



IMFormation August 2008

14 October 2008

at the Birmingham Medical Institute Symposium and Tabletop Exhibition entitled
'Surface Preparation and Pre-Treatment prior to Finishing'

Programme

**Sono-chemical Surface Treatment – A route to Lean, Green and Clean Manufacturing –
Andy Cobley (Coventry University)**

Traditional methods for surface modification of materials prior to plating often use long process times, employ toxic and hazardous chemistry, and copious amounts of water. This presentation will describe how sono-chemistry enables the use of low temperature benign chemistry employing fewer process steps, thus it may be a route to sustainable manufacturing.

A sustainable alternative to iron phosphate – Neil Taylor (Atotech UK Ltd)

Development in organic films has allowed the replacement of iron phosphate as a pre-paint adhesion promoter and corrosion protector. The technology is sustainable, reduces waste and costs, whilst retaining the performance characteristics of iron phosphate.

**Replacements for chromic acid anodising in bonded structures - Gary Critchlow
(IPTME-Loughborough University)**

Details of a novel anodising process will be presented which provides optimised surface chemistry and nano-engineered structures capable of producing durable bonds with applied epoxide adhesive which are suitable for application in the demanding aerospace, automotive and defence industries.

**Sustaining the use of chlorinated solvents for surface preparation – Richard Starkey
(SAFECEM Europe GmbH)**

Solvents such as trichloroethylene have always been synonymous with precision cleaning – how can we benefit from the best solution by meeting legislation and without compromising quality.

Plasma cleaning and etching – Paul Stevenson (Innovatek Medical Ltd)

Gas plasma processing as part of the manufacturing process has an important role in enhancing surface properties. Presented here will be examples of surface cleaning, improved adhesion, and performance enhancing surface coatings delivered by the plasma route. The performance of plasma will be compared to more traditional surface cleaning and deposition techniques.

Novel conversion coating technology – Andy Rabbetts (Henkel Loctite Adhesives Ltd)

This presentation will describe a novel conversion technology, free of proscribed heavy metals, offering environmental, operational and energy saving benefits, which can permit multisubstrate treatment of metals prior to painting.

Ceramic Filtration – Ray Newell (Power Utilities Ltd)

This presentation will discuss membrane separation techniques for the optimisation of cleaning system

Hot and cold cleaning methods: Carbon dioxide cryoblasting and laser ablation – Gary Critchlow (IPTME-Loughborough University)



This presentation will detail the mechanisms of removal, and discuss the advantages and disadvantages of methods to remove, fully cross linked resins from both metal and CRFP surfaces. Such methods are essential for the removal of material from RTM moulds and similar surfaces.

Detailed brochure is enclosed with this newsletter to enable delegates to register or alternatively contact IMF, telephone: 0121 622 7387 or email: exeterhouse@instituteofmetalfinishing.org

DATE FOR YOUR DIARY

Christmas Lectures & Luncheon, followed by Annual General Meeting and Presentation of Institute Award – Wednesday 10th December 2008

Health, Safety and Environment

WEEE regulations – are you obeying?

More than a third of firms risk WEEE prosecution in the belief that small companies are exempt from the regulations. Research by the Environment Agency (EA) showed that only 76% of businesses are aware of the regulations and the environmental cost of electrical and electronic waste.

But there are still some major misconceptions about the rules which could put businesses at risk of breaching the regulations and incurring a fine. One of the major areas of concern for the EA was that many UK businesses do not realise they are classified as electrical producers. Some companies also mistakenly believe that, if their offices are not in the UK, they do not need to join a WEEE compliance scheme in the UK. The EA also found that some importers believed that the regulations only applied to manufacturers, whereas the WEEE regulations applies to all in the supply chain – from manufacturers to distributors.

CETS meeting in Warsaw - Report

Chromic Acid – extensive research was carried out in France to enable chromium plating companies to prove to their local authorities that they are exempt from the SEVESCO regulations. The test has proved that chromic acid is not toxic by direct inhalation. The work carried out on chromic acid solution of 288 g/l shows that air emissions in plating area are below the WEL for chromic acid. CETS is to raise the status of the report to the EU. In the UK, the SEA is to submit the document to DEFRA for inclusion in the risk reduction strategy they are completing for chromium.

REACH – This was part of a series of presentations from the Nickel Institute covering what was happening with regard to REACH. One specific point for attention is the 'Implementation Programme RIP 4.3 4.5 which is still under draft and deals with substances which will be prioritised. ENIA is lobbying for Ni and its compounds to be postponed to towards the end of the classification period as there is already a lot of information about Ni and its compounds, and further the legislation was primarily aimed at new and unknown chemicals. Review IPPC Bref STM – planned review in 2008 has not yet happened.

PFOS – in the UK the current derogation is that it may be used in hard chromium plating as a mist suppresser and as a wetting agent in controlled plating processes. In the USA, the EPA issues exclusion for Continued Use of PFAS (in UK - PFOS) The EPA further stated that the continual use of PFAS as a fume suppressants in metal finishing is warranted because the releases and exposure to PFAs are of much less concern than those related to Ni and CrVI which result when PFAS fume suppressants are not used.



REACH symposium report

The REACH symposium held on Friday 4 July attracted some 55 delegates, some from companies not associated with the Surface Finishing industry. This meeting was held following the monthly meetings of the IMF REACH Club (commenced late 2007) in order to present their findings to a wider audience. All the speakers gave candid and 'down to earth' presentations and often assisted each other with helpful comments. Questions came fast and furious such that the chairman took the decision to delay two presentations until the afternoon in order that lunch could be taken at 1.00 pm. All presentations are available on the IMF website at: www.uk-finishing.org.uk

Company News & Products

Fraser technologies Ltd

A new range of sealed vapour degreasers under the 'Vmax' brand name, driven largely by the solvent emission legislation. The machines have been designed specifically to replace the use of traditional open-top solvent degreasers in medium to small-scale production units.

It is estimated that thousands of open-top solvent cleaning tanks are in use across the manufacturing and engineering subcontracting sectors of industry, many of which do not comply with the Solvent Emissions Regulations (SER) introduced last year or with latest health and safety legislation. V-max™ machines are fully compliant.

The range comprises three standard ranges each with nine selectable programmes, single-button operation and are fully automated, apart from manual loading and unloading of the parts baskets,

Further information from Graham Fraser – Tel 01506 443058 or email: sales@frasertech.co.uk

CERAM

Ceram offers a nation-wide landfill gas analysis service. Next day on-site sampling is supported by an extensive range of instrumentation to analyse bulk gases, trace elements, siloxanes etc. The waiting for test results can have a knock-on effect on business so, Ceram testing and environmental laboratories operate from 7am to 10pm. Ceram offers a range of physical and chemical testing and analysis. In addition there are a range of services which are aimed at improving the profitability of company clients. – sectors include construction, engineering, manufacturing, medical and pharmaceutical.

For more information visit: www.ceram.com or email: enquiries@ceram.com or call 0845 026 0902

Riley Industries Ltd

Riley Industries is celebrating 40 years servicing the Surface Finishing industry by launching a new name - Riley Surface World – to reflect its expanding product portfolio and global reach. A new website: www.rileysurfaceworld.co.uk will give visitors access to the range of used equipment, complete with photographs and full technical details. The site will be regularly updated.

British Coatings Federation

VOC product directive guidance document 'Are You Ready for 2010' available online for users, specifiers, architects and others involved in the decorative sector. January 2010 sees further changes to VOC limits, as the second phase of the VOC's 'Regulation 2005' comes into force.

See publications section of: www.coatings.org.uk



Nickel Institute

The third edition of 'Safe Use of Nickel in the Workplace' was released in May 2008 to inform downstream users of nickel about the anticipated systems, and outcome of the EU Nickel Risk Assessment. The 124 page guide is available for downloading as a PDF at: www.nickelinstitute.org/healthguide

IMF News

New members and transfers

Affiliate

Baxter, Mark SR Technics
Birdsall, Paul Protech Finishing Ltd
Brawn, John Protech Finishing Ltd
Cowie, Andrew Kohler Mira Ltd
Crumpler, Kevin Dorsetware Ltd
Edge, Tristan GoodrichActuation Systems
Feszczyn, Izabela Nu-Pro Surface Treatments Ltd
Gagol, Magdalena Schloetter Company Ltd
Hellier, Nathan Daido Industrial Bearings
Jobbins, Paul Protest Panels Ltd
Lapinskas, Arturas Martec Ltd
Mooney, Alex MacDermid Plc
Moore, Gary Aerospace MachineTechnology
Smith, Simon Dunlop Equipment
Winwood, Chris MacDermid Plc

Associate (AssocIMF)

Parker, Nicholas Filtronic Defence

Member (MIMF)

Waugh, William Aerospace Machining Tech.
Viron, Chritelle Atotech UK Ltd

New Sustaining Members

Edelchemie (UK) Limited

Holland House, Valley Way
Welland Industrial Estate
Market Harborough, Leics LE16 8UJ
Tel: 01858 469001, Fax : 01858 469002
Email: mail.uk@edelchemie.com

Edelchemie is a specialist recycler of precious metal including copper, nickel and tin bearing waste solutions, filter cakes etc and ammonium, potassium and other compounds.

C & G Chemicals Limited

Sovereign Works, Deepdale Lane
Dudley, West Midlands DY3 2AF
Tel: 01384 455225, Fax: 01384 456355
Email: sales@c-gchemicals.co.uk

Speciality chemicals for Metal Finishing industries. Products include cleaners (spray and immersion), derusters, paint strippers, pretreatment etches and brighteners, phosphates and



passivates.

Pre-Treatment Technologies Ltd

Mile Cross, Gibbet Street,
Halifax, West Yorkshire HX1 4JQ
Tel: 01422 323383, Fax: 01422 344558

The company is dedicated to the supply of specialty chemicals for manufacturing industry. Products are produced within a facility which is ISO 9001-2000 approved. We formulate and technically support our chemical systems.

Examination Results

Foundation Certificate - Poeton Industries Limited

Akerman, Nathan Catlow, Darren *

Davies, Adam * Gardner, Brett

Hill, Liam # Hughes, Jan #

Spanner, John # Thomas, Darren *

Gilka, Roksana Martellini, Carlo #

Foundation Certificate - Revill Industrial Finishes

Bolt, Stephen Jacobs, Matthew #

Kersey, Mark # Wood, Toby

Distance Learning - General Principles

Mayhew, Phillip Alan Technologies

Distance Learning - Plating Practice

Houghton, Karen * AEM Ltd

Distance Learning - Paint & Powder

Manning, Ian # Triumph Motorcycles

Technician Certificate - South West Metal Fin.

Blackmore, Daniel Coombes, Tim

Cox, Leigh # Harrer, Jason *

Mayer, Andrew

* pass with merit # pass with distinction

IMF Conference 2009

Two-day conference and Exhibition to be held 9/10 June 2009 within the National Cold War Exhibition at the Royal Air Force Museum Cosford

The conference is themed to address:

Surface Coating/Surface Engineering for the Aerospace Industry

Papers on subjects relevant to title are invited, submissions must contain title, name of author(s) & affiliation and a 50 to 100 word abstract.

Research papers are welcome provided they are expected to come to fruition within 5 years.

Deadline for submission of title and abstract is 31st October 2008 and should be addressed to the: Events Organiser at Exeter or by email to: exeterhouse@instituteofmetalfinishing.org

Senior member meeting

The next meeting will be held on

Wednesday 8 October at Exeter House.. Meet with old friends, enjoy a buffet lunch followed by a talk by Dr Peter Crouch.

Telephone David and let him know you anticipate being there. Tel: 0121 622 7387

EUROCORR 2008



Representing finishing professionals in surface engineering and coatings since 1925

The Institute are a co-operating body in this event organised by the European Corrosion Congress. The events being held in the Edinburgh International Conference Centre from the 7 – 11 September 2008 entitled ‘Managing Corrosion for Sustainability’ Technical programme and further information access website: www.eurocorr.org