

REPORT OF THE 7th ANNUAL GENERAL MEETING, (AGM), OF THE FUEL AND ENERGY RESEARCH FORUM, (FERF).

HELD ON WEDNESDAY 7th JUNE 2023 AT 12.45.pm.
AT UNIPER TECHNOLOGIES Ltd., RATCLIFFE-ON-SOAR, NOTTINGHAMSHIRE.

THE FUEL AND ENERGY RESEARCH FORUM AGM.

Dr. Will Quick, Chairman (Industry) of the FERF, welcomed the approximately 25 participants to this Forum event and chaired this 7th Annual General Meeting of the Fuel and Energy Research Forum.

i) Report of the year 2022 Annual Meeting

The Minutes of the year 2022 Annual Meeting, held on Wednesday 6th April 2022, (issued as FERF E-mailshot No.16, (2022), on 15th April 2022), were formally approved without modification.

ii) Review of Actions

Dr. Will Quick noted that there were no actions arising from the report of the year 2022 Annual Meeting.

iii) Report by the Chairman/General Secretary

The Chairman (Industry), Dr. Will Quick, presented the formal report for the calendar year 2022 as follows :-

The calendar year 2022 has again been a challenging year for the **Fuel and Energy Research Forum**. However, in summary, 2022 has been a more active year for the **Forum** than for the previous two years, where there have been 3 live events. The FERF has been able to provide all of its usual services this year, where all of the 2022 FERF Newsletters, the regular **Forum** E-mailshots, and the up-dating of the website have been provided.

In April, the FERF held its 2022 Annual Meeting at The Diamond Centre, The University of Sheffield. This event was held jointly with an Environment Interest Group seminar entitled, "New Fuels and Emissions Control", and with a Biomass and Waste Interest Group seminar entitled "Pathways to Net Zero".

The 3rd Clean Energy Science Lecture, which is now organised by the FERF, was presented by Prof. Patricia Thornley of Aston University and was held at Aston University as part of the 2022 SuperGen Autumn event in early September last year. This 3rd CESL was entitled, "Can Negative Emissions from Bioenergy Systems Become a Reality and What is Needed to Secure Their Development?".

Later in September, the FERF held a joint Interest Group seminar at Imperial College London between the Electricity Generation and Storage Interest Group entitled "Decarbonisation of Dispatchable Power Generation" and the Fuel Characterisation, Upgrading and Carbonisation Interest Group entitled, "Decarbonisation of The Steel Industry".

The **Forum** has continued its major transformation into the **Fuel and Energy Research Forum**, where the **Forum** has been pursuing and has made progress in achieving its new

objectives, which have now broadened considerably with the expansion of the **Forum's** activities.

The year 2022 has seen the issue of three editions of the new **Forum** Newsletter (January, May, and September). During the year, the **Forum** website has continued to provide information to Members and has been regularly added to and up-dated, (it now has a News Articles section), where many of the presentations from previous **Forum** events can be viewed on the Members Only section of the FERF website. During the year, there have been 39 **Forum** E-mailshots. The **Forum** has also actively assisted with the promotion of, and publicity for, several other fuel and energy research events, including on-line events, and funding opportunities in the UK, Europe and worldwide, through several **Forum** E-mailshots.

FERF Members have been invited to join several both on-line and live seminars throughout the year organised by the UKCCSRC, the IChemE Clean Energy SIG, the International Centre for Sustainable Carbon, the British Flame Research Committee, (their 2022 Annual Flame Day), the Wolfson Centre, the Institute of Physics Combustion Physics Group and others.

A fund is available from the **Forum** for the funding of PhD students to attend national and international conferences, where the recipients of these awards have provided articles on their impressions of these conferences for previous FERF Newsletter.

The **Forum** is in the advanced stages of the planning of the "2nd FERIA Conference, the European Conference on Fuel and Energy Research and Its Applications, the Successor to the ECCRIA Series of Conferences", to be held at the University of Sheffield on 4th to 6th September 2023. The 4th Clean Energy Science Lecture entitled, "A Career in Energy and Today's Revolution?", has also been arranged to be held as part of the 2nd FERIA Conference, where the invited lecturer is Steve Holliday FREng, Past President of the Energy Institute.

The **Forum** is now connected to LinkedIn, (<https://www.linkedin.com/company/71250581/admin%E2%80%9D>), and Twitter, ([@Ferf_Forum](https://twitter.com/Ferf_Forum)), as had been announced in a previous FERF E-mailshot.

The Executive Committee has been in discussions with and is actively promoting several other fuel and energy research issues and events. The **Forum** is actively co-operating with a number of bodies, particularly in the UK and overseas and has continued to provide an information service to Members.

iv) Report by the Treasurer

Dr. Andrew Goddard, the FERF Treasurer, presented the Treasurer's report to the meeting, which included a summary of the Income & Expenditure Account and the Balance Sheet for the period 01/01/2022 to 31/12/2022.

The Income & Expenditure Account for the calendar year 2022 showed expenditure resulting from normal **Forum** operating activities, that is, expenses for 2 FERF seminars, newsletter services, secretarial and administrative services, treasurer and webmaster services, the rental of the Forum Post Office Box, the website rental fee, the public liability Insurance provisions and bank charges.

The significant source of income was, as usual, Membership subscriptions. This

consisted of Membership subscriptions from a total of 43 Members for 2022, (6 less than for 2021), and 1 advanced payment for 2023. The other income was from 4 x non-members seminar fees and a compensation payment from HSBC bank for their loss of a cheque. It should also be noted that there was no surplus from the 1st FERIA Conference, so there was therefore a significant deficit in this 2022 account.

This account is supported by the Balance Sheet at 31/12/2022, where overall, there was a significant cash deficit for the year. The total assets at 31/12/22 were all currently held in the **Forum's** HSBC current account.

v) Election for Vacancies on the Executive Committee.

There were eight vacant positions on the Executive Committee, (Chairman, Industry), Treasurer, General Secretary, 4 x Representatives from Industry and 1 x Representative from Academe), for which the following nominations had been received.

<u>CANDIDATE.</u> <u>(POSITION).</u>	<u>PROPOSERS.</u>
Dr.W.J.Quick (Chairman, Industry)	Prof.W.Nimmo Dr.D.J.A.McCaffrey Dr.A.J.Goddard
Dr.A.J.Goddard (Treasurer)	Dr.W.J.Quick Dr.D.J.A.McCaffrey Prof.W.Nimmo
Dr.D.J.A.McCaffrey (General Secretary)	Dr.A.J.Goddard Prof.W.Nimmo Dr.W.J.Quick Prof Y.Yan
Dr.Fatih Gulec (Representative from Academe)	Prof.E.H.Lester Dr.A.Samson Dr.O.Williams
Dr.T.Beeley (Representative from Industry)	Dr.W.J.Quick Dr.A.J.Goddard Dr.G.S.Riley.
Dr.J.Morris. (Representative from Industry)	Dr.W.J.Quick Prof.W.Nimmo Dr.A.Samson
Mr.P.Cook (Representative from Industry)	Dr.W.J.Quick Dr.A.J.Goddard Prof.W.Nimmo

The candidates for the positions of Chairman (Industry), Treasurer, General Secretary, the one vacant position for a Representative from Academe, and the three of the four vacant positions for Representatives from Industry were therefore elected unopposed.

Nominations for the one vacant position for Representatives from Industry were invited from the meeting but no nominations were received.

vi) Any Other Business

There were no matters raised under this item.

REPORTS FROM THE INTEREST GROUP CO-ORDINATORS

To include progress in their Interest Groups during the year 2022.

Combustion, Dr. Gerry Riley

Dr. Riley reported that the last meeting of the Combustion Interest Group had been today's joint seminar with the Combustion Engineering Association, (CEA), the RSC Energy Sector and the IChemE Clean Energy Special Interest Group entitled, "Emissions Reduction Requirements for Medium Sized Combustion Plant and Incinerators" held at Uniper Technologies Ltd, Ratcliffe-on-Soar, Nottinghamshire. Dr. Riley thanked Dr. McCaffrey for all of his efforts in the organisation of today's seminar and for approaching some of the speakers to take part.

Dr. Riley continued that the next Interest Group seminar would be in a year or so's time and concluded that he would always welcome the views of Forum Members and was open to suggestions for topics for a future Interest Group seminar.

Environment, Prof. Bill Nimmo

Dr. Quick reported on behalf of Prof. Nimmo that the last seminar of this Interest Group entitled, "New Fuels and Emissions Control", had taken place on Wednesday 6th April last year at the University of Sheffield and had been held jointly with the Biomass and Waste Interest Group. He continued that the front runner for the next Interest Group seminar was likely to again be issues on environmental impact. The NO_x best practice Ricardo Study on EfW had been published in Autumn last year and on 8th November 2021 and the Government had announced that EfW plant would be eligible for support for CCS development. Three days after this, the Cory Belvedere, (London), EfW plant announced its intention to apply CCS. Given that the 2nd FERIA Conference would take place in September 2023, the next Interest Group seminar would now be in 2024.

Biomass and Waste, Dr Katie Chong

Dr. Quick reported on behalf of Dr. Chong that the last seminar of this Interest Group entitled "Pathways to Net Zero", had taken place on Wednesday 6th April last year at the University of Sheffield and had been held jointly with the Environment Interest Group. He continued that Dr. Chong was considering a future Interest Group seminar on Hydrogen, which could be held at an EfW plant with an educational centre. Dr. McCaffrey concluded that Dr. Chong would always welcome the views of Forum Members and was open to suggestions for topics for future Interest Group seminars.

Electricity Generation and Storage, Mr. Niall Moroney

Dr. Quick reported on behalf of Mr. Moroney that the last seminar of this Interest Group entitled "Decarbonisation of Dispatchable Power Generation" had taken place on Wednesday 22nd September last year at Imperial College London and had been joint with the Fuel Characterisation, Up-grading and Carbonisation Interest Group.

Mr. Moroney had informed Dr. McCaffrey that due to pressure of work, he was standing down as the Interest Group Co-ordinator as from today, where the FERF Executive Committee would be discussing his replacement at its next meeting.

Carbon Capture and Storage, Prof Jon Gibbins

Dr. Quick reported on behalf Prof. Gibbins that he, (Prof. Gibbins), was currently organising an Interest Group seminar, which would be a live event entitled, “An Up-date on Current Carbon Capture and Storage Projects”. Although the venue had yet to be confirmed, this was likely to be either the University of Sheffield or a Biomass and/or Energy from Waste Plant that was considering the inclusion of a Carbon Capture and Storage facility. Such sites now often have an associated ‘education centre’ built-in to encourage education and public engagement. The proposed date for this event is in November this year.

Action : JRG.

Prof. Gibbins reminded the meeting that the UKCCSRC had been presenting regular on-line webinars during the Covid-19 pandemic and that Forum Members had been invited to join these seminars. He concluded that he would always welcome the views of Forum Members and was open to suggestions for topics and content for such future Interest Group seminars.

Fuel Characterisation, Up-grading and Carbonisation, Prof Ed Lester

Prof. Lester reported that he had organised a Programme for the joint seminar with the Electricity Generation and Storage Interest Group, which had taken place on Wednesday 21st September last year at Imperial College London entitled, “Decarbonisation of The Steel Industry”. He continued that there were no current plans for the next Interest Group seminar, however, he would always welcome the views of Forum Members in this matter and was open to suggestions for topics and content for such future Interest Group seminars.

Concluding Remarks

Dr. Will Quick, FERF Chairman, (Industry), repeated his earlier statement that although the year 2022 had been a challenging year for the **Forum**, it had also been a much more active year for the FERF than for the previous two years. He concluded the meeting by thanking the speakers for their presentations, the local organisers for the arrangements for the day and all those for attending this event.

Dr David J A McCaffrey

General Secretary of the Fuel and Energy Research Forum

8th June 2023