

PROGRAMME – TUESDAY 21st JUNE

8.30 Registration and Coffee

10.00 CONFERENCE OPENS

Chairman: Mark Sexton.
President, Sheffield Metallurgical and Engineering Association

Opening Address Achieving Engineering Excellence in Steels.
Professor Harry Bhadeshia, Tata Steel Professor of Metallurgy, University of Cambridge

10.45 SESSION I ALLOY DEVELOPMENT

Chairman Dr Peter Morris.
Research Fellow, Swinden Technology Centre, Tata Steel RD&T

1 Integrative Computational Materials Engineering – Applications in Steel and Process Design.

Dr.-Ing. Ulrich Prahll.
Head of Simulation Group, Department of Ferrous Metallurgy. RWTH Aachen University.

2 The Butterfly Effect in Continuous Casting.

Professor Peter Lee. Department of Materials, Imperial College London.

3 Exploring Possibilities and Limitations of the Quenching and Partitioning Process

Professor Jilt Sietsma. Delft Institute of Technology,
Maria Santofimia and Lie Zhao. Delft University of Technology and Materials innovation institute, M2i.

12.20 Lunch

13.20 SESSION II ENERGY APPLICATIONS

Chairman: Dr Alan Partridge.
Chief Executive, National Metals Technology Centre

1 Metallurgical Challenges for Sub-Sea Development.

Dr Steven Shademan.
Senior Corrosion & Materials Engineer, EPT – Inherently Reliable Facilities, BP America Inc.

2 Supercritical Plant – Boiler Material Implications.

Dr Peter Barnard. Principal Engineer, Doosan Power Systems.

3 Power Plant Boilers – Corrosion Challenges of Biomass Firing.

Colin Davis. Corrosion Engineer, Materials Team, E.ON New Build & Technology Ltd.

4 Process Modelling for Nuclear Applications.

Professor Jesus Talamantes-Silva.
Director Research & Development, Sheffield Forgemasters International.

15.00 Tea and Exhibition

15.30 SESSION III TRANSPORT APPLICATIONS

Chairman Dr Peter Morgan.
Consultant.

1 Material Requirements for High Speed Railway Systems.

Professor Roderick Smith, Future Rail Research Centre, Imperial College London.

2 Steel Developments for Next Generation Electric Vehicles.

Mike Woodcock. Project Engineer and Dr Iain McGregor. Manager Technology, Tata Steel Automotive.

3 Metallurgical Challenges in the Manufacture of High Performance Gears.

Dr Brian Shaw.
Director - Design Unit, School of Mechanical and Systems Engineering, Newcastle University.

4 Bainitic Steels for High Performance Prestrained Mechanical Components.

Dr-Ing. Thomas Sourmail. Metallurgy – Section Manager, Ascometal CREAS, France.

17.30 Close

SMEA CELEBRITY LECTURE

- 17.40 Coach to University.
18.00 Interval Bar Open – Located in University House near The Auditorium

19.00 CELEBRITY LECTURE – THE AUDITORIUM.

CAN MANUFACTURING AND ENGINEERING RE-BALANCE OUR ECONOMY?

Juergen Maier, Managing Director, Siemens UK Industry.

Followed by a Buffet Supper – University House.

- 21.15 Coach to Endcliffe Conference Centre.

PROGRAMME – WEDNESDAY 22nd JUNE

8.45 SESSION IV CONSTRUCTION APPLICATIONS

Chairman: Mark Tomlinson.
Operations Director, Sheffield Forgemasters Steel.

- 1 **Alloy Developments for Lifting and Excavation Applications.**
Bill Timms. Plates Technical, Tata Steel Long Products and
Dominic Hill. Technical Services, Lifting and Excavating, Tata Steel.
- 2 **Development of Deepwater Linepipe for Collapse Resistance.**
Simon Slater. Manager Technical Support and Development, Tata Steel Tubes.
- 3 **Development of Duplex Stainless Steels for Constructional and Architectural Purposes.**
Andrew Backhouse.
Technical Business Development Manager, Outokumpu Stainless Distribution.
- 4 **Safety Critical Cast Components for Offshore Structures.**
Ian Nicholls. Managing Director, Vulcan SFM.

10.25 Coffee

10.45 SESSION V DEVELOPMENT OF MANUFACTURING TECHNOLOGIES

Chairman: Mick Steeper.
Manager Technology, Siemens VAI.

- 1 **Development of Low CO₂ Steelmaking Processes.**
Mark Sexton. Director Processes and Dr Tim Peeters, Manager Ironmaking, Tata Steel RD&T.
- 2 **Inter-Critical Processing of HSLA Steels for Pipe Lines.**
Dr Eric Palmiere.
Senior Lecturer, Department of Materials Science & Engineering, University of Sheffield.
- 3 **Overview of the Development and Application of Bulk Metallic Glasses.**
Dr Iain Todd.
Reader, Department of Materials Science & Engineering University of Sheffield.
- 4 **The Impact of Materials Metrology on Production and Performance.**
Dr Jerry Lord. NPL Materials Centre, National Physical Laboratory.

Closing Address **Future Challenges – A Road Map for Sustainable Steel.**
Louis Brimacombe. Manager Environment, Tata Steel.

13.05 Close Conference

13.15 Lunch