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Jambo.

It is a great honour to be invited to serve the RSC/SCI Electrochemistry Community by editing this newsletter, and I must thank the committees of the RSC Electrochemistry Group and the SCI Electrochemical Technology Group for so very kindly allowing me this opportunity. I can only apologise for the slowness at which I have been able to put together this first issue – challenges and difficulties afford new lessons.

Evolution via considered design has its own benefits and pitfalls; I hope that this "new-look" newsletter does not disappoint expectation. Over my tenure, this magazine will change format and dissemination style – the move to an electronic version has begun. In part this will be undertaken to embrace and rejoice in the dynamicism of our particular form of scientific culture, by engendering a degree of spheres-of-influence-centred interactivity and, it is hoped, afford significant improvements in redressing information asymmetry, rather than merely acting as a "newsletter" *per se*. *Néanmoins*, your views, comments, suggestions and opinions on this style of newsletter and its subsequent directions are welcomed and strongly sought – this magazine seeks to serve you and your work within our cultural universe.

I thank all those who have so generously provided materials for this issue. Particular gratitude goes to Dr. Daren Caruana for all of his help.

J. Cundhan.

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

Letter to the Editor

In the May Electrochemistry Newsletter, Anselm Kuhn ("And so to market") attacks the Alternative Investment Market (AIM) as a source a funding. A senior member of the New York Stock Exchange (NYSE) is quoted as complaining that it is a "casino", "stockbrokers" are characterised as ignorant "red-braces wearing money-men" and the commercial future of Plurion, a company described as being floated on AIM, is dismissed. Two of the founders of another flotation, AIC, are described as having an "extremely modest track record", with investors "induced to punt".

This negative view of AIM is sad. The market provides a potentially valuable route for entrepreneurs, including electrochemists, to seek risk capital to fund their ideas. AIM is not a widows and orphans market – everyone knows there are high risks, and it's greatly to the credit of the London financial market that it is available as an alternative (sic) to listing on the main Stock Exchange. New York has seriously lost out to London in this space, hence sour grapes from the NYSE.

Anselm Kuhn is entitled to his views, but needs to take care about his facts. There is no traditional "stockbroker" function on AIM (though no doubt some red braces are in evidence) and Plurion was not floated on AIM, or indeed anywhere else. It is a privately held Scottish company in which AIC has a stake. As for AIC, in my opinion it is a company using risk capital to develop interesting, exciting and, yes, risky, ideas. This is the basis of all economic and technical development, and those who put up money, careers and reputations in this way should be applauded, not rubbished.

Professor Sir Andrew Likierman
Non-Executive Chairman
AIC

Obituary

Dr J Peter Millington

1937 – 2006

Dr. J. Peter Millington

In 1965 as a very fresh and inexperienced first year doctoral student I met this urbane, widely travelled and worldly wise postdoc whose approach to any problem put to him, be it scientific, political, philosophical, or whatever, was to light up his pipe, to puff away reflectively, and, with an authoritative air, to cast his pearls of wisdom before you. His stay at the Physical Chemistry Lab in Oxford only overlapped my time there for one year, but that year was enough to cement a lifetime friendship and, later on, a fruitful period of collaboration. Yes, Peter Millington was a man to whom one instinctively warmed and with whom one felt comfortable and relaxed.

Peter's interest in chemistry started at an early age when he commandeered his father's garden shed in Swinton discovering the wonderful – and sometimes unexpected – world of chemical reactions. This interest matured as he moved on from school down the road to the Royal College of Advanced Technology, the precursor of today's Salford University. There he graduated with a first class honours degree which opened up a fellowship at Queen's University in Kingston, Ontario, first for an MSc and then a PhD. At Queen's Peter studied solvolysis effects of alkyl chlorosulphates with Dr Erwin Buncel. This work led rather naturally to his move as a postdoc to Oxford where, at the PCL, he investigated the kinetics of hydration of dichloroacetone in dioxan and acetonitrile with Mr R P Bell FRS. This erudite study was published in the prestigious Proc Royal Soc, although I often wondered how much the kinetics were influenced by the combination of cigar and pipe smoke and ash from Ronnie and Peter.

Although Peter was working as a physical organic chemist at the PCL, Ronnie Bell's group very much intermingled with that of a young protégé of Ronnie's who was rapidly becoming the new wunderkind of electrochemical science in the UK. So perhaps it was not too surprising that after a year of experiencing, albeit second-hand, the dynamics of John Albery, Peter took up a post in 1966 with the Electricity Council Research Centre (ECRC) at Capenhurst as a research electrochemist. Over the next thirty or so years the ECRC evolved from being totally supported by the electricity utilities through the Electricity R&D Centre to EA Technology Ltd, a small private company. The initial phase of Peter's career at Capenhurst was primarily in R&D and this led to a dozen or so patents. This was followed by a more commercial phase where he managed projects that were still scientifically oriented but were more directed towards the exploitation of the technology. During this period Peter's talents and skills were recognised and he grew with the company through various managerial positions to become Divisional Director for Environmental and Process Technology. Within three years he transformed this group from being a levy-funded operation to a technology based business unit with a turnover of about £4M. Some personal recollections of the 'later years' at Capenhurst are given below in a collation produced by his good friends and colleagues – Ian Dalrymple, Dan Gilroy, Gary Sunderland, and Brian Surfleet. Another very personal appreciation of Peter as a delightful person, a good friend and a highly valued colleague over many years is also given below by Robert Clark.

In the mid-1990s Peter took up a visiting chair in the Environmental Technology Centre in the Department of Chemical Engineering at UMIST. He did some lecturing, but his main activity was to put in place the Pollution Control Network which was designed to provide technical assistance to small businesses in Lancashire. Using his entrepreneurial skills

Peter generated funding from government and EU organisations so that when he retired from the Network in 2005 the unit had a three staff completely supported by the EU.
During the time after Peter left the PCL we kept in touch on a personal basis, and when I returned to academia we began to collaborate on various electrochemical projects, first at Salford and then at Strathclyde. At his alma mater we had the pleasure of working with Ian Dalrymple while he pursued his PhD, and then in the late 1980s Peter was appointed Visiting Professor in the Chemistry Department at Strathclyde. That was a very fruitful and productive period of collaboration, with another memorable PhD student, Tom Ralph. The work Tom pursued in conjunction Peter, myself and Frank Walsh on the industrially important electrochemical reduction of L-cystine is still producing publications, with the last one appearing only a few months before Peter died.

Peter's professional career was prolific and remarkably creative. Everything he tackled he did so with gusto and energy. That vigorous approach to life carried over into his social life too. Until his car accident he walked and climbed with his many friends in the mountains of Wales and Scotland, as well as in the Alps and in the Atlas mountains. In the 1980s he took up marathon and fell running, and participated in a London marathon and the Three Peaks run. Even after his accident, and after six operations and other spells in hospital, he went out with the professional and business association (PROBUS) walking group with the aid of crutches!

He also had interests in local history, gardening, poetry, music, and a host of other pastimes; and he was very widely read - and always enjoyed a good argument. One of his favourite sayings was 'Come on, let's get on with it – life is not a rehearsal'. Truly he epitomised the words of Abraham Lincoln: 'In the end, it's not the years in your life that count. It's the life in your years'.

Peter was a great colleague and a good friend. I shall miss him greatly. Many others will miss him too, but none more so than his beloved wife of over 45 years, Janet, and his children Kate and Robert.

Michael Hitchman

A Recollection of the Later Capenhurst Years

Following privatisation of the electricity industry in 1990, the role of Capenhurst changed with greater emphasis to a more independent commercial organisation and Peter was appointed the head of the Environmental Division. The new role embraced not only electrochemistry and chemistry for clean manufacturing, materials recycling and effluent treatment, but many other scientific areas, including high temperature ceramics, a three phase plasma unit for the destruction of chloro-organics, a novel atmospheric pressure microwave plasma, and metallurgically related projects, to list but a few.

Peter's skills of presentation and the dynamism that he brought to winning over clients came to the fore in this competitive environment and his commercial attributes were fully exploited during and after privatization. Industrial contracts in Japan, Australia and the UK, and European Union funded contracts became an important mix during the post-nationalisation period. Peter was astute at identifying possible funding contributors and the very early European projects benefited from his involvement.

Peter maintained his contact with the Universities and his collaboration with UMIST developed via a joint post graduate PhD programme. The collaborative programme enabled the PhD students to carry out their research at Capenhurst.

This was to be a platform for Peter and following his departure from Capenhurst 1996 he moved to UMIST where he and a fellow "escapee" from Capenhurst were successful in winning projects funded by the North West Development Agency and the European Regional Development Fund (ERDF) to assist SMEs in the North West of England. The projects identified problems facing SMEs, such as challenges in meeting the requirements of environmental legislation, and Peter used his broad experience to propose technological solutions and to link the SMEs with technology providers. As a component of the projects, Peter organised many seminar programmes in different parts of the North West with presentations by research and technology specialists, legislators and industrialists. This was followed by further European funding for the development of sensors based on genetically modified yeast for the quantitative measurement of genotoxicity in pharmaceutical development and environmental impact assessment.

His scientific interests stretched across the Atlantic to California where he collaborated with Dr. Robert Clark (Electrochemical Design Associates) on the removal of toxic components from contaminated aquifers and soils. And

as mentioned below, the collaboration also resulted in Peter's involvement in the development of a novel redox flow battery.

Finally with the amalgamation of UMIST and the University of Manchester Peter decided to leave academia and he 'retired' in 2005.

Peter's capacity to deal with physical pain resulting from a near fatal motoring accident earlier in his career and his ability to remain positive in the face of the seemingly impossible continued to the end of his life.

Ian Dalrymple, Dan Gilroy, Gary Sunderland and Brian Surfleet

A Personal Recollection of Peter as a Friend and Colleague

Peter Millington was a remarkable man and a good friend to many. I had the pleasure of working with him many times, latterly as a co-inventor of a flow battery on which project he was also a highly valued consultant. Peter was the ideal type of consultant who spoke up convincingly regardless of favor to tell the truth as he saw it. He was very comfortable in his own skin, and spoke up with candour. He was an optimist who saw the best in people. He liked to travel, to walk on the hills and be about, but he was also a modest man personally with nothing to be modest about. In a word he was very likeable and well met by everyone who knew him. He was as sharp in his later years as he was as a post doc at Oxford. He was better, in fact, as he had a varied exposure to many aspects of his discipline and he gained from it.

In my first experiences with him as a colleague, we worked on the synthesis of anthraquinone from naphthalene in a joint collaboration with LB Holliday and the ECRC that created many instances where his patience and tolerance was taxed. But it was humorous also as we shared an old caravan as a mobile lab - kind of like electrochemistry on the set of `Last of the Summer Wine'. I will not say who was Campo, but it wasn't Peter.

In much changed circumstances we traded ideas and opinions at many conferences around the electrochemists' circuit. Our wives became friends and we enjoyed each other's company. We often we met like a group of conspirators in Florida, Portugal, Spain and the UK where discussions resumed as if we had never been interrupted.

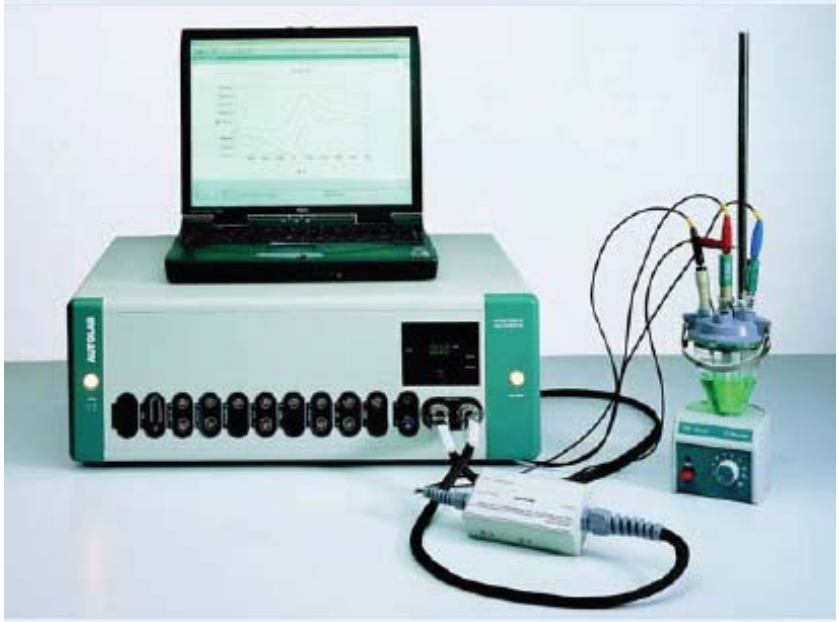
Apart from being a very able and practical electrochemist he had gifts of personal integrity and fortitude that are lesson for us all. Just before his premature loss, he spoke frankly and without self pity about the risks he was undertaking by accepting another heart operation precipitated by the carelessness of others. He knew the risks, but he showed great courage and thoughtfulness in the way he approached it all.

I am personally very saddened by his loss. He and I had plans to work together much longer and on topics dear to both of us. His light had not dimmed and he intended to travel around and enjoy his life with Janet and his family as much as he could. His ideas will live on and his investment in his friends and family is not over.

Robert Clark

Future meetings

Bath Electrochemistry Winter School



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Southampton Electrochemistry Conference 2008

to celebrate the achievements of Phil Bartlett

Professor P. N. Bartlett

The Conference in honour of Professor Philip Bartlett will be held in the School of Chemistry, The University of Southampton (Building 29, Room 1101) during the afternoon of Monday, April 7th and the morning of Tuesday, April 8th, 2008. The speakers will be

Philip N. Bartlett (University of Southampton), *Working Under Pressure – Electroplating in a Supercritical Fluid*
Bernhard Gollas (Technical University, Graz, Austria), *Electrochemistry in Liquid Ammonia - New Uses for an Old Solvent?*
Phil Nelson (Nanotecture), *Liquid Crystal Templating: Pushing Power Sources Further and Faster*
Jeremy J. Baumberg (University of Southampton), *Turning Nothing into Gold: a Light Story*
Julian Gardner (University of Warwick), *The Electronic Nose: The Early Days*
Ernesto J. Calvo (Ciudad Univ., Buenos Aires, Argentina), *Organized Self-assembled LbL Redox Films: Experimental and Theory, Recent Results*
Sumeet Mahajan (University of Southampton), *Engineering Substrates for SERS: Photonics to Biosensing*
Mike Lyons (Trinity College, Dublin), *Redox and Catalytic Behaviour of Carbon Nanotube Modified Electrodes*
Peter Birkin (University of Southampton), *HMV from a Pulsating Jet System*

There will also be a Poster Session. All are invited to attend. The Conference is free but there will be a dinner on the Monday evening and the cost of the dinner is £35/person. For further details and registration form (due for return by March 1st), please contact

Professor Derek Pletcher,
The School of Chemistry,
University of Southampton,
Southampton SO17 1BJ
Email: dp1@soton.ac.uk


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Theory and Practice of Electrochemical Impedance Spectroscopy
University of Bath
15th - 18th July 2008
A hands-on intensive course given by Professor Laurie Peter and colleagues at the University of Bath in collaboration with Solartron Analytical
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Electrochem 08

This annual meeting of the RSC Electrochemistry Group, the RSC Electroanalytical Group and the SCI Electrochemical Technology Group will take place in the European City of Culture.

LIVERPOOL, UNITED KINGDOM

15 - 18 September 2008

The following sessions are planned.

Single molecule electrochemistry.
Redox-active molecules and materials.
Electrochemical surface science.
Sensors.
Photovoltaics.
Electrochemistry and sustainability.

Check it out at the following URL.

http://www.soci.org

Meeting reports

The 58th Annual Meeting of the International Society of Electrochemistry
September 9-14, 2007, Banff, Canada.

Banff, Canada. The picture emphasises the beauty of working at solid | liquid interfaces.

The 58th Annual Meeting of the International Society of Electrochemistry (ISE) for the first time was held in Canada (the Banff Centre, Banff) under the co-chairmanships of Professor S. Roscoe and J. Lipkowski.

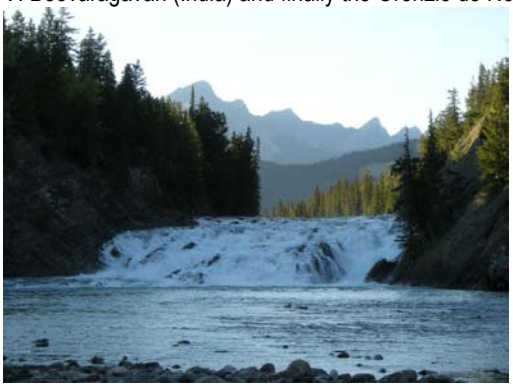
Banff National Park was an interesting venue for the conference. Its charming alpine beauty and abundant wildlife made an incredible environment for the meeting and especially social events.

The theme of the meeting was "Exploring Frontiers of Electrochemistry" with the programme running over six days (9th to14th September 2007). The proceeding commenced on Sunday with tutorial lectures in two sections of Nanotechnology and Corrosion in the Oil and Natural Gas Industry in which the programme traditionally included plenary lectures, oral and poster presentations.

The lecturers presented a review about nanotechnology, especially nanoelectronics and nanosensors and the electrochemical corrosion protection of oil and natural gas industry.

The scientific programme traditionally included plenary lectures devoted to the most important problems and ten symposia; (1) Bioelectrochemistry, (2) Energy storage and energy conversion systems (3) Proton conduction and transfer (4) Electrochemical nanoscience and nanotechnology (5) Electrocatalysis, catalysis, bioelectrocatalysis: the common aspects, the practical applications (6) Electroanalysis and electrochemical sensors (7) Surface electrochemistry, *in honour of the late Professor Brian E. Conway* (8) Electrochemical material science and deposition and particle growth (10) General session. Each symposium included oral and poster presentations. Around 500 lectures and 400 posters were presented.

The programme commenced on Monday by awarding the 2006 ISE prizes. The electrochemical Acta gold medal was given to Prof. A. Wieckowski (USA), the Tajima prize was awarded to Dr. A. Walcarius (France), Hans-Jűrgen Engell prize was awarded to Dr. M. Santamaria (Italy), the Oronzio de Nora Fondation Young Author prize was awarded to Dr. V. Boovaragavan (India) and finally the Oronzio de Nora Fondation prize of ISE on Electrochemical Energy Conversion was given to Prof. K. W. Park from South Koria. The programme was followed by Prof. A. Wieckowski from the University of Illinoise at Urban-Champain. Prof. Wieckowski lectured his group recent work on "Surface Diffusion EC-NMR and Phase Transition by BB-SFG".



The diversity of electrochemistry. Here the picture illustrates surface reactions under turbulent flow conditions.

The four other plenary lectures were demonstrated at the opening of Tuesday to Friday's programme by Prof. K. Itaya (Tohoko, Japan), Prof. W. Knoll (Max Planck Institue, Germany), Prof; H. D. Abruna (Cornell University, USA), and Prof. J. R. Dahn (Dalhousie University, Canada) respectively.

Prof. Itaya reviewed the progress in interfacial electrochemistry of low index crystals and the development of

applied techniques from 1992 to date under the title of “A New Avenue of Electrochemical Surface Science from Monolayer to 3D Crystals”. Prof. Knoll devoted his lecture to the preparation of membrane sensors and membrane chips.

Considerable progress in preparing nanodevices by nanometric building blocks such as TPY-SH and investigating their redox and photoactivity was presented by Prof. Abruna on Thursday. And finally Prof. Dahn reviewed his research on Li-ion battery electrode materials and proton exchange membrane fuel cell catalysis.

Eventually, at the meeting of general assembly president, treasurer and general secretaries along with new ISE fellows were introduced.

The success of the meeting was covering a wide range of electrochemical research area and its well organisation. Although, there are always some points that considering them might help the forthcoming meetings. One of these points was timetable of the oral presentation and the distance between some of the lecture theatres that considering a few minutes interval could help some audiences not to miss the beginning of the following lectures.

The next ISE spring and annual meeting will be held in Foz do Iguacu, Brazil and Seville, Spain respectively.

Maryam Bayati

University of Leouis Pasteur,
Strasbourg, France

The 58th Annual Meeting of International Society of Electrochemistry

September 9-14, 2007, Banff, Canada.

Electrochemists require energy to obtain inspiration to develop new forms of fuel cell technology.

This last September from 9th until 14th, I attended the annual meeting of ISE in Banff which is one of the highly regarded conferences in electrochemistry. I presented a paper on *Hydrodynamic focusing in microreactors by electrochemical techniques* and a poster on *Development of microelectrcochemical biosensors for application in biocatalysis.* My paper was well received by the audience and I was appreciated for my work so far. There were more than thousand delegates attending this conference from all over the world and five plenary lectures in total by highly established professors.

The conference was extremely vital for my PhD work and I managed to learn a lot in my field as I am working closely in this area.

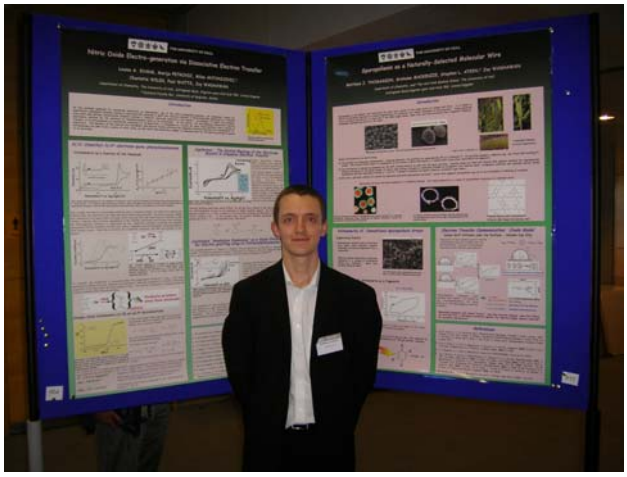
Abhishek Deshpande
Cambridge University

Electrochem 07
September 3-4, 2007, London, UK.

Professor Christian Amatore with Mr. Matthew J. Thomasson, Esq.

The Electrochem '07 conference was held in the Sir Alexander Fleming building of the Imperial College in London. The conference was held over a two day period at the beginning of September. The conference was spilt into six subject areas which were Bioelectrochemistry, Physical Electrochemistry, Electrochemical Technology, Bioanalytical and Electroanalytical Chemistry, Fuel Cells and Batteries and Electrochemical Surface Science. The conference consisted of over 50 lectures and 60 posters. The location of the College makes it ideal to take in some of the local attractions, including the Science Museum, Natural History Museum, The Victoria and Albert Museum as well as the tranquil setting of Hyde Park.

I am a second year PhD student studying at the University of Hull and I had never been to a conference before. When I had the opportunity to go I jumped at the chance. I went to the conference to present my work on the electrochemistry of sporopollenin in the form a poster. I was very nervous and apprehensive as I didn't know what to expect from a conference, but excited none the less. I was looking forward to meeting new people and listening to the presentations that were being given. One aspect of the conference which I was not looking forward to was the tube strike that was taking place on the Monday evening and Tuesday. However, the line I needed was running, although at a some what crowded capacity.



Matthew Thomasson with the prize-winning posters from Hull University.

The highlights of the conference included the presentation of the RSC Electrochemistry group Faraday Medal to Professor Christian Amatore on the subject of neurovascular coupling between neuronal activity and blood delivery in the brain. I also managed to discuss my research with him, which was a wonderful opportunity. Also the presentation of the SCI Electrochemical Technology Groups Castner Medal to Professor Geoff Kelsnall on the subject of reactor models of aqueous chloride electrolysis was another enjoyable lecture.

The conference also saw several poster prizes being distributed. Congratulations to Anne Vuorema (working with Dr. Frank Marken) on indigo electroanalysis, Huonh Ho (working with Dr. Robert Dryfe) on the nucleation of electrodeposited palladium, Yasuaki Wakizaka (working with Professor John Owen) on ionic liquid lithium batteries and Delphine Feuerstein (working with Professor Martyn Boutelle) on signal processing tools for rapid sampling microdialystate from head injury patients. The latter winner won the best overall poster prize. Both I and my group colleague, Louise Evans, were also awarded poster prizes, and we both would like to thank the judges for this honour.

Overall, I found the conference an enjoyable experience, with the presentations intellectually stimulating and it was great way to meet new people from all around the world and to discuss my work and the work of my peers.

Matthew Thomasson,
Hull University

212th Meeting of the Electrochemical Society, October 7-12, 2007, Washington, DC, USA.

Oral and poster presentations by students formed an integral part of the 212th ECS Meeting held at the Hilton Hotel in Washington, DC. This major international conference on electrochemistry consisted of a network of delegates consisting of distinguished scientists, engineers, industrialists, academia, students and professionals. This interdisciplinary scientific meeting in the wider area of electrochemistry and its applications include 35 topical symposia comprised of 1576 technical presentations, poster sessions, panel discussions, tutorial sessions and over 35 major exhibitors from electrochemical related industries. The meeting was attended by over 1500 delegates from over 100 institutions around the world.

The meeting held in Washington, DC, USA kicked off with the opening speech by the ECS President-Professor Barry MacDougall who welcomed everyone to the meeting and encouraged all participants to use the unique opportunity provided by this meeting to exchange ideas, discuss the latest theories and data and develop new solutions to pressing scientific, medical and engineering problems. Professor Barry MacDougall's talk highlights an underlying ethos of ECS meeting which serves to provide a network forum for postgraduates and scientists, to present their work in a scientific and yet friendly environment. Professor Barry MacDougall also encouraged students (both the graduates and undergraduates) to use the conference to present their research works in both oral and poster presentations in a friendly and relaxed environment and for networking opportunities with the hope of exchange of ideas and collaborations. Professor Barry MacDougall's opening speech was followed by inspiring plenary lecture on "Understanding Non-conventional Photovoltaic Cell…. For the Rest of US" delivered by Professor Laurie Peter of the University of Bath, UK. In his presentation, Professor Peter told the scientific audience of how non-conventional cells work and how they can be described within a simple unified theoretical framework that is accessible to physicists alike which allows definition of strategies for device optimization. He added that solar cells (DSC or Gratzel cells) and bulk heterojunction organic solar cells (polymer/fullerene cells) are two examples of these non-conventional PV cells. The overall potential application of his findings is in the development of a strong practical focus on the application of electrochemistry and photoelectrochemistry for the fabrication and characterization in thin film solar cells. The evening ended with the Sunday Evening Get-Together/welcome reception.

Mr. Liadi Kolapo Mudashiru, Esq. with his poster.

The morning plenary session was chaired by Professors K. Ota (Duke University) and P. Strassner (Mississippi State University) and the first speaker of the day was Dr. Bernard S.Meyerson, the Vice-President for Strategic Alliances and Chief Technology Officer of IBM's Systems and Technology Group who delivered the ECS lecture entitled "The Origin of the Imperative for Green IT." Dr. Meyerson topical lecture surveyed the latest trends and advances in technology and technology innovations. He opined that the increasing carbon footprint associated with information technology (IT), though, still modest, forewarns of action is required to prevent out-of-control growth. This was followed by a talk by Dr. Sergio Trasatti (University of Milan), who was the recipient of the ECS 2007 Olin Palladium Medal. His talk entitled "An Excursion to the Hear of Electrochemistry" described fundamental concepts from the view point of considering the electronic energy of metals as the primary factor establishing a number of observed irregularities in the properties of electrode interfaces. He provided plausible explanations and rationale for concepts such as the physical meaning of electrode potential, pzc-work function relationships, metal/vacuum vs. metal/solution interfaces, metal vs. oxide surface properties and factors of

elctrocatalysis. The plenary session ended with presentation and recognition of other Divisional Award winners including Professor Philip N. Bartlett (University of Southampton, UK) who won the ECS Carl Wagner Memorial Award.

Day 3 and 4 saw students' oral and poster presentations, Technical Exhibit (exhibitions by companies in electrochemical industry), job fairs and postgraduate career workshop on Writing an Effective Cover Letter and Resume. Over 200 students presented their research work with 25 posters judged as superior, receiving a medal and cash awards. The highlight for me was talk by Ashley Garvin of Florida State University on the Carbon Nanotube. This was an intriguing talk in which the benefits of combining the unique characteristics of carbon nanotubes with the energy storage properties of conducting polymers were highlighted. This talk provided valuable insights into both the experimental applications and theoretical evaluations of these fascinating miniaturised synthetic systems.

The event culminated in a conference banquet on the evening of the 5th day. The banquet features an evening of fine dinning, conversation, music, dancing, cash bar and recognitions of this year's honorary members. The meeting was brought to a close with closing remarks from Professor Barry MacDougall's (The ECS President) who thanked all the participants and commented on the high qualities of both the oral talks and posters presented by students. Prizes were then presented to the best talk and best poster. A.D. Meyernck (Pennsylvania State University) was awarded the prize for the best presentation and D. Buttery (University of Wyoming) won the poster competition.

Overall, the meeting was well organised, intellectually stimulating and thoroughly enjoyable. The meeting provided a unique opportunity for me to learn more about a wide range of scientific research going on around the world, meet many famous and distinguished scientists, networking opportunity with fellow postgraduate researchers. I wish to thank the RSC-Electrochemistry Group for the opportunity to present my research work at this interdisciplinary research conference through the generous award of Electrochemistry Group Travel Bursary towards to the cost of my travel expenses.

Liadi Kolapo Mudashiru (Postgraduate Research Student)
Newcastle University.

Electrochemistry and Self-Assembly for Nanomaterials Science

August 29-30, 2007, Namur, Belgium.

This short conference held in honour of Professor I. Rubinstein was organised and chaired by Professor Z. Mekhalif and Professor C. Amatore. A short conference, but one attended by *ca.* 130 delegates from sixteen countries (only one from the UK) – electrochemists of many religions and backgrounds, held at a Belgium's oldest university (Namur, capital of Wallonia).

Professor Rubinstein "kicked off" the academic programme celebrating his 60th birthday by discussing the step changes he made from electrochemistry to nanochemistry during his "first 38 years of research". This was followed by Professor Bard discussing the (spectro)electrochemistry of single molecules. Surprisingly, this hugely exciting lecture on an innovative approach was considered by Bard to have annoyed the delegates - he later bemoaned that "everyone thinks [he] only do[es] SECM"! It is always a huge pleasure and privilege to listen to Professor Amatore speak, and the third talk on electrochemistry *within* molecules captivated the entire audience. The rest of the first day was taken by Professors Reinhoudt, Vaskevich and Tadjeddine respectively discussing molecular printboards, localised surface plasmon resonance spectroscopy and sum frequency generation as a vibrational probe of interfaces and thin films.

The first day concluded with a poster session (featuring particularly exquisite work from the research groups of Professors Bilewicz, Girault, Hapiot, Schumann, Wittstock and Zoski) affording a variety of networking opportunities, as well as enable discussions with friendly faces, and a birthday banquet at the local château (it seemed like seven courses to me).

The following day started with Professor Girault discussing nanoparticle assembly and reactivity at liquid | liquid interfaces. In his inimitable sophisticated and interactive delivery style, Professor Girault argued the consideration of these interfaces as being "self-healing", whilst enabling the audience to challenge their own electrochemistry perceptions. Lectures by Professor Buess-Herman and Mekhalif focused on the study of supramolecular

nanoelectrochemistry, whilst Professors Golan, Weiss, Janata and Schmuki discussed methods of nanoscale synthesis and directed-assembly.

A thoroughly enjoyable and stimulating meeting – Professors Mekhalif and Amatore are to be congratulated for the smooth running of the event. Professor Rubinstein appeared to enjoy the event too.

jw,
Kingston-upon-Hull

3rd International Workshop on Surface Modification for Chemical and Biochemical Sensing

November 4-8, 2007, Włodowice, Poland

The purpose of this workshop subsidised by the Electrochemical Section of the Polish Chemical Society is to encourage and foster the "interdisciplinary permeation of concepts between chemistry, biology, physics, materials science, microelectronics and engineering", whilst providing a forum for training European doctoral students. This conference did not disappoint, and Professor W. Kutner and Professor M. Opałło are to be congratulated on organising and spearheading the engineering of this fantastic opportunity.

The gathering of the delegates for this conference occurred in the Polish Academy of Sciences in Warsaw on a cold day in early November. It provided a forum for networking with familiar faces and names. After a lunch, and at the appointed hour two coaches departed Warsaw heading southwards to our destination. Such expeditions, although time consuming (it took over four hours) do have the advantage of enabling a degree of experiential learning of the country environment. As we drew nearer out destination, The Eagle's Nest Hotel, I had the feeling of entering a tale by Charles Perault!

The academic programme commenced on the Monday morning with Professor Schuhmann giving the finest tutorial lecture of the conference, and discussing his recent seminal research in SECM. This was followed by a superb young French electrochemist, Professor Mathieu Etienne discussing shear-force-based distance control in SECM. This incredibly sharp and rigorous scientist would later present some amazing electrochemical syntheses of electrode-supported well-ordered mesoporous silica films displaying a regular arrangement of mesopore channels oriented normal to the underlying electrode. Professor Etienne was followed by general lectures in electroanalysis and bioelectroanalysis using nanoparticles and nanotubes and other new electrode materials. Particularly noteworthy was Professor Szunerits' keynote talk on nanopatterning of boron-doped diamond with polypyrrole using E-SNOM (electrochemical scanning near-field optical microscopy), and Professor Nöll's short communication on introducing selectivity into photochemical dissociation and release of molecules locked by the flavoprotein dodecin. The afternoon session heralded new developments in potentiometry and electrocatalysis. Particularly exciting talks were given by Professor Lewenstam who tutored the theoretical modelling of membrane potentials, Professor Nagels on surface potentials and Professor Bron on the surface modification of carbon materials for electrocalysis. Dinner and a poster session concluded the day.

Owing to the presence of heavy snow on the second day, and the threat of a power cut, the cultural trips and the networking activities planned for the Tuesday had to be abandoned and replaced by exciting lectures by Professor Krysiński on electrochemistry with magnetic nanoparticles, and on AC-SECM by Professor Maciejewska. This was followed by an outstanding tutorial lecture by Professor Blanchard on controlling curvature and intermolecular interactions in biomimetic membranes and then by Professor Gratzl (Case Western Reserve University) employing rotating droplet microelectrochemistry for innovative and adventurous enzyme and cellular transport studies. Although the afternoon was dominated by Professor Gorton's tutorial on anodic and cathodic reactions for biofuel cells, memorable and notable lectures included Professor Haupt's work on molecularly-imprinted polymers for biochips and acoustic biosensor arrays, and Professor Leech's keynote on innovations in mediated bioelectrochemical reactions. This latter lecture additionally served as an introduction to Dr. K. Foster's research with Professor Leech on electrode modification for biosensors and biofuel cells.

The complete loss of all sources of power on the Wednesday morning served as an excuse for engaging in external activity. The fearless explored the carbonate-based geological and anthropological features of interest nearby; I,

within a smaller group, chose to take a taxi to Częstochowa to pay respects to the Black Madonna at Jasna Gora. The afternoon saw three wonderful lectures from the UK contingent – Professor Marken "kicked off" the afternoon with a tutorial on electrochemistry at the three phase boundary, with his thesis student, Ms. N. Katif detailing her excellent work on exploiting such systems for sulfite detection. Professor Kataky's co-worker, Dr. F. A. Aguiar presented elegant experiments fitted with relevant theory for conically-recessed microelectrode arrays. Enjoyable lectures were also given by Professor Karyakin on electrochemical sensors based on nanoscaled films and redox-active polymers, and Professor Ferapontova on electrochemical DNA biosensors for label-free nucleic acid detection. The events of the day concluded with an excellent conference banquet, and bop.

The final day of the conference saw outstanding lectures by Professor D'Souza on supramolecular donor-acceptor nanostructures for mimicking photosynthesis and the use of polysaccharides for chemical sensing by Professor Schauer. I was very pleased (and relieved) that there was at least one person (other than the session chair!) present when I gave my talk – the last lecture of the conference.

I thoroughly enjoyed the stimulation that this conference afforded, and congratulate and thank the organisers for this wonderful opportunity to learn more in convivial surrounds. The next conference in this series will be held in 2009; I strongly recommend it to all who feel able to attend.

jw,
Kingston-upon-Hull.

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).

EbookREV

***De l'Oxydoréduction à l'Electrochimie*, Y. Verchier, F. Lemaître, Ellipses Edition Marketing, Paris. 2006**
(ISBN: 978-2-7298-3072-4, 22.94€)
***Electrochimie: Des concepts aux applications*, F. Miomandre, S. Sadki, P. Audebert, R. Mèallet-Renault, Dunod, Paris, 2005**
(ISBN: 2-10-007088-6, 35.00€)

These books represent two fantastic introductory texts in electrochemistry, written pedagogically fully engaging with all four Honey and Mumford learning styles, whilst allowing the learner to realise the essence of "courtly education" expounded in Montaigne's 1580 essay. The authors' backgrounds are similar. Verchier has recently finished his doctoral thesis at Paris VI - the same university at which Lemaître educates students. Miomandre, Mèallet-Renault and Audebert are all based at Ecole normale supèrieure in Cachan, whislt Sadki teaches at the Joesph Fourier University in Grenoble and also works at the French Atomic Energy Commission. They are all extremely gifted with the art of explaining this rather difficult subject to school/undergraduate students (the book by Verchier and Lemaître) and advanced undergraduates/postgraduates (Sadki's book).

Verchier's book constitutes a series of twelve lectures split across three parts where problem-based learning is a central theme – the learner is able to experience the subject didactically via an integrated, worked-examples approach. Each lecture is considered via a step-by-step approach, with material ranging from a "baggage minimum" of real and ideal solutions and Debye-Hückel relationships through to electrode potentials, Nernst equations, Pourbaix diagrams, and batteries. The last third of the book is devoted to studying the kinetics of heterogeneous electron transfer events. It is this delightful end which is the books real strength in being used for modern holistic second year RSC-accredited (or otherwise) electrochemistry courses.

Sadki's book contains two special surprises. First, there is a wonderful discussion of electrochemistry in the modern world by Professor Christian Amatore. The second is a series of twelve experimental practicals ready-made for the student laboratory class. Apart from this, the book is entirely clear and so beautifully written (except the hand-drawn voltammograms) that it is so very difficult to stop one from reading it. The problems at the end of the text are another asset to the book - these questions act as good practise for RSC-accredited UK university examinations (note that full worked solutions and a list of errata are given on the publisher's website).

These two books are truly assets to any (electro)chemistry library and I strongly recommend them. That they are also written in French allows them to provide even more lessons for English-speaking learners!

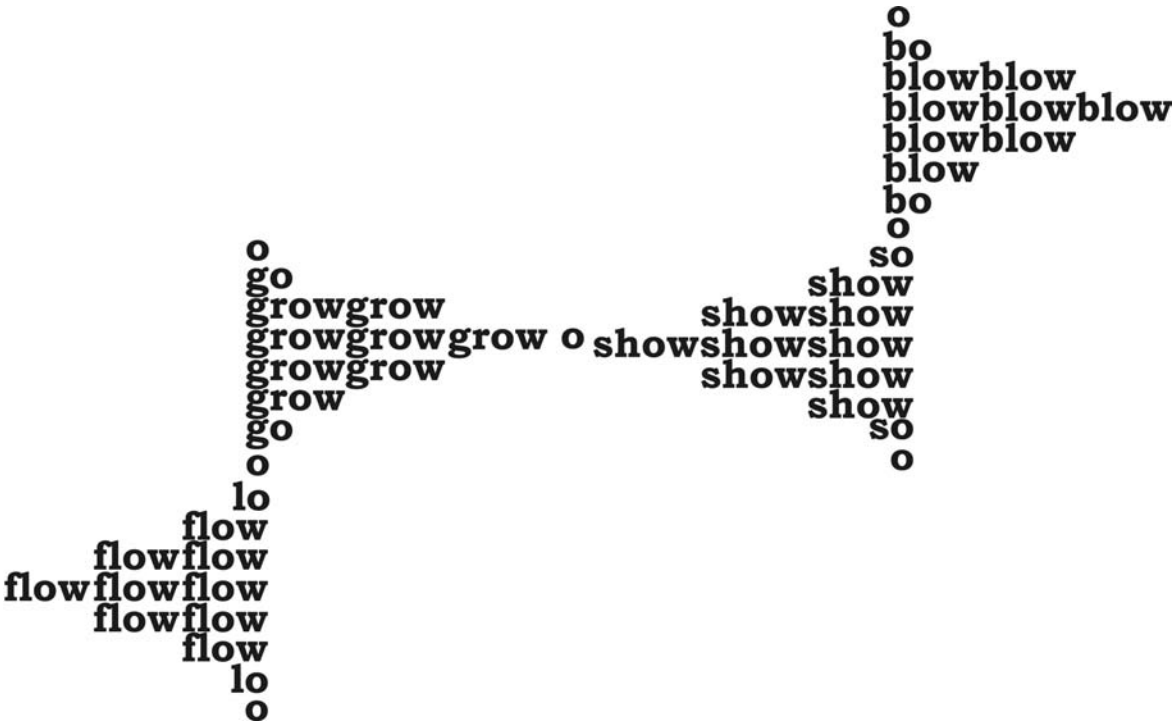
jw,
Kingston-upon-Hull

EchemRT

Louis Pasteur would be 185 years old, were he alive today. In his lesson of March 6, 1865 (*q.v. Notes pour des leçons de physique et de chimie appliquées aux Beaux-arts*), he teaches an almost Jacototian philosophy:

> "*Il y a des circonstances où je vois clairement l'alliance possible et desirable de la science et de l'art et où le chimiste ou le physicien peuvent prendre place auprès de vous et vous éclairer.*"

Applying this in an "inverse" sense, consider the following work by Eugen Gomringer, one of the founding members of the concrete poetry movement of the 1950s. What do you see? What do you feel?



EchemHIST

Professor J. E. Randles

John Edward Brough Randles (*b*. 26th August 1912, England, *d*. February 13, 1998, England) was one of the founders of dynamic electrochemistry. He was educated at Derby School and Cambridge University. During the second world war, Randles was a conscientious objector, and was allocated to a research establishment. In 1945 he was appointed Lecturer at Birmingham University (U.K.), and remained there for the rest of his scientific career. Archie Hickling had invented the potentiostat in 1942, but it was an essentially static device. John Randles built a dynamic version which he reported in 1947 *[i]*. This was a cathode ray polarograph that had a synchronizing circuit to give exact control of the time lag between the fall of a mercury drop and the start of a linear voltage sweep. Within a year, Randles in England *[ii]* and Augustin Ševčík in Czechoslovakia *[iii]* had independently developed linear sweep voltammetry and derived an expression for the current-voltage response of a diffusion controlled electrode reaction. Today, this landmark result is known as the Randles-Ševčík equation. Many modern techniques of electrochemistry are descended from this work, including cyclic voltammetry, anodic stripping voltammetry, and various types of hydrodynamic voltammetry. At the Faraday Discussion of 1947 Randles described the impedance of a circuit containing both diffusion and interfacial electron transfer, and showed that the mathematical couplings between diffusion, electron transfer, and solution resistance could be represented by an equivalent circuit of linear components *[iv]*. This opened the way to the study of fast electrode reactions, and laid the groundwork for the future field of a.c. impedance. At the same meeting, a communication from Boris Ershler *[v]* revealed that parallel
developments were in progress in the Soviet Union. Today, the "Randles-Ershler equivalent circuit" (Randles-Ershler impedance) remains one of the most widely used models of electrochemical impedance, typically including a double layer capacitor and a charge transfer resistance in parallel, and a solution resistance in series. In 1952, Randles realized that thermal fluctuations were required in the atomic coordinates of reactant species and their solvation shells, before electron transfer could take place *[vi]*. This epochal idea was illustrated with a plot of potential energy versus reaction coordinate, and remains today as the cornerstone of modern electron transfer theory. Besides his theoretical insights, Randles was a first-class experimentalist. His measurement of the Volta potential difference between mercury and aqueous solution remains a classic *[vii]*. This experiment generated estimates of the absolute hydration enthalpy of the proton, ΔHaq°[H^+], which averaged about –1131 kJ mol^{-1}. Modern estimates (Tissandier *et al.*, *[viii]*) place the true value at –1150 ± 10 kJ mol^{-1}, remarkably close to Randles' value.

References

[i] Randles JEB (1947) Analyst 72:301; [ii] Randles JEB (1948) Trans Faraday Soc 44:327; [iii] Ševčík A (1948) Coll Czech Chem Comm 13:349; [iv] Randles JEB (1947) Discuss Faraday Soc 1:11; [v] Ershler BV (1947) Discuss Faraday Soc 1:269; [vi] Randles JEB (1952) Trans Faraday Soc 48:828; [vii] Randles JEB (1956) Trans Faraday Soc 52:1573; [viii] Tissandier MD, Cowen KA, Feng WY, Gundlach E, Cohen MJ, Earhart AD, Coe JV (1998) J Phys Chem A 102:7787

S. Fletcher,
Loughborough University,
in "Electrochemical Dictionary"
(Edited by Allen J. Bard,György Inzelt , and Fritz Scholz)
Publisher: Springer (2008).

Diffusion des Savoirs

27 February 2008 - 29 February 2008
FC EXPO 2008
Tokyo Big Sight, Tokyo, Japan
"4th International Hydrogen & Fuel Cell Expo"
Contact
FC EXPO Show Management

30 March 2008 - 04 April 2008
NHA Annual Hydrogen Conference 2008
Sacramento, California, U.S.A.
"Ramping Up Commercialization"
Contact
NHA Annual Hydrogen Conference 2008

21 April 2008 - 25 April 2008
Group Exhibit Hydrogen + Fuel Cells
Hannover Messe, Germany
At the HANNOVER FAIR'08
Around 150 companies and institutions from around the globe will be
showcasing the full spectrum of hydrogen / fuel cell-related products
and services.
Contact
Megan McCool and Tobias Renz, FAIR-PR

15 June 2008 - 19 June 2008
17th World Hydrogen Energy Conference (WHEC) 2008
Brisbane, Queensland, Australia
Will cover a range of topics highlighting the complex issues of
hydrogen as an energy carrier. These will include methods of generating
hydrogen, materials for hydrogen storage, infrastructure development and
hydrogen utilisation technologies, particularly fuel cell systems.
Contact
Secretariat

24 June 2008 - 27 June 2008
7th International Symposium on New NanoMaterials for Electrochemical
Systems
Montréal, Canada
Fuel Cells
Advanced Primary and Secondary Batteries
Electrochemical Super-capacitors
Bio-electrochemical Devices
Sensor Systems
Solar Cells
Photo-electrochemical Cells
Elaboration and Characterization
Contact
New Materials 2008 Secretariat

16 May 2010 - 21 May 2010
18th World Hydrogen Energy Conference (WHEC) 2010
Essen, Germany
Contact
Info

14 - 19 January 2008
Bath, United Kingdom
Bath Electrochemistry Winter School 2008
Lectures and experiments
Overview of electrochemistry
Introduction to electrode processes
Electrode kinetics
Mass transport
Electrochemical impedance
Mechanisms of electrode reactions
Spectoelectrochemistry
Electroanalytical methods
Bioelectrochemical systems
Design of experiments
Hilary Vidnes
Department of Chemistry
University of Bath, Bath BA2 7AY, UK
Tel: +44 (0)1225 386815
Fax: +44 (0)1225 386231
Email: J.J.Vidnes@bath.ac.uk
http://www.bath.ac.uk/chemistry/eissummerschool

17 - 19 March 2008
Foz do Iguaçu, Brazil
6th ISE Spring Meeting: Electrochemistry for a Healthy Planet
Environmental analytical electrochemistry: monitoring the planet
New electroanalytical methods for environmental sampling and detection
Environmental electroanalysis based on chemically modified electrodes
Electroanalysis designs and miniaturization for environmental applications
Electrochemical sensors to monitor the environment
Novel electrode materials for environmental analytical applications
Environmental electrochemical engineering: protecting the planet

Electrochemical cell and reactor design for environmental systems
Clean energy production
Electrochemically enhanced separation processes
Frontiers of electrochemistry in soil and groundwater remediation
Electrochemical and photo-electrochemical water treatment
Electrode materials and processes for a cleaner planet
http://ise-online.org
Email: info@ise-online.org
http://spring08.ise-online.org
Email: events@ise-online.org

08 April 2008
University of Southampton, UK
Southampton Electrochemistry Research Conference
Professor Derek Pletcher
School of Chemistry, The University, Highfield
Southampton SO17 1BJ, United Kingdom
Tel: 44 (0)23 8059 3519
Email: dp1@soton.ac.uk
30 April – 03 May 2008
Tartu, Estonia
BEC-5: 5th Baltic Conference on Electrochemistry
Fundamentals of charge transfer and adsorption kinetics
Modern techniques in materials science and electrochemistry
Interfacial electrochemistry and nanomaterials
Electrical double layer and hybrid capacitors
Novel fuel cells, electrolysers and baterries
Professor Enn Lust
Institute of Chemistry, University of Tartu
2 Jakobi Street, 51-13 Tartu, Estonia
Email: enn.lust@ut.ee
www.balticconference.ut.ee

04 - 08 May 2008
Crveni otok (Red Island), Rovinj/Istria/Croatia
1st Regional Symposium on Electrochemistry of South-East Europe: RSE-SEE
All aspects of fundamental and applied electrochemistry
Sustainable development and economic growth.
Dr. Višnja Horvat-Radošević
Ruđer Bošković Institute
Bijenička 54, 10000 Zagreb, CROATIA
Tel.: +385 1 4561 152
E-mail: vhorvat@irb.hr
http://www.rse-see.net

11 – 14 May 2008
Tapei
6th Asian Conference on Electrochemistry in Taipei: Electrochemistry in the 21st Century for Sustainable Society
Electrochemical energy conversion and storage
Environmental issues
Sensors
Plating and surface technologies
Electronic industries
Solid state science
Professor Andrew Lin
Department of Chemical & Materials Engineering
Chang Gung University, Taoyuan
Taiwan 333
Email: acec2008@gmail,com
http://www.acec2008.org

18 - 23 May 2008
Phoenix, Arizona, USA
213th 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
10 South Main Street, Pennington
New Jersey 08534-2896
USA.
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings

09 - 12 June 2008
Varna, Bulgaria
7th International Conference on Lead-Acid Batteries: LABAT '2008
Professor D. Pavlov
Institute of Electrochemistry and Energy Systems (former CLEPS)
Acad. G. Bonchev Street, block 10
Sofia 1113, Bulgaria
Tel: +35 9 2 9710083
Fax: +35 9 2 8731552
E-mail: dpavlov@labatscience.com
http://www.labatscience.com

25 - 27 June 2008
Berlin, Germany
4th Gerischer Symposium: Electrochemistry with Spatial and Temporal Resolution

Constanze Duvigneau
Institute of Electrochemistry
University of Ulm
89069 Ulm
Germany
E-mail: constanze.duvigneau@uni-ulm.de
http://www.uni-ulm.de/ge-symp/

30 June – 04 July 2008
University of Southampton, UK
Electrochemistry Summer School:
Electrochemistry, Electrochemical Engineering and Electrochemical Technology
Understanding electrochemical technology
Cell design and process development
Fuel cells, nanotechnology and water treatment
Lecture notes, recommended textbook and CD provided
Hands-on laboratory sessions with choice of experiments with 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 - 28 August 2008
Prague, Czech Republic
8th European Symposium on Electrochemical Engineering
Special Session at CHISA 2008:
International Congress on Chemical and Process Engineering
CHISA 2008
Novotneho Lavka 5
116 68 Praha 1
Czech Republic
Fax: +420 221 082 366
Email: org@chisa.cz
http://www.chisa.cz/2008/

24 - 28 August 2008
Prague, Czech Republic
8th European Symposium on Electrochemical Engineering:
Process Intensification through an Understanding of Microscale Phenomena
Special Session at CHISA 2008:
Electrochemical engineering on the micro and nanoscales
Tailored materials for electrochemical applications
Nanostructured materials in electrocatalysis
Energy conversion systems
Hydrogen production technology
Electrochemical processes for health and environmental protection
Mathematical modelling in the understanding and optimization of electrochemical processes and reactors
General session
Karel.Bouzek@vscht.cz
Department of Inorganic Technology
Institute of Chemical Technology Prague
Technicka 5
CZ-166 28 Prague 6
Czech Republic
Tel.: +420-22044-4019
Fax: +420-22044-4410
http://www.chisa.cz/2008/

07 - 12 September 2008
Seville, Spain
59th Annual ISE Meeting: Electrochemistry down to the Molecular Level -
Interfacial Science for Life and Technology
Interfacial electrochemistry
Molecular electrochemistry
Bioelectrochemistry
Sensors and biosensors
Electrochemical materials: molecular, supramolecular and nanomaterials
Electrochemical energy conversion and storage
Electrochemical engineering
General session
http://ise-online.org
Email: info@ise-online.org
http://spring08.ise-online.org
Email: events@ise-online.org

09 - 11 September 2008
Düsseldorf, Germany
MAM-08: 4th IUPAC International Symposium on Macro- and Supramolecular Architectures and Materials: Synthesis, Properties, and Applications
Professor Dr H. Ritter
Institute of Organic Chemistry and Macromolecular Chemistry
Universitätsstrasse 1
D-40225 Dusseldorf
Tel: +49 211 811 4760
Fax: +49 211 811 5840
Email: mam08@uni-dueseeldorf.de
http://www.uni-duesseldorf.de/MAM-08

15 - 18 September 2008
Liverpool, United Kingdom

Electrochem 08
Single molecule electrochemistry
Redox-active molecules and materials
Electrochemical surface science
Sensors
Photovoltaics
Electrochemistry and sustainability
http://www.soci.org

12 - 17 October 2008
Honolulu, Hawaii, USA
PRIME 2008
214th Meeting of the Electrochemical Society &
2008 Fall Meeting of the Electrochemical Society of Japan
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
Sensors and displays: principles, materials and processing
10 South Main Street, Pennington
New Jersey 08534-2896
USA.
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings

19 – 23 October 2008
Kobe, Japan
2008 Joint Symposium on Molten Salts
in conjunction with the 2nd Asian Conference on Molten Salts
Corrosion and electrodeposition
Surface, interface and nanoscale studies
Industrial electrolysis
Spectroscopy and modelling
Catalysis and synthesis
Thermodynamics
Ionic liquids
Fuel cells
Nuclear energy
Dr Minoru Mizuhata
Department of Chemical Science & Engineering
Graduate School of Engineering
Kobe University, 1-1 Rokkodai-cho
Nada,Kobe 657-8501, Japan
Email: mizuhata@kobe-u.ac.jp
Tel: +81 78 803 6186
Fax: : +81 78 803 6186

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

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

24 - 29 May 2009
San Francisco, California, USA
215th Meeting of the Electrochemical Society
10 South Main Street, Pennington
New Jersey 08534-2896
USA.
Tel: +1 609 737 1902
Fax: +1 609 737 2743
Email: ecs@electrochem.org
http://www.electrochem.org/meetings
04 - 09 October 2009

Vienna, Austria
216th Meeting of the Electrochemical Society
10 South Main Street, Pennington
New Jersey 08534-2896
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
10 South Main Street, Pennington
New Jersey 08534-2896
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

10 - 15 October 2010
Las Vegas, USA
218th Meeting of the Electrochemical Society
10 South Main Street, Pennington
New Jersey 08534-2896
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

- **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, 2008***
  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: 2008
  Applications: from ***01 February to 01 May, 2008***
  Chair of the Award Committee: Takayuki Homma

- **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: Claude Gabrielli

- **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, 2008***
  Chair of the Award Committee: Wolfgang Kautek

- **The Oronzio and Niccolò De Nora Foundation Young Author Prize**
  may be awarded annually to a scientist of less than 30 years 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, 2008***
  Chair of the Award Committee: Galina Tsirlina

- **The Klaus-Jürgen Vetter Prize for Electrochemical Kinetics**
  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: Angelika Heinzel

- **The Frumkin Memorial 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: David Schiffrin

- **The Oronzio and Niccolò De Nora Foundation Prize for Environmental Electrochemistry**
  is an award of ISE Division 3, which 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 electrochemical energy conversion.
  Next award: 2008
  Applications: from ***01 February to 01 May, 2008***
  Chair of the Award Committee: Marina Mastragostino

- **The Oronzio and Niccolò De Nora Foundation Prize of ISE on Applied Electrochemistry**
  is an award of ISE Division 5, which 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 electrochemical technology and engineering.
  Next award: 2008
  Applications: from ***01 February to 01 May, 2008***
  Chair of the Award Committee: Constantinos Vayenas

- **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: Wolfgang Schuhmann

- **The Electrochimica Acta Travel Awards for Young Electrochemists**
  are aimed at favouring the participation of young electrochemists in the ISE Annual Meetings. Applicants must be ISE members who have obtained their PhD not earlier than 6 years before the deadline for applications.
  Next award: 2008
  Applications: not later than ***31 January, 2008***
  Award Committee: The four Vice-Presidents of the ISE