REPORT OF THE 3rd ANNUAL GENERAL MEETING, (AGM), OF THE FUEL AND ENERGY RESEARCH FORUM, (FERF).

HELD ON WEDNESDAY 10th APRIL 2019 AT 12.15.pm. AT CONFERENCE ASTON, ASTON UNIVERSITY.

THE FUEL AND ENERGY RESEARCH FORUM AGM.

Dr. Will Quick, Chairman (Industry) of the FERF, welcomed the approximately 70 participants to this Forum event and chaired this 3rd Annual General Meeting of the Fuel and Energy Research Forum.

i) Report of the year 2018 Annual Meeting

The minutes of the year 2018 Annual Meeting, held on 11th April 2018 at the University of Sheffield, (issued as FERF E-mailshot No.8 (2018), on 19th April 2018), 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 2018 Annual Meeting.

iii) Report by the Chairman/General Secretary

The Chairman, (Industry), Dr. Will Quick, presented the formal report for the calendar year 2018 as follows:-

The calendar year 2018 has continued the major transformation of the **Forum** into the **Fuel and Energy Research Forum**. 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. During the year, the **Forum** has organised a number of fuel and energy research events. In April, the **Forum** Annual Meeting was held at the University of Sheffield, which included the election of Executive Committee Members and reports from the Interest Group Chairmen. This event continued with the Inaugural Meeting of the Environment Interest Group entitled, "Materials for Energy Technologies".

In early September, the **Forum** held its biennial three-day conference at Cardiff University entitled, "12th ECCRIA Conference, the European Conference on Fuel and Energy Research and its Applications". As a direct result of the expansion of the **Forum's** activities into biomass and waste and other fossil fuels, this has been the most successful Conference in the ECCRIA series of Conferences. There had been a good venue, more abstracts submitted than any previous ECCRIA Conference leading to the introduction of some triple sessions, and where more sponsorship had been received than for any previous ECCRIA Conference. This Conference had covered all aspects of fuel and energy utilisation research currently being carried out in the UK and had attracted participants from most of the major UK organisations carrying out fuel and energy R&D, as well as many participants from overseas.

The Conference had been attended by just over 135 participants, where almost a third of the participants were from overseas representing 14 countries, (Germany, Denmark, Poland, Spain, Portugal, the Netherlands, Norway, Australia, South Africa, China, Malaysia, Russia and Kazakhstan). The conference had 95 oral

presentations, some presented in triple sessions, as well as over 30 poster presentations.

The year 2018 has seen the issue of four editions of the new **Forum** Newsletter (January, May, July, and October). During the year, the new **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 the above **Forum** events can now be viewed on this website. During the year, there have been almost 30 **Forum** E-mailshots. The **Forum** has also actively assisted with the promotion of, and publicity for, several other fuel and energy research events and funding opportunities in the UK, Europe and worldwide, through several **Forum** E-mailshots.

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 the FERF Newsletter.

The **Forum** is at the preliminary stage of its plans for the "1st FERIA Conference, the European Conference on Fuel and Energy Research and Its Applications, the Successor to the ECCRIA Series of Conference", (there was the need to change the name of the Conference to match the expanded aims and remit of the new Forum), to be held at a venue to be announced in early September 2020.

The Executive Committee has been in discussions with and is actively promoting several other fuel and energy research issues with a number of bodies both in the UK and overseas and has continued to provide an information service to Members. In particular, these discussions have led to the proposal to hold a "Clean Energy Science Lecture" in October 2019 at a London venue.

iv) Report by the Treasurer

Dr. Alan Thompson, (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 01/01/2018 to 31/12/2018.

The Income & Expenditure Account for the calendar year 2018 showed expenditure resulting from normal FERF operating activities i.e. newsletter services, secretarial and administrative services, treasurer and webmaster services, the rental of the Forum Post Office Box, the website rental fee, and related costs, the credit card facility fee, postage and the Public Liability Insurance provisions. There were no Seminar Expenses, as these had ben met by other parties. In addition, there were some other expenses, which included two PhD Student bursaries and additional Secretarial expenses.

The significant source of income was, as usual, Membership subscriptions which consisted of Membership subscriptions from a total of 49 Members for 2018, (6 more than for 2017), 1 late payment for 2017 and 1 advanced payment for 2019. Other income included an interim surplus payment from the 12th ECCRIA, (Cardiff), non-members seminar fees and bank/building society interest, where it was noted that the latter gave a very poor interest rate but where there were no known viable alternatives.

This account was supported by the Balance Sheet at 31/12/2018, where overall, there was a cash surplus for the year, although Dr. Thompson noted that the normal

operations of the FERF would have made a large deficit but for the interim surplus arising from the 12th ECCRIA Conference. The total assets at 31/12/18 were described, which included the funds in the Nottingham Building Society.

Dr. Thompson announced that he would be stepping down as Treasurer as from today's Annual Meeting and Dr. Quick thanked Dr. Thompson for all of his efforts as Treasurer for the last 17 years since 2002.

v) <u>Election for Vacancies on the Executive Committee.</u>

There were seven vacant positions on the Executive Committee, (Chairman, (Industry), Treasurer, General Secretary, 3 x Representatives from Industry and 1 x Representative from Academe), for which the following nominations had been received.

CANDIDATE. (POSITION).	PROPOSERS.
Dr.W.J.Quick (Chairman, Industry)	Prof.J.W.Patrick Dr.D.J.A.McCaffrey Dr.A.Goddard Dr.A.W.Thompson
Dr.A.Goddard (Treasurer)	Dr.A.W.Thompson Prof.J.W.Patrick Dr.D.J.A.McCaffrey
Dr.D.J.A.McCaffrey (General Secretary)	Dr.A.W.Thompson Prof.J.W.Patrick Dr.A.Goddard Prof.W.Nimmo
Dr.K.Chong (Representative from Academe)	Dr.A.W.Thompson Dr.A.Goddard Dr.D.J.A.McCaffrey
Dr.T.Beeley (Representative from Industry)	Dr.W.J.Quick Dr.A.Goddard Dr.G.S.Riley
Dr.G.S.Riley (Representative from Industry)	Dr.W.J.Quick Dr.A.Goddard Dr.T.Beeley
Mr.P.Cook (Representative from Industry)	Dr.W.J.Quick Dr.D.J.A.McCaffrey Dr.A.W.Thompson

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

vi) Any Other Business

There were no matters raised under this item.

REPORTS FROM THE INTEREST GROUP CO-ORDINATORS

Combustion, Dr. Gerry Riley

Dr. McCaffrey reported on behalf of Dr. Riley, (who had given his apologies), that the Inaugural Seminar of this new Interest Group had been held at the University of Nottingham in April 2017 and was entitled, "Combustion Safety and Flame Stability". Dr. McCaffrey continued that Dr. Riley was considering another workshop on Ash Utilisation or the Deployment of Aggregate for say, late 2019 or 2020, and was also open to suggestions for topics for this event. Dr. McCaffrey concluded that Dr. Riley would always welcome the views of Forum Members and was open to suggestions for topics for future Interest Group seminars.

Environment, Prof. Bill Nimmo

Prof. Nimmo reported that the Inaugural Seminar of this new Interest Group had been held at the University of Sheffield in April last year and had been entitled, "Materials for Energy Technologies". He continued that he would always welcome the views of Forum Members and was open to suggestions for topics for future Interest Group seminars, where the front runners were likely to be issue on environmental impact such as "The Control of Gaseous Emissions, NOx, SOx and Particulates" or "The Control of Mercury and Trace Element Emissions".

Biomass and Waste, Dr Katie Chong

Dr. Chong reminded the meeting that the Inaugural Seminar of the Biomass and Waste Interest Group had been held at the University of Leeds in June 2017 and had been entitled, "Low Grade Biomass – Challenges and Opportunities".

Dr. Chong continued that the next seminar in this series of Interest Group seminars had been today's seminar at Aston University, entitled, "Waste Not – Want Not". Dr. Chong concluded that she would always welcome the views of Forum Members and was open to suggestions for topics for future Interest Group seminars, where a proposed next seminar would be more interactive to include research targets and funding calls to solve industrial problems.

Electricity Generation and Storage, Mr. Niall Moroney

Dr. McCaffrey introduced Mr. Niall Moroney as the Co-ordinator of this newly formed Electricity Generation and Storage Interest Group. Mr. Moroney reported that he was currently planning the Inaugural Seminar of this interest Group entitled "The Challenges of Electricity Generation with Biomass and Waste Fuels", provisionally to be held at the University of Leeds on 11th September this year, (to be confirmed).

Mr. Moroney concluded that 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.

Carbon Capture and Storage, Prof Jon Gibbins

Dr. McCaffrey reported on behalf of Prof. Gibbins that the Inaugural Seminar of this Interest Group had been held jointly with the UKCCSRC's, (of which Prof. Gibbins is the Director), September 2017 Autumn meeting at the University of Sheffield. He continued that Prof. Gibbins had stated that 2018 had been a very busy year for CCUS with numerous meetings called by BEIS and others around the CCUS Cost Challenge Taskforce report and the subsequent follow-up, including the UK hosting an extra International Conference in Edinburgh in November. This left little opportunity for a FERF event on CCUS and none was held. In 2019 the emphasis is moving to delivery and there may be possibilities to hear about plans from potential projects later in the year, subject to any commercial confidentiality clauses that may be imposed by funders. Dr. McCaffrey continued that Prof. Gibbins 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

Dr. McCaffrey reported on behalf of Prof. Lester that the last meeting of this Interest Group, (under the previous CRF Division), had been the seminar at Imperial College London in April 2016 entitled, "The Analysis and Characterisation of Coal for Utilisation". He continued that this subject had also been well covered at the 12th ECCRIA Conference held at Cardiff University in September 2018.

Prof. Lester reported that the Inaugural Seminar of this new FERF Interest Group had been today's seminar at Aston University entitled, "Biomass and Waste Fuel Characterisation", which had shown the breadth of the field ranging from new fuels, renewables and the ongoing focussed sourcing of coals for the steel industry, which continues to be a global playing field. Dr. Lester concluded that 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.

Fuel and Minerals Engineering, Mr Andrew Howells

Dr. McCaffrey reported that Mr. Howells had resigned as the Co-ordinator of this Interest Group during the year and that the Executive Committee had made the decision to disband this Interest Group.

Dr David J A McCaffrey General Secretary of the Fuel and Energy Research Forum 11th April 2019