



IMFormation October 2009

FOUNDATION CERTIFICATE

The revised Foundation Certificate course and distance learning module is in place and it is pleasing to report that students have enrolled for the module and will be examined in January next. Further students are enrolling now for the next session due for induction in January 2010.

The existing units have been revised with the technology brought up to-date and further units written. There are now a total of 28 units available for study, and a module consists of 15 units which includes 7 mandatory units – Surface Finishing (description of the technologies), Corrosion, Environment, Health & Safety, Cleaning & Pretreatment, Sacrificial Coatings, and Services. Technology blocks of 5 units have been introduced covering Electroplating, Organic Coating, and Aerospace, applicable to the respective technology.

The student is then free to select three further units of their own choice to make up the total 15 units. Obviously these changes have necessitated some modification to the assessment format. The examination now consists of 30 multi-choice questions in Section A and 5 short essay questions in Section B, with the examination time lengthened to 1½ hours. 40% of the total marks are awarded for section A, 40% for section B and 20% for Tutor Marked Assessments.

Students who are still studying under the previous format are reminded that time is running out to take their examination and it is envisaged that the last examination date under the previous format will be June 2010.

R.R.Read, Chairman Education & Training

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Date for your Diary

Wednesday 9 December 2009

Hothersall Memorial Lecture, Christmas Luncheon followed by Annual General Meeting

Health, Safety & Environment

Health & Safety Executive

HSE announce the new Midland Region Director. Rosi Edwards has taken over the top job after seven years as Head of Operations for the Construction Division for Midlands, Wales and the South West. In her new role she will oversee the work of HSE's staff dealing with a wide range of activities including education, health services and manufacturing across both the West and East of the region. Her predecessor, Nick Ratty, has moved to the HSE's operational policy unit in Manchester.

Ms Edwards said: "There is a common misconception that HSE is there to hamper businesses, to control them with even more stringent rules and regulations, but this is simply not the case. Our role is to ensure that every employee and member of the public can go about their daily lives in as safe an environment as possible. There are still too many firms that needlessly put people at risk by failing to follow easy and straightforward practices and it is these businesses we need to target."

Ms Edwards will be supported in her new role by Samantha Peace, as Head of Operations in the East Midlands in November and Peter Galsworthy who starts as Head of Operations in the West Midlands in October.

Warehousing Chemicals Safety Guidance Storing packaged dangerous substances. The fourth edition of this guide has been updated in the light of changes in legislation. New sections have been added to reflect changes to industry practice and also to take account of the types of chemical stored covering: aerosols, intermediate bulk containers (IBCs); storage of hazardous wastes; information, instruction & training; audit & review; and process safety & performance indicators. If you have responsibility for storing dangerous substances, this book is aimed at you. It will help you keep chemicals and other dangerous substances in your warehouse safe and to comply with the law, whatever the size of your storage facility. It sets out control measures aimed at eliminating or reducing the risks to people at work or otherwise, from the storage of packaged dangerous goods.

Updated Advice on COSHH

Every year many workers are subjected to illness by contact with hazardous substances. Employers

are responsible for taking effective measures to control exposure and protect workers health. HSE has produced a revised leaflet 'Working with substances hazardous to health – What you need to know about COSHH'

Leaflet INDG136 (rev4) – ISBN 978 0 7176 6363 7 is available free from HSE Books – tel: 01797 881165 or can be downloaded from: <http://www.hse.gov.uk/pubns/indg136.pdf>

Indicative Occupational Exposure Limit Values (IOELVs)

The European Commission is progressing a third list of IOELVs based on the recommendations of its Scientific Committee for Occupational Exposure Limits (SCOEL).

The Directive will require Member States to introduce domestic exposure limits for the substances listed in the Annex to the Directive, taking account of the level of the IOELV for that substance. Member States will vote on the final text of the draft Directive following which it will be adopted by the Commission and published in the Official Journal.

Member States will then have two years to implement the Directive.

In the current draft Annex, there are 19 substances with IOELVs.

Once the Directive has been adopted, HSE will consult on its implementation and the inclusion of new and revised workplace exposure limits (WELs) into the publication EH40.

Revision of the Biocidal Products Directive (BPD)

The European Commission is proposing to revise the BPD, which came into force in 1998. Having taken into account comments from Member States, it is expected the Commission will submit a proposal to the Council and European Parliament to revise and replace the Directive with a European Commission Regulation.

The main provisions proposed are:

- Extend scope to cover treated materials containing biocides;
- Require mandatory sharing of vertebrate animal test data for both active substance assessment and product authorisation;
- Simplify procedures and data requirements, and adopt a centralised (E U) authorisation scheme;
- Harmonise the fee structure across Member States.

HSE Guidance to be available free

The contents of HSE's priced publications, some 250 items, on health and safety advice and guidance, as well as detailed information on health and safety regulations and codes of practice, will be accessible free of charge to read and print, as from September 2009, on the web.

Hard copy version will continue to be available on a priced basis for those who prefer or need access in that particular format.

Why is HSE doing this?

They want to do all they can to help employers fully understand their legal duties as well as those health and safety precaution they need to take. They also want to help safety representatives maintain, and where possible to improve health and safety in the workplace.

Company News and Products

Atotech opens new Biotechnology

Global chemical supplier Atotech, a member of the TOTAL group, opens its latest investment in Guangzhou China this September.

Atotech is an internationally recognised partner to the surface treatment and metal finishing industry. A world leader in chemical processes and equipment, the company continues to invest in research and development despite the current global recession, with over €51 million having been invested during 2008.

The biotechnology laboratory and production facility opened on 24th September at their Guangzhou site, which was followed by a seminar on Advanced Green Technology. Heading the opening ceremony was Mr Reinhard Schneider, Atotech President and Mr Francois Cornelis Total Vice-President.

This new facility represents a significant expansion of the company's biotechnology focus and will support business growth in China and across Asia. Atotech is an industry leader in green paint shop technologies, with processes for degreasing, metal treatment, paint removal and the detackification of



paint oversprays.

In the UK Atotech operates from its headquarters in William Street, West Bromwich. In addition to supporting the needs of local customers, the building hosts a global research and development team focused on a range of technology areas, which includes paint support.

Pexa

Pexa, a leading supplier of high technology materials to the aerospace and defence industries, has launched its new Minitank dispensing systems for non-agitated paints and solvents.

Easy to install and simple to fill, use and clean, it eliminates tiresome decanting of paints and solvents. The Minitank range, manufactured in West Yorkshire from stainless steel, can be wall mounted, and is available in two sizes with capacities of 5l and 15l and is specially designed for quick and easy dispensing.

Commented Jim Rowbotham, Pexa MD "It is our vision to develop our product range to offer our customers quality products and solutions that are the best on the market. The Pexa Minitank does just that, giving an efficient, clean and accurate dispenser for paints and solvents".

Further information available at www.pexa.co.uk

Schloetter

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Surface Engineering Association (SEA)

The SEA has a new chairman – Huw Williams Huw is Managing Director of Serfilco Europe, the well-known plating equipment supplier and a Vice President of The Institute of Materials Finishing. We wish him well in this new role.

Congratulations to David Elliott and Diana Blair for receiving the 'Trade Association Newsletter of the Year Award 2009' sponsored by UK Publications.

IMF News

Senior' Meeting

The talk by John Sargent on 'Restoring and gold plating the High Altar Cross of Coventry Cathedral' was well received.

Thanks expressed to Peter Farr for providing wine, and to Anne Chapman, who as always, does the washing up and ensures the room left clean and tidy.

New Affiliate & Sustaining Member

Patel, Jayantilal Quinetiq Ltd

Fraser Cleaning Technologies Ltd

24 Grange Road
Houstoun Industrial Estate
Livingston EH54 5DE
Tel: 01506 443058, Fax: 01506 443161

Email: sales@frasertech.co.uk

Web: www.frasertech.co.uk

Supplier of cleaning equipment and chemicals, electronic soldering products, single & multi stage ultrasonic and spray washing equipment, solvent and aqueous chemistries and waste minimisation equipment.

Hothersall Memorial Lecture

"Nano electrodeposition for magnetic layers".

P.L.Cavallotti

CMIC Dep. Politecnico Milano Italy

Nanostructured layers in one dimension, two dimensions or as nanodots can be obtained through electrodeposition. Electrocrystallization must be carefully controlled in order to define it at a nano level. A rational approach to the electrodeposition processes in order to control them is presented, taking into consideration and comparing the electrokinetic behavior of the elements and the electrodeposit structure, resulting from the electron exchange reaction at the cathodic surface. Transient electrokinetic parameters were obtained with the secondary current pulse technique, where a square galvanostatic pulse of few ms duration is overimposed on the cathode while electrodeposition is running.

Two parameters are measured, the transient Tafel slope and the adsorption pseudo-capacitance; whilst a third parameter the diffusive time constant must be introduced if the overvoltage does not arrive to a steady state during the short pulse period. These parameters are related to the growth of different structures; this is important for most deposition processes, but in particular for nano electrodeposition of magnetic layers. Examples of one dimensional structures are the magnetic layers of hard cobalt alloys, of importance for magnetic recording and MEMS. Local control of growth can be obtained with cellular electrodeposition, giving metallic fibrous single crystals with deposition of non-metallic stuff at grain boundary. In the case of soft magnetic layers the nano electrodeposition of two-dimensional single layers, for magnetic field shielding and for GMR or spin valve multilayers, is examined. Nano electrodeposition with templates of porous anodised alumina or porous silicon is also examined and possible methods to obtain highly ordered arrays of nano wires and nano dots presented.

Events – postponement

One-day Symposium and Table-top Exhibition on the 'Testing of Surface Coatings' originally scheduled for October 2009 has been postponed until March 2010.