

## IMFORMATION FEBRUARY 2024









#### **DIARY**

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by UKAS and Nadcap Accredited Laboratory



Contact: Mark Ricketts Unit 20, Mercia Business Village Westwood Business Park Coventry CV4 8HX Tel: (024) 7647 4474 support@aerotechlabs.co.uk



#### **IMF DIARY**

#### DISTANCE LEARNING START DATES

Apply by 23rd May 2024 for start date 7th June 2024.

Please note that all course fees must be paid in full before any course materials can be released.

Please contact Karen Yates by email karen@materialsfinishing.org

You can find details of courses and qualifications on our website- <a href="https://materials-finishing.org/">https://materials-finishing.org/</a>

#### **UPCOMING WEBINARS/SEMINARS**

Laser Assisted Cold Metal Spraying of Nickel Alloys for Structural Repairs

Date: Wed March 6<sup>th</sup> @7.15pm

For further information please contact johnburgess@materialsfinishing.org

## **SECRETARY GENERAL'S COLUMN (i)**

Greetings from seat 19D on Emirates flight 040 to Dubai and on to Singapore. Yes, once again I'm off on my travels! This was planned in late 2023 and seemed a long way off but it's come round so quickly! Yet again it leaves me wondering where time goes. At least on this trip I have the enjoyment of 4 days at the Singapore Airshow, and catching up with old friends I haven't seen since before Covid. I stop off in Dubai on the way home to run some training so not back in the UK until mid-March.



The first 6 weeks of 2024 have seen some amazing business involvement and I hope Indestructible are not the exception to the rule by being so busy. Surely all of us involved in material finishing must be seeing an upturn in business as I'm sure all the world is becoming dynamically active.

I have to say I'm pleased to hear the good news from the UK HSE on the results of their investigation into the re-authorisation analysis on Chromium Trioxide. It will be remembered that two requests for re-authorisation of CrO<sub>3</sub> had been submitted, both to the UK HSE for UK REACH, but also ECHA for EU REACH. Whilst ECHA seem to enjoy prevarication, the HSE have got down to business, with the outcome that they are recommending a 12-year re-authorisation for use in slurry



coatings, for both flight and industrial applications. This now has to be signed off by the Secretary of state, but this is expected to be a formality, and will mean that chrome-based slurry coatings can continue to be manufactured in the UK and applied both in the UK and throughout the world (except Europe!!) until 2036.

## SECRETARY GENERAL'S COLUMN (ii)

As yet it's unclear what will happen in the EU with EU REACH. I understand ECHA have consultation out onto whether Chromium Trioxide should be moved from Annex XIV (continued authorisation) to Annex XVII (restriction), but I also understand that their workload is so high it is unlikely that any investigation will be possible before the sunset date of September 2024. At least BREXIT has had even a slight benefit!

My ever-demanding role within indestructible has meant I have been lax in my involvement with the Institute, but I do keep up to date with activities within the committees and groups. I am happy to hear that E&TC are continuing activity to ensure the IMF is correctly recognised by OFQUAL as a provider of education; this will help to widen the appeal and benefits of these excellent courses within the Materials Finishing industries.

We have a new sub-group with Membership and Marketing, initially described as the business development group, with a role to actively sell sustaining membership of the Institute. Being handled by Barry Gay, Ken Griffiths and myself we are looking to actively engage with potential material finishing companies to extoll the benefits of Institute membership. Within the very short time we have been looking at this, I think we have engaged with four new member companies.

I hope the weather continues to be as placid as it has been for the start of 2024, and we can get into Spring without any major issues.

Graham Armstrong February 16<sup>th</sup> 2024



### **SOUTHERN BRANCH**



The Institute of Materials finishing (Southern Branch) is presenting an upcoming seminar entitled:

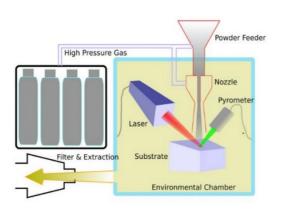
## Laser Assisted Cold Spraying of IN718 for Structural Repairs

By: Parcelino Sudigdo (PhD student from Nottingham University)

Date of seminar: Wednesday 6<sup>th</sup> March 2024

Time: 19:15

The project (which is an account of PhD research progress to date) aims to investigate the influence of laser and cold spray parameters on the microstructures and mechanical properties of fabricated IN718 coatings.



This exciting new technology should prove to be very interesting; we look forward to welcoming you to this event and hope that you will find it valuable.

The seminar is to be held over the "Zoom" platform.

To register for this event please contact either:

Helen Wood: <u>helen@materialsfinishing.org</u>

or

John Burgess johnburgess@materialsfinishing.org



### **EDUCATION AND TRAINING**



## **EDUCATION**

A warm welcome to our 17 new FOUNDATION students and 6 TECHNICIANS who enrolled in January

GOOD LUCK WITH YOUR COURSES!

Our next start date for all Distance learning courses is 7<sup>th</sup> June 2024



Anyone interested in a course please contact me for further details and costs Karen Yates - karen@materialsfinishing.org

Or telephone 0121 622 7387



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### FRASER TECHNOLOGIES

### Navigating the Skies: 5 Key Trends in the Aerospace Industry and the Role of Fraser Technologies' Cleaning Solutions



As we enter Q1 2024, a year marked by global dynamics and pivotal shifts, Fraser Technologies directs its focus toward the Aerospace and Defence sector in the UK. With a steadfast commitment to staying informed, we diligently track client feedback, domestic trends, and global affairs, ensuring we anticipate and understand the trends that may unfold in the coming year. Our mission extends beyond mere trend identification; we stand ready to offer tailored products, solutions, and pragmatic strategies to support our clients effectively.

#### Trend 1: Environmental Sustainability

Responding to the aerospace sector's escalating focus on environmental sustainability. Fraser Technologies introduces Opteon™ SF80 from the Chemours™ Opteon™ range This cutting-edge solution delivers superior cleaning performance, recyclability, reusability, safety, and user-friendliness, all while boasting an ultralow Global Warming Potential (GWP). With Opteon™ SF80, Fraser Technologies propels sustainability efforts forward without compromising performance, addressing various cleaning needs in the aerospace industry.

#### Trend 2: Regulatory Compliance

The aerospace industry, in tandem with regulatory updates, faces significant changes, including bans on specific chemicals and shifts in manufacturing practices. Fraser Technologies, with over 55 years of experience, stands as a reliable partner in navigating these regulatory challenges seamlessly. By offering application trials, expert advice, and alternative chemistries and equipment, we ensure our clients remain compliant while staying ahead of industry changes.

#### Trend 3: Recruitment Challenges

As industries grapple with recruitment challenges, Fraser Technologies recognises the critical importance of a skilled workforce. Leveraging technological advances, we offer innovative solutions to mitigate recruitment hurdles. Our cuttingedge cleaning equipment, customisable to semi-automated or fully automated configurations, minimising staffing challenges while optimizing operational efficiency, ensuring seamless operations amidst evolving recruitment landscapes.

#### Trend 4: Boost to Manufacturing in the UK

The British Government's significant investment in British manufacturing, particularly in aerospace, underscores the need for scalable cleaning solutions. Fraser Technologies, with comprehensive stock of Chemours and Koki products, ensures swift next-day delivery, enabling seamless adaptation to fluctuating activity levels. Moreover, our expertise facilitates smooth chemical switch-overs, minimizing disruptions and enhancing efficiency, thereby supporting the aerospace sector's growth amidst increased manufacturing activities in the UK.

#### Trend 5: New Capabilities

In the face of a volatile and disruptive global landscape, the need for new capabilities becomes imperative. Fraser Technologies rises to this challenge by introducing innovative solutions, including specialized heat transfer fluids. tailored to address multifaceted industry challenges. By redefining industry standards and delivering high performance, reduced waste, and quicker turnarounds, we position ourselves as forwardthinking partners equipped to navigate the complexities of the contemporary business environment.

In an industry defined by high demand and evolving challenges, Fraser Technologies stands as a trusted partner, renowned for our ability to thrive amidst these demands.

For more information, please contact us:
Tel: 01506 443058 | E-mail: sales@frasertech.co.uk | www.frasertech.co.uk

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## **NEW MEMBER—AEROFIN LABORATORIES (i)**

Aerofin laboratories Ltd is an independent NADCAP & ISO 17025 accredited laboratory practice & advisory. Our aim is to satisfy the needs of our customers with a comprehensive service in an increasingly demanding market place.

Our extensive services, aid production with laboratory testing facilities in process solution control, accelerated environmental testing, metallurgical testing, coating evaluation and solution control. Whether you are considering your testing requirements for the first time or extending / reviewing internal / outsourcing options, we provide comprehensive, professional support.

The delivery of our laboratory testing services are continually evolving to meet your needs within the aerospace, defence, automotive & wider surface engineering markets, adding real value at every stage of the process.



#### **Solution Analysis**

Process Solution Control or Process Analytical Chemistry for compositional materials, additives, trace metals and contaminants. Aerofin Laboratories are Nadcap accredited to chemical processing 7108-4 certification.

Process Solution Control or Process Analytical Chemistry is used to maintain adherence to specification and the requirements of our customers that are involved in all aspects of the application of surface treatments, coatings and platings.

Utilising the application of analytical chemistry with specialised methods and sampling techniques for the determination of composition and contaminant levels of processing solutions and coatings of a traditional or proprietary nature.

#### **Accelerated Environmental Testing**

Environmental testing evaluates a material or coatings performance against deterioration. Environmental exposure testing is designed to evaluate a material or coatings performance against environmental deterioration. This could be part of periodic testing or R&D. The aim is to establish whether a coating is suitable for its intended purpose, or which coating is best for its intended purpose.

The process is simple: expose samples to a pre determined exposure & evaluate against pre defined criteria to see if it meets the performance requirements. R&D may see various examples of materials, finishes & coatings exposed to the same environment with evaluations to see which has performed best.







## NEW MEMBER—AEROFIN LABORATORIES (ii)



#### **Material Evaluation**

Material evaluation intends to examine a materials characteristic through metallographic examination. Material Evaluation covers a broad range of testing including hardness testing, hydrogen embrittlement and metallurgical testing. Evaluating the physical properties of a material or coating. These types of tests can be performed at various stages of production to ensure quality material supply, process effectiveness and quality control.

#### **Coating Evaluation**

Evaluation performed to determine a coatings aesthetic or performance suitability for its intended use. The terms "paints" and "coatings" often mean the same thing. Most commonly paints are considered to be used primarily for aesthetics, while coatings are used principally to prevent substrate deterioration or for corrosion protection. Industrial coatings are most commonly used for corrosion protection of metal substrates in structures.

Regardless of its primary function, the coating or paint must have adequate performance capabilities for its intended purpose. In order to assess performance, paints and coatings go through testing as both; the finished article and pre-application (wet state).

Coating testing is performed generally for two reasons. Research & Development initially to establish whether a coating is suitable for its intended purpose and which coating is best suited for that purpose. Or as part of qualification and periodic testing to qualify the ability to apply a coating through testing to a given criteria.





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## FISCHER (i)

## JOIN US!

#### Fischer Hands-on! Workshop Measuring with XRF







Date: Wednesday 13th March 2024

**Time:** 10-3 pm

Location: Fischer office, Pershore, WR10 2JL

#### Agenda details:

- The Fundamentals of XRF
- Developing an application (DefMA structure) and influences affecting readings
- The Importance of Calibration
- Getting Hands-on!
- Interpreting Data making measuring meaningful!
- Question and Answer Session

To join us for this event please register by contacting

#### Georgina McWhirter

Email: gmcwhirter@fischergb.co.uk Phone: 01386 577370

www.fischerinstrumentation.co.uk



## FISCHER (ii)

## JOIN US!

#### Fischer Hands-on! Workshop Measuring with Handheld Gauges







Date: Wednesday 10th April 2024

Time: 10-3 pm

Location: Fischer office, Pershore, WR10 2JL

#### Agenda details:

- The Fundamentals / Avoiding the Common Mistakes
- Probing the Best Practice Approaches that Work!
- The Importance of Calibration
- Getting Hands-on! Instrument Set-Up & Tackling Applications
- Interpreting Data making measuring meaningful!
- Process Control and Optimisation
- Question and Answer Session

To join us for this event please register by contacting

#### Georgina McWhirter

Email: gmcwhirter@fischergb.co.uk

Phone: 01386 577370

www.fischerinstrumentation.co.uk



# SURFACE WCRLD

... we have everything covered

