IMFORMATION
AUGUST 2025

IMF DIARY

DISTANCE LEARNING ENROLMENT DATES

22 Aug 2025 for Start 5 Sep 2025

8 Jan 2026 for Start 16 Jan 2026

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

Please email training@materialsfinishing.org

You can find details of courses and qualifications on our website- https://materials-finishing.org/

UPCOMING EVENTS

imf Institute of Materials Finishing

2025 AGM and AWARDS

To be held at

The Manor Hotel, Meriden

CV7 7NH

19th November 2025

All members welcome and please feel free to bring a guest. Morning presentations followed by awards and then lunch concluding with the presentation of accounts. To book your place please contact Helen.

Email : Helen@materialsfinishing.org

ENROLMENT
4TH SEPTEMBER 2025

DISTANCE LEARNING

THE NEXT START DATE FOR DISTANCE LEARNING IS THE 4TH SEPTEMBER 2025.

PLEASE DON'T HESITATE TO CONTACT MICHELLE AT
TRAINING@MATERIALSFINISHING.ORG

OR CALL
0121 622 7387
FOR MORE IMORMATION

To all our distance learning students who took their exams in June

21 Foundation Passes

3 Technician Passes

Well Done !

DISTANCE LEARNING A

Foundation Module Basic Surface Finishing

Develops fundamental understanding from 29 Units of which a student studies 15, including 7 mandatory units. One of three core technology blocks are chosen, either **Electroplating** (8,9,10 & 18); **Organic Coating** (19, 20, 21, 22, & 23); or **Aerospace Finishing** (19, 21, 23, 24 & 25), each comprising 5 units plus 3 optional units relevant to the student or their employer – all units are listed below.

Two pieces of marked coursework are required and on passing an examination a student is awarded the **Foundation Certificate.**

Unit 1 *	Surface Finishing
Unit 2 *	Corrosion
Unit 3 *	The Environment & Surface Finishing
Unit 4 *	Health and Safety
Unit 5 *	Cleaning and Pre-treatment
Unit 6 *	Sacrificial Coatings
Unit 7 *	Services
Unit 8	Surface Improvement
Unit 9	Principles & use of Electroplating - ***double unit***
Unit 10	Plant and Equipment
Unit 11	Copper, Silver and Gold Plating
Unit 12	Nickel Plating
Unit 13	Chromium Plating
Unit 14	Zinc & Cadmium Plating & Passivation
Unit 15	Electroless Plating
Unit 16	Alloy Plating & Composites
Unit 17	Printed Circuit Board Processes
Unit 18	Electroplating - Care & Maintenance of Solutions & Product Quality
Unit 19	Conventional Paint Processes
Unit 20	Electrophoretic Paint Processes
Unit 21	Paint Application Methods
Unit 22	Coating Powders & Application
Unit 23	Testing Paint & Powder & Coatings
Unit 24	Chemical Conversion Coatings and Sol Gel Coatings
Unit 25	Anodising of Aluminium & Alloys
Unit 26	Vacuum Coating Processes
Unit 27	Duplex Coatings of Galvanising plus Paint
Unit 28	Electroforming
Unit 29	Nanotechnology

** Mandatory units*

On achievement of the **Foundation Certificate** candidates may wish to progress to the **Technician level modules,** please see over the page for details.

ND TUTORED MODULES

Technician Modules

Develops in-depth knowledge for key finishing technologies and their application and best practice methods.

Principles of Electroplating	Broad introduction to electroplating technology
Electroplating Practice	Industrial application of major metals and supporting pre-treatments for electroplating and electroless deposition
Paints, Lacquers & Varnishes	Application methods, equipment, curing, drying and testing of solvent and water based industrial finishing processes
Powder Coating	Application methods, testing, environmental, health & safety topics
Environment, Health & Safety	Legislation information on environmental, health & safety topics
Materials Science	Manufacture, properties and examination of materials which require various forms of coating or treatment to meet service life needs
Automotive Surface Finishing	Applications specific to the automotive industry
Electroforming	How electroforming can be used to manufacture components and tooling

On successful completion of four marked assignments and passing an examination, a student is awarded a **Technician Module** certificate.

Passing two Technician modules leads to the award of **Technician Certificate.**

Passing four Technician modules leads to the award of **Advanced Technician Certificate.**

For more comprehensive details of all modules offered please refer to the IMF website **www.materialsfinishing.org** where you find the full syllabus for each module.

ROYAL SOCIETY OF CHEMISTRY

The Future of TiO_2 in the Coatings Industry

- **Hosted by the RSC Surface Coatings Special Interest Group;**
- A one-day conference exploring the future of titanium dioxide (TiO_2) in the coatings industry. This event will bring together experts from academia and industry to discuss key challenges, innovations, and regulatory developments shaping the sector.
- **Conference Details:**
  Date: 15th September 2025, 10am-5pm
  Venue: Burlington House, London, UK.
- **Fees to attend - includes lunch and refreshments**
- **Student RSC Members: £25**
  Student Non-Members: £50
  RSC Members: £90
  Non-Members: £120

Poster Session:
Students, postdoctoral researchers, and recent graduates are encouraged to participate in our poster session, with prizes awarded for the best entries.

imf Institute of Materials Finishing


Date for the 2026 IMF Golf Day coming soon.
Register your interest –
Helen@materialsfinishing.org

PSC LUNCH (i)

The Parliamentary and Scientific Committee (PSC) is a Westminster-based all party group comprising politicians, scientists, industry practitioners and scientific organisations with the aim of raising and discussing scientific issues important to the UK and internationally (https://www.scienceinparliament.org.uk/).

Specifically, the purpose is two-fold, informing decision and policy makers within the parliamentary system and conversely disseminating political priorities, policies and opportunities amongst the wider science-based community. The IMF has had a seat on the PSC for many years, and we have been represented there by Trevor Crichton (FIMF) who has been chair of our own Science Committee. Trevor has been, and continues to be, involved in setting the agendas for PSC meetings and the subject areas have been wide-ranging. Themes have included space technologies, corrosion, biotechnologies and mechanisms for making research facilities more accessible to industry. Many of these themes are relevant to the core activities of the IMF and our members.

Each year, in addition to the scheduled programme of scientific discussion meetings, the PSC hosts a lunch event for its members at the House of Lords (Cholmondeley Room and Terrace) on the banks of the Thames. This year the lunch event was held on July 1st. London was bathed in glorious sunshine and the event was attended by the current chair of the IMF Science Committee (KSR, this author). This is a beautiful and historic setting for the engaging afternoon of discussion and networking among both guests and members of the scientific community. The current president of the PSC, Viscount Stansgate, hosted the lunch and gave a warm welcome to attendees paying particular attention to the vital connections between science, industry and policymaking. We were also joined by the current chair of the PSC, George Freeman FRSA MP, and his long-serving predecessor, Stephen Metcalffe. Amongst our gracious hosts were the organisers and facilitators of the PSC, Karen Smith and Leigh Jeffes (Chief exec. of the PSC).

In addition to the delicious meal, the event featured much energetic discission and networking. Following lunch, the group was addressed by the invited speaker, Professor Virginia Murray, who is the current chair of the United Nations Office for Disaster Risk Reduction (UNDRR) and the International Science Council (ISC).

During her address, Prof. Murray shared many anecdotes and insights into her role and that of the UNDRR, specifically regarding the identification and prioritisation of global community disaster risks. Among these were familiar themes such as climate change and war, but also others relating to the rapid pace of change in modern society and the increasing reliance of modern science-based technologies. One key theme was the importance of global collaborative efforts to enhance resilience especially in vulnerable and often poorer communities. All this seems especially relevant now and brings into keen focus the necessity for good communication between policy makers and scientific innovators!

The atmosphere was very constructive, cordial and lively. Much discussion was focused on the need for collaboration amongst science and political policy leaders in order to address the challenges of these times.

Karl S. Ryder

The Seamless Transition from 3M Novec 72DE to Opteon™ SF80

Client Review

Client: Leading UK manufacturer of precision-engineered components

Founded: 1962

Products: Springs, valve rotators, actuators, exhaust valves

Daily Output: 30,000+ springs

Old Solvent: 3M Novec 72DE

New Solvent: Chemours Opteon™ SF80

Key Gains: Lower costs, improved cleaning, reduced environmental impact

Background

With a track record stretching over 60 years and a Queen's Award for Enterprise and Innovation, our client is a respected name in precision manufacturing. Their high-performance springs, made from high-carbon steel and silicon chrome, must be perfectly clean before heat treatment—a process previously reliant on 3M Novec 72DE.

When 3M announced the solvent's discontinuation, the company needed a true drop-in replacement that maintained quality without expensive equipment changes. Their 3M distributor recommended Fraser Technologies to take on the challenge.

The Challenge

- Maintain cleaning efficiency for components ranging from 0.25mm to 1.5mm in diameter.
- Avoid costly modifications to the existing ultrasonic cleaning system
- Minimise disruption to high-volume daily production

Finding the Right Solution

Fraser Technologies quickly identified Opteon™ SF80 as the most compatible replacement:

- Drop-in compatibility with existing equipment
- Better environmental profile (GWP <2 vs. HFE72's 47)
- Improved cleaning performance and lower running costs

Trial Process:

1. Client sent a batch of springs to Fraser Technologies.
2. Springs cleaned using Opteon™ SF80 in FT's facility.
3. Returned to client for internal heat-treatment testing.

Result: Zero residue and complete confidence.

"The switch was surprisingly easy. We continued using our existing cleaning equipment without major modifications, making the transition cost-effective and efficient." - Spring Department Manager.

Implementation

Transition steps were minimal: drain tanks, change filter and O-ring, refill with SF80. Fraser Technologies provided on-site guidance, ensuring the process was smooth and disruption-free.

The Results

1. Performance: Outstanding cleaning results, maintaining production standards.
2. Cost Savings: Reduced solvent consumption lowered operational costs.
3. Sustainability: Significant reduction in environmental impact.
4. Continuity: No process changes or downtime.

"Not only did we achieve excellent cleaning results, but the overall cost was reduced, and we now have a more environmentally friendly solution." - Client

Long-Term Benefits

- Superior Cleaning: Consistent, high-quality results.
- Lower Costs: Ongoing savings in solvent use and maintenance.
- Improved Compliance: Environmentally responsible and future-proof.

Fraser Technologies' Role

Expertise in both chemistry and equipment meant the right solution was identified without unnecessary trial-and-error. FT managed testing, validation, and implementation seamlessly.

"FT's understanding of degreasing chemistry and ultrasonic cleaning systems made this process incredibly easy, we would recommend them!" – Client

With SF80 delivering on performance, cost, and environmental gains, the client sees Fraser Technologies as their go-to partner for future cleaning challenges.

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

HMG Paints Celebrates Three Peaks Success and Fundraising Triumph

Following an incredible display of resilience and determination, staff from Manchester-based independent paint manufacturer HMG Paints, have successfully completed the demanding British Three Peaks Challenge.

This challenge saw the HMG team conquer the UK's three highest mountains over three days, raising funds for their three chosen charities of 2025: Cancer Research, Francis House Children's Hospice and Memories by Hudson.

The challenging event, saw 12 dedicated members of staff from HMG travel across the UK, pushing their limits to scale the highest mountains the UK has to offer: Ben Nevis in Scotland, Scafell Pike in England, and Snowdon in Wales. The team aimed to complete this task in their own style, tackling one mountain each day.

The journey began with Scotland's Ben Nevis, the highest peak the challenge had to offer. The team faced an unexpected challenge, as they ascended and descended on what turned out to be Fort William's Hottest day in 20 years, with temperatures reaching a scorching 28 degrees during their descent and humidity soaring to 95%. This remarkable coincidence, aligning with HMG's 95th anniversary., felt "written in the stars."

Next, the team looked to conquer Scafell Pike, England's highest peak based in the Lake District. After their first climb, finding the motivation for the second climb was tough for the team at HMG. Despite their tired legs and the heat that lingered on the day, the HMG team rallied together and powered through, demonstrating great resilience and reaching the second summit. As the team powered through, they proudly raised their company flag at England's highest point marking the end of their second journey.

HMG PAINTS (ii)

The final ascent took HMG to Wales' Snowdon, where they encountered the full force of British weather. Winds at the summit of Wales's highest peak reached an unbelievable 60mph, combined with relentless rain and hail, providing a true test to the team as they were close to the finish line. The successful summit of Snowdon meant that HMG had conquered both the Three Peaks Challenge, as well as everything British weather had to offer.

Nathan Rayner, Production Operative at HMG Paints, reflected on the journey: "Character building, facing fears, sunburn, windburn, hail and rain, we faced all that British weather could throw at us. But through it all, it was a challenge filled with team-work, banter and lots of laughter."

Throughout the weekend, the fundraising efforts provided by HMG's community were nothing short of phenomenal. The team's original goal of £1000 was not only met but surpassed before the climb had even begun, a testament to the incredible support from HMG staff, suppliers and customers. With this early success, HMG set their sights on a new target of £2500, which was once again met as the final peak was conquered.

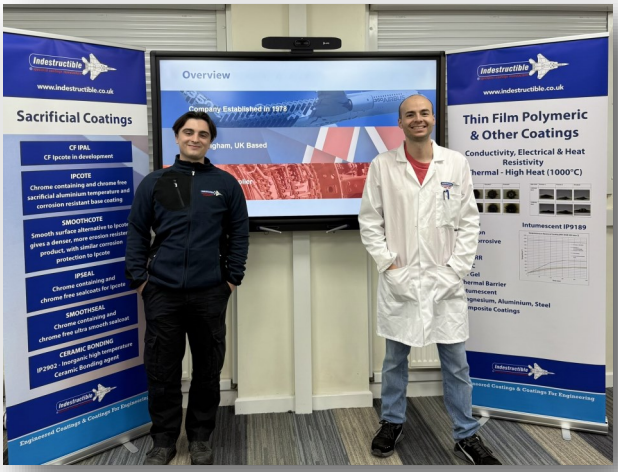
"The National Three Peaks Challenge turned out to be even more demanding than I had imagined" said Brian Dowling, HMG Paints' Health, Safety and Environment Manager "Mother Nature certainly played her part in testing us, but as the aches and pains begin to fade, what remains are the powerful memories of a truly shared experience. Completing this challenge and raising this money means a great deal, we may have set off as

INDESTRUCTIBLE PAINTS

Indestructible Paint Ltd., a leading manufacturer of high-performance coatings for aerospace and industrial sectors, is pleased to announce the appointment of two new members to its laboratory team: **George Hounslow** as Laboratory Technician and **Felipe Vieira** as Research Chemist.

These appointments reflect the company's ongoing commitment to research, innovation, and regulatory compliance as it continues to develop next-generation coatings for demanding applications worldwide.

George Hounslow, joining as a **Laboratory Technician**, will work closely with the technical team to manage and update legislative documentation throughout the organisation. His responsibilities will also include ensuring compliance with national and international chemical regulations. His role is vital in maintaining the operational integrity and safety of the company's products and processes.



Felipe Vieira, stepping into the role of **Research Chemist**, brings valuable experience in coatings technology. In this role, Felipe will contribute directly to product development, formulation refinement, and technical innovation. He will work closely with the R&D department to advance Indestructible Paint's portfolio of high-performance coatings, enhancing the company's ability to meet emerging market needs and client-specific requirements.

"We are delighted to welcome George and Felipe to Indestructible Paint," said Brian Norton, Managing Director at Indestructible Paint Ltd. "Their knowledge and expertise will strengthen our technical capabilities and help drive forward our commitment to innovation and regulatory excellence in the coatings industry."

Coventry Building Society Arena 9-10 June 2026

SURFEX
Surface, Paint & Coatings Technology

ADVANCED ENGINEERING

29 & 30 October 2025
NEC Birmingham, UK

imf Institute of Materials Finishing