



The Biomass and Fossil Fuel Research Alliance (BF2RA) - an Introduction/Update

Peter Sage, BF2RA Technical Officer

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BF2RA – What is it?

- BF2RA was formed in late 2009. It is a not for profit company that is limited by guarantee and not having a share capital
- Membership is open to both the private and public sector
- Members currently include those from the energy, equipment manufacture, fuel user and research sectors
- The objectives of BF2RA are to promote research into:-
 - the production, distribution and use of biomass and fossil fuel and their derivatives
 - the minimisation of by-products arising from the use of biomass and fossil fuel and to assess the environmental impact and
 - to provide funding for such research and to encourage the publication of results and to advance the education and training of those undertaking the research
- BF2RA is organising the Coal Science Lecture 2012 onwards



BF2RA Members



Funding Model/Process

- Proposals submitted against an open call with research scope defined by BF2RA Members. Two-stage process with a limited number of full proposals invited following ranking of outline submissions. Process duration around 9 months with call launched in January for October onwards starts
- Funding typically up to £40k per successful project with balance funding coming from academic institution, other third party and/or UK Research Council sources
- Typically fund 3-4 year PhD projects but can be shorter duration RA projects in well justified cases



Priority Research Themes

The reduction of carbon emissions from fossil fuel based systems is an over-arching requirement that runs through the following priority themes in the BF2RA 2012 Call for Proposals:-

- Utilisation of fossil fuel and biomass
- Materials development
- Advanced cycles for fossil fuel/biomass utilisation and issues relating to performance
- Control of emissions and products arising from fossil fuel and biomass utilisation



Current Research Portfolio

Nine research projects underway (more starts later in 2012)

- Dynamic modelling and simulation of supercritical coal-fired power plant with CO₂ capture ability
- Intelligent flame detection incorporating burner condition monitoring and on-line fuel tracking
- Impact of biomass torrefaction on combustion behaviour in co-firing
- Avoiding sintering of coal-fired shallow fluidised beds
- Milling and conveyance of biomass
- A new classification system for biomass and waste materials
- Reduction of agglomeration in fluidised beds
- Modelling of power plant alloys
- Development of a novel feeding system for use with high pressure combustion and gasification systems



BF2RA – Value to Members

- World class research with good funding leverage
 - Gearing ratio currently up to 30:1 depending on Membership Tier
- Full access to 6 monthly progress reports and final reports via “Member only” area of BF2RA website
- Full access to participate in any project progress meeting
- Provide Industrial Supervisor for project of particular interest
- Shape the scope of the open call
- Membership of the BF2RA “Club”
 - Better understanding of supplier/customer research interests
 - Collective view often better than the individual company view.



For further information about BF2RA including details on membership, application forms, etc., please:-

- visit: - www.bf2ra.org
- email: - technical@bf2ra.org
- telephone:- 07786 918054

Thank you

