

Technical training courses

Short technical training courses at Swinden House

1 & 2 Day Workshops April/May

We are developing technical training courses to meet the needs of industry and address the skills gap within the sector. Parts of our core service provision are short technical courses which may stand alone or contribute towards bespoke training as required.

11th April (Optional further day 12th April) Carbon & Alloy Steel Metallurgy and Processing Course

Designed to help non technical and non metallurgical technical people to gain a basic understanding of metallurgy and the processing of carbon & alloy steels.

The basic metallurgical principles covered will include Transformation, Precipitation, Effects of Stock Reheating and Rolling and Cooling.

Attendance will help delegates to be more effective whether working with technical colleagues, handling customer enquiries or ordering materials.

The optional second day is a study of the processing and properties of various steel product forms: Rod and Wire, Plates, Strip, Sections, Line Pipe and Engineering Steels.

Attendees will need a basic understanding of Metallurgy. (Or by previous attendance on NAMTEC's 2 day Metallurgy for Non Metallurgists' course).

26th April Introduction to Non-Destructive Testing.

This overview of Non-Destructive Testing (NDT) will enable students to gain an understanding of the subject, its uses and limitations. Topics covered include Ultrasonic Inspection, Dye Penetrant, Radiographic and hands-on exercises.

This workshop will be of interest to managers, designers, engineers, supervisors, technicians and sales personnel. It will be particularly relevant to those working in aerospace, automotive, chemical, marine and oil & gas industries.

9th May Introduction to Fatigue.

This course is intended as an initial grounding in fatigue design approaches and testing methods. The course is aimed at design engineers seeking a sound understanding of

the different design approaches supported by modern software, and at materials technologists needing an appreciation of the ways in which different approaches to testing relate to the requirements of the design community.

10th May Introduction to the Strain – Life Approach to Fatigue Design.

This course is an optional extension to the "Introduction to Fatigue" course. It will explore in greater detail the application of the approach in fatigue design. In addition, the course will include guidance on the provision and use of materials data.

11th May Introduction to the Fracture Mechanics Approach to Fatigue Design.

This course is another optional extension to the one-day "Introduction to Fatigue" course. In addition to explaining the principles of Fatigue Design the course will cover the provisions of several design codes, and will also include important aspects of the provision of appropriate materials data and sources of stress intensity factor solutions.

Costs are £195 +vat per person per day.

For more information, please email anita.sunderland@namtec.co.uk alternatively call 01709 722 462



namtec
national metals technology centre

news

Issue 8 Spring 2006

In this issue
Girl Power - Gender
Awareness Event
BAT3
SMART.mat

Best in industry Best for your business Best Available Techniques BAT3

Companies in South Yorkshire are being invited to participate in a new scheme which will improve their energy efficiency, reduce impacts on the environment and consequently cut business costs.

Assistance is now available, exclusively to metals-related businesses through the Best Available Techniques scheme run by NAMTEC and E9. Ltd. Working collaboratively with companies, they provide the expertise and techniques to reduce business costs, address opportunities for efficiency (including energy) and move the company forward.

The BAT3 scheme can help companies in a number of ways, from health, safety and environmental improvements through to training and project management.

"I'd recommend any forward looking manufacturing company to engage with NAMTEC/E9. The project had significant impact, challenged our thinking and provided a workable solution, which is now being implemented. Manufacturing companies require expertise in certain specialist areas and E9 were able to understand our business processes and provide real benefits to our future development." Gordon Panter, MD of PMS Diecasting.

Previous BAT schemes have created increased turnover for participating companies of £3.25m and safeguarded sales of more than £11.5m

For further information please contact Helen King, Project Manager

Swinden House Conference and Training Centre – Open for Business.

NAMTEC recently opened its newly refurbished Conference and Training Centre in Rotherham, South Yorkshire. NAMTEC moved into Swinden House last year following the establishment of the organisation as a Research and Technology Organisation (RTO) at the beginning of 2005. During the Spring and Summer of last year the house, which is a Grade II listed building, underwent a major refurbishment to create a state of the art facility. This was supported in part by Yorkshire Forward and the Learning and Skills Council (South Yorkshire) as part of their commitment to developing the regional infrastructure.

Swinden House has a long association with the metals industry going back to 1882. Originally called the Red House, it was purchased by iron foundry owner William H Micklethwait from the estate of Thomas Badger a solicitor. A member of a prominent Rotherham family, Badger had the house built between 1878 and 1880 but fled the country two years later leaving heavy debts.

Micklethwait died in 1925 and his widow continued to live in Red House until her death in 1932. The house was left empty until the Second World War when it was occupied by the National Fire Service. In 1946 the house was purchased by United Steel and was renamed after Dr T Swinden their first Director of Research.

Swinden House now combines state of the art conference and training facilities with the splendour and beauty of Victorian architecture.



There are 10 rooms, each available in a variety of layouts to suit individual needs and tastes. Several of the ground floor rooms are oak panelled, the panels coming from Rotherham Parish Church during the original construction of the house.

From the prestigious Boardroom to the spacious Auditorium, all rooms provide the perfect venue for business meetings, conferences and training courses away from the hustle and bustle of the city. Catering is available to meet all tastes, ranging from working lunches to executive buffets.

The rooms are divided into three suites:

The Moorgate Suite consists of three large spacious conference rooms: the Auditorium (the centres' largest room), the Gallery and the Pavilion which provides a relaxed and tranquil environment for meetings and smaller presentations.

The Swinden Suite is located in the oldest part of the house and comprises the Boardroom, the Garden Room and the Drawing Room (Computer Suite) which provides the ideal venue for ICT training.

The Micklethwait Suite comprises four rooms: Micklethwait, Swinden, Red House and Moorgate. The latter two rooms are ideal for smaller meetings.

There is a breakout area with internet access. This area is suitable for networking or social events where refreshments and lunch away from meeting rooms can be taken.

Swinden House is located within a few minutes drive of both the M1 and M18 motorways and Sheffield and Rotherham train stations are only nine and two miles away respectively.

Full details of the facilities available can be found at: www.swindenhouse.co.uk



NAMTEC, Swinden House,
Moorgate Road,
Rotherham, S60 3AR.

(01709) 724990.
Email marketing@namtec.co.uk
www.namtec.co.uk

Supported by



This project is part-financed
by the European Union
European Regional
Development Fund



Funded by:



Leading learning and skills

namtec
national metals technology centre

MasMicro Girl Power - Gender Awareness Event



MasMicro, an EC funded project run by 36 European partners, aims to develop an integrated production facility to enable the mass manufacture of miniature and micro components. Technological knowledge and training will then be transferred to companies within the EC.

As part of the MasMicro project funding, NAMTEC are running a gender awareness event aimed at encouraging girls to consider science and engineering as a future career.

The day involves teams of Year 9 students building and racing solar-powered model cars and boats.

There will be prizes for the fastest time, best designed vehicle etc. Industry professionals will be on hand to assist with the building of the cars and the technological aspects involved such as gear ratios etc. The experts will also present short talks on working in the science and engineering sectors.

Schools in South Yorkshire are invited to participate in the event which will be held at NAMTEC in Rotherham on Thursday 15th June 2006. Up to 100 students will be taking up the challenge.

For further details of the event please contact Darren Helley, Project Manager.

Materials KTN and SMART.mat launch

Science and Innovation Minister, Lord Sainsbury, launched the Materials KTN (Knowledge Transfer Network) at the Science Museum in London in January.

The Materials KTN which is managed on behalf of the DTI by the Institute of Materials, Minerals and Mining, comprises the former Advanced Materials Forum and includes the Faraday partnerships of: Advance, Plastics, Packaging, Powdermatrix and Technitex; as well as the National Composites Network. These form a series of specialist networks within the Materials KTN.

Lord Sainsbury said, "The Materials Knowledge Transfer Network will bring together industry and research expertise and as a result make the best use of resources and spread best practice. It will provide a one-stop shop for



Lord Sainsbury: Science and Innovation Minister

unsurpassed materials advice to UK manufacturing and service providers. NAMTEC will soon be a formal part of the KTN taking the lead for the metals node".

Lord Sainsbury also announced the formation of the Smart Materials, Surfaces and Structures Network (SMART.mat) as part of the new Materials KTN. This will be delivered by the partnership of NAMTEC, QinetiQ and the Institute of Materials, Minerals and Mining who will develop virtual networks and technical workshops to promote the exploitation of SMART materials with the aim of stimulating economic growth in support of UK businesses.

SMART materials are those that sense changes in their surroundings and then react in a positive, controlled and predicated manner; for example self-cleaning glass which does not allow surface contamination or metal spectacle frames which revert back to their original shape after being bent.

The project has been established as part of the DTI's plans to strengthen the UK capability in the commercial exploitation of this area of technology, which to date has been restricted by the fragmented nature of the science and technology base and the concentration of Smart technology development in the aerospace and defence sectors.

In his summary presentation NAMTEC CEO Dr Alan Partridge paid tribute to the DTI Materials team and said "The research base and the entrepreneurial community in the UK need to understand the technical problems that companies are seeking to overcome. This will help direct research towards finding solutions

for technical problems and increase the rate at which SMART technologies are incorporated into new systems. The new SMART.mat network will help facilitate this by acting as an expert knowledge centre for SMART technologies."

The SMART.mat network is open to all individuals, organisations and academia, its aim is to bring smart solutions to areas of current concern or to aid in future innovative developments. Current technology will be explored and adapted to new processes; new technologies will be exploited to bring growth and development to the UK.

Membership of the network is free, and provides companies with the opportunities to study and exploit these advanced technologies. The network also provides grant support to develop new SMART technologies and ideas, advice on funding, access to State of the Art Reviews and technical support from some of the key players in industry.

www.materialsktn.net

NAMTEC becomes a new Research & Training Organisation (RTO) for the metals and manufacturing industries in the UK and overseas



Rt Hon Alun Michael: Minister for Industry and the Regions

NAMTEC recently officially launched its new research and training activities. The national launch was held at Church House, Westminster and was addressed by the Rt.Hon Alun Michael, the Minister for Industry and the Regions. He complimented NAMTEC on its success to date, and said, "Since its inception the centre has more than lived up to expectations – it has established itself as part of the knowledge base of the country and provided essential support to a wide range of industrial companies".

NAMTEC has undergone a significant enlargement through the development of a research and training capability. This enlargement programme has been supported by the DTI, Yorkshire Forward, Objective 1 (South Yorkshire) and the Learning and Skills Council (South Yorkshire).



Dr Alan Partridge: NAMTEC CEO

"The training facilities will ensure that the sector maintains its competitiveness in the global market"
Dr. Alan Partridge, CEO of NAMTEC

A regional launch was held at Swinden House, NAMTEC's new Conference and Training Centre. The launch was addressed by John Healey MP, the Financial Secretary to the Treasury, and Member of Parliament for Wentworth, Rotherham. He said, "NAMTEC is committed to increasing the level of research, training and knowledge transfer within the metals sector, and is playing a key role in the renaissance of the metals industry within the region".



John Healey MP: Financial Secretary to the Treasury

During the open day many of the 180 guests took the opportunity to tour the extensive research and test facilities at the Swinden Technology Centre. NAMTEC is working in partnership with Corus RD&T centres to open up their extensive research and development facilities to companies across the UK.

Dr. Alan Partridge, CEO of NAMTEC said, "The training facilities offered by Swinden House, combined with the research capabilities available through Corus' Swinden Technology Laboratories will provide important and much needed support, both regionally and nationally to the metals sector, and will ensure that the sector maintains its competitiveness in the global market".



The Computer Aided Engineering (CAE) software tools & test solutions exhibition for the Metals & Manufacturing Industry is being held on Thursday 27th April between 9.30am – 3.50pm at the National Metalforming Centre (NMC), West Bromwich.

MetMan is a one-day event to promote the capabilities and latest developments in the most advanced CAE software tools & engineering solutions available to the metals & manufacturing industry. Such tools will enable improved product design and quality, whilst reducing product lead-times, tooling and material costs. This free-to-attend event combines an exhibition with "audience-friendly" product demonstrations on CAD-CAM, Finite Element Analysis and specialist visualisation simulation tools. Software and service providers will give audio-visual product demonstrations in separate morning and afternoon sessions.

The event is aimed specifically at representatives of the UK metals manufacturers & processors, tool designers, foundries & machine shops, OEMs and manufacturing companies in their supply chains.

The day has been designed to be as flexible as possible so please feel free to drop in at your convenience. A free buffet lunch is included.

For further details please contact Andrew Richardson on 0121 5006810