



Lichfield Science & Engineering Society

PATRON

Ian Dudson CBE KStJ
H.M. Lord-Lieutenant of Staffordshire

PRESIDENT

Professor Rik Bryan
PhD MRCS FAcadTM

Chairman's Spring Newsletter 2023

The year so far has gone more or less according to plan although even the Visits Secretary has been subject to alteration and cancellation. The Meetings Committee has grown rather used to that.

The January lecture on small nuclear reactors by Matthew Blake of Rolls-Royce was as planned and was a good introduction to what Matthew convincingly assured us was the future of nuclear energy. Rolls-Royce were pioneers in the field, Matthew's Father having designed them for submarines, and they continue to lead in their development. Unfortunately he was not willing for his talk to be recorded and archived on the website so if you weren't in the first full house we've had for a long time I'm afraid you've missed it.

February should have been a talk on malaria vaccine but the speaker was ill (though we hope not with malaria) and cancelled at rather short notice. Instead, and thanks to Alan, we had a talk on measuring the atmosphere from Alex Lodge from the Facility for Airborne Atmospheric Measurements at Cranfield. FAAM has its own plane which gathers data not only for research into long term changes in the atmosphere but also supports forecasting

More on the atmosphere in March when Birmingham's own Professor Christine Foyer spoke on the way plants adapt to the increasing concentration of CO₂ in the air. The University has a site in Staffordshire where, at huge expense, they spray CO₂ at the trees. A potential visit?

In April, rather on the lines of the talks we used to have in conjunction with the Lichfield Festival on subjects linking science with the Arts, Professor Neil Brownsword from Staffordshire University spoke of the decline of the pottery industry in the area, its effect on a community which relied heavily upon it and the way that the skills essential to the industry and the local infrastructure are being repurposed.

More hassle for the Meetings Committee when the May speaker pleaded a more pressing engagement. So no James Webb Telescope (we're working on it though, watch this space) but again thanks to Alan we'll have an update on Fusion Energy which is apparently getting closer to reality.

As I said earlier Visits have had their own problems. The one to Briggs of Burton in February went according to plan when 27 members were treated to a professionally organised visit to this long-established process engineering company. The senior management had put a lot of thought into the planning of the day. Short presentations by five young engineers covered the key market areas of distilling, brewing and pharmaceuticals, together with Briggs' approach to R&D and their Graduate Training Scheme. These were used as a public speaking training exercise for the young people. Each gave an indication of their progress towards professional qualification and it was evident that Briggs is committed to both team and individual career development. In 1995, the company employed one Chartered Engineer; by 2023, there were 20 Chartered Engineers and five Fellows of Engineering. This was followed by a plant tour and lunch, provided by the Company. A great example of engineering alive and kicking on our door step.



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Meggitt postponed our visit in March but only for a week. Their facility next to The Fort in Erdington, was originally built by Dunlop so a nostalgia trip for me. Meggitt is now part of the large US organisation, Parker Hannifin; this testing centre is responsible for validating aircraft wheel and braking modules produced at their Coventry facility which the Society visited in May 2022. A group of 22 members was given a detailed presentation of the centre's history and capabilities, which was surprisingly managed by only four test engineers. Then followed a tour of the various testing units, which included the Wheel and Brake Dynamometer, Roll and Load Testing Machines, Shaft Static Dynamometer, Burst Pit and the Central Control Room, after which we were treated to a generous buffet lunch.

So far so good, but Alan's problems were compounded by Tokamak Energy cancelling the proposed visit in April; I'm sure that's not the last we shall hear of it.

One organisational change recently; long-standing Member Peter Pallett has recently been co-opted to the Committee and will stand for election at the AGM.

So, after a few hiccups which were quickly cured by a pat on the back by your hard-working Committee, a successful start to 2023 which augurs well for an increasingly approach to normality after the last rather testing couple of years. As this is my last Newsletter I take the opportunity of thanking all the Committee for their unfailing and often very necessary support and of wishing all our Members a good Summer.

Mike Beeson
Chairman, LSES