



# IES

# News Bulletin

March 2022

The Institution of Engineers in Scotland A Multi-disciplinary Engineering Institution

## Message from our President

Dr Andy Pearson



### Welcome to the March bulletin.

We are still all dealing with the consequences of the Covid pandemic and since it has become normal for us to keep at a distance and hide behind masks we can easily forget how we used to meet socially at evening lectures and

site visits. The UK Government have lifted all Covid restrictions recently but it has to be said that this seems to have less to do with scientific or medical advice and more to do with politics. The infection rates for Covid-19 are still relatively high, particularly in Central Scotland, so we will continue with remote access to lectures until the end of this session and then decide over the summer whether we continue in that vein for next year.

Our March talk will be online only – I hope you will be able to join us – and the AGM will be held exclusively on Zoom on Tuesday 26 April. This will include some amendments to our Articles of Association which require members' approval so I trust you will lend your support. I am delighted to confirm that we will also be joined by the most recent inductee to the Scottish Engineering Hall of Fame, Professor Stephen Salter, who will give a short talk on possible ways to counteract climate change. More details of the AGM and the talk are included later in the bulletin.

We are still keen to receive input from members over a wide range of topics, and this month we are introducing more ways to participate in this. Members are welcome to submit opinion pieces for the website – these are not a reflection of official institution opinion although they will be subject to an editorial review to ensure that we are able to publicise the views expressed. We are also interested in receiving a variety of papers. Some of these may be suitable for inclusion in the next Journal, or perhaps as a special interest paper in the IES Library on line. Others may be more suitable to be articles on the news pages of the website. We have also introduced a new working group to engage with government consultation requests. This is described elsewhere in the bulletin under the heading "IES Consult". We know that engineers are not usually short of an opinion on things and we hope that you will be able to contribute in one way or another to make our voices heard more effectively.

## Subscriptions and Gift Aid

Every year we are able to collect approx £2500 from Gift Aid – the amount has allowed us to hold off increases in our subscriptions for over 5 years – we would like to continue.....if any of you haven't completed a gift aid form or 'ticked' the box on your MemberMojo page please consider doing so – it would really help!

Please check you are up to date with your subscriptions



## Members' visits

We have been sent some great ideas for members' visits and hope to arrange some soon. It will be no surprise to hear that we are waiting to see how the levels of Covid infection are in the next few weeks before we make our decisions

# The Institution of Engineers in Scotland library on-line



Over the last 165 years the Institution has built up a record of its proceedings in the form of an annual volume of transactions. In the early days these were the records of papers presented at meetings of the Institution together with the subsequent discussion of the topic which often included written contributions from members who were unable to attend the lecture and sometimes carried forward into the following month's meeting. Some of the early volumes of the Transactions are over 500 pages long.

From 2013 (Volume 153), the transactions have been described as the Journal of Engineering with a new graphics style. The Journal includes papers that were not presented at meetings.

Following the relaunch of the IES website, now at [www.engineers.scot](http://www.engineers.scot), digital versions of the transactions were

transferred to [library.engineers.scot](http://library.engineers.scot). Each volume is represented in the resource by a 'collection' that includes the file for the complete volume and separate files for each of the papers. All 159 volumes can now be accessed and we are working to complete the uploading of all the papers.

The transactions provide fascinating information about the development of engineering and the role of IES in the changes that have occurred since our formation.

IES Council has decided to allow open access to the digital library. Users need to register but there is no charge. Members are encouraged to promote its use to all who may be interested about engineering and the Institution.

## IES Consult

A working group, under the chairmanship of Allan Mungall, has been set up to co-ordinate responses from the Institution to requests for consultation from the governments at Westminster and Holyrood. These calls for consultation are frequent but often not well publicised so the IES Consult working group will act as a sorting office, advising members of new calls for consultation, requesting input from members who are qualified to comment (based either on training, experience, location or

general interest in the topic at hand). Expect to see requests for input on a regular basis and provide feedback, but don't feel under pressure to respond to every call. We hope that this new initiative will provide a valuable conduit for engaging our members in the government consultation process and giving useful input to the development of legislation affecting the world of engineering.

# Bookshelf – Book review Iain MacLeod



*The Unknowers, How strategic ignorance rules the world* (2019)  
by Lynsey McGoe

Lynsey McGoe analyses arguments that Adam Smith made in his seminal eighteenth-century economic treatise *The Wealth of Nations*. Free-market economists use Smith's work to justify their economic philosophies but McGoe explains that *The Wealth of Nations* was made up of five 'books' the last of which is not normally part of published versions. Book 5 advises that governments need to take action to prevent markets being distorted by people who operate only for their own self-interest.

McGoe quotes Smith: 'The interests of dealers, however, in any branch of trade or manufacture, is always in some respects different from, and even opposite to, that of the publick.'

McGoe writes that Smith defined 3 orders of people:

- First order: wealthy, landed gentry who lived off land rents and were made stupid by their wealth because they did not need to think about how to make money.
- Second order: wage labourers who were dulled by the pressure of their occupation and lacked education.
- Third order: the merchant class, the employers that lived by profit, had the ability to think more clearly about their own self-interest than the other two.

By this analysis, we have a 'merchant class' that are good problem solvers who turn this ability to their own ends and do not address the public good. That markets do not address public good issues is well accepted but McGoe's view is that the when the merchant class put forward false arguments to justify their actions, their promotion of ignorance can be strategic.

For example, she summarises the marginal productivity theory of income distribution (that has had an important impact on economic thinking) as: 'Under perfectly competitive markets, the remuneration that people receive from different economic activities tend to align naturally with the economic value that they have contributed to society.' In other words, you tend to be paid what you are worth. This theory is criticised on the basis that (a) none of the assumptions are valid and (b) it cannot be tested – that it is a fiction promoted by the merchant class to justify them taking a disproportionately large proportion of profits.

Fat cats taking all the cream for themselves should at least be viewed as unacceptable behaviour. A new ethos as to what is and what is not acceptable in business is needed.

Lynsey McGoe makes very good points about negative features of society.



# IES

## Let's get talking – Cuppa and Chat meetings



We have scheduled three more dates for our Cuppa and Chat meetings – please let me know if you would like to join one (or all)

The dates are::

- **Tuesday 22nd Mar 5.30pm**
- **Tuesday 10th May 5.30pm**
- **Tuesday 7th Jun 5.30pm**

## Remaining Programme for 2021-2022

### **Edison vs Tesla...who was really right? The Evolution of the Smart Grid for the 21st Century**

**Dr Nigel Jakeman**, Engineering & Business Development Director at TPS

**Tuesday 15th March 2022, 18.30pm – online**

Smart Grids are intelligent networks that monitor the distribution of electricity and enable a two-way dialog where energy can be exchanged between utilities and their customers. This in turn facilitates a demand-supply balance and helps distribution networks deliver electricity more efficiently and sustainably.

This exciting lecture will explain how the Smart Grid works and what we can expect in the future

Register via Eventbrite – <https://www.eventbrite.co.uk/e/edison-vs-tesla-the-evolution-of-the-smart-grid-for-the-21st-century-tickets-163176239525>

### **Boeing Scotland Alliance: research and development project**

**Craig Knowles**, Senior Manufacturing Engineer, AFRC, NMIS

This talk will be postponed until later this year

### **AGM – Tuesday 26<sup>th</sup> April – online 6.00pm – 6.30pm**

Register via Eventbrite – <https://www.eventbrite.co.uk/e/ies-annual-general-meeting-tickets-287914749767>

**(registering for the AGM will also give you access to the lecture from Stephen Salter at 6.30pm)**

### **Lecture from Stephen Salter – online 6.30-7.30pm**

Stephen Salter – recent inductee to Scottish Engineering Hall of Fame, inventor of the Pelamis (renewable waves) and the Salter Duck will talk about reversing climate change with marine cloud brightening

Register via Eventbrite – <https://www.eventbrite.co.uk/e/stephen-salter-talk-tickets-287923475867>

**Please visit [www.engineers.scot](http://www.engineers.scot) for further the latest and most up-to-date information and registration details**