electrochem'08 in September, 2008.

CONGRATULATIONS and GOOD LUCK to Doctor Andrew MOUNT who is the current Chair of the RSC Electrochemistry Group.

WELCOME to Professor Doctor David FERMIN (right) and Doctor Katherine HOLT (left) who have joined Doctor Mount's team as Academic Representatives.

Congratulations to....

Professor Philip N. BARTLETT of The University of Southampton, United Kingdom, recipient of *Electrochimica Acta Gold Medal* of the *International Society of Electrochemistry*, and a *Tilden Prize* from *The Royal Society of Chemistry* for his "original and broad contributions to electrochemistry and chemical sensors."

Doctor Richard BROWN of the National Physical Laboratory, United Kingdom, recipient of a *SAC Silver Medal* from *The Royal Society of Chemistry* for "excellence in the application of measurement science to a variety of analytical chemistry problems. In particular in the areas of: environmental analytical chemistry, electroanalysis and surface-enhanced Raman spectrometry."

Professor Robert A. W. DRYFE on his election to a Professorship in Chemistry at The University of Manchester, United Kingdom.

Doctor Katherine B. HOLT of University College, London, United Kingdom, recipient of the *Edward Harrison Memorial Prize* of *The Royal Society of Chemistry* for her "novel applications of electrochemical methods in the material and life sciences."

Professor Rudolph A. MARCUS of The California Institute of Technology, United States of America, on his election to the *Spiers Memorial Award* of *The Royal Society of Electrochemistry*, and in acknowledgement of his "outstanding contributions to the theory of electron transfer and chemical reactivity."

Doctor Frank MARKEN of The University of Bath, United Kingdom, on his election to the *Theophilius Redwood Lectureship* of *The Royal Society of Chemistry*. Doctor Marken is "distinguished for his research on both fundamental and applied aspects of electrochemistry, particularly involving liquid | liquid and energy-modified electrochemical processes."

Professor George THOMPSON of The University of Manchester, United Kingdom, recipient of the *Corrosion Science Award* of *The Royal Society of Chemistry* for his "significant contributions to corrosion science which, assisted by pioneering approaches, have provided detailed consideration of the relationship between material structure, properties and performance, including corrosion control strategies through surface and near-surface modification."

Mister Sumeet MAHAJAN of The University of Southampton, United Kingdom, who has been awarded the *Ronald Belcher Lectureship* of *The Royal Society of Chemistry* for his work on "SERS-melting for characterization of mutations in the human CFTR gene."

This is a remarkable researcher of significant potential; the editor had the pleasure to listen to Mr. Mahajan's awarded lecture at The Royal Society of Chemistry Analytical Research Forum 2008 held in Kingston-upon-Hull in July, 2008. The following is a brief summary of Mr. Mahajan's background taken from the RSC webpages; further information is available at the URL below.
http://sumeetmahajan.googlepages.com/

"Sumeet Mahajan is currently a PhD student in the Electrochemistry group at the University of Southampton working with Prof. Phil Bartlett. He has been working on the fundamentals and applications of colloidal crystal templated electrodeposited substrates for surface-enhanced Raman spectroscopy (SERS). He has especially worked on developing novel analytical applications based on SERS for detecting DNA sequences and distinguishing mutations.

"Prior to his PhD he has had an accomplished academic career having graduated from Indian Institute of Technology (IIT) Kanpur majoring in Chemistry. For his Masters degree in Biomedical Engineering from IIT Bombay he worked on conducting polymer sensors and actuators and got attracted towards electrochemistry. In between the two degrees he worked as a Scientist in Defence R&D Organization for five years developing analytical methods, improving and scaling up chemical processes.

"He has won several awards for his academic achievements including a Proficiency Prize at IIT Kanpur for his dissertation, an ORSAS scholarship and the best poster award among second year PhD students for 2007. He has co-authored 14 papers and is an inventor on two patent applications.

"His research interests lie in the field of Bio(electro)analytical chemistry, photoelectrochemistry and functional nanomaterials."

The editor additionally warmly congratulates Professor Emmanuel MAISONHAUTE, UMR-CNRS-UMPC-8640, Paris, France, who some seven years ago, engaged in post-doctoral research within the United Kingdom, and who was recently awarded the 2008 *Instrumentation Prize* of the Chemical Physics Division of the French Chemistry Society and French Physics Society, for his realization of equipment for ultra-fast electrochemistry.

RS•C
ROYAL SOCIETY OF CHEMISTRY

Electrochemistry Research Symposium

Division of Chemistry and Materials

Manchester Metropolitan University

Symposium Opening by Professor John Brooks, Vice-Chancellor of Manchester Metropolitan University

RSC Theophilius Redwood Lecture

Microwaves in Electroanalysis

Dr Frank Marken,
University of Bath, UK

Biomolecular Detection: Electrified Liquid Interfaces and Miniaturised Systems

Dr Damien Arrigan,
Tyndall National Institute, University College, Cork, Ireland

New Insights into Electrodeposition

Professor Robert Dryfe,
University of Manchester, UK

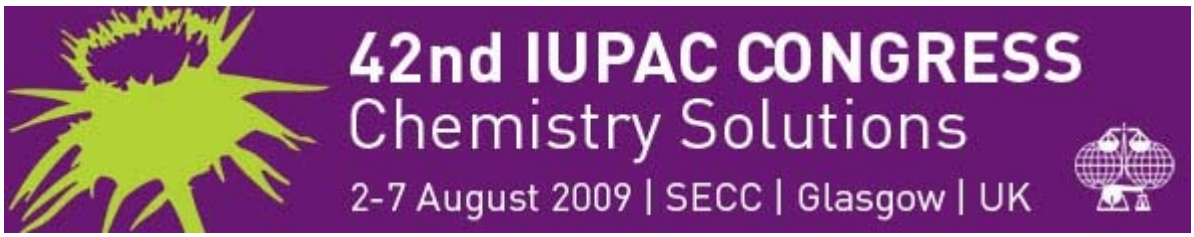
Followed by a wine reception

Location: Manchester Metropolitan University Assembly Hall (C0.14), John Dalton Building, Oxford Road, Manchester, M1 5GD

Wednesday 17th December 2008, 1.30 pm

Please contract Dr Craig Banks (c.banks@mmu.ac.uk) for further details and to confirm your attendance.

Notices 2



The 42nd IUPAC annual congress (www.iupac2009.org) will be held in Glasgow, Scotland, August 2-7, 2009.

The Scottish Exhibition and Conference Centre (SECC) on the banks of the River Clyde.

The *Electroanalytical Group of the Royal Society of Chemistry* is organizing a symposium on Miniaturized Electroanalytical Systems, which will encompass the latest advances in integrated electrochemistry within microfluidic and nanoscale structures and their deployment in bioanalytical and environmental detection.

Glasgow attractions: the Cloch Lighthouse (left) and the Gallery of Modern Art (right).

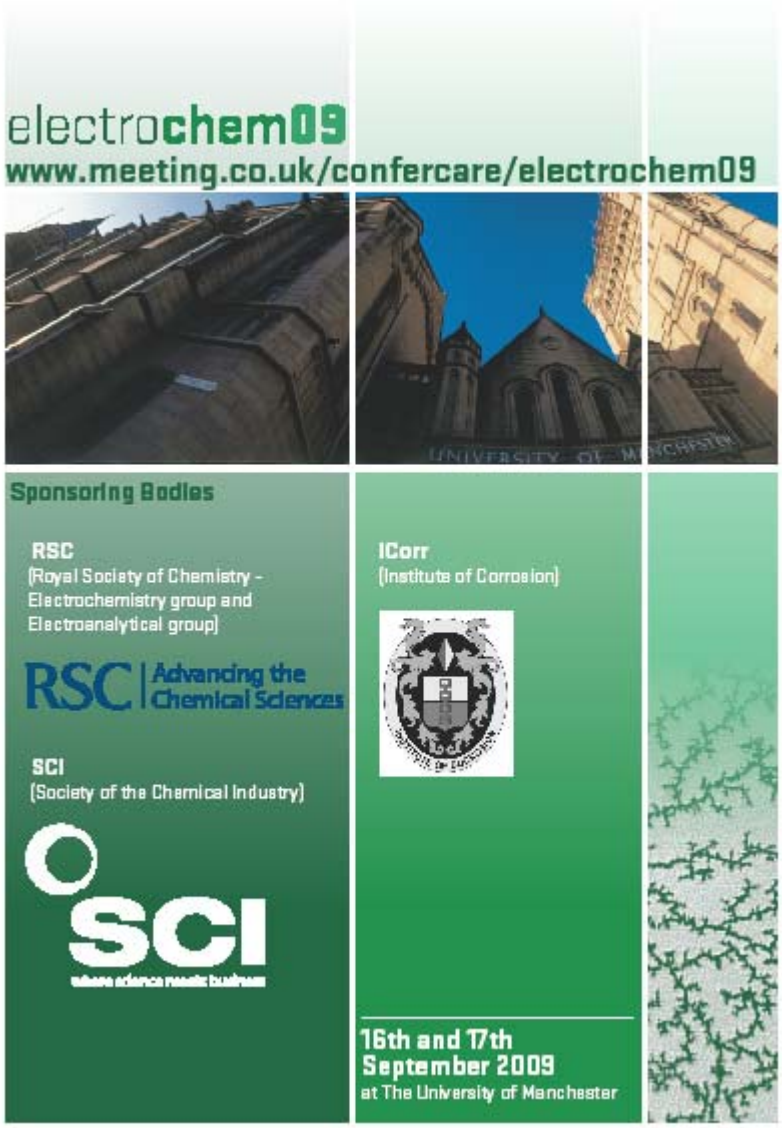
The deadline for abstracts for oral presentations is 16th January 2009 and for poster presentations is 5th June 2009.

Please consult the website for further details: http://www.iupac2009.org

Any queries about the symposium can be directed to Professor Damien ARRIGAN: damien.arrigan@tyndall.ie.

Notices 3


electrochem09
16th and 17th September 2009
at The University of Manchester
incorporating the 50th Corrosion Science Symposium
Lead organisers –
Robert Dryfe, Nick Stevens
Peter Fielden & Ted Roberts
The University of Manchester
• Plenary lectures from - the RSC Electrochem group Faraday medallist, Professor Reg Penner, (University of California Irvine), ICorr Evans Medallist, Professor Christofer Leygraf, (KTH Stockholm) and SCI Castner Medallist (to be announced)
• Conference will include a poster session
• Commercial exhibitors
• A choice of accommodation will be provided ranging from en-suite halls of residence, to local hotel rooms
• Abstract submission deadline – 31st May 2009
www.meeting.co.uk/confercare/electrochem09


electrochem09
www.meeting.co.uk/confercare/electrochem09
Sponsoring Bodies
RSC
(Royal Society of Chemistry -
Electrochemistry group and
Electroanalytical group)
RSC | Advancing the Chemical Sciences
SCI
(Society of the Chemical Industry)
SCI
ICorr
(Institute of Corrosion)
16th and 17th
September 2009
at The University of Manchester

freshEYES 1

Doctor Tim ALBRECHT (right) joined Imperial College London as a Lecturer in October, 2006, where his group now works on different aspects of charge transport in nanoscale systems. Part of his current research interests focus on electrochemical charge transfer processes at monolayer and single-molecule levels in a broad range of systems, including small redox molecules, nanoparticles, proteins and redox-modified DNA in aqueous and ionic liquid media. He was the first to demonstrate redox-mediated charge transport through individual transition metal complexes; to use ionic liquids as gating medium for such experiments; and to probe charge transport through different charge states of small nanoparticles using electrochemical gating. Another activity involves the study of ion and biopolymer transport in solid-state nanopores for biosensing applications (DNA, proteins, peptides), particularly with a view on integrating small electrode structures to improve translocation control and detection characteristics ('electrode/pore architectures').

Tim is Member of the Royal Society of Chemistry, the Institute of Physics, the International Society of Electrochemistry and the Electrochemical Society, and regularly acts as a referee for a range of journals, including *Journal of Physics: Condensed Matter*, *Nanotechnology*, *JACS*, *JPC*, and *Electrochemistry Communications*. To date he has published 15 articles in peer-reviewed journals, (co)authored two book chapters and filed two patent applications. Since 2007 he is also affiliated with the London Centre for Nanotechnology (LCN).

Tim studied chemistry at the University of Duisburg-Essen, Germany, and finished with a master ('Diplom') thesis in Atmospheric Chemistry in 2000, after visiting Ron Cohen's group at UC Berkeley and the group of Nicolo Omenetto at the EU Joint Research Centre in Ispra, Italy. His interests then shifted and he moved on to do his PhD at the Max-Planck Institute for Bioinorganic Chemistry, working on heterogeneous charge transfer processes of artificial ('*de novo*') and natural electron transfer proteins on metal surfaces. During that time, he also visited the Instituto de Tecnologia Química e Biológica in Oeiras, Portugal (2001-2002) and Prof. Jens Ulstrup's group at the Technical University of Denmark in Lyngby. He obtained his PhD degree from the Technical University of Berlin in 2003 and then moved back to Denmark to join Prof. Jens Ulstrup's group again, as a postdoctoral researcher (until 2006).

Find out more on http://www.imperial.ac.uk/people/t.albrecht and http://www.london-nano.com/content/lcndirectory/timalbrecht/.

Doctor Katherine B. HOLT (left)

I have been employed in the Chemistry of Department of UCL since 2004, first as a Ramsay Fellow and currently as an EPSRC Advanced Research Fellow. I carried out my doctoral research under the supervision of John Foord at the University of Oxford, with a project on the fabrication and characterisation of boron-doped diamond (BDD) electrodes. This was followed by two years postdoctoral research in the group of Allen Bard at the University of Texas at Austin, where I was introduced to the technique of Scanning Electrochemical Microscopy (SECM) and undertook projects to understand the antimicrobial mechanism of Ag^+ and the electrochemical activity and distribution of dopant in BDD films.

My current research interests are fairly broad. I have active projects using SECM to probe the respiratory chain function of *E. coli* and mitochondria; fabrication and application of BDD ultramicroelectrodes; redox properties of undoped diamond nanoparticles; and biomimetic complexes of the hydrogenase enzyme for use as electrocatalysts for H_2 production.

Find out more on http://www.chem.ucl.ac.uk/people/holt/index.html.

Solutions for electrochemical research

IVIUM TECHNOLOGIES

IviumBoost

For high power applications

- Batteries
- Fuel cells
- MEA's
- Electrolysis
- Corrosion
- Deposition

Full Potentiostat/galvanostat compliance

40A @ ±10 V
20A @ ±20 V

The IviumBoost will increase the maximum current of the IviumStat or IviumStat.XR:

- 2 models: # maximum 40A at ±10V
  # maximum 20A at ±20V
- All electrochemical techniques applicable
- Full potential range, no singularities at 0 V
- Bandwidth > 100kHz
- Rise time < 50 µs
- 100-240V, 50-60Hz, 1000W

For more information contact

Steve Fryatt at Alvatek

Tel 01666 500991
info@alvatek.co.uk

freshEYES 2

Doctor Craig E. BANKS (right) completed his D.Phil. in 2004 at The University of Oxford and undertook two years post-doctoral work at the same institution before being appointed as Lecturer in Analytical Chemistry with Forensic Applications at The Nottingham Trent University in October, 2006. In January, 2008 he took up the position of Senior Lecturer at The Manchester Metropolitan University.

Craig has published over 140 papers, co-written an authoritative textbook, holds seven patents and has spun out two companies (Oxtox, Ltd., - see http://www.oxtox.com/ - and Kanichi Research Services, Ltd.) Craig is a prolific referee for a plethora of international chemistry journals and serves on the Editorial Advisory Board for *The Open Electrochemistry Journal*.

Craig has broad research interests in the areas of electrochemistry, electroanalysis, sonoelectrochemistry (the combination of electrochemistry with ultrasound), sono-electroanalysis, nano-electrochemical systems, enhanced electrochemical sensing platforms, nanocomposities, micro- and nano- scale architectures, electro-synthetic chemistry and green synthetic chemistry. Currently research is directed towards the pursuit of studying the fundamental understanding and applications of nano-electrochemical systems such as carbon nanotube and nanoparticles derived sensors.

Find out more on http://www.sci-eng.mmu.ac.uk/bchs/staff/staffbiog.asp?StaffID=462&pageddiv=chemistry and http://craigbanksresearch.com/

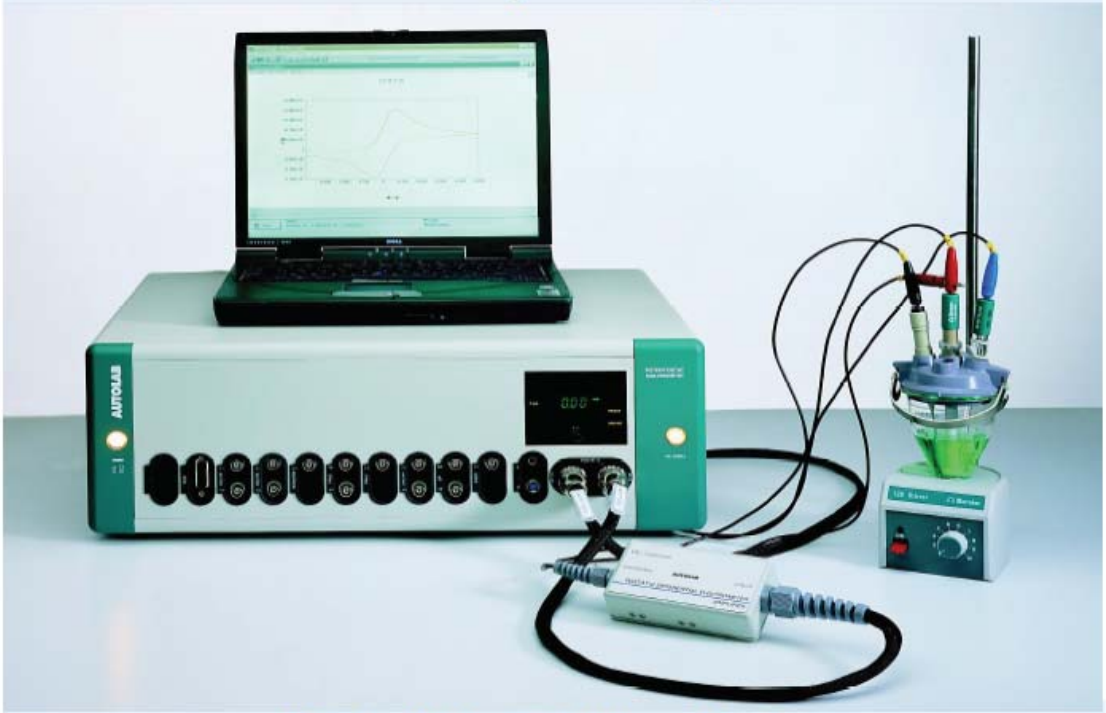
Doctor Darren A. WALSH (left) obtained his B.Sc in Analytical Science from Dublin City University in 1997 and his M.Sc. in Analytical Chemistry from ITT, Dublin in 1999. In 2002, he obtained his PhD in Physical Chemistry from Dublin City University where he studied heterogeneous electron transfer dynamics using ultrafast electrochemical techniques with Prof. Robert Forster. He then spent one year as a postdoctoral researcher at Dublin City University, studying charge transfer dynamics within redox polymers at electrode surfaces. In 2003, he moved to the University of Texas at Austin to do postdoctoral work with Allen J. Bard. In 2005, he moved to the University of Newcastle upon Tyne to take up a position as a Lecturer in Physical Chemistry. In 2007, he joined the School of Chemistry at the University of Nottingham as a DICE (Driving Innovation through Chemistry and Chemical Engineering) Lecturer.

Research projects in the Walsh lab include the development of new probes for scanning electrochemical microscopy (SECM). Of particular interest is the development of new probes for screening fuel cell electrocatalysts using SECM. Other projects in the lab include the development of fuel cell electrocatalysts on porous carbon supports using supercritical carbon dioxide as solvent. Supercritical carbon dioxide is especially useful as its high diffusivity allows access to narrow pores of the support material. The group is also interested in the development and applications of electrodes based on carbon nanotubes and nanofibres, in particular as supports for electrocatalytic materials.

Find out more on http://www.nottingham.ac.uk/chemistry/staff/staffrole.php?id=ODA3OTM5&page_var=personal and http://www.nottingham.ac.uk/~pczdaw1/Electrochemistry.htm.

Future events

Bath Electrochemistry Winter School
12th – 16th January 2009



Intensive Hands-on Training and Lectures

A five-day intensive course given by Professor Laurie Peter and his colleagues in collaboration with Windsor Scientific

http://www.bath.ac.uk/chemistry/summerschool

UNIVERSITY OF BATH

windsorscientific

Windsor Scientific Ltd., 264 Argyll Avenue,
Slough Trading Estate, Slough, Berkshire SL1 4HE.
Tel: +44 (0)1753 822522. Fax: +44 (0)1753 822002.
Email: sales@windsorscientific.co.uk
Web: www.windsorscientific.co.uk

The Southampton Electrochemistry Summer School

Instrumental Methods in Electrochemistry

July 5 – 10, 2009

A one-week residential course presented regularly since 1969

by the Southampton Electrochemistry Group

The course comprises a combination of lectures and laboratory work. The objective is to teach the application of modern electrochemical techniques to problems in *Chemistry, Biology, Sensors, Materials Science and Industrial Processing.*

Understanding electrode reactions and electrochemical techniques

Theory, practice, applications, data presentation and analysis

Lectures with a book, lecture notes and CD Rom provided

Hands-on practicals with a choice of experiments

Experience a range of modern PC based instrumentation

One-to-one discussions of electrochemical problems

For Booking and enquiries, contact:

Derek PLETCHER or **Guy DENUAULT**

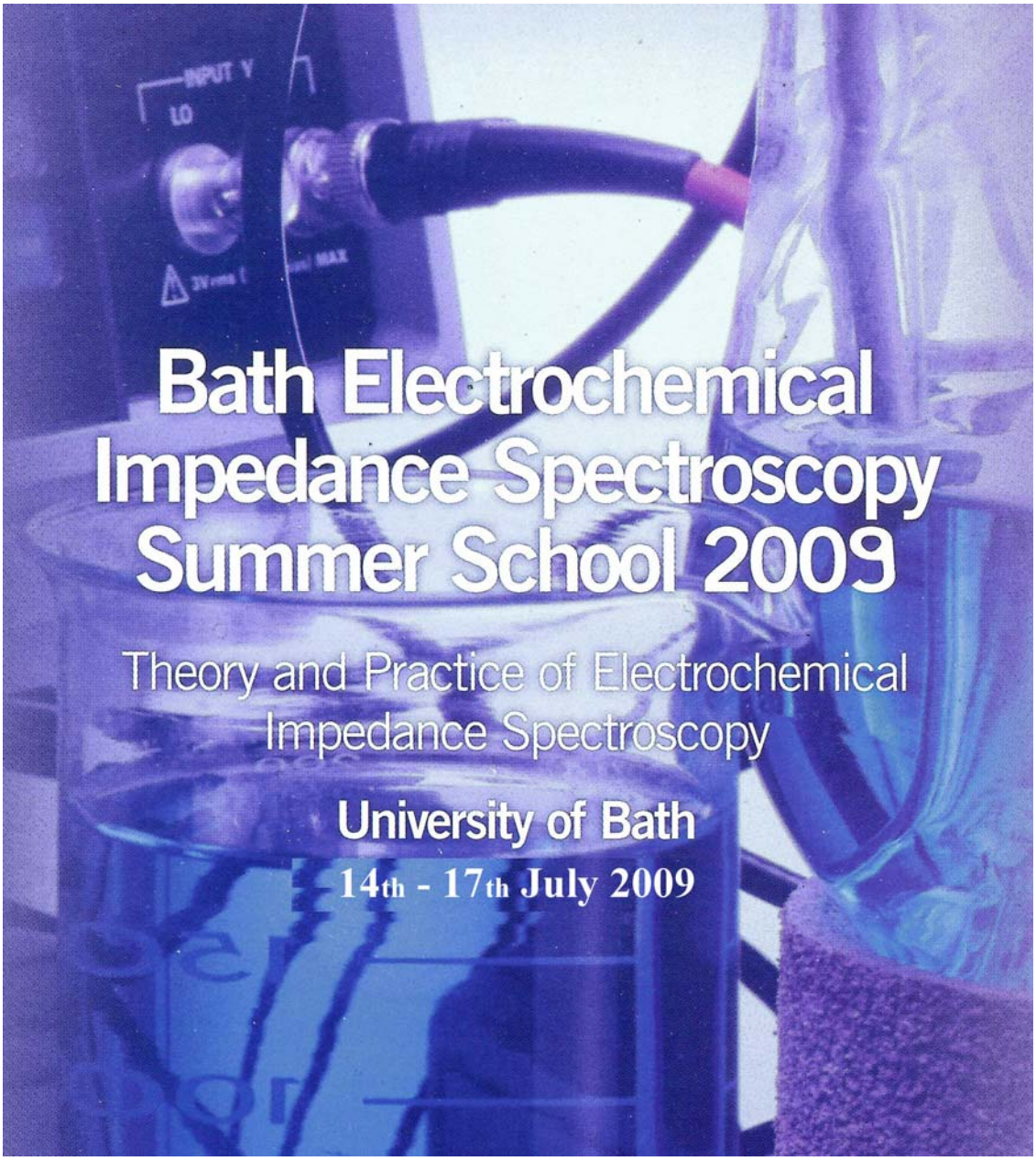
Tel.: +44 (0) 23 80 59 31 19
email: D.Pletcher@soton.ac.uk

Tel.: +44 (0) 23 80 59 21 54
email: gd@soton.ac.uk

Postal address:
School of Chemistry, University of Southampton, Highfield, Southampton, SO17 1BJ, UK
Fax: +44 (0) 23 80 59 37 81

Website URL

http://www.soton.ac.uk/~gd/summerschool.html


INPUT V
LO
Bath Electrochemical Impedance Spectroscopy Summer School 2009
Theory and Practice of Electrochemical Impedance Spectroscopy
University of Bath
14th - 17th July 2009

Meeting reports

The 59th Annual Meeting of the International Society of Electrochemistry

September 7-12, 2008, Seville, Spain.

Ms. Daniela Plana presenting her poster at ISE 2008.

The 59th Annual Meeting of the ISE was held in Seville, Spain, organized by Manuela Rueda and co-chairs Antonio Aldaz and Christopher Brett. The subject this year was "Electrochemistry Down to the Molecular Level: Interfacial Science for Life and Technology". The attendance was great with over 450 talks and just under 800 posters presented over the course of a week, with some 1400 participants.

A wide range of topics were covered with ten different symposia taking place at all times, ranging from biological and molecular electrochemistry to electrochemical energy and industrial applications, including new materials, nanoscale technology and theoretical methods. Whilst it was interesting to have a display of the different aspects of electrochemistry, it was sometimes difficult to switch between symposia and attend all the desired talks, especially as talk times were not strictly adhered to and the location and layout of the rooms caused frequent interruptions.

Seville presented a spectacular setting for the meeting, with bright sunny skies and a wonderful show of the mixed cultural background typical of southern Spain. The conference set off with registration and a welcome reception on Sunday, held at the Rectorado de la Universidad de Sevilla (originally one of the first Tobacco Companies in Europe), which allowed for meeting new people as well as seeing old faces, while enjoying Spanish food and wine. A couple of tutorial lectures were also given on Sunday, on Impedance Spectroscopy and Scanning Probe Microscopy.

On Monday, the meeting started with the presentation of the 2007 ISE Prize Winners and Award Lecturers. Philip Bartlett, from Southampton, was awarded the Katsumi Niki Prize for Bioelectrochemistry, for his contribution to the understanding of enzyme electrodes; other prize recipients included Chi-Chang Hu (Taiwan), Bruno Pettinger (Germany), Hiroaki Tsuchiya (Japan), Magdalena Hromadová (Czech Republic), Nuria García-Araez (Spain), and Priscilla Reale (Italy).

The day was rounded off with a sight-seeing coach ride from the Escuela Superior de Ingenieros, where the conference was held, to the city centre. Once there, a tour of the Reales Alcázares was arranged, as well as a walk around the Jewish Quarter and the iconic Cathedral and Giralda, symbol of Seville.

Professor Jean Clavilier (LEI CNRS, France) received the Frumkin Memorial Medal for his lifetime contribution to the study of interfacial and surface electrochemistry. Prof. Clavilier gave the first plenary lecture of the meeting, giving an insightful account of his work and the evolution of interfacial and surface electrochemistry over the last few decades. A plenary lecture was given each day, with Professor Christian Amatore (ENS, France) talking about neurovascular coupling between neuronal activity and blood delivery in the brain; Professor Henry S. White (University of Utah, USA) explaining the electrochemistry of synthetic and biological nanopores; Professor Richard G. Compton (University of Oxford, UK) discussing nanoelectrode arrays; and Professor Zhong-Qun Tian (Xiamen University, China) talking about electrochemical SERS. The different subjects covered by the five professors again showing the wide range of interests and applications in the field.

There were many interesting talks throughout the week, including a very enthusiastic presentation by Andrew Nelson (Leeds, UK) on a newly developed mercury-based micro-sensor. An insight-full review of biomimetic membranes at electrode interfaces was offered by Jacek Lipkowski (Guelph, Canada); while the ongoing studies of nitrate reduction were well covered by Daniel Bélanger (Montréal, Canada).

Countering the ever present studies of platinum, which seemed to dominate the symposium on interfacial electrochemistry and theoretical methods, Klaus Wandelt (Bonn, Germany) gave a comprehensive presentation on copper electrochemistry; when asked about his interest for copper, he replied that, "rationally it is an important metal for electronics and irrationally, he wanted to escape the obsession of electrochemists with noble metals!"

Julia Kunze (Erlangen, Germany) talked about highly efficient TiO_2 nanotubes, prompting an interesting discussion on different fabrication methods as well as useful complementing characterization techniques. On a completely different note, Cyrille Costentin (Paris, France) described concerted proton-electron transfers and different approaches to study the kinetics and thermodynamics of such complicated yet common-place systems.

The general assembly was held on Thursday, where, amongst other news, the next meeting sites were announced: next year's Annual ISE Meeting will be held in Beijing, China, and the 2009 Spring Meeting will take place in Szczyrk, Poland. An increase in the membership of the ISE was reported and the 2008 prize winners were announced, amongst them Philip Bartlett of the UK, who will receive the Electrochimica Acta Gold Medal in Beijing. The conference Banquet was held that night at the Hacienda Ochoa, with traditional Andalusian dancers welcoming and entertaining the participants. I would like to thank the RSC electrochemistry group for the award of a bursary, which allowed me to present my work (in poster form) at this excellent meeting.

Daniela Plana
School of Chemistry, University of Manchester
Conveyed by Professor R. A. W. Dryfe,
Manchester University, Manchester, UK.

The 59th Annual Meeting of the International Society of Electrochemistry

September 7-12, 2008, Seville, Spain.

This year the ISE meeting was held in the heart of Andalucía in Seville, Spain. This was my second ISE meeting which I had privilege to attend, and still having great memories from the last conference in Banff (Canada), my expectations about this meeting was very high.

Seville.

Spain greeted us with sunny warm weather and after 2 years of English rainy summers, it was amazing to have few summery hot days. Seville itself was an amazing place. I loved everything about the place: small streets with their hidden fascinating history, amazing architecture of Cathedral, the Alcazar with marvellous gardens. But still my favourite was the Santa Cruz quarter, with its charming narrow streets, flowered balconies and cosy small cafes. I think everyone who attended the conference would agree that the place was excellent for holding the conference.

The lecture theatres were located in the Engineering School of the Seville University. The topics covered were from a variety of different electrochemical research, specifically bioelectrochemistry, fuel cells, sensors, electrosynthesis, and nanostructures *etc*. However, the number of talks which concentrated on electroanalysis was, unfortunately, very low. The scientific contributions from all

participants were good. The five plenary speakers included Jean Clavilier as the Frumkin Memorial Medal winner, Christian Amatore (France), Henry S. White (USA), Richard G. Compton (UK) and Zhong-Qun Tian (China) were inspiring. I also found other presentations especially interesting. These included talks given by Patrice Simon ("Nanostructured Electrodes for Energy Storage Applications), Keiichi Kaneto ("Training and Fatigue in Polypyrrole Artificial Muscles"), Angela Molina ("Theory for the application of multipulse voltammetry to study of ion transfer across liquid membrane"), Aleksei Boika ("Applications of Hot Microelectrodes") and Danny O'Hare ("Electroanalytical methods for real-time measurement of neurotransmitters").

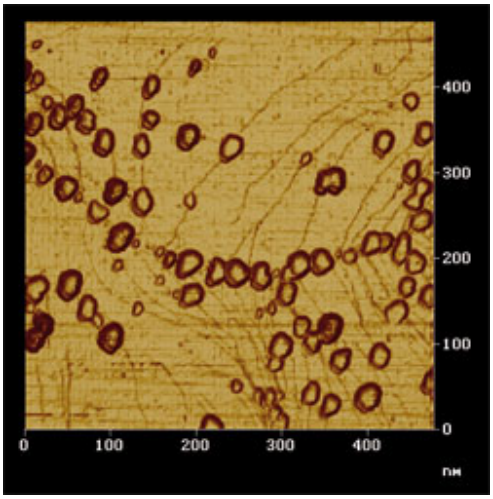
The Seville Meeting was attended by ~ 2000 participants. However, the only downside, in my opinion, was the lecture theatres themselves. Although they could accommodate the required number of delegates, it was difficult to see the presentations from some parts of the room. This caused significant problems for the speaker and the audience. Despite this drawback the general impression from the conference was good.

In closing, I would like to thank all the delegates for their excellent oral and poster presentations, all organisers and the Electrochemistry group of the RSC for financial support.

Jekatrina Kuleshova
School of Chemistry, The University of Southampton.

Electrochem'08

September 15-17, 2008, University of Liverpool, UK



An in-situ scanning tunnelling microscopy image of bulk copper growth centres forming on a gold substrate. Using such images we can study how the solution chemistry affects the formation of nanometre-size metal particles on surfaces. Image and caption taken from SCI webspace.

The 14th Annual "Electrochem" Conference was held from 15-17th September at the University of Liverpool, the European Capital of Culture for 2008. Some 50 lectures covered topics as diverse and interesting topics as "Nanoscale Electrochemistry", "Electrochemical Sensors", "Electrochemistry and Sustainability", "New Developments in Electrochemistry", "Redox-Active Organic Materials" and "Electrochemical Surface Science".

The conference saw plenary lectures with a truly international feel, with Prof. Henry White (University of Utah), presenting his work on Electrochemistry in Synthetic and Biological Nanopores, using lipid bilayers for ion channel recordings. The 2008 recipient of the RSC Electrochemistry group Faraday Medal, Prof. Nate Lewis (California Institute of Technology), gave an excellent presentation on Photoelectrochemical Water Splitting, particularly the investigation of radial junction solar cells to maximise photon adsorption while maintaining short electron pathways.

The first day also saw two keynote talks, Dr Damien Arrigan (Tyndall Institute) gave an imaginatively titled talk on 'Chips and Gravy – The Development of Engineered Electrochemical Systems for Biomolecular Detection' and Prof. Alexei Kornyshev (Imperial College) agreed to step up at short notice, giving a talk

on electrochemically driven Oil-Water Bubble Deformation for optical applications, the computer gremlins not detracting from the presentation.

The afternoon saw parallel symposia on “New Developments”, “Sensors” and “Nanoscale Electrochemistry”, the last of which included interesting presentations on a range of areas such as DNA Bioswitches (Dr Andy Mount – Edinburgh), Direct Enzyme Electrical Contacts (Dr Jose Abad Pastor – Liverpool), Gelled μITIES for Charge Transfer Across Interfaces (Dr Jorg Strutwolf – Tyndall), a highly energetic talk on electron transfer from Prof. Stephen Fletcher (Loughborough) and a follow on talk from Prof Kornyshev about optical filters.

Tuesday saw Prof. White’s aforementioned plenary talk, followed by keynotes from Prof. Gary Attard (Cardiff) on Biologically Grown Gold Nanoparticles, Prof. Alan Bond (Monash University – Australia) on the Electro/Photochemical Synthesis of Transition Metal Complexes and finally Prof. Peter Skabara (Strathclyde) on Semi-Conducting Organic Polymers.

The subsequent parallel session talks on “Nanoscale electrochemistry” were diverse, with topics ranging from metal and metal oxide electrochemistry (Dr Frank Marken – Bath and Dr Harm van Zalinge – Liverpool), Diamond Ultramicroelectrodes (Dr Jingping Hu – Oxford), Carbon Nanotube Electrochemistry (Miss Ioana Dumitrescu – Warwick), Paired Hemispherical Nano-junctions (Mr Robert French – Bath) and Bipolar Voltammetry (Miss Daniela Plana – Manchester). At the end of the afternoon, the “Electrochemistry and Sustainability” session was dominated by the major theme during Electrochem’08; photo-electrochemistry, with talks from Dr Upul Wijayantha (Loughborough), Mr Graham Dale (Ulster) and Dr Stephen Dennison (Imperial) on various aspects of semiconductor electrochemistry.

The final day was preceded by an excellent conference dinner at the historic Adelphi Hotel, resulting in the tardy start to Wednesday. Prof. David Schiffrin (Liverpool) got proceedings going with a keynote talk on Platinum Nanoparticle Growth, with the rest of the morning “Sustainability” session dominated by more applied electrochemistry. Prof Sudipta Roy (Newcastle) presented early progress on Copper Recovery from Tin-Strip Solutions, whilst Dr Andrew Campen (Arvia Technology) presented a Novel Packed Bed Reactor for Waste Water Treatment. The remaining three talks focused on aspects of Redox Flow batteries: Prof. Frank Walsh (Southampton) discussed the All-Vanadium Battery, Dr Scott Lilley (Plurion Limited) talked about the Cerium-Zinc cell and Dr Daniel Scamman (CMR Fuel Cells) presented a Polysulphide-Bromide variant.

The poster session was diverse and excellent in quality; however only one person could win the prize for best poster: this went deservingly to Xiaohang Zhang from the University of Bath, for her work on Triple-Phase Boundary Electrochemistry of Oils at Boron-Doped Diamond Electrodes.

In spite of the excellent work done by the lead organiser, Dr. Simon Higgins, just over 100 people attended the conference, which should be a matter of some concern to the electrochemical community. Ways to enhance the meeting before next year’s event, in Manchester, are under discussion.

Jeffrey Martin (Postgraduate student)
School of Chemistry, University of Manchester
Conveyed by Professor R. A. W. Dryfe,
Manchester University, Manchester, UK.

The 9th International Conference on Fundamental and Applied Aspects of Physical Chemistry

September 24-46, 2008, Belgrade, Serbia

Viminacium – old Roman city 100 km away from Belgrade

The 9th International Conference on Fundamental and Applied Aspects of Physical Chemistry was held in Belgrade, Serbia, from 24th till 26th of September. The conference was organized by the Society of Physical Chemists of Serbia in the glorious Serbian capital every other year. This year the conference was slightly more special than previous years since this years conference was dedicated to honour the 200th anniversary of the University of Belgrade.

Topics from different areas of physical chemistry were explored, including spectroscopy and molecular structure, kinetics and catalysis, nonlinear dynamics, electrochemistry and other related areas. The program of the conference included six invited plenary lectures, 22 invited lectures and 184 contributions, given as either oral or poster presentations by 480 authors from 23 countries.

One of the noted plenary lectures was given by Professor Richard G. Compton from the University of Oxford, UK, on *"Design, characterisation and applications of nanoelectrode arrays"*. The lecture highlighted recent work carried out in Professor Compton's group on methods of fabricating and characterizing arrays of micro- and nano-electrodes. Examples of electroanalytical applications of nanoparticle arrays were presented as well, including multi-metal nanoparticle arrays for combinatorial electrochemistry. Other plenary lectures were given by Bernard Cretin (France), Jana Hajslova (Czech), Semion Kuchanov (Russia) and Roger Leblan (USA). All contributed papers, accepted for the Conference, were published in the Conference Proceedings with Chemical Abstracts indexing, and selected papers will be published in the Russian Journal of Physical Chemistry as articles.

As in keeping with conferences, a social element was included where participants visited Viminacium, one of the most important Roman cities in Serbia, 150 km away from the capital. "Viminacium was devastated and destroyed in the middle of the 5th century, and it remained forgotten and buried like Pompeii." The remains of the Roman town and the military camp represent a site of exceptional importance and thereafter Viminacium has often been called the Balkan Pompeii. Today the foundations of the Roman houses from the 3rd century BCE, together with the remnants of the town trenches, and the castrum, can be seen. More interestingly, a necropolis decorated by frescos has recently been excavated. The coloured frescos represent peacocks, reindeers or horsemen being attacked by lions. Around these remains lie more than 2000 Roman tombs.

The participants also visited the main tourist points of Belgrade including the Belgrade fortress and Kalemegdan, as well as Skadarlija, an old Bohemian street. This cobblestone promenade is place where one can find well-known restaurants with typical national cuisine, art galleries, and antique and souvenir shops; groups singing traditional city music and actors dressed in traditional costumes perform freely down the street.

Dr Biljana Šljukić,
University of Belgrade, Serbia
Conveyed by Dr. Craig E. Banks,
Manchester Metropolitan University, Manchester, UK

Student Conference Bursaries

The Student Bursary Scheme provides financial support to promising postgraduate students to attend a major electrochemistry conference abroad. This includes UK based students travelling to a conference abroad and students based abroad wishing to attend a conference in the UK. The Bursary Scheme is open to all postgraduate student members of the RSC's Electrochemistry Group undertaking research in electrochemistry. Applications shall consist of:

(i) the application form (download from http://www.rsc.org/lap/rsccom/dab/fara005bursary.htm),
(ii) the abstract submitted to the conference organisers,
(iii) one A4 page *curriculum vitae* stressing academic and scientific achievements (e.g., research articles, oral and poster presentations *made by the applicant*).

Applications may be made at any time of the year and shall be submitted to the Group Secretary in electronic form.

The selection committee of the Electrochemistry Group shall decide the sum awarded. Under normal circumstances this sum shall not exceed £300.

Successful applicants shall produce a conference report article for the Newsletter.

Candidates should submit their applications directly to the Dr Frank Marken, the Group Secretary (f.marken@bath.ac.uk).

Solutions for electrochemical research

IVIUM TECHNOLOGIES

MultiWE32

32-channel potentiostat module

- Nanotechnology
- Sensor development
- Analytical electrochemistry
- Biotechnology
- Medical research
- Semiconductor
- Corrosion

Potential applied
To 32 channels simultaneously

The MultiWE32 will accommodate cells with up to 32 Working Electrodes!

- To be used as add-on module for CompactStat and IviumStat
- Operate up to 32 WE's, sharing a single CE and RE
- All channels can be sampled simultaneously
- Independent programmable offset for each channel
- 2 modes of operation: - sequential operation
  - simultaneous operation
- Stackable up to 8 units with 256 channels! (i.c.w. IviumStat)

For more information contact

Steve Fryatt at Alvatek

Tel 01666 500991

info@alvatek.co.uk

EchemHIST

Happy 75th Birthday Allen Bard!

Allen Bard with former postdocs at the SECM workshop, Falcade, 2006. From left to right: Guy Denuault, Mike Mirkin (City University New York), Dave Wipf (Mississippi State University), Pat Unwin, Allen Bard, Dani Mandler (Hebrew University, Jerusalem), Shigeru Amemiya (University of Pittsburgh).

December 18th 2008 will see the 75th birthday of Allen Bard, of the University of Texas at Austin, generally regarded as the major figure and influence on modern electrochemistry.

Al Bard was born in New York City and after graduating from the City College New York, went on to study for a PhD at Harvard University in 1955. His first supervisor was the young British Chemist, Geoffrey Wilkinson, and save for the fact that Wilkinson was not given tenure at Harvard (leaving in January 1956), the course of inorganic chemistry and electrochemistry might have been very different! Al went on to graduate from Harvard in 1958 with a PhD in electrochemistry (supervisor J. J. Lingane).

With Al Bard moving in 1958 to a faculty position at the University of Texas at Austin, 2008 also marks the half-century of the development of electrochemistry in Austin. Al began as an Instructor and progressed through the ranks to the Hackerman-Welch Regents Chair which he has held since 1985. During Al's time, Austin has become a major institution for electrochemistry research, a position that has been consolidated through the recent creation of the Center for Electrochemistry (http://cec.cm.utexas.edu/), involving electrochemists and materials scientists from across the Austin campus.

Al's scientific contributions are immense and have provided a foundation for many important areas of electrochemistry. They include the discovery of electrogenerated chemiluminescence (ECL), the invention of scanning electrochemical microscopy (SECM), and major contributions to photoelectrochemistry, including key initial work on semiconductor photocatalysis and photosynthesis. Al played a major role, starting in the early 1980s, in the developing the idea of *Integrated Chemical Systems*, which is a significant theme in nanotechnology today, and is written up in wonderful style in his classic text of the same name (published in 1994). Al's studies of electrode reactions have been many and varied and include the introduction of new techniques into mechanistic electrochemistry, such as electron spin resonance (ESR), in the 1970s, the investigation of reactions under extreme conditions (in the 1970s and 1980s), and many contributions to the area of chemically functionalised interfaces.

Al has had an extensive influence on many generations of electrochemists. Well in excess of 200 postdoctoral fellows and PhD students have been through his group, many of whom have gone on to set up their own groups in academia and industry. His seminal text with Larry Faulkner, *Electrochemical Methods: Fundamentals and applications* (1980 and 2001) continues to be regarded as 'the bible' of electrochemistry! In the UK, Derek Craston (presently Government Chemist), Guy Denuault (Southampton University), Ben Horrocks (Newcastle University), Katherine Holt (UCL), Darren Walsh (Nottingham) and the author of this birthday tribute are among those who have benefited enormously from working with Al as postdoctoral fellows. Al creates an environment in his group which encourages exploration and creativity; and mirrors the creativity and excitement of Austin as a university and city. Al gives his co-workers freedom to pursue their interests, with just the right amount of encouragement for each individual. Al Bard is not only a great scientist, but a great person, of generous spirit with a real knack of developing the potential of every person who works with him.

On this auspicious occasion, we in the UK send Al Bard Many Happy Returns and wish him All The Best For The Future.

Patrick Unwin
University of Warwick

Ivium CompactStat™

BIG ON PERFORMANCE! - Small on Cost!

- ⇒ Potentiostat
- ⇒ Bipotentiostat
- ⇒ Galvanostat
- ⇒ Impedance Analyzer (10uHz-2MHz)
- ⇒ < 600 grammes
- ⇒ Free IviumSoft™

The CompactStat™ integrates swept dc and ac electrochemical measurements into a single, compact design: superior to bulky, expensive alternatives. The comprehensive and intuitive software suite, IviumSoft™ is provided free of charge. Call Alvatek for more information.

- 0.15fA sensitivity
- 100Khz sampling
- 10kV/Sec
- USB—powered
- True Linear Sweep
- Auxilliary I/O & triggering

CompactStat™ has all this and more — and in a truly portable, USB-powered package.

Also available - same functionality at High Power …..

IviumStatXR to 20V, 5A

IviumBoost 10V/40A & 20V/20A

Call 01666 500991 or email steve.fryatt@alvatek.co.uk for more information or to request a demo/evaluation.

Alvatek

Diffusion

10 - 12 December 2008
Nancy, France
Fundamentals and Developments of Fuel Cell Conference 2008 - FDFC2008
Technical and scientific results on fuel cell materials, fuel cell stacks and systems
Scientific exchanges between laboratories, fuel cells suppliers, component manufacturers and industrial end-users.
Fundamentals of fuel cells, with emphasis of physicochemical phenomena
Developments of fuel cells components and systems
Applications of fuel cells
Fuel cell market and costs
http://www.fdfc08.ciril.fr

22 - 25 March 2009
Szczyrk, Poland
7th Spring Meeting of the ISE:
Recent Advances in Electrocatalysis and Photoelectrocatalysis
Electrocatalysis - including processes of importance to the development of fuel cells (e.g. of oxygen reduction or oxidation of alcohols, etc.)
Photoelectrocatalysis (e.g. water splitting under illumination, hydrogen generation. photooxidation of a large variety of organic compounds).
http://ise-online.org
Email: info@ise-online.org
http://spring09.ise-online.org/general/scope.php
Email: events@ise-online.org

16 -19 May 2009
Atlanta, USA
NACE Corrosion 2009
Advances in materials for oil and gas production
Advances in underdeposit corrosion and its control
Advances, novel applications and measurement of vapour corrosion inhibitors
Biofuel corrosion issues
CO_2/H_2S corrosion in wet hydrocarbon containing environments
Cathodic protection
Close-interval potential surveys
Coating failures
Corrosion issues and solutions for military and aerospace
Corrosion resistant materials, test methods, and repair techniques for concrete
Corrosion in gas treatment
Corrosion in nuclear systems
Corrosion in supercritical systems
Corrosion in the pulp and paper industry
Corrosion of biomedical materials and devices
Coupled multi-electrode techniques for corrosion monitoring
Direct assessment
Effects of flow on corrosion
Environmentally assisted cracking
High temperature corrosion
Managing corrosion with polymers
Marine corrosion: ships and structures
Microbiologically influenced corrosion
Oil and gas production
Pipeline integrity and coatings
Practical approaches and experiences in maintaining water systems
Real-time corrosion monitoring: automation and process control
Recent experiences with corrosion resistant materials
Refining industry and sour gas corrosion
Top of the line corrosion and advances in corrosion inhibition
Waterside boiler tube failure
http://www.nace.org/nace/content/conferences/c2009/

24 - 29 May 2009
San Francisco, USA
215th Electrochemical Society Meeting
ECS
65 South Main Street, Building D
Pennington
New Jersey, 08534-2839
USA
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings/biannual/215/215.htm

24 - 28 May 2009
Erlangen, Germany
5th Kurt Schwabe Symposium in Electrochemistry:
Corrosion, Semiconductors, Solar Cells
Materials durability issues
All aspects of corrosion and corrosion protection
Electrochemical surface engineering techniques for 2-D or 3-D structures
Nano- and micro-architectures either via dissolution or deposition approaches
Site selective cluster formation
Selective dissolution/deposition
Pore formation
Nanorod/ nanotube growth and etching

Other self-aligning processes; and applications in energy conversion devices
Email: KSCS2009@ww.uni-erlangen.de.
http://www.kscs2009.uni-erlangen.de/
Conference Secretary: Julia Kunze
Email: kunze@ww.uni-erlangen.de.

07-10 June 2009
Weingarten, Germany
ECHEMS 2009: Functional Molecules and Materials
Electrochemical synthesis
Electroanalytical chemistry
Polymers/materials
Non-conventional environments
Applications
E-mail (bernd.speiser@uni-tuebingen.de)
Germany
http://www.echem.uni-tuebingen.de/echems5

10 - 11 June 2009
RAF Cosford Museum, UK
Surface Coating/Surface Engineering for the Aerospace Industry
Events Organiser
IMF Exeter House, 48 Holloway Head, Birmingham B1 1NQ, UK
Email: exeterhouse@instituteofmetalfinishing.org

24 June 2009
Bologna, Italy
Electrocor 2009
Cathodic protection systems
Modelling methodologies
Electrodeposition and electroforming
Modelling stress corrosion, cracking and corrosion fatigue
Interference and signature control
Electrocoating and plating
Optimisation
Detection and monitoring of corrosion
Protection and control of corrosion
Pipeline corrosion
Environmental impact of corrosion and corrosion systems
Multi-scale modelling - atomistic, nano-, micro-, meso-, maso-
Bacterial corrosion in pipelines
Electrosynthesis
Measurement techniques
Electrolysis reactors
Comparison of experimental measurements and computer results
Case studies
Irene Moreno
Conference Secretariat, ELECTROCOR 2009
Wessex Institute of Technology
Ashurst Lodge, Ashurst
Southampton, SO40 7AA
UK
Tel: +44 (0)238 029 3223
Fax: +44 (0)238 029 2853
Email: imoreno@wessex.ac.uk
http://www.wessex.ac.uk/ecor2009rem2.html

28 June – 02 July 2009
Lucerne, Switzerland
Lucerne Fuel Cell Forum 2009
European Fuel Cell Forum
Morgenacherstrasse 2F
POB 99
CH-5452 Oberrohrdorf
Switzerland
Tel: +41 56 496 7279
Fax: +41 56 496 4412
http://www.efcf.com

05 - 10 July 2009
University of Southampton, UK
Electrochemistry Summer School: Instrumental Methods in Electrochemistry
Understanding electrode reactions and electrochemical techniques
Theory, practice, data handling and applications of electrochemical methods
Lecture notes, recommended textbook and CD provided
Hands-on laboratory sessions with choice of experiments using modern instrumentation
One-to-one discussion of electrochemical projects
Bev Macey
Tel: +44 (0)23 8059 3597
Email: bm@soton.ac.uk
School of Chemistry
The University, Highfield
Southampton SO17 1BJ
United Kingdom
or Professor Derek Pletcher
Tel: +44 (0)23 8059 3519
Email: dp1@soton.ac.uk

24 - 29 May 2009
San Francisco, California, USA
215th Meeting of the Electrochemical Society
ECS
65 South Main Street, Building D
Pennington
New Jersey, 08534-2839
USA
Tel: +1 609 737 1902
Fax: +1 609 737 2743

Email: ecs@electrochem.org
http://www.electrochem.org/meetings

16 - 21 August 2009
Beijing, China
60th Annual ISE Meeting: Emerging Trends and Challenges in Electrochemistry
Bioelectrochemistry
Corrosion science and technology
Electroanalysis and electrochemical sensors
Electrocatalysis
Electrochemical energy conversion and storage
Electrochemical materials science
Electrochemical engineering and technology
Electrochemical nano-/micro- technology
Interfacial electrochemistry
Molecular electrochemistry
General session
http://ise-online.org
Email: info@ise-online.org
http//:spring09.ise-online.org
Email: events@ise-online.org
http://www.ise-online.org/09_beijing.pdf

06 - 11 September 2009
Almagro (near Ciudad Real), Spain
5th European Summer School in Electrochemical Engineering (ESSEE 5)
http://www.uclm.es/dep/drg/essee5

16 – 17 September 2009
Manchester, UK
Electrochem 09 & Corrosion Science Sympsoium
http://www.meeting.co.uk/conference/electrochem09

04 - 09 October 2009
Vienna, Austria
216th Meeting of the Electrochemical Society
General topics
Batteries, fuel cells and energy conversion
Biomedical applications and organic electrochemistry
Corrosion, passivation and anodic Films
Dielectric and semiconductor materials, devices and processing
Electrochemical / chemical deposition and etching
Electrochemical synthesis and engineering
Fullerenes, nanotubes and carbon nanostructures
Physical and analytical electrochemistry
Sensors and displays: principles, materials and processing
ECS
65 South Main Street, Building D
Pennington
New Jersey, 08534-2839
USA
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings

25 - 30 April 2010
Vancouver, Canada
217th Meeting of the Electrochemical Society
ECS
65 South Main Street, Building D
Pennington
New Jersey, 08534-2839
USA
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings

26 September - 01 October 2010
Nice, France
61st Annual ISE Meeting
Bioelectrochemistry
Corrosion science and technology
Electroanalysis and electrochemical sensors
Electrocatalysis
Electrochemical energy conversion and storage
Electrochemical materials science
Electrochemical engineering and technology
Electrochemical nano-/micro- technology
Interfacial electrochemistry
Molecular electrochemistry
General session
http://ise-online.org
Email: info@ise-online.org
http://spring10.ise-online.org
Email: events@ise-online.org
http://www.ise-online.org/10_nice.pdf

10 - 15 October 2010
Las Vegas, USA
218th Meeting of the Electrochemical Society
ECS
65 South Main Street, Building D
Pennington
New Jersey, 08534-2839
USA
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings

24-29 October 2010
Moscow, Russia
9th International Frumkin Symposium: Electrochemical Technologies and Materials for the 21st Century
Microsymposia include:

Double electrical layer and electrochemical kinetics (from phenomenology to molecular level) (Organizer V.A. Safonov)
New processes, materials and devices for successful electrochemical transformation of energy (Organizers – M.R. Tarasevich, A.M. Skundin)
Corrosion and protection of materials (Organizers – Yu.I. Kuznetsov, A.D.Davydov)
Electroactive composition materials (Organizers – A.V. Vannikov, E.I. Mal'tsev)
Bioelectrochemistry (Organizer – Yu.A. Chizmadzhev)
Dr. A.I. Danilov (secretary)
A.N. Frumkin Institute of Physical Chemistry and Electrochemistry
RAS Leninskii prospect 31, Building 4
Moscow 119991
Russia
Tel: +7 495 955 44 55
Fax: +7 495 952 08 46
Email: danilov@phyche.ac.ru

01 - 06 May 2011
Montreal, Canada, USA
219th Meeting of the Electrochemical Society
ECS
65 South Main Street, Building D
Pennington
New Jersey, 08534-2839
USA
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings

11 – 16 September 2011
Niigata, Japan
62nd Annual ISE Meeting
Bioelectrochemistry
Corrosion science and technology
Electroanalysis and electrochemical sensors
Electrocatalysis
Electrochemical energy conversion and storage
Electrochemical materials science
Electrochemical engineering and technology
Electrochemical nano-/micro- technology
Interfacial electrochemistry
Molecular electrochemistry
General session
http://ise-online.org
Email: info@ise-online.org
http://spring10.ise-online.org
Email: events@ise-online.org

09 - 14 October 2011
Boston, MA, USA
220th Meeting of the Electrochemical Society
ECS
65 South Main Street, Building D
Pennington
New Jersey, 08534-2839
USA
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings

ISE AWARDS
The International Society of Electrochemistry offers a number of awards; further details are available on the ISE website:
http://www.ise-online.org/awards/index.php.
All award winners will be announced at the Annual Meeting following the nomination/application deadline which is provided on the web site of the Society.

The Electrochimica Acta Gold Medal
may be awarded every two years to the person judged to have made the most significant contribution to electrochemistry in recent years.
Next award: 2008.
Nominations: from *01 February to 01 May, 2010*
Chair of the Award Committee: Sergio Trasatti.

The Tajima Prize
recognises the contributions made by younger electrochemists. Candidates must be less than 40 years old. An award may be made every year. The decision of the Award Committee will be based on published work.
Next award: 2009.
Applications: from *01 February to 01 May, 2009*
Chair of the Award Committee: To be announced.

The Prix Jacques Tacussel
may be awarded every two years to a person who has made important contributions to an electrochemical technique.
Next award: 2009.
Nominations: from *01 February to 01 May 2009*
Chair of the Award Committee: to be appointed by an ISE Executive Committee.

The Hans-Jürgen Engell Prize
may be awarded annually to a young electrochemist on the basis of published work in the field of corrosion, electrodeposition or surface treatment.
Next award: 2008.
Applications: from *01 February to 01 May, 2009.*
Chair of the Award Committee: To be announced.

The Oronzio and Niccolò De Nora Foundation Young Author Prize
May be awarded annually to a scientist of less than 30 years of age for the best paper published in the ISE Society journal in the calendar year preceding the award.
Next award: 2008.
Applications: from *01 February to 01 May, 2009.*
Chair of the Award Committee: To be announced.

The Klaus-Jürgen Vetter Prize for Electrochemical Kinetics
This is a joint prize of the ISE, the Fachgruppe Angewandte Elektrochemie of the Gesellschaft Deutscher Chemiker (Society of German Chemists), DECHEMA e.V., and the Deutsche Bunsengesellschaft für Physikalische Chemie. It may be awarded biannually to a person of less than 40 years of age for distinguished contributions to the field of electrochemical kinetics.
Next award: 2009.
Applications: from *01 February to 01 May, 2009.*
Chair of the Award Committee: to be appointed by the ISE Executive Committee.

The Frumkin Memorial Medal
This medal may be given once every two years. It recognises the outstanding contribution of a living individual over his/her life in the field of fundamental electrochemistry.
Next award: 2009.
Nominations: from *01 February to 01 May, 2009.*
Chair of the Award Committee: to be elected by the committee members.

The Oronzio and Niccolò De Nora Foundation Prize of the ISE on Environmental Electrochemistry
The prize may be awarded annually to a scientist of less than 35 years on 01 January of the year of the award for recent application-oriented achievements in the field of environmental electrochemistry.
Next award: 2009.
Applications: from *01 February to 01 May, 2009.*
Chair of the Award Committee: To be announced.

The Oronzio and Niccolò may be awarded annually to a scientist of less than 35 years of age on 01 January of the year of the award, for recent application-oriented achievements in the field of applied electrochemistry.
Next award: 2009.
Applications: from *01 February to 01 May, 2009.*
Chair of the Award Committee: To be announced.

The Katsumi Niki Prize for Bioelectrochemistry
may be awarded every two years to a scientist who has made an important contribution to the field of bioelectrochemistry.
Next award: 2009.
Nominations: from *01 February to 01 May, 2009.*
Chair of the Award Committee: Lo Gorton.

Bioelectrochemistry Prize of ISE Division 2
This prize may be awarded every two years to a scientist who has made an important contribution to the field of bioelectrochemistry.
Next award: 2010.
Applications: from *01 February to 01 May, 2010.*
Chair of the Award Committee: to be announced.

Brian Conway Prize for Physical Electrochemistry
The Brian Conway Prize for Physical Electrochemistry may be awarded every two years, in recognition of the most successful achievements in Physical Electrochemistry in recent years.
Next award: 2010.
Nominations: from *01 February to 01 May, 2010.*
Chair of the Award Committee: To be announced.

The Electrochimica Acta Travel Award for Young Electrochemists
favours the participation of young electrochemists in the ISE Annual Meeting. Applicants must be ISE members who have obtained their PhD not earlier than 6 years before the deadline for applications. Candidates should apply on their own behalf. The winners will give an oral presentation at the ISE Annual Meeting.
Next award: 2009.
Applications: not later than *31 January, 2009.*
Award Committee: The four Vice-Presidents of the ISE.

http://www.ise-online.org/awards/index.php