IMFORMATION SEP 2018

SURFACE WORLD LIVE 2018 – we have everything covered

19th & 20th September 2018, Hall 11, NEC, Birmingham

SHOW EDITION
IMF DIARY

IMF EVENTS

1st FEBRUARY – DISTANCE LEARNING ENROLMENT

19TH – 20TH SEPTEMBER SURFACE WORLD NEC

31ST OCTOBER – 1ST NOVEMBER ADVANCED ENGINEERING – NEC

27TH NOVEMBER – AGM COBDEN HOTEL BIRMINGHAM

SOUTHERN BRANCH

3RD OCTOBER – ELECTRONICS GURKHA MUSEUM IN WINCHESTER

KEEP IN TOUCH

PLEASE MAKE SURE WE HAVE YOUR CONTACT DETAILS UP TO DATE. ANY CHANGES PLEASE CONTACT KAREN ON 0121 622 7387 OR EMAIL: KAREN@MATERIALSFINISHING.ORG

NEXT ENROLMENT DATE FOR TRAINING COURSES IS

1st February 2019

Contact
KAREN YATES

Tel 0121 622 7387
Email: karen@materialsfinishing.org

SPECIAL SHOW OFFER

25% off Courses or Membership if you join at the show

*payment for membership must made within 30 days, and payment for courses must be made by the 19th December 2018.

PUMPS AND FILTERS

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A WELCOME FROM THE SECRETARY GENERAL

Welcome to this special show edition of IMFormation. I do hope you enjoy the show and will have found your visit interesting and informative.

The Institute of Materials Finishing work closely with the show organisers, to promote the surface engineering and materials finishing industry to as wide an audience as possible.

As part of our remit to disseminate technology information on materials finishing, our stand at the show will be manned by specialists in all aspects of the industry, so we will be able to answer your materials finishing issues or queries, whether they be on plating or painting. If we can’t solve your issues at the show, I’m sure through the wide knowledge of both our individual members, and sustaining member companies, we will be able to find an answer for you!

We also look forward to welcoming both old and new friends within the industry, whether they be members or not. Of course we would love these non-members to join our institute and become a more integrated part of this exciting industry sector, and join fellow professionals representing both industry and academia.

In addition to the dissemination of information, a major role of the Institute is the training of personnel working in every area, to help build the knowledge base and technology core.

We offer a range of courses, to include practical application in both paint and plating, through tutored or distance learning at foundation, technician and licentiate levels. These courses build from a knowledge grounding of the technologist involved through to detailed research into specialised areas of surface engineering. The courses lead to a qualification that is acknowledged throughout the industry, and recognised by both the Engineering Council and the Royal Society of Chemistry. Sustaining members additionally use study and success in these courses as part of their Continuous Professional Development (CPD) programme. For more information of these courses, please talk to one of our members on the stand, or contact our education and training manager Karen Yates at the Birmingham office.

Of major interest in both academia and industry is our technical publication, Transactions of the IMF. Published six times a year, it details research reports on in depth work conducted in both university and research centres into all aspects of materials finishing.

The publication is renowned as one of the most prestigious sources of detailed knowledge of the industry.

Our team are always open to comment and suggestions, and the submission of articles and information on your company or projects for publication in IMFormation.

For more information, please contact Helen Wood at the Birmingham office.

Graham Armstrong
“CUTTING EDGE TECHNOLOGY”

Date: Wednesday 3rd October 2018 (17:00 – 21:00)

VENUE:
Gurkha Museum Peninsula Barracks
Romsey Road
Winchester SO23 8TS

PRESENTATIONS:
Non-Destructive Testing
ISO 45001 an overview on Health & Safety
The issue of waste
Bringing new life back to military swords

Exhibition: 17:00 – 18:45
Space will be available for anyone interested in exhibiting and if you are interested then please contact John Burgess (email: JohnB_IMF@btinternet.com)

Cost to exhibit:
£50 + VAT
Entrance including buffet is £10.00 payable on the day.

Registration:
Please register in advance by contacting:
John Burgess. (JohnB_IMF@btinternet.com)
IMF PRACTICAL TRAINING WORKSHOPS

Over the past few months, the IMF have received a number of requests for practical training workshops to cover surface finishes, most specifically aimed at paint and powder application.

Such training falls outside our normal offering of distance learning courses to Foundation and Technician level, which deal more with detailed knowledge of the science behind surface engineering and finishing. This makes these courses more suited to laboratory staff and technicians rather than operatives.

To meet this new need, our organic finishing group committee, working closely with our education and training committee, have devised courses for the application of both wet finishes and powder coatings.

The courses will be run over consecutive days, subject to a minimum number of applicants. Anyone who wishes can attend both the powder and paint sessions.

The courses are designed so that they can be held either within a training/applications laboratory, located at one of two sites in the West Midlands or, preferably, at the client’s own premises, where specific issues with the coating of their own components can be directly addressed.

The attendees will be provided with a fully documented training manual, with space allowed for attendees to make notes as the course progresses.

On successful completion of the course, attendees will be issued with a certificate identifying the aims of the course and confirming their attendance.

THE SESSIONS COVER THE FOLLOWING TOPICS:

- The basis of paint and coatings technology
- Why paint and/or powder is used
- Technical characteristics of different types of coatings
- The theory of paint and/or powder application
- Basic details of application equipment and its care
- Personnel protection and Health & Safety
- Detailed application information for any required specific products
- Practical application instruction in a spray shop or applications laboratory
- Simple quality control and evaluation of the applied coatings

For further details, costings and the next planned course, please contact Helen or Karen at the IMF office on 0121 622 7387 or helen@materialsfinishing.org karen@materialsfinishing.org
The Institute of Materials Finishing has represented the interests of individuals and companies engaged in all aspects of surface finishing since 1925.

JOIN THE PROFESSIONALS TODAY!

- Professional recognition
- Career progression
- Industry information
- Technical publications
- Networking opportunities
- Skills development
- Recognised qualifications
APPLICATION FOR SUSTAINING MEMBERSHIP

(Please use BLOCK CAPITALS throughout)

Company …………………………………………………………………………………………………………………………………………………………………………………

Address …………………………………………………………………………………………………………………………………………………………………………………

.................................................................................................................... Postcode .................................................................................................

Telephone No. ............................................................................................. Fax .................................................................................................

E-Mail .............................................................................................................. Web Address ........................................................................................

Full Name of Nominated Representative ..................................................................................................................................................

Position ……………………………………………………………………………………………………………………………………………………………

We wish to become a Sustaining Member of the Institute of Materials Finishing and submit this application. We agree to be bound by the provisions of the Memorandum and Articles of Association and the Bye-laws of the Institute.

Our Grade of Membership will be: (State A, B or C) ...........................................................................................................................................

Grade A - 90 words £610 + VAT - Total: £732 • Grade B - 60 words £450 + VAT - Total: £540 • Grade C - 30 words £275 + VAT - Total: £330

A cheque for £ : in payment is enclosed. I understand a VAT receipted invoice will be forwarded if the application is approved.

Date: ........................................ Signature: ........................................................................................................................................

PLEASE GIVE DETAILS OF YOUR PRODUCTS AND SERVICES TO BE INCLUDED IN THE SUSTAINING MEMBER DIRECTORY – THE NUMBER OF WORDS TO BE IN ACCORDANCE WITH GRADE REQUESTED

The application should be forwarded to: HELEN WOOD - INSTITUTE OF MATERIALS FINISHING. Exeter House, 48 Holloway Head, Birmingham B1 1NQ, Telephone: 0121 622 7387 • helen@materialsfinishing.org
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by EASYFAIRS
RESEARCH FUNDING FOR INNOVATIONS AND BUSINESS DEVELOPMENT IN SURFACE ENGINEERING.

The surface engineering industry enables 50 percent of the UK’s manufacturing GDP to be achieved. It is crucial to the future of the UK’s economy and is the single most important aspect of manufacturing, but is a very little understood business sector. To maintain its dominance in the global market, UK manufacturers need to develop new products and processes and to help them do so, the Government provides funding through its UK Research and Innovation (UKRI) program.

Part of the UKRI is InnovateUK (https://www.gov.uk/government/organisations/innovate-uk), through which companies can obtain funding and lead projects where their objectives are to create new opportunities, jobs and wealth within the UK and to encourage entrepreneurship. Funding is generally up to 70 percent of eligible costs, so successful applicants only need to obtain 30 percent of their costs to carry out their work and develop their ideas. However, some types of organisations are eligible for 100 percent funding.

As a general guide, InnovateUK funded projects need to be industry led, although academia and Research Institutes can take part, as long as their costs do not exceed 30 percent of the total grant. However, different specific calls have differing criteria, so it is important to check the funding terms and partner eligibility. Typical projects can be either single partner or consortia and can last between 6 months and 3 years; funding levels are between £25k and £1-2 million, depending on the call. In these days of continued austerity, we as an industry should take every opportunity for using this cheap money, because if we don’t, there is a high risk that the funding will be reduced and we will lose our influence and impact on the global economy.

The IMF is very keen to help its members, both corporate and individual, obtain funding and we can even take part and help with activities such as project management and dissemination. We can also provide brokerage skills and technical advice.

If any member wishes to develop these exciting and low cost opportunities any further, please contact Exeter House or Trevor Crichton (chair of the Science Committee).
Would you business benefit from a cash injection of £42,000? This is the average cash rebate secured for its Clients from HMRC by RD Tax Solutions Limited. Read on to see how your business could benefit, and also watch this 90 second explainer video:  http://rdtaxsolutions.com/video/

A number of companies within the material finishing sector have already made successful claims, but R&D Tax Credits is available for a wide range of companies, and not restricted to what is perceived to be R&D, for example, men in white coats in a lab with a Bunsen burner! Who would think that a Solicitors practice, a jewelers and a football club would have R&D, but they have all benefited from the Legislation!

HMRC recently published their annual Research & Development Tax Credits Statistics survey, which looks at the uptake of the government’s R&D Tax Credit Legislation.

SME’s and large Corporates can make claims, and a SME is defined as being a business with less than 500 employees of a turnover of less than 100 million Euros. Headline figures show there has been an increase in the number of SMEs looking to take advantage of the Legislation. There was a grand total of 22,445 R&D claims processed by HMRC in the 2014-2015 tax year, which resulted in UK businesses receiving £2.45bn in tax relief – a marked increase of £675m (38 percent) compared with the previous tax year.

However, there is a problem – despite all UK companies being entitled to this tax benefit, very few business owners are actually aware of it. Those that are aware tend not to know that the activity they have carried out is eligible for this tax rebate or do not know what it is worth to them.

Currently, just about 0.5 percent of companies that could be entitled to claim are actually making claims for R&D costs. One of the main reasons for this is a lack of understanding and the sheer complexity of this area of tax. Sadly, this means that an enormous amount of potential tax relief is being lost.

Ultimately, R&D Tax Credits are a valuable form of tax relief available to companies in every sector who are developing new products, services or systems – or materially improving existing ones. They apply to those businesses that are liable for corporation tax and can be off set against a corporation tax bill or be claimed as a cash sum paid back to a company by HMRC due to an overpayment of tax.

For SMEs, since 1 April 2015, the enhancement rate on qualifying R&D expenditure has been at 230 percent. Therefore, for every £100,000 a business spends on qualifying R&D activity, the company could reduce their profits chargeable to corporation tax by an additional £130,000 on top of the £100,000 originally spent on the project.

This means when an SME incurs an expenditure of £100,000 on R&D costs, it can deduct £230,000 when calculating its profits chargeable to corporation tax or increases the losses arising in the year. As the £100,000 would already have been taken into account, the balance of £130,000 would be an additional deduction resulting in a tax saving of £26,000 (at a corporation tax rate of 20 percent).
OVERVIEW OF RESEARCH & DEVELOPMENT (R&D) TAX CREDIT LEGISLATION...

Process of making a claim and what constitutes qualifying activity. In order to make a claim it is advisable to contact an R&D specialist like ourselves. The R&D specialist will then carry out a detailed investigation to identify the qualifying activity and will build a profile of the costs incurred by the company. Once they have this profile they will send all the relevant information to HMRC for assessment.

It’s worth pointing out that most R&D tax specialists, including RD Tax Solutions Limited, operate on a ‘results-based’ basis, and only charges a fee once the tax benefit has been identified, meaning there is no financial risk and no up-front cost for business owners.

Types of qualifying R&D expenditure include staffing costs (salaries, bonuses, pension’s contributions and employer’s NIC), utility bills (water, fuel and power), software directly used in R&D activities, subcontract costs and externally employed workers, and costs involved in creating a prototype.

So what might a successful claim look like?
A leading micro-brewery in the North West, Lancaster Brewery, recently received a sizeable cash sum back from HMRC as a result of R&D activity it had carried out to find a distinct flavour for a new pint. The recipes included a range of uniquely flavoured beers using non-standard brewing ingredients such as honey grass, honey, ginger and blueberry. Since this activity was deemed to have advanced knowledge in the brewing field, and carried a degree of risk relating to the company’s stable yeast strain and wastage costs, it was eligible for R&D tax relief.

The R&D costs involved in finding this unique new flavour amounted to around £98,500. After sending all the relevant information to HMRC for assessment, Lancaster Brewery’s Finance Director was told he would be receiving just under £25,000 of tax relief (roughly 25 percent of the total R&D costs mentioned above) for the 2014 and 2015 tax years combined. Imagine that – the Government paying you to taste beer!

Future of R&D Tax Credit Legislation
R&D tax credits are the government’s way of rewarding innovative companies for developing new, or appreciably improving existing, products, processes, systems and materials. They are effectively an incentive for pioneering companies that are increasing the UK’S wealth creation capacity.

As announced in the Autumn Statement in 2016, this reward is about to get a whole lot bigger, with the Government investing an extra £2 billion per year in R&D by the end of this parliament. This is a major increase that will have an extremely positive impact on many businesses and will also aid Britain in remaining an attractive place for businesses to invest in innovation and research.

It is fantastic to see that more businesses are taking advantage of this tax relief scheme, but the resounding headline is that many SMEs are still in the dark. A lot more needs to be done in terms of educating business owners and CFOs about this tax rebate, how it works, and the massive impact it can have on their company.

For more information and to see if your business could benefit, please call Richard Armstrong on 079797 00003, or email richard.armstrong@rdtaxsolutions.com.

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SURFACE ENGINEERING PROVIDES FOR A PROFESSIONAL AND DIVERSE CAREER.

A career in surface engineering is not just about using strange coloured liquids in big tanks – it is about being a professional and developing skills that will take you into a huge range of alternative career opportunities.

Professional and trained surface finishers, painters, engineers or coatings operators are in a unique position of having, and demonstrating, skills that are highly transferrable to other business sectors, such as research, development, marketing, sales, quality control, quality assurance and even management! By the very nature of the jobs involved, surface processors also become extremely aware and proficient in health and safety, so there is virtually no career opportunity that is not open to the surface engineering practitioners.

Surface engineering is one of the most important business sectors in the UK and, indeed, in the global economy. Without it, we would not be able to produce 50 percent of our manufacturing GDP, which is worth about £173bn each year, although the UK’s surface engineering industry’s direct value is less than 10 percent of this (£13.5bn).

To maintain our dominance in the surface engineering and coatings sector, we need to have a highly trained and professional workforce, as otherwise we will lose out to other nations that take the time and effort to invest in their people. The IMF provides a wide range of excellent and up to date training courses that can be done by either distance learning or through tutors; we can also provide bespoke courses to meet the needs of specific employers and technologies.

Not only do the training courses make our workforce a more potent and skilled group, but it also helps secure long term jobs through being highly efficient and professional and ensuring that employers remain competitive.

Encourage your friends and colleagues to become members of the Institute and take advantage of the opportunities we can offer you, both employer and employee.
The Institute of Materials Finishing has represented the interests of individuals and companies engaged in all aspects of surface finishing since 1925.

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- Can improve product performance
- Improve career prospects through continuous professional development
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AUTOMOTIVE SURFACE FINISHING

- Surface finishing techniques
- Chemical symbols and chemical equations
- How coatings can prevent corrosion
- Calculating thickness, area & volumes
- Adhesion
- Introduction to paints, basecoats, clear coats & powder coating
- Aspects of formulations of organic coatings
- The nature of automotive finishes
- Substrates and their cleaning
- Pretreatment with chemical conversion coatings
- Working with paints, basecoats, clear coats & powder coating

MATERIALS SCIENCE

- Properties of materials
- Manufacture of materials
- Mechanical properties and their evaluation
- Corrosion & protection
- Architecture of solids
- Examination of materials
- Phase composition

ELECTROPLATING PRACTISE

- Why surface finishing
- Introduction to electroplating
- Properties of electrodeposited metals
- Care & maintenance of solutions & product quality
- Introduction to corrosion
- Anodising
- Services
- Health, safety & environmental issues

ELECTROFORMING

- Surface finishing techniques
- Electrode reactions in electroforming
- Selection and use of mandrels for electroforming
- Electroforming electrolytes
- Control of the physical and mechanical properties of electroforms
- Plant & equipment for electroforming
- Case studies in electroforming
- Health, safety & environmental issues
IMF COURSES

**PRINCIPLES OF ELECTROPLATING**

- Why surface finishing
- Introduction to electroplating
- Properties of electrodeposited metals
- Care & maintenance of solutions & product quality
- Introduction to corrosion
- Anodising
- Services
- Health, safety & environmental issues

**POWDER COATING**

- Why surface finishing
- Introduction to corrosion
- Basic science for coatings
- Introduction to powder coating
- Cleaning & pretreatment
- Application methods
- Plant & equipment
- Services
- Controlling the product and the process
- Health, safety & environmental issues

**PAINTS, LACQUERS & VARNISHES**

- Why surface finishing
- Basic science for coatings
- Introduction to paints, lacquers & varnishes
- Preparation for painting
- Application of paints, lacquers & varnishes
- Plant & equipment
- Services
- Controlling the product and the process
- Health, safety & environmental issues

**ENVIRONMENTAL, HEATH & SAFETY**

- Why surface finishing
- Waste
- Treatment & disposal of waste
- Legal and other aspects
- Protection from health, safety & environmental hazards
- Managing health, safety & environmental impacts
- Surface finishing & the environment

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