



www.britishflame.org.uk

British Flame Technical Meeting: *New and Unusual Power Generation Processes*

18th June 2008

To be held at:

**South Building
Newport Road Campus
Cardiff University
Queens Buildings
Newport Road
CF24 3AA**

Building 60/63 on our map via main Newport Road Campus Entrance / Porters Lodge (Building 58/59 on the map)

*This **British Flame** meeting is open to non-members*



Objective

This meeting continues the British Flame *Meet the Challenges* series, which are aimed at discussing and facilitating links between academia and industry to identify areas in which R&D effort will provide the greatest benefit to companies involved in the industrial combustion and use of scarce energy resources.

Background

The UK is at a major crossroads in terms of the future of the way it generates electricity. Many of the UK's power stations, which were built in the 1970s, are now coming to the end of their working life. Those destined for continuing operation have to meet very stringent emissions legislation through the LCPD, as well as the EU ETS in addition to CO₂ capture & storage issues. More localised / decentralised power generation is seen as becoming more important, along with growth in CHP installations. Also because of pressures to reduce CO₂ emissions, means that solid, liquid and gaseous fuels from renewable sources and hydrogen will become a more important part of the day-to-day UK power generation mix. Likewise, the wider take-up of fuel cells and new thermo-electric systems will become increasingly significant, provided they are cost-effective.

Power generation system design engineers therefore face many new challenges in developing systems & processes to cope with these complexities. Also owners and operators need to understand the implications for their plant and equipment when changing from a conventional fossil fuel to one of these new fuel sources or considering changing the scale of their power plant operations.

Our **British Flame** technical meeting will address how technology is meeting the challenges to these new power generation processes and opportunities. Presentations from a number of UK power generators and system manufacturers and Universities will summarise many of the issues we all have to face to make sure UK lights remain on!!

1 - Day Technical Meeting: *New and Unusual Power Generation Processes; 18th June 2008*

COST

**£20 + VAT for British Flame Members
£50 + VAT for Non-Members**

Attendance Request Form

Please complete and return this form, **with your cheque or purchase order**, to: Jeff Rhine, British Flame Membership Officer, % 58 Howard Road, Kings Heath, Birmingham, B14 7PQ
Alternatively fax back your booking on 0121 4413865
Or, **preferably**, email the form to jmrhf@aol.com

| | Cost (£) |
|--|----------|
| I wish to reserve Members' place(s) at the £20 + VAT (£23.50) | |
| I wish to reserve Non-members' place(s) at the £50 + VAT (£58.75) | |
| Total Cost | _____ |

Cheques should be made out to BFRC – we cannot accept credit cards, but will accept payment on the day

Delegate Name(s).....
Position.....Department.....
Organisation.....
Address.....
.....
Tel:.....Fax.....
Email

Important note: *All Delegates are required to return this form and register for the conference. Places are limited.*

Please complete form and return with your cheque / purchase order to:

Jeff Rhine
British Flame Membership Officer
% 58 Howard Road
Kings Heath
Birmingham
B14 7PQ

For more information:
Phone: 01214413865
Fax: 01214413865
Email: jmrbf@aol.com

British Flame Web site:
www.britishflame.org.uk

Cheques should be made payable to BFRC

If you require hotel accommodation please contact Jeff Rhine at the above address / email / telephone number

Note the nearest car park is in Fitzalan Place; about 5 minutes walk from the venue

Held in association with



Conference Location Information



By Air

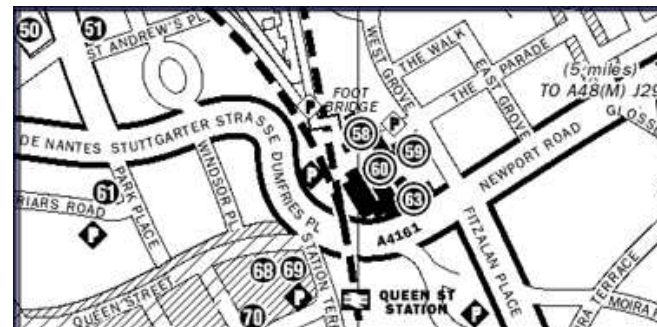
Cardiff International Airport is 11 miles from the city centre. National Express (Enquiries Tel: 08705 808080) and various rail companies (Enquiries tel: 08457 484950) operate direct services to Cardiff Central Station from London's Heathrow and Gatwick airports. See www.gobycoach.com

By Rail

High speed InterCity trains provide frequent services between all major British cities. Frequent regional network trains connect Cardiff with: Bristol (50 mins), Birmingham (2 hrs 10 mins), Southampton (2 hrs 30 mins), Manchester (3 hrs), Liverpool (3 hrs) and with many other cities and towns. From Cardiff Central Station there is a frequent train service which stops at Cathays Station, located on the campus (Enquiries: 08457 484950). There are also bus services: the No 27 service leaves from stand D3 in front of Cardiff Central Station, and the No 53 service leaves from nearby Westgate Street (Enquiries: 0870 6082608). See www.thetrainline.com

By Road

Cardiff is served by the M4 and is easily accessible from all parts of Britain. From the south west, take the M5 and from the south of England, follow major A roads to the M4. From Scotland, the north of England and the Midlands, travel via the M50 to the M4. Travelling west on the M4. Leave the motorway at Junction 29, follow the A48(M)/A48, to the A4161. Follow the A4161 into Cardiff, signposted City Centre to West Grove. Venue – South Building – number 60/63 on map below. There are several multi-storey car parks located only minutes away from the South building, the nearest is in Fitzalan Place.



PROGRAMME for the Day

- 9:30 Registration
- 10:00 Welcome and Introduction
Roger Dudill – Chair of British Flame
- 10:15 Future Power Generation Options: R. Irons, E.ON Engineering
- 10:45 The UK's first commercial hydrogen powered mini-grid, Rotherham: J. Stoyel, TNEI
- 11:15 } Coffee Break
11:30 }
- 11:30 Advanced gas turbine power cycles: C. Hodrien, Expansion Energy Ltd & Oxford University
- 12:00 Cardiff University's Gas Turbine Research Centre and Developments: P. Bowen, Cardiff University
- 12:30 British Flame AGM - for BF members only
12:30 Tour of Cardiff University's combustion engineering facilities – for non-members
- 13:00 Lunch & networking opportunity
- 14:00 RWE npower demonstrate recent developments in CO₂ capture technologies, transportation & storage: M Whitehouse, RWE npower
- 14:30 Biomass powered CHP: P Sartin, The Bruce Boucher Consultancy
- 15:00 Biomass gasification for combined heat and power: G Gallagher, Sustainable Energy Ltd
- 15:30 Developments in thermo-electric power generation: G Min, Cardiff University
- 16:00 Challenges and opportunities for MGT/FC hybrid technology in power generation: M. Pourkashanian, et. al, University of Leeds
- 16:30 FINISH