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Edito.

We are half-way through a very special anniversary year for electrochemistry: Professor Unwin pays tribute to Davy's discovery of calcium 200 years ago (and the publication of his discovery of sodium and potassium) on page 6, and I note, with pleasure, that the Debye-Hückel law is 85 years old this year. January 5 marked the 85th birthday of Professor J. O'M. Bockris and the 70th birthday of Professor A. Kuznetsov. July 21 marks the 85th birthday of Professor R. A. Marcus (who, I understand, will speak at Faraday Discussion 145: Frontiers in Physical Organic Chemistry in Cardiff, September 2009), whilst September 19 and December 18 will celebrate the 75th birthdays of Professors Savéant and Bard respectively. Apparently, Professor Heller is also 75 this year. These are all scientists whose published works personify Proverbs 13:14; we are privileged to work in these special times.

I thank all those who have so generously provided materials for this issue, and those who have provided feedback on this publication.



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

Congratulations to....



Professor Fraser A. Armstrong on his election to Fellow of the Royal Society. The following is taken from the Oxford University webpage.

"Fraser Armstrong is a Professor of Chemistry at Oxford University and a Fellow of St. John's College. He obtained his Ph.D. at the University of Leeds with Geoff Sykes and then carried out postdoctoral research with Peter Kroneck (Konstanz), Ralph Wilkins (New Mexico), Helmut Beinert (Madison), and Allen Hill (Oxford). In 1983 he was awarded a Royal Society University Research Fellowship which he held in Oxford until 1989, when he joined the Chemistry Faculty at the University of California, Irvine. He moved to his present position in 1993. His interests are in biological redox chemistry, in particular the application of dynamic electrochemical techniques in studies of complex electron-transfer and catalytic reactions in proteins, and most recently

the mechanisms and exploitation of biological hydrogen cycling. He was awarded the 1998 European Medal for Biological Inorganic Chemistry, the 2000 Royal Society of Chemistry award for Inorganic Biochemistry, the 2003 Carbon Trust Academic Innovation Award (with Kylie Vincent), the 2004 Max-Planck "Frontiers in Biological Chemistry" Award, and the 2006 Royal Society of Chemistry Medal for Interdisciplinary Chemistry."

Professor Philip N. Bartlett, recipient of the Carl Wagner Memorial Award. The following is from the Southampton University webpage.

"[this award is from] the Electrochemical Society in the US "to recognize a mid-career achievement and excellence in research areas of interest of the Society, and significant contributions in the teaching or guidance of students or colleagues in education, industry, or government." This can be added to a growing list of major awards that Professor Bartlett has received in the last few years... He is a co-founder and Chief Scientific Officer of Nanotecture PLC (<http://www.nanotecture.co.uk/>), a spin-out company of the University"



Feature article

Funding for British Electrochemistry: a two-century-old problem

The year 2008 marks the bi-centenary of Sir Humphrey Davy's claim that 'a new path of discovery [had] been opened in the agencies of the electrical battery of Volta' and that electrochemistry was 'a new department of science'. Following his 1806 lecture to the Royal Society on 'some chemical agencies of electricity', for which he had been awarded Napoleon's prestigious prize of three thousand francs (announced in January 1808), Davy had gone on to isolate, electrochemically, the metallic elements potassium and sodium. During the Napoleonic Wars, international rivalry in chemistry, between France and Britain, was intense. An international race was on to construct more powerful voltaic apparatus, which Davy called 'an alarm bell for experimenters'. Throughout Europe and North America it was becoming clear to natural philosophers and chemists that the age of 'big science' was dawning, raising questions as to how research in chemistry should be funded.

As Professor of Chemistry at the Royal Institution, Davy sought institutional support for his researches, but the Institution at that time was near bankruptcy. In July 1808, frustrated by the facilities available to him and apprehensive that better apparatus was being made available elsewhere in Europe, particularly Paris, where an order was given at government level to construct a battery of unprecedented power, Davy made a passionate plea to the managers at the Royal Institution to 'raise a fund by subscription, for constructing a powerful battery, worthy of a national establishment'; he went on: 'in other countries, public and ample means have been provided...and it would be dishonourable to a nation so great, so powerful, and so rich, if, from the want of pecuniary resources, [the science] should be completed abroad.'

The appeal has often been written up as a success, with Davy himself referring to 'a fund of upwards of £1000 having been raised', when in fact the books were open for nine months and less than £600 was actually forthcoming of the £1000 pledged. Key scientists of the day who signed up, but did not in fact pay included Davy's friend, and fellow electrochemist, William Hyde Wollaston and Henry Cavendish (the latter pledging £30 which appears to have never been forthcoming). Among the principal supporters were several London financiers, who had an interest in both experimental science and in the fine arts, together with leading members of the Geological Society of London. (At the time, it was anticipated that electrochemical analysis would have its greatest application in such new fields as mineralogy and geology).

To test which type of battery might be most useful, Davy and several scientific friends carried out experiments on melting and decomposition. They met at Ferox Hall, the Tonbridge home of George and John George Children (now a prep school in Tonbridge) who had constructed a 'galvanic laboratory'. The juxtaposition of large-plated and small-plated batteries provided opportunities to compare the quantity (voltage) and intensity (current) of different kinds of voltaic apparatus. The subsequent funding and construction of the 'great battery' in the basement of the Royal Institution took almost eighteen months. In September 1809 a number of distinguished chemists, including Cavendish and Wollaston visited the laboratory and witnessed early experiments.

In expressing thanks for the new battery, Davy urged the Royal Institution managers to support public science since 'a scientific institution ought no more to be made an object of profit than an hospital, or a charitable establishment'. Surely these insightful words are as relevant today as they were two centuries ago.

An account of the funding of equipment for Davy is given in P. Unwin and R. Unwin (2007). *'A devotion to the experimental sciences and arts': the subscription to the great battery at the Royal Institution 1808-9*. *British Journal for the History of Science* **40**(2), 183-203.

Patrick Unwin
University of Warwick
p.r.unwin@warwick.ac.uk

Election'08

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GROUP***

REQUEST for NOMINATIONS

For the election of a new Chairman
at the **Annual General Meeting at the Electrochem 2008**,
Liverpool, Tuesday, 16th September 2008

Please send your nominations for

1. a new Chairman for the Electrochemistry Group
2. a new committee member (academic representative) for the Executive Committee of the Electrochemistry Group

to the Secretary: Frank Marken, Department of Chemistry,
University of Bath. Bath, BA2 7AY, UK, email f.marken@bath.ac.uk, tel. 01225 383694,
fax 01225 386231.

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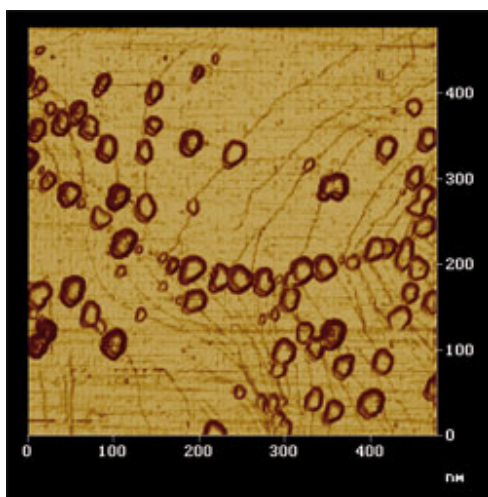
Postal address:

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

Electrochem 08

Monday 15 – Wednesday 17, September 2008
University of Liverpool, UK.

Organised by the SCI Electrochemistry Group, RSC
Electrochemistry Group and RSC Electroanalytical Group



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 webpage.

This meeting covers all fundamental and applied aspects of modern electrochemistry, with a special emphasis this year on electrochemistry on the nanoscale. The meeting is aimed at academic and industrial practitioners of electrochemistry, in its widest sense, spanning materials chemistry, nanoscale science, sensing, and electrochemical engineering.

Registration

Registration will begin at 12.30 pm on Monday 15 September. The conference will open after lunch with a plenary lecture, following which there will be parallel sessions of contributed lectures and keynote talks. In the evening there will be an extended poster discussion session, during which light refreshments will be available.

On Tuesday 16 September, there will again be a plenary lecture in the morning, and parallel sessions of contributed lectures and keynote talks. A further poster session in the evening will be followed by a conference dinner at the Adelphi Hotel.

The conference will conclude on Wednesday 17 September with parallel sessions of lectures and keynote talks, followed by lunch. There will be a free afternoon on

Wednesday, where delegates will be able to leave or explore Liverpool. Information can also be found on: www.liv.ac.uk/chemistry/electrochem08/index.html

Plenary and Keynote Lectures

The plenary lectures will be given by:



- **Nate Lewis: Faraday Medal Lecture**

Prof. Nate Lewis (Caltech) is the 2008 Faraday Medallist. He is the George L. Argyros Professor of Chemistry at the California Institute of Technology. His research interests include light-induced electron transfer reactions, both at surfaces and in transition metal complexes, surface chemistry and photochemistry of semiconductor/liquid interfaces, novel uses of conducting organic polymers and polymer/conductor composites.

W: <http://nsl.caltech.edu/natelewis.html>



- **Henry S White**
Prof. White is the Distinguished Professor of Analytical Chemistry and Chair of the Department of Chemistry at the University of Utah. He is engaged in both experimental and theoretical aspects of electrochemistry, with diverse connections to analytical, biological, physical, and materials chemistry.

W: <http://www.chem.utah.edu/faculty/white/white.html>

Theme, Keynote and Organiser

- **Redox-Active Organic Materials**
Peter Skabara, University of Strathclyde. Organiser: Simon Higgins
- **Nanoscale Electrochemistry**
To be announced . Organiser: Richard Nichols
- **Electrochemical Surface Science**
Nenad Markovic, Argonne National Laboratory & Gary Attard, Cardiff University. Organiser: Chris Lucas & Sarah Horswell
- **Electrochemistry and Sustainability**
To be announced. Organiser: Edward Roberts
- **Electrochemical Sensors**
Damien Arrigan, Tyndall National Institute. Organiser: John Hart, Peter Fielden and Stan van den Berg
- **New Developments in Electrochemistry**
David Leigh, Edinburgh University. Organiser: Frank Marken & Katherine Holt

Venue

This year's meeting will be held in Liverpool, in its year as European Capital of Culture. Further information on the city can be found on: www.visitliverpool.com The University Campus is just a ten-minute walk from the nearest mainline station at Lime Street. Further information on travel will be sent to you with your confirmation booking letter.

Registration includes access to all the meeting sessions, abstract book, lunches on Monday, Tuesday and Wednesday and all refreshment breaks. It also covers drinks receptions on Monday and Tuesday and the conference dinner on Tuesday evening. The conference dinner will be held in the Adelphi Hotel, in the centre of Liverpool. The registration fee does not include accommodation.

The University Lecture Block at the University of Liverpool is an ideal venue for the exhibition. All lecture theatres, meetings rooms, refreshments, lunches, the exhibition and posters are situated in a single concourse, ensuring excellent access to delegates throughout the meeting. Please email E: conferences@soci.org for further information and prices.

Accommodation

We have negotiated rates and reserved a number of rooms at the following hotels, which are all within walking distance of the University. To make a booking, please contact the hotel directly, quoting the reference code listed below. There are only a limited number of rooms on hold, until early August. Early booking is therefore strongly recommended. Please note: due to its city centre location, there is limited parking at the University, which is rather expensive. We strongly encourage the use of public transport. Walking times from the University are listed below:

- **Premier Inn** (approx 25 minute walk), +44 (0)870 238 3323
Vernon Street, Liverpool, L2 2AY, www.premierinn.com, B&B: £70.50
Ref no: DCR120375 (ask for Gemma Smith)
- **The Feathers Hotel** (approx 5 minute walk), + 44 (0)151 709 9655
117/125 Mount Pleasant, Liverpool L3 5TF, www.feathers.uk.com/feathers ,B&B: £59.95 (single)
£69.95 (double/twin)
Ref no: UNI15098 (ask for Shelley Doherty)

- **The Adelphi Hotel** (approx 12 minute walk), + 44 (0) 871 222 0029
Ranelagh Place, Liverpool, L3 5UL, www.adelphi-hotel.co.uk, B&B: £80
Ref no: SCAD1509

All prices are based on single occupancy. In addition, there are a number of moderately priced hotels and guesthouses in the local area. Please see the website at: www.visitliverpool.com/site/accommodation for further details.

Exhibition and Sponsors

The organisers are grateful to ISE for its sponsorship of the meeting.



Other Sponsors and Journals



Notes:

The prices below include a 5% web discount

Event Location:

University of Liverpool , UK

Call for papers/posters:

There is currently a call for papers and posters for this event go to www.soci.org/electrochem08 for more details

Prices:

SCI/RSC Member (before 25 July)	GB£256.00
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SCI/RSC Member (after 25 July)	GB£285.00
Non-Member (after 25 July)	GB£370.00
Subsidised Member (after 25 July)	GB£200.00
SCI/RSC Student (after 25 July)	GB£142.00

Date and Times:

15 September 2008

16 September 2008

17 September 2008

For more information, please contact:

Conference Team , T: +44 (0) 20 7598 1507 , F: +44 (0)20 7235 7743 , E: conferences@soci.org

ELECTROCHEM 08: be part of it

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Electrochem 08

Monday 15 - Wednesday 17 September 2008

University of Liverpool, UK

CANCELLATIONS received in writing 1 to 3 weeks prior to the meeting will be subject to a 20% administration charge. We regret that refunds cannot be made for cancellations received after this period although substitutions may be made. Should unforeseen circumstances occur, SCI reserves the right to alter the content of the programme and cancel or postpone any of its meetings without notice or, in the case of complete cancellation, liability to enrolled delegates other than return of fees.

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Meeting reports: International Reviews

The 12th International Conference on Electroanalysis, ESEAC 2008

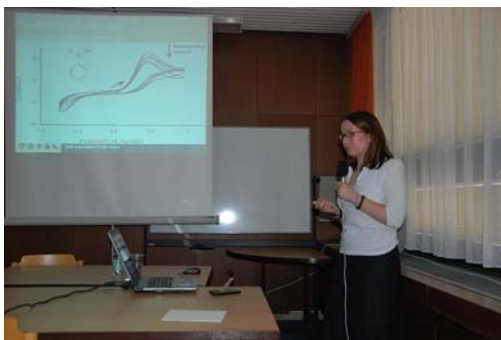
June 16-19, 2008, Prague, Czech Republic.



Prague – a delightful seat of learning “from medieval alchemy to the frontiers of science”.

Following two full days of lectures on the Monday and Tuesday, Wednesday morning began with a magnificent lecture from Prof. Evgeny Katz on biocomputing systems based on electrochemically wired enzymes, and after lunch we were treated to a choice of either a four hour guided sightseeing trip of the city of Prague, or a guided tour of the Heyrovsky Institute, the birthplace of polarography. Having never visited Prague before I decided to join the sightseeing party, and I was not disappointed. Taking in Prague Castle, Wallenstein Gardens, Charles Bridge and some of the Old Town including the famous Astronomical Clock, the four hours were packed with historical buildings, each with an interesting background as explained by our guide.

The guide left us at 6pm, allowing us to explore the city further before making our own way back to the hotel via the metro and tram systems.



Ms. L.A. Evans speaking at the ESEAC meeting.

I arrived in Prague late on Sunday night, missing the welcome party, and by all accounts I certainly missed out. So bright and early on Monday morning following my late registration, the conference began with an introduction to the heads of the organising and scientific committees. Prof. Marek Trojanowicz began the three days of lectures with an interesting look at the electrochemical sensing of chiral molecules, a superb start to a very stimulating three days. A wide variety of electrochemical topics were covered, and with plenary sessions it was necessary on occasions to make tough choices as to which lecture to attend. However, whichever auditorium you chose to attend, few were disappointed.



Professors Zuman and Wang are on either side of Professor Smyth, with Professor Barek on Professors Zuman's right hand side.

Having made our way back, we were then treated to a cocktail evening, where the wine and Czech beer flowed, together with a buffet meal. Scientific discussions were undertaken, but with 34 different countries represented at the conference, and with Euro 2008 in full swing, much of the talk centred on the football! Thursday saw the conference to a close, with a morning of lectures followed by the closing ceremony. Overall, the four days were very enjoyable, with 272 people attending many friendships were created, and fresh ideas for new projects formed and shared. I wish to thank the RSC Electrochemistry Group for so kindly awarding me with a generous bursary to attend this event.

Louise A. Evans
University of Hull, Kingston-upon-Hull, UK

The 5th Baltic Conference on Electrochemistry

April 30 – May 3, 2008, Tartu, Estonia.



Professor Enn Lust opening the conference.
© Andres Tennus

The 5th Baltic electrochemistry conference was held in Tartu, Estonia in the 'city of good ideas' and was organised by Professor Enn Lust and his team in the conference hall of the Library at University of Tartu. A diverse and intellectually stimulating program was presented addressing most aspects of electrochemistry with the general theme of 'functional materials in electrochemistry'.

The welcome party was held at the 'Museum of Tartu University History' and in keeping with all electrochemistry meetings had plenty of food and wine sprinkled with culture from the hosting country in the form of traditional Estonian folkdance and excellent art from modern Estonian graphics and painters and of course many delegates and internationally famous electrochemistry to converse with.

Of notable interest from the oral presentations, Bilewicz described the laccase catalyzed reduction of oxygen at nanostructured carbon surfaces reporting how beneficial these are. However, the lifetime of the enzyme they investigated is (only) 10 – 14 days. Wieckowski's lecture posed the question: Is there a Particle Size Dependence of Fuel Cell Reaction Rates? Exploring the electrochemical reduction of hydrogen peroxide using various platinum nanoparticles, Wieckowski showed that the current density and electron transfer rate increases as particle size is decreased. Kornyshev's lecture explored electrochemistry as a means for providing variable optics and demonstrated that an oil drop containing organic electrolytes behaves in an aqueous solution akin to a mercury drop and may possibly be used to construct transparent optics (*i.e.* lenses).

In addition to the oral presentations, poster sessions were organised where again, one could sample the wines while browsing the latest electrochemical developments.



What is the collective noun for electrochemists?
Photograph copyright of Dr. Jaak Nerut

The conference provided the opportunity for excursions which included a choice from the Selisoo bog, the Kuremäe nunnery, Kohtla mining or the waterfall of Valaste.

These delegates opted for the Kohtla mine which is currently dormant and has been turned into a museum which exposes the daily life of the oil-shale miners and the equipment and machines they used. Visitors saw how the oil-shale was mined, what sort of technologies were used, use the drill to make the holes for explosives and travel by the underground train. Above is a picture of the delegates who opted for the Kohtla mine; the delegates are standing in a scoop of an open-mining excavator. The weather was fantastic and supported any kind of out-door activities. After the excursion, dinner was held in the Maidla village which is an excellent place to sample Spanish wines, and if one so desired, Estonian-like food.

The following day tired delegates returned to the conference to listen to the final day of lectures.

Jaanus Kruusma and Karmen Lust
University of Tartu, Estonia
*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).

Meeting reports: Regional Reviews

2007 Midlands Electrochemistry Group (MEG) Meeting

April 16, 2007, Birmingham, West Midlands, UK



Mr. Stuart MacDonald, Esq. with Dr. Daren Walsh (Nottingham University).

The Midlands Electrochemistry Group meeting 2007 was held at the University of Birmingham on 16th April 2007. The meeting was attended by 60 people with representatives from Bath, Birmingham, Coventry, Leicester, Loughborough, Nottingham and Warwick. The aim of the MEG meetings is to bring together electrochemists covering a broad range of research areas to discuss their work and share ideas in an informal setting.

The meeting comprised four sessions and was opened with an excellent plenary lecture given by Darren Walsh (Nottingham) who spoke on high throughput electrocatalyst screening using scanning electrochemical microscopy. This was followed by a series of wide ranging talks from

electrodeposition in ionic liquids, corrosion studies of aluminium alloys through to ion transfer studies at liquid/liquid interfaces. The high standard of talks continued in the afternoon session beginning with a second plenary given by Bruno Pollet (Birmingham) on ultrasound assisted electrochemistry. Topics covered in the following sessions included titania doped membranes, in-situ EXAFS studies of atoms in polymer membranes and applications of high resolution microscopy in localised corrosion processes. The meeting also included a lively poster session providing many talking points over the all important coffee breaks.



Mr. Mathias Schnippering, Esq. with Professor Trevor Rayment (Birmingham University).

The concluding remarks were made by Trevor Rayment who took the opportunity to apologise for the number of times thermodynamics was introduced to the discussion and to award the prize for the best talk (Stuart MacDonald, Bath) and poster (Mathias Schnippering, Warwick).

We would like to thank the RSC for providing financial support for the meeting.

Dr. Richard J. Wiltshire
Birmingham University
Conveyed by Professor Alison J. Davenport,
Birmingham University, Birmingham, UK

The editor apologises for the delay in circulating this report.

Electrochemistry North West (ENW) Meeting

June 2, 2008, Manchester, Greater Manchester, UK

Electrochemistry North West has returned from its short break, with the 7th meeting being held on the 2nd of June at the University of Manchester's School of Chemistry, organised by Dr. Robert Dryfe. The aim of the meeting was "to establish and promote interactions and collaborations between researchers in all branches of electrochemical science and technology throughout the North West", which certainly seemed to transpire as over 65 people attended from Universities in Liverpool, Preston and Bangor, along with several attendees from industry and those representing the local universities of Manchester and Manchester Metropolitan.

The event consisted of eight talks, two of which were plenary lectures, ranging from the ever popular carbon nanotubes to bipolar cells. The first plenary lecture was given by Prof. DJ Schiffrin from the Department of Chemistry, University of Liverpool who gave an insightful talk highlighting the advantages of using modified carbon electrodes. The second plenary lecturer was from the University of Manchester's School of Materials, Dr I Kinloch, who discussed the "Electrochemistry of Carbon Nanotubes: from production to applications". The oral programme also included a presentation on the applications of electrochemistry in waste-water treatment from Dr Ted Roberts (Chemical Engineering, University of Manchester). Additionally three post-graduate students (two from Manchester, one from Manchester Metropolitan) and two post-doctoral researchers (one from Bangor and one from Liverpool) gave talks. Alongside its role for developing relationships, the meeting was designed to offer postgraduate students and post-docs an opportunity to present and discuss their work to a knowledgeable and receptive audience. In addition to the student talks, 15 posters were presented. Congratulations go to Zainab Mohammed Redha from the University of Manchester, School of Chemical Engineering & Analytical Science (working with Prof. P. Fielden) for winning the poster prize with her poster entitled "Fabrication of a novel hybrid microfluidic electrochemical sensor by screen printing and injection moulding", which was awarded by an independent judge.

Thanks to everyone who attended and, especially, to those who presented their work and demonstrated just how diverse topics in electrochemistry are! Thanks also to the Royal Society of Chemistry Electrochemistry Group, the Electroanalytical group, the NW region Analytical Division, and Alvatek Ltd, who kindly sponsored the meeting.

It is hoped that this meeting of like-minded electrochemists in the North West will continue to grow, and researchers and academics alike are encouraged to attend, helping to map the wide and eclectic mix of electrochemistry work taking place across the North West.

Huong Ho (Post-graduate Student),
School of Chemistry, University of Manchester
*Conveyed by Dr. Robert A. W. Dryfe,
University of Manchester, Manchester, UK*

2008 Great Western Electrochemistry (GWE) Meeting

June 10, 2008, Bath, Somerset, UK

The annual GWE meeting was hosted by Bath and as with other meeting of this type, it was a great opportunity for fellow electrochemists to get together and share current work. Further to this it gave a number of PhD students the opportunity to present to a wider audience thus initiating and stimulating valued input from the gathered electrochemists from the West region.

The main flavour of the day was to be found in the area of electrochemically assisted detection of various analytes using novel electrochemical techniques. The whole spectrum of this area was discussed during the day, from the fundamental theory through the chemical exploration of the systems to the development of "field prototypes". Those gathered were also treated to supplementary contributions from different scientific disciplines. These extra dimensions demonstrating the wider context of the field and helping to expand electrochemical research in the west region.

The day started as it meant to go on with an immediate contribution from one of the younger members of the meeting, Frankie Rawson from UWE in Bristol. Discussing the merit of microband electrodes as biosensors, the ability to

fabricate screen printed carbon electrodes (SPCE's) whilst incorporating electrocatalytic elements was proven and shown to be an effective tool. Followed by a colleague from the University of West England, A. Crew described the advanced stages of a field prototype using an array of SPCE's in the detection of organophosphate pesticide. The portable device (well, on the back seat of a car at any rate!) provided a nice illustration of the powers of 'neural networking'. A brand of combinatorial electrochemistry where by artificial intelligence is used to determine concentrations of multi-analyte solutions through inhibition pattern recognition. The UWE team thus combined to demonstrate that electrochemical research is not only cutting edge but it is also applicable in the real world.

The input from different scientific disciplines was a recurring theme throughout the day, giving everyone the opportunity to take a look at electrochemistry from a new and often extremely interesting perspective. The first talk to fall into this category was given by Dr. Meritxell Casadesus who is studying the surface science of biologically produced nanoparticles.

In a collaboration with biologists from Manchester, Dr. Casadesus has been studying the possibility that biologically produced nanoparticles might one day produce designer surfaces for chiral catalysis. The results presented follow on nicely from work also done in Cardiff by Prof. Gary Attard in the area of electrochemical chirality. The biological fabrication aspect brings with it great hope for further development in this field.

Before the lunch break we were given a very interesting talk about working going on outside of electrochemistry by Dr. Davide Mattia from the University of Bath Chemical Engineering Department. Interdepartmental discussion and collaboration is a key source of new ideas. It can bring new perspectives to what can sometimes be a very one sided argument between like-minded chemists as to where new research efforts should be directed. Dr. Mattia approach was to engage the audience with his research on the values of nanofluidics with a combination of literature background and his own personal musings on the possible routes research in his area could follow. With an extra large helping of impressive 'video' TEM images, it wasn't long before those in the audience were intrigued with the subject. With impressive statistics such as flow rates in carbon nanotubes that are 10,000 times that of microfluidic systems, the arguments put forward for us as electrochemists to give some thought to research this subject were indeed compelling.

After a long lunch on the grass in the beautiful summer sunshine and poster viewing, it was back to business with some great contributions from the University of Oxford contingent. Demonstrating the diverse nature of the Compton group, we were treated to the extremities of electrochemical research paradigms with contributions from theoretically driven work and work with a more industry based motivation. Denis Meshykau was first up with an elegant look at the effect of electrode roughness upon cyclic voltammetry. Next was the first of two more commercially aware projects, the first of which examined the suitability of various ionic liquids, the 'designer solvent', when used in devices for the detection of hydrogen sulfide. This then brings me to the last of the Oxford presentation from Roohollah Kachoozangi about his research into more effective means of determining the pungency of chillies. The application of carbon nanotube electrochemical sensors was succinctly described to maximum effect to prove to us once and for all that electrochemistry can conquer even old boys such as Wilber Scoville. By covering all aspects of the science behind chillies with novel methods, justified mechanisms and a real world application, this was a deserving winner of the days best talk prize. Anyone there is sure to avoid "mad dog's revenge" if it is ever offer to them by chance in the future!



Discussions in the department (and outside).

To continue the theme of interdepartmental discovery, two of the three evening talks were from a physicist and an engineer respectively. Jonathan Velleuer, currently based in Bristol, gave a talk on his work combining stress measurements with underpotential cyclic voltammetry. By monitoring the deposition of lead on copper in the presence and absence of chloride ions, changes in morphology were also seen to correspond to changes in stress on the substrate which was monitored using a laser. Dai Warren from Swansea completed our set of diverse contributions with his engineer's perspective on corrosion called "pores for thought". Plasma deposition of anti-corrosion layers has been used in industry for some time. This work tried to use fresh approaches for discussion the effectiveness of this technique. A combination of electrochemistry and luminescence was used to highlight the positives and negatives.

Finally, and by no means least, came a presentation from our own electrochemical research group here in Bath from Rob French. He presented his latest work on electrochemistry between paired hemispherical nano-junction electrodes. He demonstrated that this is a highly reproducible technique coupled with some interesting thoughts on its future including nano-scale triple phase junction amongst other things.

The day was rounded off by poster prizes and, as it always should be, with a reflective discussion on the day with a suitable quota of 'refreshments'. To all intents and purposes it was a thoroughly enjoyable day that just goes to show how much great electrochemistry that is happening in the Great Western area. On to Liverpool and Electrochem 08!

Michael J. Bonné,
University of Bath
*Conveyed by Dr. Frank Marken,
University of Bath, Bath, UK.*

2008 Midlands Electrochemistry Group (MEG) Meeting

April 8, 2008, Loughborough, Leicestershire, UK

MEG 2008 was held at Loughborough University on Wednesday 8th April 2008. The conference was ably organised by Thomas Varley and Nooshin Haj-Hassan, who are both PhD students in Electrochemistry. The industrial sponsors were BASi and Ametek.

The Midlands Electrochemistry Group Meeting provides an annual opportunity for PhD students to describe their recent research. This year the theme was Materials Electrochemistry, with a focus on electrochromics, supercapacitors, and novel thin-film architectures. A superb keynote address was provided by Prof. Michael D Ward of Sheffield University, who described his work in near-infrared electrochromic materials. A fascinating poster session was also held during the lunchtime break, and the prize for the best poster went to Hollie Patten and Piotr Dudin of Warwick University for their poster describing nanocatalysis. The prize for the best talk went to Ionna Dumitrescu, also of Warwick University, who spoke about her work on carbon nanotube network electrodes. Both prizes were presented by Dr. Andrew White of Ametek.

The total attendance was 54 students and faculty, a testimony to the continuing popularity of Electrochemistry in the Midlands. Next year's meeting is scheduled for Nottingham.

SF
Loughborough.

Royal Society of Chemistry Electrochemistry Group : Annual Report 2007-8

MEMBERSHIP

According to the RSC, the group has 400 members.

MEMBERSHIP OF THE EXECUTIVE COMMITTEE

Dr. Peter Birkin, **Treasurer**, Southampton University.
Dr. Martyn Boutelle, Organiser of Electrochem 2007, Imperial College London.
Dr. Alison J. Davenport, ECS rep., University of Birmingham.
Dr Darryl Dawson, Industry rep., Alphasense.
Dr Robert A. W. Dryfe, Academic rep., UMIST.
Dr. Simon Higgins, ISE rep., Organiser of Electrochem 2008, University of Liverpool.
Dr. Anthony Kucernak, Academic rep., Imperial College London.
Dr. Frank Marken, **Secretary**, University of Bath.
Dr. Andy Mount, Academic rep., Edinburgh University.
Dr. Danny O'Hare, Organiser of Electrochem 2007, Imperial College London.
Dr. Chris Slevin, Industry rep., Stirling Medical
Prof. Patrick R. Unwin, **Chairperson**, University of Warwick.
Dr. Ed Wright, Industry rep., Johnson Matthey.
Dr. Jay Wadhawan, **Editor of the Newsletter**, University of Hull

ACTIVITIES UNDERTAKEN IN 2007/2008

Annual general meeting

The last General Assembly was held during the Electrochem 2007 conference at Imperial College in London (4th September 2007).

Committee meetings

The Executive Committee met on a regular basis: three Executive Committee Meetings took place during the year (4th September 2007 in London, 12th December 2007 in Wolverhampton, 14th April 2008 in London). As in previous years, at every meeting the Executive Committee also had joint committee meetings with the SCI Electrochemical Technology Group (co-organisers of the Electrochem conference and contributors to the Newsletter) at all of these meetings.

Conferences

Since 1994 the Group has been organising (in partnership with the SCI Electrochemical Technology Group and RSC Electroanalytical Group) the annual meeting of the UK electrochemical community known as the Electrochem conference. The event usually held in late August early September, lasts for two and a half days and is attended by around two hundred delegates and exhibitors from academia and industry. Most come from the UK but every year the conference is attended by well-known foreign electrochemists. The Group strongly supports and encourages the involvement of postgraduate students and as a new incentive free participation is given to best-presentation winners of the regional meeting. Electrochem 2004 took place at the University of Leicester, Electrochem 2005 at the University of Northumbria at Newcastle, Electrochem 2006 at Heriot-Watt University Edinburgh merged with the ISE meeting, and Electrochem 2007 with a strong bio-electrochemical theme was held at Imperial College London. This year the Electrochem 2008 will be held at the University of Liverpool (15th to 17th September) with a strong Molecular Electronics focus and invited international speakers.

Regional meetings

The Electrochemistry Group supports and sponsors one-day regional graduate meetings. Three regional meetings have been supported this year: the Midlands Electrochemistry Meeting in Loughborough, the Great Western Electrochemistry meeting in Bath, and the North-Western Electrochemistry meeting in Manchester.

Student Bursaries

In 1999, the Group Executive Committee introduced a scheme to offer a limited number of Postgraduate Student Bursaries. The aim of the Student Bursary Scheme is to provide financial support (300£) to a small number of promising postgraduate students to attend a major electrochemistry conference abroad. The student is expected to present work at the conference and to report back to the Newsletter editor. Details of the scheme are advertised in the Newsletter and application forms can be found on the Electrochemistry Group website.

Links with other societies and RSC subject groups

The Group has maintained strong links with major overseas Electrochemistry Groups, particularly the ISE (The International Society of Electrochemistry) and ECS (The Electrochemical Society). Both societies now have representatives on the Group Executive Committee, and both now sponsor financially parts of the annual Electrochem meeting. The two representatives publish Newsletter articles to promote the links with ISE and ECS. The Group is also developing closer links with the Institute of Corrosion. The group also has a representative from the RSC Electroanalytical Group co-opted onto the executive committee.

FARADAY MEDAL

The Group has been awarding a Faraday Medal since the early sixties. In 1999 the Executive Committee reviewed and revised the rules for awarding the Medal. Past recipients include 1999 - Dr Philippe Allongue (CNRS, Paris), 2000 - Professor Alan Bond (Australia), 2001 - Professor Michael Grätzel (Switzerland), 2002 - Professor Henry White (USA), 2003 - Professor Dieter Kolb (Germany), 2004 - Daniel Scherson (USA), 2005 - Professor R M Wightman (USA), 2006 - Professor Hubert Girault (Switzerland), 2007 - Professor Christian Amatore (Paris, France), and in 2008 it will be awarded to Professor Nate Lewis at the Electrochem 2008 meeting in Liverpool (15th to 17th September 2008).

NEWSLETTER

In 2003 Dr Daren Caruana from UCL started his term of office as Newsletter editor and in 2007 he passed on this responsibility to Dr. Jay Wadhawan (University of Hull). The Newsletter is published three times a year and is the main news medium for the Group. Each edition is now available as a PDF document online (RSC Electrochemistry group web site). In the past the paper copy the Newsletter had a circulation greater than one thousand (a significant number of copies were mailed to overseas members) and we are hoping to now further improve the circulation with the new PDF format. The editor of the Newsletter always welcomes unsolicited contributions from members of the Electrochemistry Group (including conference reports, news items, new books, opinions, and new developments).

PLANNED ACTIVITIES FOR 2007 AND BEYOND

Annual General Meeting

Our next Annual General Meeting will be held on 16th September 2008 at the Electrochem 2008 meeting in Liverpool.

Committee meetings

The executive committee of the Electrochemistry Group will continue meeting on a regular basis (three times a year). Our next meeting is going to be in September 2008 at the Electrochem 2008 meeting in Liverpool. This is a joint meeting with the SCI Electrochemical Technology Group in order to discuss the organization of the next Electrochem meetings and a wider range of joint activities.

Conferences

The committee is supporting the Electrochem 2008 meeting with strong molecular electronics and sustainable energy themes and many international contributions. The Electrochem meeting attracts around 200 delegates which contribute to the symposium topics (i) Redox-Active Organic Materials, (ii) Nanoscale Electrochemistry, (iii) Electrochemical Surface Science, (iv) Electrochemistry and Sustainability, (v) Electrochemical Sensors, and (vi) New Developments in Electrochemistry. During the conference the Faraday Lecture will be given by Professor Nate Lewis (Caltech, US) and a Poster Session & Faraday reception will be held.

Regional meetings

A number of regional meetings have been supported in 2007/8. The Midlands electrochemistry meeting took place in Loughborough on 9th April, The North-West Electrochemistry meeting will be held in Manchester in June, and the Great Western Electrochemistry meeting will be held on 10th June 2007 in Bath. The best student presentation from each of these meetings will be recognised and encouraged to participate at the Electrochem 2008 meeting in Liverpool.

Frank Marken
University of Bath
5th May 2008

Members' Adverts

Unbound back copies of *Journal of Power Sources*, volume 77 (January 1999) to volume 158 (July 2006) are available from a member. If you are interested in owning these, please contact the editor :

electrochemistry.newsletter@googlegmail.com

EbookREV

Electrochimie physique et analytique (2nd edition), H.H. Girault, Presses Polytechniques et Universitaires Romandes, Lausanne, 2007 (ISBN 978-2-88074-673-5., 65.00€)

I reviewed the first edition of this French language text for the newsletter, shortly after its publication in 2001, expressing the hope that an English translation would materialise. This wish was fulfilled in 2004, with the publication of *Analytical and Physical Electrochemistry* by the EPFL Press. Last year, a revised and extended (by *ca.* 100 pages) edition of the French text appeared. This offers substantial additions to six of the ten chapters. The emphasis of the book is still very much on building an understanding of electrochemical theory from the relevant underlying physics – thermodynamics, electrostatics, transport phenomena. However, substantial additions have been made to chapters 1 and 2 (“Electrochemical Potential” and “Electrochemical Equilibria”, respectively) to put more chemical flesh on the physical bones. I think these changes are welcome, as they should make the chapters more digestible for the student readership: the Gerischer model of electron transfer is introduced in chapter 1, while chapter 2 provides more chemical examples of the relevant redox equilibria, with an appendix giving a molecular orbital interpretation of reduction potentials.

Chapters 5 and 6 (“Electrified Interfaces” and “Electro-kinetic phenomena”, respectively) have also been extended with new material on the applications of this material in supercapacitors and isoelectric focussing – highlighting the breadth of the book’s coverage. As I said in my review of the first edition, the unified treatment of electrical double layers (electrode/electrolyte, immiscible electrolytes, semiconductor interfaces) is particularly pleasing. Chapters 8 and 10 (“Amperometric Electroanalysis” and “Cyclic Voltammetry”, respectively) have also been extended with the inclusion of various kinetic cases.

Overall, a very good text (the first edition) has been strengthened. The rear cover of the new edition states that the first four chapters are aimed at BSc level students, while chapters 5 to 7 are targeted at Masters students. My concern is still that most students in the UK would not have the mathematical (or physical) background to cope with the material, because of the rigour of the treatment, in spite of the clarity and brevity of the derivations. This is a great pity, but I do think the remaining audience (research students, and those more advanced in age) will find the 2nd edition of this text a very useful reference. Again, I hope that a translation of the new edition will follow in due course.

*Robert Dryfe,
University of Manchester*

EchemRT

After *Forsythia* by Mary Ellen Scott (b: July 8, 1920; d: June 21, 2007).

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EchemHIST

The first lecture I heard given by Professor Savéant was on Saturday, November 22, 2003. On that day, even though England were trying to become world champions in rugby union, the opportunity to listen to Professor Savéant talk on *Voltammogrammes cycliques: les beaux, les pas beaux, les monstrueux*, was too good to miss. Indeed, I was not disappointed - Professor Savéant amazed the audience by detailing the resolution of the kinetics of six steps in a horseradish peroxidase-mediated reaction using cyclic voltammetry!

Professor Savéant was born on September 19, 1933 in Rennes, Bretagne, France. He completed his four-year training for professors (agrégation des sciences physiques) at the Ecole normale supérieure (ENS) in Paris, France in 1958. In 1959, he undertook a *stage de recherche à l'étranger* at the Istituto di Chimica Fisica dell' Università di Padova, Italy. This was followed in 1960-2 by military service, during which Professor Savéant was a naval officer.

In 1966, he took his Docteur es-sciences physiques, and was awarded Prix Louis Ancel from the Société Chimique de France. During his thesis, Professor Savéant held a teaching position (agrégé-preparateur) at ENS which he gave up in 1967. Professor Savéant's last three years at ENS were spent being the sous-directeur: in 1971 he moved to Université de Paris VII - Denis Diderot, where, until 1985, he was Professeur (as second class, then first class, and subsequently Exceptional Class). Over this period, he was awarded the Médaille d'Argent of the Centre National de la Recherche Scientifique in 1976, and in 1983, the Medaglia Luigi Riccoboni and the RSC-forerunner Electrochemistry Group Faraday medal.

Between 1985 and 2000, Professor Savéant was Directeur de Recherche au CNRS (Exceptional Class), being an invited professor at Caltech 1988-9, and being elected to l'Académie des Sciences as Membre Correspondant in 1993, and then as a member in 2000. He was awarded the Prix Emile Jungfleisch (1989), Charles N. Reilly Award (1990), Palladium Medal (1993), Oscar K. Rice Distinguished Lecturership (University of North Carolina, 1995), Medaglia Luigi Galvani (1997) and Nelson Leonard Distinguished Lecturership (University of Illinois, 1999).

Since 2000, Professor Savéant has been Directeur de Recherche Emerite au CNRS. He was elected as a Foreign Associate of the National Academy of Sciences of the United States of America, and was the Baker Lecturer at Cornell University in 2002. The lectures of this last award have been collected in his book, *Elements of molecular and biomolecular electrochemistry. An electrochemical approach to electron transfer chemistry*. Readers may recollect this is in the same series as R. P. Bell's infamous *magnum opus*.

Professor Savéant has 420 publications. Full details can be found on his webpage:

http://www.lemp7.cnrs.fr/directories/PERSONAL/JM_Saveant_en.htm

On behalf of Electrochemistry UK, I wish Professor Savéant a very enjoyable 75th birthday!

jw
Kingston-upon-Hull

Diffusion des Savoirs

09 - 11 July 2008

The University of the Western Cape, Bellville, South Africa

International Symposium on Electrochemistry (Electrosymp 08)

- Latest developments in sensors and sensor technology
- Selected applications of nanomaterials
Electrochemical applications of nanomaterials
Sensors and sensor technology
Industrial electrochemistry

<http://associated.sun.ac.za/UWC/ElectroChemSA/>

15 - 18 July 2008

Bath, UK

Bath Electrochemical Impedance Spectroscopy Summer School 2008

- Familiarisation with equipment
- Model circuits
 - Simple redox systems
 - Corroding metals
 - Polymer coatings
 - Batteries
 - Solar cells
 - Solid oxide fuel cell materials
- Dielectric properties

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<http://www.bath.ac.uk/chemistry/eis Summerschool/>

17 - 21 August 2008

Philadelphia, USA

Fuel Cell Chemistry and Operation:

ACS Fall National Meeting

- PEM fuel cell membranes
- PEM electrocatalysts
- Fuel cell modelling
- Diagnostics and durability
- Solid oxide fuel cells

Andrew M. Herring

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Thomas A. Zawodzinski

Taz5@case.edu

Steven Hamrock

sjhamrock@mmm.com

<http://oasys.acs.org>

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 116 68 Lavka 5

Czech 116 68 Praha 1

Fax: +420 221 082 366 Republic

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 nano-scales

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 - 11 September 2008
Edinburgh, United Kingdom
Eurocorr 2008 - The European Corrosion Congress

Managing Corrosion for Sustainability
Corrosion in the petroleum industries
Marine corrosion, cathodic protection and microbial corrosion
Infrastructure maintenance and asset management

High temperature corrosion processes
Nuclear industries and waste disposal
Corrosion mechanisms and methods
Corrosion education and student poster session

- Corrosion inhibition, nano-coatings and smart coatings
- Polymers, coatings and corrosion in transport
- 49th Corrosion Science Symposium and other specialised symposia

Andrea Kohl
DECHEMA e.V.
Theodor-Heuss Allee 25
60486 Frankfurt am Main
Germany
Email: eurocorr@dechema.de
<http://www.eurocorr.org>

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 Düsseldorf
Tel: +49 211 811 4760
Fax: +49 211 811 5840
Email: mam08@uni-duesseldorf.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>

05 - 09 October 2008
Hyogo, Japan
3rd International Conference on Electrophoretic Deposition:
Fundamentals and Applications

Fundamentals of the EPD process and modelling

- Traditional applications, including ceramics, metals and coatings
- Novel applications: composite materials, laminates, nanomaterials, functionally graded materials, materials for solid oxide fuel cells and devices, nanostructures, carbon nanotubes, biomaterials, etc.

Dr. AR. Boccaccini
Imperial College London
UK
Prof. O. van der Biest
Kath. University Leuven
Belgium
Dr. T. Uchikoshi, NIMS, Tsukuba, Japan
Prof. R. Clasen
Saarland University
Germany

08 - 09 October 2008

Copenhagen, Denmark

Fuel Cells Science & Technology 2008

Membrane science

Fuel processing

Materials science

Systems and applications

Modelling

Fuels for fuel cells

Janet Seabrook

Fuel Cells Science & Technology 2008 Conference
Secretariat

Elsevier

The Boulevard, Kidlington

Oxfordshire OX5 1GB

United Kingdom

Tel: +44 (0) 1865 843691

Fax: +44 (0) 1865 843 958

E-mail: fuelcelladvances@elsevier.com

<http://www.fuelcelladvances.com>

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](#)

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>

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

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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 Bioelectrocatalysis

<http://ise-online.org>

Email: info@ise-online.org

<http://spring08.ise-online.org>

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
CO₂/H₂S 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/>

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

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>

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

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<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

ECS

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New Jersey, 08534-2839
USA

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01 - 06 May 2011

Montreal, Canada, USA

219th Meeting of the Electrochemical Society

ECS

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New Jersey, 08534-2839
USA

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Fax: +1 609 737 2743

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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

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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 De Nora Foundation Prize of ISE on Applied Electrochemistry](#)

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 (two) Electrochimica Acta Travel Awards for Young Electrochemists

favour 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#eataye>