



# Lichfield Science & Engineering Society

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Ian Dudson CBE

H.M. Lord-Lieutenant of Staffordshire

PRESIDENT

Professor Rex Harris, FEng, FIMMM, FInstP, MIEEE

CHAIRMAN

Paul Bettson

## WELCOME TO THE SUMMER NEWSLETTER 2013

It is with sadness that I report the death, this Spring, of Steve Taite, a former committee member and long standing member of the society who I remember as a friendly face when I joined the Society in the 1990's.

## THE AGM

The AGM in May was attended by 119 members. After I gave the Chairman's report Carol Hannam presented the Financial Report on behalf of Dr. Robert Giles who could not attend. The Committee was re elected en bloc. Tim Sims, having served five years as Visits Secretary moved to general committee member, with Mike Beeson moving from Deputy to take the position. Tim is still helping Mike with the visits which are always popular and we owe him a big vote of gratitude for all the work he has undertaken over the last five years.

Professor Sahar Al-Malaika is standing down after her two years as President, during which time she and her husband Sam have attended many of our events and supported the Society in many ways. Following the AGM, Sahar gave us a fascinating and informative Presidential Lecture entitled "A Radical View of Oxidative Stress". She explained how oxidation plays a major part in our lives, causing aging not only in her own specialist field of polymeric materials but also of our own bodies. She offered suggestions to combat the latter, some more attractive than others.

Professor Rex Harris has accepted our invitation to be the next President and his inauguration will take place at our Annual Dinner in October. Rex is Professor of Materials Science and Leader of the Applied Alloy Chemistry Group in the School of Metallurgy and Materials at Birmingham University. He is particularly interested in magnets and hydrogen.

## SUMMER SUPPER

Seventy four members and guests attended a very successful Summer Supper at Curborough Hall Farm on June 5<sup>th</sup>. After supper Tony Kelly of Firmin & Sons Ltd spoke about the Uniforms, Badges, Buttons, Helmets and Cuirasses which the company has supplied to Royalty and the armed forces since 1655. It was a very interesting and light hearted talk with plenty of history of the company and the military. Tony brought along some examples of buttons as well as a Bearskin and Helmet for us to try on.

## VISITS

Members were recently fortunate to be able to visit two of the largest china factories remaining in The Potteries, Churchill China and Dudson Group. Both can trace their roots back over 200 years and Dudson has remained in our new Patron's family since 1800. Both companies manufacture a wide range of tableware, Churchill aiming at the retail market whilst Dudson's focus is on the high-end hospitality sector. The showrooms illustrated this, Dudson's being especially beautiful, and in both visits members saw how the range is designed.

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Members were welcomed at Churchill by Andrew Roper, Chief Executive and by Ian Dudson CBE at his premises, and conducted round the factories by senior members of management team. The lunch at both factories was excellent which may, or may not, have been attributable to your Visits Department having informed both hosts that we would be visiting the other as well, thus introducing a degree of competition.

As would be expected the processes in each factory were similar; clay arrives as a slurry, is dried in filter presses, moulded, glazed, fired and, if decorated, fired again. There was the impression that robots were more in evidence at Churchill, Dudson maintaining very much a hands-on approach. Both companies produce items in fine and vitreous china, the latter being stronger and highly chip-resistant. In Dudson's laboratory members were given convincing demonstrations of the difference.

It was good to see that both Churchill and Dudson take their social responsibilities seriously. Several members bought mugs produced by Churchill in support of a local charity, Dudson invests personnel time in supporting the charitable trust set up to run The Dudson Centre, a centre for voluntary groups in Stoke-on-Trent.

In June a visit was arranged, after almost three years of trying, to the Laboratories of the Health and Safety Executive at Harpur Hill. The laboratories occupy a 500 acre site in rural Derbyshire and deal not only with research into such areas as safe noise limits and robustness of hazardous waste containers but also accident investigations. There are five public footpaths across the site which have to be policed during large scale dangerous tests; unfortunately one of these was in progress while we were there, the smoke visible for miles around, and our mini-bus was limited to only half the site. Negotiations are already on-going for another trip.

The Society's next visit is to Rothamsted Research, the subject of last year's talk by Dr. John Lucas. The notice for this is very short and those members on e-mail have already been advised but, in order not to disadvantage the others, please note that no places will be allocated until the enclosed form is returned.

Members' feedback on the choice and organisation of visits would be much appreciated; if you enjoyed it tell your friends, if you didn't enjoy it please tell us.

## **FESTIVAL LECTURE**

The annual Festival Lecture, Aesthetics Meets Structures delivered by Richard La Trobe-Bateman MDES, RCA, took place on 10<sup>th</sup> July in the Main Theatre of the Lichfield **Garrick** and was attended by 116 members and visitors. The lecture concentrated on humankind's relationship to the physical world, the ontological in the face of the ontic. Richard not only demonstrated, with the aid of a variety of pieces of wood, how bridges work, but also showed pictures of some of the 50-odd bridges he has designed. All of these were interesting and beautiful, among them one which had to go around and through an existing willow tree.

This was the last event which the Society will organise in conjunction with the Lichfield Festival but next year there is a June lecture in our normal programme.

## **LOOKING FORWARD**

The 24<sup>th</sup> Erasmus Darwin Memorial Lecture, 'Project Sunshine' will be given by Professor Tony Ryan, Pro-vice Chancellor of the Faculty of Science & Professor of Physical Chemistry, The University of Sheffield on November 19<sup>th</sup>. The event should prove popular so please buy tickets early to avoid disappointment. As usual they are on sale at the Lichfield **Garrick** Box Office. Project Sunshine tells the story of how scientists are working to reconnect us to the 'solar economy', harnessing the power of the sun to provide sustainable food and energy for a global population of 9 billion people: an achievement that would end our dependence on



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'fossilised sunshine' in the form of coal, oil and gas and remake our connection with the soil that grows our food. It is an astonishing fact that capturing all the energy in just one hour's worth of sunlight would enable us to meet the planet's food and energy needs for an entire year.

A reminder to you all of our Annual Dinner to be held on October 16<sup>th</sup> at Aston Wood Golf Club, with the inauguration of our new President Professor Rex Harris. This is always a very enjoyable evening at a first class venue and I encourage members and guests to secure their tickets by completing the enclosed application.

Mike Beeson has arranged three visits for the coming months, see the enclosed application form. Please note Mike's comments about returning forms for the Rothamsted and Pilkington visits.

The next discussion lunch will be on Monday 21 October at Erasmus Darwin House when Dr Jeremy Duncan Brown will lead a discussion on 'Managing your own death'. Details are enclosed and as with all of these events a prompt reply is always helpful.

### **WEBSITE**

We have just launched a new, updated website using the same address as previously, [www.LSES.org.uk](http://www.LSES.org.uk). The site contains all the current information and a significant history section. The Short History Booklet which we used to send out to new members is available as a PDF and the wealth of past activities is displayed in an easy to explore format. The newly featured Members' Area gives access to forms keeping you up to date with planned Visits, Discussion Lunches and Social Events and enables easy application for places. To see messages in this area you will need a password which will be emailed to you. For new members the Application Form is available online. As well as improving your own web experience we hope that the site will serve as a showcase to prospective members, lecturers and visits hosts.

To see the best screen display of the new site the developers recommend using Internet Explorer ver. 9+, Chrome ver. 27.0+, Firefox ver. 19.0+, or Safari ver. 6+.

### **SUBSCRIPTIONS**

A gentle reminder that subscriptions fall due in September and it is of great assistance if they are paid on time.

### **IN CLOSING**

Often those behind the scenes are forgotten, so a big thank-you to all of the committee who have worked tirelessly to organise events for the society.

I wish you all a pleasant summer and look forward to meeting many of you at the beginning of the next season of lectures starting in September.

Paul Bettson  
Chairman