

## Nuclear Supply Chain Seminar

The Special Metals Forum (SMF), in association with The Westinghouse Electric Company, recently held a Nuclear Supply Chain seminar at the Innovation Technology Centre on Rotherham's Advanced Manufacturing Park.

Over one hundred distinguished and influential guests representing all facets of the energy sector attended. Dr. Alan Partridge, CEO of NAMTEC, opened proceedings with a brief insight into the objectives of the Special Metals Forum and the services one can expect from becoming a member.

Dr. David Powell of Westinghouse discussed their approach and vision for the new nuclear build proposal bids that are currently in place. David was accompanied by Dr. Rick Wright, a senior Westinghouse engineer with responsibility for some of the company's global licensing activities. After the presentation, which was particularly well received, Rick answered questions related to quality and nuclear accreditation. Dr. Stephen Court (NAMTEC) wrapped up the seminar by giving an update on the remit and forward activities of the SMF Nuclear Working Group.

The morning closed with a special networking lunch enabling attendees to discuss the morning's proceedings in a relaxed environment. It also gave non SMF members a chance to talk with current members and get a first hand account of the benefits and rewards of becoming a member of the forum.

Overall, the meeting proved to be a huge success and was well received by all



delegates. The presentations were full and informative, encapsulating the nuclear bid proposal and showing future business possibilities for UK based companies.

### Minister to speak at Nuclear Supply Chain Workshop

Mike O'Brien MP, the Minister of State for the Department of Energy and Climate Change (DECC), will be speaking at the "Manufacturing a Nuclear Future" event in March. He will outline the role of nuclear power in the UK's Energy Strategy.

This event, to be held at Rolls-Royce, Derby on the 3rd of March, is being supported by the Special Metals Forum (SMF), the Nuclear Industry Association (NIA), the Office for Nuclear Development (OND) and BERR Manufacturing.

The objectives of the workshop are to create an opportunity for the UK manufacturing base to gain an insight into the planned UK nuclear build, to understand how the supply chain operates and to realise the potential for supplying into this sector.



Presentations will be made by AREVA, Westinghouse, EDF, Rolls-Royce, BAE Systems, Doosan Babcock, Sheffield Forgemasters and Unite the Union.

There will be an extended lunch allowing the opportunity to network and to view exhibition stands. The workshop will close with a question and answer session and an opportunity to "Meet the Contractors".

Visit [www.specialmetalsforum.com](http://www.specialmetalsforum.com) for further details. To register for this event, email [sarah.chandley@namtec.co.uk](mailto:sarah.chandley@namtec.co.uk)

# European Titanium Conference

The Titanium Information Group in Association with the Special Metals Forum and NAMTEC, is hosting a European Titanium Conference to be held at the Belfry Golf Club and Conference Centre, in Birmingham. The conference will cover up to date technical developments, academic research and market reviews from various perspectives. We have confirmed speakers from world leading organisations and renowned academic institutions.

To maximise the range of topics available to delegates, the two day programme will be split into a combination of plenary and parallel sessions, providing plenty of opportunity for delegates to attend a variety of presentations.

## Session Titles

### Market overview – Defence and Biomedical

- Near Net Shape Processing
- Primary Processing Techniques
- Welding and Joining

### Market overview – General and Aerospace

- Microstructure and Microtexture
- Future Trends and Developments

The full two day programme is available at [www.namtec.co.uk](http://www.namtec.co.uk) or [www.titaniuminfogroup.co.uk](http://www.titaniuminfogroup.co.uk)

The conference will feature high profile speakers from international titanium producers and end users including ATI, Boeing, Messier Dowty, Rolls Royce, RTI International Metals, Timet, VSMPO, Wyman Gordon and renowned academic institutions.

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For a comprehensive list visit [www.namtec.co.uk](http://www.namtec.co.uk) or [www.titaniuminfogroup.co.uk](http://www.titaniuminfogroup.co.uk)

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In addition it will present an opportunity to learn about the titanium industry from the perspective of various industry stakeholders.

This prestigious event presents a unique opportunity to share information, and network with senior commercial, operational and technical decision-makers from within the titanium sector, and provides an insight into the latest industry trends and developments.

The programme will cover the current status of the titanium market, the key factors that will influence the future growth and development of the market, and the key drivers for the wider introduction of titanium.

Several opportunities for networking will also be incorporated into the event structure including a Conference Dinner on the first night.

This event has been scheduled to coincide with the Paris Air Show (15th to 21st June), allowing delegates to travel onto the event after the airshow.



Business, golf & leisure in one resort.



# Special Metals Forum Chairman's Statement

It is very pleasing to report that 2008 has been the year in which the Special Metals Forum has really taken off. With the active involvement of NAMTEC, a comprehensive programme of events has taken place and this has encouraged new members to join the Forum to avail themselves of what is now on offer. At the time of writing, membership of the Forum stands at 65.

The Forum concept was always to have two aspects: a more formal side with events/initiatives, giving members opportunity to receive latest information relevant to the sector and to participate in the full range of Forum activities in skills/training and technology; and a less formal networking aspect to facilitate members getting to know each other at various organizational levels. While the former aspect is progressing strongly, we are conscious we need to do more to encourage the latter aspect and we will address this during 2009.

From a business perspective, it seems most likely that 2009 will be a challenging year for most of our members. It is in just such an environment that the help, advice and mutual support that the Forum can provide should be of even greater relevance and NAMTEC are determined to rise to that challenge. The current thinking on the 2009 programme is described in our annual report and I hope you will agree this is growing and maturing in a way that brings even greater value to you.

Tony Pedder SMF Chairman



## Special Metals Forum Welcomes 50<sup>th</sup> Member

Special Metals Wiggin became the SMF's landmark 50th member! The company's operation in Hereford is the major European production facility in the Special Metals group. Using air and vacuum melting, vacuum arc and electroslag remelting, powder metallurgy, forging, extrusion, hot and cold rolling, and cold drawing, it makes a comprehensive range of nickel alloys in most standard wrought forms. These include ingot, billet and bar, extruded sections, pipe and tube, flat products (plate, sheet, strip, and foil), wire and wire rod.

## BENEFITS OF TECHNOLOGY TRANSFER REVEALED AT NORTHERN MANUFACTURING EVENT

NAMTEC showed how technology transfer can stimulate growth and maintain competitiveness in a well attended seminar held as part of the Northern Manufacturing exhibition at Sheffield's Hallam FM Arena recently.

The seminar was presented by Dr Wavell Coulson from NAMTEC, who covered all of the latest technologies available for manufacturers, including surface engineering, design and simulation and rapid manufacture and laser deposition.

Dr Coulson explains: "Dozens of businesses in the region have benefited from our technology transfer programme and this was a great opportunity to demonstrate the benefits at the exhibition. The programme offers a range of techniques to help

manufacturers, including direct access to a team of specialist staff and equipment, which can have a major impact on the speed and efficiency of product development. The ultimate aim is to make UK businesses more competitive by helping them develop world class products and services whilst taking advantage of the best knowledge and skills in the field."

The Technology Transfer (TT) Programme is a partnership between NAMTEC and TWI and is funded by Yorkshire Forward. The programme encompasses the Design, Modelling and Simulation Centre, The Surface Engineering Group, the Rapid Manufacturing Programme and the Innovative Metals Processing Centre.



Dr Wavell Coulson

# Higher Level Skills

2008 saw the start of the three year Higher Level Skills Project sponsored by Yorkshire Forward to stimulate and encourage good quality people at all levels into the Advanced Engineering and Metals sector in the Yorkshire and Humberside region.



Left to right: Rebecca Creighton, Claire Hallam, Kerri Franks

The scope and content of the project is the result of research into the sector by Yorkshire Forward and by discussion with NAMTEC membership companies regarding their current and future technical and engineering personnel and training and education requirements.

The supply of high quality people into the AEM sector at all levels and their subsequent development when in work is the driver for the Higher Level Skills Programme. It is based upon activities in three programme areas: two of those activities, the Education Intervention Programme and the Graduate Development programme were featured in the last issue of Namtec News. The third one, the Employee Development programme and an update on the overall programme are detailed below:

## Employee Development Programme

The purpose of the employee development programme is to offer AEM Technical personnel a structured, professional continuous skills development programme. It will allow both employers and employees to gain maximum benefit by providing a wide range of disparate opportunities

The needs of employees and the businesses will vary and these will be considered when potential training is discussed. It is likely that a degree of tailoring will be required to address an individual's skills target.

NAMTEC will develop and deliver a variety of learning opportunities which includes identifying the foundation degree courses most relevant to the AEM sector for

technician level personnel and a new manager's course targeting those with high levels of technical skills whose work requires them to embrace the management of people.

Short Technical courses and the delivery of technical modules into the Part Time MSc Materials and Manufacturing Management and Advanced Engineering Metals in partnership with Sheffield Hallam University form an important core of this strand of the programme. These will enable a flexibility of response to technical knowledge/skills gaps particularly, either by attendance at public scheduled dates or by the delivery of in company/be spoke variations.

Where discussions with businesses indicate a technical training provision not currently available in the market place at the required level, then NAMTEC will seek to develop and deliver that provision. NAMTEC will continue working with its key partners and develop new partnerships as the programme requires and guide businesses to appropriate organizations that can assist the companies with training development needs that are outside of our field of expertise and remit.

## New Team Members

Anita Sunderland is the Higher Level Skills Programme Manager and is delivering the Employee Development part of the programme. Anita has now been joined by some new members of the Training Team. Rebecca Creighton is the new Training Development Manager and will be managing

the Undergraduate Development strand. Kerri Franks is the Training Co-ordinator. Kerri is managing the Education Intervention Programme and will also be helping to deliver the Undergraduate Development Programme. They are supported by Claire Hallam, the Training Administrator, who is principally supporting the Employee Development strand, and Peter Morgan a company engagement consultant.

## Update

There are six schools engaged in the Education Intervention Programme of industry visits and ambassador assistance. We have already attended several careers fairs, and are well under way with organizing the work placements.

Discussions with AEM companies as part of the Employee Development Programme, have started to guide us in developing and delivering a variety of learning opportunities which include identifying the foundation degree courses most relevant to the sector and to be able to promote their use. Also, a Technician to Manager Course will be available to help highly skilled technical people make the transition to managing teams.

A series of Innovation and Leadership Seminars have been scheduled for 2009, the first of which involve keynote speakers from Davy Markham, Siemens VAI and SFEL. The events will provide the opportunity for senior managers to network and to hear from leaders at the cutting edge of change and advancement.

# SHEFFIELD ENGINEERING COMPANY HAS A DOUBLE CELEBRATION

Sheffield company Neville Roe Industries is celebrating achieving its ISO9001 quality accreditation and implementing a hugely successful new system for Health & Safety in its manufacturing facility.

Both achievements were made thanks to the BAT4 programme, run across South Yorkshire in partnership with consultancy company E9 Ltd.

The programme, which is funded through the European Regional Development Agency, helps companies to access Best Available Techniques and Technology through grant supported consultancy services.

Neville Roe Industries, which provides grinding services as well as sub-contract manufacturing and refurbishment for large components, wanted a more professional and formal structure to both its Health and Safety as well as its operating systems and procedures.

Managing Director, Spencer Roe, explains: "The business was starting to get too big to manage without a more formal structure. Also, I wanted to be able to take annual leave and be confident in the knowledge that the business would perform like clockwork, and to the standards our customers have come to expect."

He continues: "The BAT4 programme provided a clear and inexpensive opportunity to get impartial advice and an analysis of our systems from an external view point."

"Our management team is dedicated and lean, so we wanted someone else to break the back of the evaluation phase, then provide a concise version of processes and procedures for our team to follow, this has worked perfectly in both cases."

The company is now very optimistic about the future, as Spencer Roe explains: "Having achieved the ISO9001 standard, we are seeing a whole host of direct benefits in terms of internal efficiency. This is delivering benefits as we can provide the same quality or better with less effort, cost and rework. We have now developed and delegated roles and responsibilities for Health and Safety and quality standards within our organisation."

Through the BAT4 programme, Neville Roe Industries was able to access the Evolve series of management tools, which has been refined and developed over the past six years into a comprehensive and flexible package to help people manage their businesses.

Dr John Trainor, Managing Director of E9, explains: "Each Evolve module has been thoroughly tested with different companies and certification bodies and it is making a powerful difference for many businesses. We were delighted to be able to help Neville Roe Industries and are delighted that they have seen so many major business improvements in such a short space of time."



# Energy Materials Supply Chain Dissemination Event

Following the successful launch of the Strategic Research Agenda for Energy Materials, Materials UK, with the support of meta<sup>4</sup>, the metals and alloys node of the Materials Knowledge Transfer Network (KTN), held a dissemination event on the status of the supply chains in the UK's Power Generation sector.

The workshop was held at The National Metals Technology Centre (NAMTEC) Conference Centre in Rotherham on the 1<sup>st</sup> May 2008, with the aims of:

- Presenting the findings of a report commissioned by the Energy Materials Working Group of Materials UK entitled: 'The Mapping of Materials Supply Chains in the UK's Power Generation Sector', and
- Briefing industry on supply chain challenges and opportunities within the UK's Power Generation sector.

The event was attended by 70 representatives from industry, Research and Technology Organisations (RTO's) and academia, and featured presentations from experts in the fields of Fossil, Nuclear, Wind, Bioenergy and Solar Photovoltaic power generation.

The day began with an introduction to the Energy Technologies Institute (ETI), presented by Andrew Haslett of the ETI. This was followed by presentations from Dr. Derek Allen of Alstom Power on conventional (fossil fuel-fired) power generation, and Derek Buckthorpe (AMEC Reactor Services) and Peter Birtles (Sheffield Forgemasters International Ltd.), both on nuclear power generation.

The Renewables sector was addressed with a joint presentation on wind power from Bob Turner (WindSupply) and Peter Carney (BWEA), a presentation on bio-energy from Prof. John Oakey (Cranfield University) and on solar photovoltaic's from Prof. Stuart Irvine (Centre for Solar Energy Research).

The day was wrapped-up with an overview of Energy Materials Supply Chain Report given by Dr. Steve Court from NAMTEC and the copies of the report were made available.

Feedback from the event was very positive and the report has received widespread recognition by both Industry and Government.



## Neil Glover becomes meta<sup>4</sup> Chairman

We are delighted to announce the appointment of Neil Glover as meta<sup>4</sup> Board Chairman. "The health of the UK metals sector is of vital importance to Rolls-Royce and many other UK companies. We are dependant upon a sustained, technically capable supply chain, a vibrant research base, and critically the availability of skilled metallurgists and materials engineers. I strongly believe that metals technology is highly challenging, exciting and full of opportunity. I believe that meta<sup>4</sup> has a central role to play in enhancing UK capability and look forward to making a contribution."

'Dr Stephen Court meta<sup>4</sup> Project Director said 'I am delighted that Neil has decided to join the Board and look forward to working with him to raise the profile of meta<sup>4</sup> as a key node of the Materials KTN. Neil brings significant industrial and academic experience in developing partnerships and collaborative R&D programmes, which will be invaluable to meta<sup>4</sup>. He also brings the views of Rolls-Royce, one of the world's leading engineering and manufacturing companies.

The Board has been composed ensuring we have representation from a multi disciplinary background and expertise. All Board members have strong links to the various sectors within the metals and community.

Other board members are:-

**Derek Allen – Alstom Power**  
**Julian Allwood – University of Cambridge**  
**John Bouchard – Open University**  
**Stephen Court – NAMTEC**  
**Andrew Haggie – Jaguar/Landrover**  
**Keith Jackson – JRI**  
**Matthew Lunt – DSTL**  
**John Parker – Cast Metal Federation**  
**Alan Partridge – NAMTEC**  
**Robert Quarshie – Materials KTN**  
**Roger Reed – University of Birmingham**  
**Malcolm Robb – BVT Surface Fleet Ltd**  
**Carmine Ruggiero – EPSRC**  
**Will Savage – ALFED**  
**Faye Smith – UK Trade and Invest**  
**Helen Stork – NAMTEC**  
**Dawn Vinall – Semta**  
**Philip Withers – University of Manchester**

# RECRUITMENT

NAMTEC are currently recruiting for the following positions.

## Business Development Manager

A capable, enthusiastic and responsive individual is needed to join our growing business development team. The position will involve the identification, formulation and securing of a range of public and private sector business opportunities in support of the engineering, manufacturing and metals industry.

Your background, experience and knowledge will allow you to fully engage with technical customers, enabling you to develop and propose tailored technical solutions. You will be self-motivated, customer focussed and an articulate communicator. Experience in a similar role would be an advantage, as would a proven ability to identify and secure large scale research and/or knowledge transfer contracts.

You will be capable of engaging with a broad range of people of differing levels of understanding and will oversee and drive selected aspects of business development activities. An appreciation of the importance of personal interaction will enable you to develop business relationships and to fit in well to the organisation.

The development and growth of a sales pipeline, taking full responsibility for proposal development from concept generation to contract negotiation will be required. You will be degree qualified (or equivalent) in a science or engineering field

## Technologist: Advanced Engineering & Metals

We are looking for a well-qualified metallurgists/materials scientist: preferably to PhD level. You will ideally have experience of working within industry or with industrially-related projects. Good communication and report writing skills are a pre-requisite, with the credibility to work at the interface between industry and the science base. You will have excellent analytical and problem solving skills and be self-motivated with the ability to work within a team environment.

The role will provide metallurgical technical support to metals-related companies throughout the UK. Working with the UK science base, including universities and research and technology organisations, you will provide solutions to technical issues within the industry base. You will also provide and manage technical support to a wide range of R&D and technology transfer projects. Responsibilities will include the generation of both market and technology based reports, and the organisation and delivery of technical workshops, seminars and conferences.

## Modellers/Engineers & Senior Modellers/Engineers

We are seeking highly motivated technical staff to join our Design, Modelling & Simulation team. There are opportunities for Graduate level engineers to contribute to the delivery of our engineering consultancy services and Research and Development projects that span both engineering integrity and materials and process simulation.

Candidates will need to be methodical and accurate with the drive, energy and commitment to complete projects within defined timescales. Candidate should have excellent analytical and problem solving abilities coupled with good report writing & presentation skills. Ideally the candidate will be a self-starter, having good client-facing skills and the ability to work under pressure. This position will involve travel throughout the UK and abroad.

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**If you wish to be part of a successful growing organisation and are looking for a challenging and rewarding position; please send your CV, including your current remuneration, to Mrs Stella Rose, NAMTEC, Swinden House, Moorgate Road, Rotherham, S60 3AR. Email: [stellarose@namtec.co.uk](mailto:stellarose@namtec.co.uk). The closing date for these positions is 20th February 2009.**

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**MI-21**  
Metals Information  
For the 21st Century

**A new information service giving chemical, mechanical and physical properties of grades of metals is now available.**

This service brings together, on-line, key data from the comprehensive knowledge bases of the World Metal Index and TWI-World Centre for Materials Joining Technology.

The service, overall, provides technical information on over 300,000 engineering metals and welding consumables. It provides comparative data (including historical grades) for standards and specifications, trade catalogues and general literature, with links to metal suppliers.

The online service is supported by a telephone support line giving access to additional information, technical support and assistance in carrying out difficult search operations.

[www.mi-21.com](http://www.mi-21.com)

# Technical training courses

## Forthcoming short technical training courses at Swinden House

### January

27<sup>th</sup> Metallurgy for Absolute Beginners (1/2 day)

### February

3<sup>rd</sup> and 4<sup>th</sup> Metallurgy for Non-Metallurgists

5<sup>th</sup> Titanium Metallurgy

### March

3<sup>rd</sup> Introduction to Heat Treatment

10<sup>th</sup> and 11<sup>th</sup> Heat Treatment for Heat Treatment Professionals

16<sup>th</sup> – 18<sup>th</sup> MSc Continuous Improvement

### April

28<sup>th</sup> Metallurgy for Absolute Beginners (1/2 day)

### May

12<sup>th</sup> and 13<sup>th</sup> Metallurgy for Non-Metallurgists

18<sup>th</sup> – 20<sup>th</sup> MSc Heat Treatment: Principles and Practice

### July

7<sup>th</sup> and 8<sup>th</sup> Mechanical Testing of Metals

### September

8<sup>th</sup> and 9<sup>th</sup> Metallurgy for Non-Metallurgists

### October

6<sup>th</sup> Introduction to Heat Treatment

13<sup>th</sup> and 14<sup>th</sup> Heat Treatment for Heat Treatment Professionals

20<sup>th</sup> Metallurgy of Special Steels, Nickel based Superalloys and Titanium Alloys for Gas Turbine Applications

### November

17<sup>th</sup> and 18<sup>th</sup> Carbon and Alloy Steel Metallurgy and Processing

25<sup>th</sup> Nickel Metallurgy

26<sup>th</sup> Titanium Metallurgy

### December

2<sup>nd</sup> Metallurgy for Absolute Beginners (1/2 day)

8<sup>th</sup> and 9<sup>th</sup> Metallurgy for Non-Metallurgists

For a full course directory and to find out more about our bespoke and corporate training programmes, please visit our website [www.namtec.co.uk](http://www.namtec.co.uk) or contact Anita Sunderland on 01709 724990 or by e-mail: [anita.sunderland@namtec.co.uk](mailto:anita.sunderland@namtec.co.uk)

## SMART MATERIALS FOR SMART BUILDINGS

14th November 2008

The Innovation Park, BRE, Watford

The event brought together 44 individuals from organisations involved in smart materials and the modern built environment (MBE). The event was opened by Alison Nicholl from the MBE KTN who highlighted areas where smart materials and technology could be used to enhance features of the built environment, in particular, energy efficiency, user comfort and health and hygiene.

A series of presentations followed indicating smart materials and technology which may provide solutions for some of the issues.

- **Photovoltaic technology** – Stuart Irvine from the Centre for Solar Energy Research
- **Phase Change materials for temperature control applications** – Claire Farrar from BASF.
- **Electronic switchable glass technology** – Alan Saxby from Smartglass International.

The afternoon centred on Clean Environments, Paul Cryer from HCAI Technology Innovation Programme introduced the challenges of reducing clinical infection in the MBE.

A series of presentations followed which provided some innovative materials which may provide some solutions to the issues.

- **Antimicrobial properties of copper** – Mark Tur from the Copper Development Association
- **The uses of silver for antimicrobial applications** – Matthew Harte from Biocote Ltd
- **The applications of self cleaning glass** – Tony Smith from Pilkingtons
- **A summary of self cleaning coating technology** – Kevin Tinkham SMART.mat, materials KTN.

The event was organised by SMART.mat a node of the Materials KTN in conjunction with the Modern Built Environment at the BRE Innovation Park. Participants described the event as “very educational” and “useful for new ideas”.

**SMART.mat**  
Smart Materials, Surfaces and Structures Network

[www.smartmat.org](http://www.smartmat.org)

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