WISHING ALL OUR MEMBERS A

Merry Christmas

AND A PROSPEROUS NEW YEAR

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helen@materials-finishing.org
IMF DIARY

DISTANCE LEARNING START DATES

20th January 2023

You may enrol up to 30 days in advance of the start date.

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- https://materials-finishing.org/

UPCOMING WEBINARS/SEMINARS

An introduction to Corrosion.  24th January

Sacrificial Coatings  28th February

Zinc and Alloy Plating  21st March

Electroplating Practice Solutions & Anodes used for Nickel plating 18th April

Electroless Plating 23rd May

Plating on Plastics 20th June

All start at 19.00 GMT.

Everyone is invited and if you wish to attend any webinar or seminar please contact John Burgess by email:
JohnB_IMF@btinternet.com

www.materials-finishing.org
I am putting this column together from my favourite hotel in Singapore as I come to the end of a two month long adventure in New Zealand and Australia. I’m not going to bore you with all the details of this fantastic trip; there is plenty of time to do that to everyone individually in the future as I bore you all with my over 1000 photographs!

Suffice to say the highlights were a helicopter trip over the Franz Josef glacier in the Southern Alps in South Island, New Zealand, the boat trip down Milford Sound, again in South Island, New Zealand and the climb up Sydney Harbour Bridge in Australia.

Whilst travelling for this length of time, I felt I could not try to keep up with what has been happening in the world of surface finishing, although I have been fortunate that e-mails have been kept to a minimum by my company. I only hope they don’t now think they can cope without me?!?!?

I’m now on my way back home, and will be back in time to have met up with many of you at the AGM on the 8th December.

The most meaningful news of late is the decision by DEFRA to finalise their review into the timing of registration of chemicals under UK REACH. You will remember a piece in IMFormation earlier this year on DEFRA putting out a consultation document on proposed delays in the implementation of registration of chemicals.

On behalf of the IMF I completed the consultation survey, and I received e-mail confirmation last week from DEFRA that they are to implement option 1 of the consultation, which gives the maximum delay in registration times. There will be more information on this in this edition of IMFormation.
While I have been travelling the Institute held a review on the financial audit, conducted earlier in the autumn by our auditors, Eden Currie. I attended via Zoom, but was lucky only to be 8 hours ahead of the UK time on that day which meant I could be there before bed time!

The good news was that the Institute is in sound financial health, with a quite substantial increase in our non-invested funds, due in the main to the “profit” we made from the sale of Old Exeter House in central Birmingham, and our move out to Coleshill in Warwickshire to New Exeter House. Now we have our new treasurer, John Oliver, in place I can only imagine our financial health to get stronger.

Having been away since early October, I admit to being totally unaware of the political situation within the UK and our standing both financially and business wise with the rest of the world. I know before I left that there was a complete shambles, but I understand Liz Truss resigned and we now have Rishi.

I do hope he and his government can get their act together and restore some international faith in UK Plc, so that our industries are not dragged into a recession that would be bad for us all.

I will be back at my desk on Tuesday 13 December; no doubt the phone will start ringing again then!

Graham Armstrong
Singapore
3 December 2022.
UK REACH: DEFRA Consultation Survey; July/August 2022

It will be remembered that in a previous edition of IMFormation, the DEFRA consultation programme concerning possible delays to the introduction of the Chemicals Registration Process under UK REACH was discussed. On behalf of the Institute I completed the consultation survey, not only to register a view, but to ensure access to the results of the survey for the benefit of all our Members.

The results of the consultation survey were released by DEFRA on the 29th November 2022 and are noted below in an extract from the DEFRA website.

“This document summarises the responses that the Department of Environment, Food and Rural Affairs (DEFRA) received to its consultation on extending the current UK REACH submission deadlines. The consultation exercise ran for 8 weeks before closing on 1 September 2022.

There were 20 questions in the consultation document. Seven of these were background questions about the respondents, providing important contextual information. This summary is a high-level overview of the main messages from the consultation responses, reflecting the views offered. It also provides a government response to these messages.

DEFRA is grateful to everyone who took the time and effort to respond. The responses have been analysed by DEFRA staff dealing with the consultation proposals.

Background to the Consultation

The UK REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) Regulation is one of the main pieces of legislation for the regulation of chemicals in Great Britain. It established the UK REACH regime (UK REACH), which regulates the use of substances in Great Britain, while EU REACH continues to apply in Northern Ireland.

UK REACH requires substances that are manufactured in, or imported into, Great Britain to be registered with the Agency for UK REACH (the Health and Safety Executive (HSE)). Registrations include information on the hazards, uses and exposure of the substance.
Registration information is used by HSE for regulatory purposes and by the registrants to identify appropriate risk management measures for themselves and other users down the supply chain.

The UK REACH Regulation contains transitional provisions to reduce the disruption to industry as they moved to the new regime from EU REACH. These provisions allow companies to submit initial ‘notification’ data in order to continue trading and then subsequently provide the full registration data. The transitional provisions apply to those that were registrants, downstream users or distributors under EU REACH before UK REACH came into effect. The current deadlines for completing this transitional registration process, depending on tonnage and hazard profile of the substance, are set down in Article 127P of UK REACH and are:

27 October 2023 for substances included on the EU REACH candidate list before UK REACH came into effect; substances that are carcinogenic, mutagenic or toxic for reproduction and manufactured or imported in quantities of 1 tonne a year or more; substances that are very toxic to aquatic life and manufactured or imported in quantities of 100 tonnes or more a year; and all substances manufactured or imported in quantities of 1,000 tonnes or more a year
27 October 2025 for substances added to the UK REACH candidate list before the 2023 submission deadline; and all substances manufactured or imported in quantities of 100 tonnes or more a year
27 October 2027 for all substances manufactured or imported in quantities of 1 tonne or more a year

In response to concerns raised by interested parties around the cost of acquiring the data to complete their registrations, the government is working with stakeholders to explore an alternative transitional registration (ATR) model. The aim of this model is to reduce costs to businesses of transitioning from EU REACH to UK REACH whilst maintaining existing human health and environment protections. Developing a new model is highly technical and complex and time is needed to develop a firm proposal. If a suitable model is found, operational (for example, IT development) and legislative changes would need to be made to implement it.

Purpose of the Consultation

The purpose of this consultation was to seek the views of interested parties on our proposal to extend the current UK REACH submission deadlines by up to 3 years. We consulted on 3 options, including a do-nothing option. These were:
Baseline – Do Nothing – do not change the current submission deadlines (27 October 2023, 27 October 2025 and 27 October 2027)
Option 1 – extend all the current submission deadlines of each tonnage band by 3 years to October 2026, October 2028 and October 2030
Option 2 (government preferred option) – extend the first submission deadline by 3 years to October 2026, the second by 2 years to October 2027 and the third by 1 year to October 2028

We also sought views on our proposal to make related amendments to the dates for compliance checks under Article 41(5) of the UK REACH so they are in lockstep with the proposed data submission deadlines and to ensure that this regulatory process is applied in the most effective manner. This would not be possible if the Agency continued to be subject to the current dates for compliance checks, as they would fall before the relevant submission deadlines. In addition, we asked a few questions (Question 15 to Question 19) about impacts of the options as outlined in the draft impact assessment published alongside the consultation document.

Consultation Process

DEFRA met with a range of interested parties including industry, trade organisations and non-governmental organisations, to discuss the government’s proposal to extend the submission deadlines, before and during the period of the consultation. Many of those who took part subsequently responded formally to the written consultation. To increase awareness, especially among our target audience, we publicised the consultation on HSE’s website and via the HSE e-Bulletin, as well as on a chemical-based online platform. We also raised awareness during the period of the consultation through internal meetings with interested parties.

A draft impact assessment accompanied this consultation and, in accordance with the Environment Act 2021, an Article 1 Consistency Statement was also published alongside the consultation. The consultation ran for 8 weeks, between 5 July and 1 September, and was live on the Citizen Space website. E-mail responses were also accepted during this period.
Analysis of Respondents

A qualitative thematic analysis of the open-ended questions was undertaken, which identified the key issues raised. Where feasible, a numerical estimate of those for and against each proposal has been provided alongside a breakdown of responses by sector.

Overview of the Respondents

A total of 289 responses to the consultation were received. 266 were submitted via the Citizen Space website and 23 via email. There was a good response to all the questions as illustrated in the later table. Each question was answered by 90% or more respondents.

Summary of Responses

There were 20 questions in the consultation document. The first 7 questions relate to the identity and role of the respondents and are reported on in the previous section.

The responses received in relation to the specific questions (Q8 to Q20) raised in the consultation paper are summarised below. In this article I will only deal with the main question on Deadlines, Question 8.

Question 8. What is your preferred option on extending the registration deadlines?

- Option 1: Extend current submission deadlines of each tonnage band by 3 years to October 2026, October 2028 and October 2030
- Option 2: Extend the first submission deadline by 3 years to October 2026, the second by 2 years to October 2027 and the third by 1 year to October 2028
- Do Nothing
- Do not have a preferred option

Question 8 asked respondents which deadline extension option they were in support of: maintaining the status quo (do nothing); extending the deadlines for all tonnage bands by three years (Option 1) or extending the deadlines incrementally so that all submissions are complete by October 2028 (Option 2). Those who did not have a preferred option could also state this.
Responses to Question 8

All those responding to the consultation (289) answered Question 8; the results are shown above. It can be seen that overwhelmingly Option 1 was the popular option, with 82% of respondents selecting this. Option 2 was only selected by a small proportion of respondents (13%) and Do Nothing by only 3%. 2% of respondents did not have a preferred option.

<table>
<thead>
<tr>
<th>Respondents by role</th>
<th>Number of responses</th>
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<tbody>
<tr>
<td>Option 1</td>
<td>82%</td>
</tr>
<tr>
<td>Option 2</td>
<td>13%</td>
</tr>
<tr>
<td>Do nothing</td>
<td>3%</td>
</tr>
<tr>
<td>No preferred option</td>
<td>2%</td>
</tr>
</tbody>
</table>
Comments from Respondents in Favour of Option 1

The general view among respondents who chose Option 1 was that it would provide more time to prepare registration documents and that the longer timeframe would reduce burdens and maximise the opportunity for businesses to submit high quality dossiers. Respondents in support of Option 1 varied from SMEs to large businesses and included only representatives, manufacturers, downstream users as well as importers and exporters of chemicals and mixtures. No NGO was in favour of Option 1.

There was also a general acknowledgement that although the data requirements were less at the lower tonnage bands, a significant amount of resource would still be required to complete the registrations in the required time. Respondents noted that Option 1 provided them with the best chance of completing all their registrations in time to avoid any risk to the continuity of chemical supply.

Several respondents who selected Option 1, suggested that SMEs would struggle to provide the registration data within the truncated timescale under Option 2. They noted that Option 1 would allow them more time to implement any learnings that may transpire from the first wave of submissions in 2026. They also noted that the one-year gap provided under Option 2 would not provide the necessary time to establish and implement best practice.

Respondents in support of Option 1 also stated that, while some of their concerns may be mitigated by the proposed ATR model for UK REACH, Option 1 would provide more time to plan their registration strategies, either through consultancies or independently, and allow time to undergo appropriate training or recruitment as needed.

Several respondents in favour of Option 1, such as those identified as industry associations, consultants, and downstream users, noted that the new provisions under the proposed ATR model were likely to require significant expertise such as (eco) toxicologists to collate, assess and submit information. They suggested that the two-year interval between deadlines under Option 1 would allow a wider spread of resources as well as costs to meet the submission requirements for the lower volume substances.

Occasionally, respondents who identified as industry associations noted that most of their member companies that operate globally would have to deal with competing deadlines due to the combination of the upcoming regulatory commitments such as EU polymer
registration, Turkey REACH (KKDIK), Korea REACH (K-REACH) and other global regulations. They described the wider demands and constraints faced by industry beyond the requirements of UK REACH. They noted that businesses were facing challenges with increased energy, logistics and related raw material costs and availability, and challenges associated with wider society’s transition to net zero.

Comments from Respondents in Favour of Option 2

Respondents who opted for Option 2 were in the minority (13%). Again, the responses varied across the organisation type. Our analysis carefully considered the points respondents made in support of this option.

However, unlike Option 1, no strong theme emerged from the analysis. One NGO did choose this option.

The majority of the respondents who chose Option 2 suggested it provided a reasonable period to comply with the submission deadlines, and was, on balance, the best option as the transitional registration data would still be received as early as possible, while allowing industry sufficient time to comply.

A small number of respondents suggested that the shorter deadlines provided by Option 2 would ensure a quicker transition to a settled regulatory environment. They noted that longer transitional deadlines under Option 1 could allow companies that have no intention of registering to keep their products on the market for longer.

Proponents of Option 2 suggested that the option provided sufficient time for the legislative changes to be made by the government and that it provides sufficient time for businesses to prepare for the new registration requirements for the most hazardous substances first, followed by those with low volume and low levels of concern.
Comments from Respondents in Favour of “Do Nothing”

The few respondents who chose the ‘Do Nothing’ option) 3%( were in favour of maintaining the current data submission provisions. The majority of the proponents of this option identified as ‘NGOs’. They noted that they had not received reassurances about the basic principles underlying the ATR model being developed and that the current proposals being considered under the model were likely to be weaker and less protective of human health and the environment.

There was only one industry response supportive of this option and they stated that they chose it because they were data owners, and that early submission was preferrable as well as beneficial to them.

Government Response to Question 8

The government believes that an extension to the submission deadlines is clearly required to allow the ATR model to be developed. ‘Doing nothing’ is not considered a viable option as it could create a situation where industry submit information that may not be required, should an alternative model be found.

The government favoured Option 2 because it allowed for quicker receipt of the data compared to Option 1: allowing HSE access to UK specific data sooner. We also believed it would provide certainty for industry and ensure the Agency can take necessary regulatory actions in the quickest time possible.

The government has carefully considered all responses to Question 8 and has balanced the impact of extending the submission deadlines on human health and environmental protections against the potential impacts that the changes could have on businesses, especially the potential cost/burdens on downstream users and SMEs. While we would like to see the data submitted in the shorter deadline provided under Option 2, we believe that the extra time under Option 1 could lessen potential burdens on businesses - especially SMEs and downstream users - without significantly impacting on human health and environmental protections. We also recognise the potential for better quality data and maximising chances of compliance under Option 1.

Subject to the consent of the Scottish and Welsh governments, the UK government will be legislating to extend the current deadlines by 3 years for each tonnage band to 2026, 2028 and 2030.
I think this summary illustrates that both DEFRA and the Government in general are now listening to industry and associated bodies to ensure a fair implementation of UK REACH. The DEFRA website details the responses to the remaining 11 questions, so for a more complete update on the results please visit the link:

https://eur02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.gov.uk%2Fgovernment%2Fconsultations%2Fuk-reach-extending-submission-deadlines-for-transitional-registrations&data=05%7C01%7Cgraham%40indestructible.co.uk%7C7C5049c3f55ec64bb82f3408dad2f54cbc%7Cc7663164d795442eafbc46fc9d5d5f03d%7C7C1%7C638054248249330792%7CUnknoun%7C8FpbGZsb3d8eyJWljoiMC4wLjAwMDAiLCJjOiV2luMzlilCJBTi6Ik1haWwiLCJUVCI6Mn0%3D%7C1000%7C%7C%7C&sdata=vloWS0wKFaDBzTZeTRc8kgVKftV6NrTklcscWRRQ%3D&reserved=0

For record, I selected “Option 1”

Graham Armstrong December 2022

This year the M&M committee have sat on a fairly regular basis discussing varying aspects allying to the IMF from looking at the Membership aspect to the website through to LinkedIn and webinars.

LinkedIn has this year proved to be very successful since Curtis Langton from Metal Finishings Ltd (Poole) has joined us on the committee. His knowledge and how to get the most out of LinkedIn has helped the IMF to grow numbers and promote the webinars.

The webinars have also proved to be successful and it was recognised that in the current climate holding webinars at 14:00 were not attracting as many people due to work commitments. A question was put out to all members to rearrange the webinars to 19:00 which was well received and our first webinar at this time realised 20 registered members. Information on upcoming webinars are to be found elsewhere in IMFormation.

I was a little disappointed that there have not been more Podcasts, so this is something that I hope to work on next year. If you are interested in having a chat with me then please do not hesitate to contact me.

I would like to wish everyone a very happy Christmas in these difficult times and looking forward to a successful New Year.

J Burgess. (M&M Chairman)
**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**.

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

* 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.
**Technician Modules**

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

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

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](http://www.materialsfinishing.org) where you find the full syllabus for each module.
Precision Cleaning – Own the process and cut the costs

With the cost of living continuing to rise and energy prices doubling, Graham Fraser, MD of Fraser Technologies, discusses the ways businesses can cut costs and increase efficiencies through cleaning, without reducing on quality.

When it comes to component cleaning, compromises can rarely be made on levels of cleanliness, but there are opportunities to make cost savings by ensuring the system being used is the most suitable for the items being cleaned. In many circumstances, investing in the correct equipment and chemistries can lead to a much more efficient and cost-effective process.

While it may seem counterintuitive, an investment and initial cost outlay in the short term could lead to significant efficiencies and cost savings in the medium and long term.

For organisations that currently clean components by hand, there are a number of immediate benefits of automation. Items can be cleaned in batches; it’s an extremely fast activity (in many cases, just a few minutes!); it is much less labour intensive, freeing up the time to get on with other jobs; and the level of cleanliness can be controlled, so every item is consistently, perfectly clean.

We recently started working with an engineering client that had been cleaning components by hand after moving away from solvent cleaning years ago. They found the process was laborious – with staff often spending an hour or two on cleaning parts to ensure oil and residue was removed from each component, and they were fully dry before use.

They began a contract manufacturing high-reliability, plated parts that were retaining a significant amount of grease and residue. In a bid to improve the cleaning quality and save time on the factory floor, they approached Fraser Technologies to look at alternative solutions. While this organisation had - quite rightly - moved away from old generation solvents, Fraser Technologies was able to introduce them to the new generation of solvents that have been developed specifically with the environment in mind and are far less harmful than comparable solutions.

One such product is Opteon™ SF80 from Chemours. SF80 has an ultralow global warming potential (GWP) of less than 2.5, unlike common F-gas solvents that can have a significantly higher GWP. SF80 is just as effective as these damaging competitor products – and in many cases can be even more efficient.

Installing one of our best-selling Solvent machines – which is compact, good value for money and extremely simple to use – along with SF80 has revolutionised their cleaning process. Parts are now consistently spotlessly clean, they can clean more at a time, and the process is complete in just minutes – with no need for rinsing or drying. They’ve found it to be less messy, more efficient, and it also has a positive impact on the team as it is silent and all enclosed, so a much safer and less distracting process.

In the current climate, all investments need to be able to demonstrate a return, but when it comes to cleaning, the return is literally clear to see. An efficient process saves time and money, while also ensuring quality – protecting the reputation of the business and keeping clients happy. When considering investing in cleaning – can any business afford not to?

For more information, please contact us:
Tel: 01506 443058 | E-mail: sales@frasertech.co.uk | www.frasertech.co.uk
How the IMF can help industry survive and invest through the current economic situation.

Although the current economic climate is not looking good for our industry, now is an ideal time to consider investing in the future and simultaneously get some of the paid taxes back! Through Government funding, it is possible to recover up to 70% and possibly 100% of eligible costs incurred from the research into new technologies, products and processes. It is also possible to get these grants for carrying out feasibility studies. This makes investment on our industry’s future very cheap and in some cases, free.

In mid 2020 the IMF became a partner in a very successful InnovateUK-funded project called ReGaIL; its objective was to determine the economic and technical feasibility of recovering gallium from LEDs. The project was successfully completed in August 2021 and was nominated for an award by the Surface Engineering Association (SEA).

The overall outcome for ReGaIL was very positive and all participating organisations had a minimum of 70% and some had 100% of their eligible costs met through an InnovateUK grant. The consortium is now seeking further funding opportunities so that ReGaIL’s outcomes can be commercialised.

The IMF is eager to again help its UK based business membership seek funding from InnovateUK and as a partner, will help to generate an application and when successful, will undertake the project management and any dissemination activities; this releases our membership from the tedious tasks of administration and allows the other members of any consortium or partnership to get on with the aspects they are good at – identifying, optimising and exploiting new processes, products or technologies.
Prospective funded projects can be as short as few months or as long as four years. There are numerous calls available, all with differing durations, terms and conditions. Many calls are for specific topics, although there are some that are open to any industrial sector. Once a call is open, it often has only a short period in which to submit an application, so it is a good idea to review what calls are coming up and start to identify any partners you may wish to include in the application; you can then start to put your application together and ready for submission.

InnovateUK is part of UKRI, which has a current budget of £7.9billion, of which £670million is specifically for InnovateUK; this will currently increase to £799million in 2023/24.

Further information about InnovateUK can be found at websites below:

www.ukri.org/about-us/innovate-uk/
www.ukri.org/apply-for-funding/
www.ukri.org/councils/innovate-uk/guidance-for-applicants/general-guidance/funding-opportunities/

Further details of how the IMF can help our membership apply for grants can be obtained from Trevor Crichton, via the IMF office.
Death of Mr Douglas Norton; Founder of Indestructible Paint

It is with deep sadness that we announce the passing of our father and founder of Indestructible Paint, Douglas Norton, in late September 2022.

Born on 19th August 1930, Doug developed a passion for paint and surface coatings when he was apprenticed at Llewellyn Ryland from 1948 to 1950. Doug was called up between 1950 to 1953 for National Service. Doug’s career progressed with Permoglaze between 1954 – 1956 at Tenbury Wells; from where he moved to Gittings & Hills Paint Company of Nechells, Birmingham. Gittings & Hills then became Ault & Wiborg, where his career progressed eventually becoming Chief Chemist; then Export Manager.

Ault & Wiborg closed their Birmingham branch circa. 1977; Doug was invited to move to London to the Perivale site but he did not wish to uproot his family.

With great pride, Doug opened the doors to Indestructible Paint on 4th July 1978 which Doug referred to as his “Independence Day “!

Thanks to his passion for surface coatings, his expertise and dedication to customer satisfaction, the company grew from a small, independent workshop in Birmingham’s Acocks Green, to become a leading supplier of high-performance, niche aerospace products for international customers. To add to Doug’s already impressive list of achievements, Doug was a Past President of the Birmingham Paint Varnish and Lacquer Club (B.P.V.L.C) and a proud member of OCCA, The Oil & Colour Chemists’ Association (of which one of the team at Indestructible is the Immediate Past President), having been a member for over 50 years, getting his 50-year Pin in 2016.

Doug’s pioneering legacy lives on in the wonderful team he developed at Indestructible Paint, his work at B.P.V.L.C, his wife Sue, children, family, and friends.

He will be greatly missed by all.
My previous two reports were dominated by a narrative of how we had been affected by the Covid19 pandemic, but I am happy to say that by and large those days seem to be behind us and life has, for the main part, returned to normal for most. Now, of course, we have the different challenges brought by spiralling energy and staff costs and high inflation. It seems likely, however, that the latter at least, will ease off in the first half of next year. During the past twelve months the activities of the Institute have continued in full operation. We have adapted from our old ways and learned new ones. Now, many of the regular meetings of the committees and the board are held in hybrid mode. This change is largely for the better, will continue and is facilitated both by our New Exeter House office and the modern networked capabilities in the meeting rooms.

During the closing weeks of last year, Helen and Karen were frantically preparing for the move of office from central Birmingham to New Exeter House in Coleshill. I am happy to say, as you will also see elsewhere in these reports, that this move is complete and has been both very successful and conducive to the activities of the Institute. The new offices are in a much more pleasant and accessible environment, offering a nicer working place and much more useable space for the activities of the IMF. This year we have hosted our first exams in the upstairs dedicated exam room, and this will continue.

At the end of last year, it was my sad duty to tell you about the loss of our Treasurer Nick Johnson. During this year we have sought to fill the position left by Nick and have been very fortunate in a new appointment. The management board of the IMF welcomes John Oliver as our new treasurer. John comes with many years of much-valued experience in the sector. Like many investment portfolios, the IMF’s has taken something of a beating from the markets...
recently, but our position is still very strong and with John’s guidance we are continually reviewing our investment policy in order to achieve the best returns for the IMF. The year of 2022 also brought another sad loss in the passing of our long-serving Queen Elizabeth. We joined in the celebrations for the proclamation of King Charles with a special cover for IMFormation.

During the year the IMF contributed to several external events and took a large stand at the Surface World 2022 exhibition (Birmingham NEC) for the first time since Covid. We hosted an evening event to raise awareness of the training and industry support that the IMF provides to its members. The days were busy, and the reception was well-attended and enjoyed. I am also pleased to report that the IMF website, is an up to date and dynamic source of news and information and is constantly refreshed with a vibrant series of webinars, technical presentations, and other resources.

The IMF continues to do well as a charitable Institute because of the willing and generous voluntary contributions from its groups, sections, officers and members as well as the dedicated staff. So I will take this opportunity to thank you for all your efforts throughout this year. Finally, as we look forward to another exciting and challenging year, I wish you all a very merry Christmas and a happy and productive 2023. Let us hope that it brings and end to Covid, conflict and high inflation.

Prof. Karl S. Ryder December 2022
The Annual General meeting of the Institute of Materials Finishing was held on the 8\textsuperscript{th} December 2022 at New Exeter House, Roman Way, 2 The Courtyard, Coleshill, Birmingham B46 1HQ.

After the general meet & greet Paul Lansdell opened the proceedings with the fire regulations and then introducing Karl Ryder our current president.

Karl introduced the first of our speakers, Harry Pemberton (PMD Chemicals) who gave a presentation on Trivalent Decorative Chrome. One of the old issues with trivalent chrome was the issue of colour and Harry informed us that their new process was almost identical to conventional hexavalent chrome and that the replenishment was by a single liquid additive rather than using solids as in some systems. This led to more consistent colour batch to batch. There was still the need for ion exchange to remove low level copper but could be run alongside the plating process. In agreement with PMD, Harry has said that he will give a webinar for the IMF so please look out for the announcement.

Our second speaker was Paul Holder from Indestructible Paints (IP) describing a case study in coating development for Chrome 6 free coatings for GT hot gas path components.

It has been difficult to find an alternative to Cr\textsuperscript{6+} coatings that will withstand the harsh high temperature environments of modern aero engines. Much work has been carried out at IP and they have now come up with an alternative that is completely Cr\textsuperscript{6+} free. The component is sprayed and heated to 1100\degree C to allow some diffusion of the material into the component the resultant test have proved that the coating can withstand the environment as good (if not better) than
the current $\text{Cr}^{6+}$ process. As before Paul has agreed to give a webinar on the subject so we will try to combine the two to produce an interesting evening.

Awards

**Canning’s Bi-centenary Medal**
(Sponsored by MacDermid Enthone)

This award is for the best practical papers published in the Bulletin section of Transactions.

Optimisation of PEO layers with incorporated nanoparticles

- R. Mann, V. Grman and W.E.G. Hansal. 99(1), 10

**Westinghouse Prize**
(Sponsored by IMF)

This award is for the best paper published in Transactions, that has shown the most valuable development in the science and practice of electrochemistry in general and electrodeposition in particular.

Unconventional pulse plating parameters for surface area measurement applications

J.-C. Puippe. 99(1), 17.

**Jim Kape Memorial Medal**

This is presented from time to time for a paper of significance in the field of aluminium or other light metal finishing and published in Transactions.

Comparative study of different surface treatments applied to Ti6Al4V parts produced by selective laser melting

Connie Sieff Memorial Award
This award is for meritorious service to the surface finishing industry internationally.
Ken Griffiths

Eddie Marlow Memorial Award
This award is for outstanding contribution to the education and training of people working in surface engineering.
Greg Payne

**Organic Award:** For the best coatings paper in Transactions.
Addev Materials Aerospace Ltd

Mechanical and tribological response of thin polymer coating filled with graphite powder and deposited on polymer substrate.
M. Abid, M. Boujelben, M. Kharrat and M. Dammak. P246.

**Examination High Achievement Prizes**

**Best Student at Foundation level:**
Ryan McGeory
Best Student at Technician level: Steven Dowdeswell

Silver Award
The award should be made to any member of the IMF who is deemed to have given extraordinary voluntary service to the IMF.
The Late Nick Johnson

Gold Medal
This award, the highest accolade given by the Institute, is presented from time to time for outstanding scientific or technical achievement relevant to the objectives of the Institute.

Graham Armstrong

After lunch our president Karl Ryder called for the approval of the minutes of the AGM 2021 and gave his report for the year 2021/22

This was followed by the secretary general Graham Armstrong who gave the Report of the Management Board for the year 2021/22

Our new Treasurer John Oliver gave the treasurer’s report giving an overall summary as to the financial position.

The conclusion of this section was given by Graham Armstrong who announced the names of Officers, Management Board Representatives, Standing Committee, Branch and Group Chairmen to serve for the 2021/22 Institute. This was followed by calling for the approval of the appointed Auditor for the current session.

If you wish to see the 2022 AGM reports please log onto www.materials-finishing.org / About the IMF/AGM/2022 AGM Management Board Reports
HMG Paints Sponsor Love Factory City of Champions in Manchester

Football’s Coming Home to HMG Paints this World Cup as the Manchester based Paint company sponsors a new community initiative in Collyhurst, the firms long term home. HMG Paints have sponsored a new project, City of Champions, during the 2022 World Cup. Schoolchildren from across North Manchester have marked England’s early World Cup success with an inspirational football-themed event at Manchester’s newest independent cultural venue, Love Factory.

Pupils from primary schools in Collyhurst were invited to take part in the ‘City of Champions’ event at the new 89,000 sq ft multi-purpose venue, which is hosting screenings of every England World Cup fixture during the tournament. Collyhurst has also been the home of HMG Paints, the UK’s leading independent paint manufacturer since they were formed in 1930.

The City of Champions event – other sponsors included Victoria North developer Far East Consortium (FEC) and contractor CRUK – saw young football enthusiasts receive free coaching sessions from UEFA-qualified coaches Football Kings, as well as inspirational talks from the founders of Classic Football Shirts and Miss Kick. The schools included in the City of Champions event were Saviours CofE Primary School, St Malachy’s Catholic Primary School and Abbott Community School.

“As a proud member of the Collyhurst community, we’re proud to support this great event” added John Falder, HMG Paints Chairman and Chair of Greater Manchester Academies Trust. “HMG Paints have a long history of working with local schools on projects and engaging with the community and we’re fully behind this great initiative. It’s great to see the Irk Valley becoming a hub not just for manufacturing innovation, but also for events that bring the community closer together.”

Having already hosted 1,300 fans for England’s opening game vs Iran on Monday, Love Factory World Cup 2022 will present an experiential programme of events inspired by the beautiful game, with matches
streamed live on three 200 sq ft screens. The Official Carling Fan Zone will combine live matches with unique exhibitions from Classic Football Shirts, interactive activities, street food vendors and exclusive hospitality.

Part of Manchester’s fast-changing New Town neighbourhood, the former Dantzic Warehouse has been leased by FEC to local creatives Connecting Dots Group. The new venue is just one of a number of sites being re-activated as part of FEC’s development of Victoria North – one of the UK’s largest urban regeneration projects, which will create 15,000 new homes in Manchester city centre over the next 10 years.

Olli Ryder, founder of Connecting the Dots, said: “We’re excited to bring this amazing space back into action for the city, with the World Cup acting as a great opportunity for people to see it for the first time. The site itself is uniquely steeped in the industrial history of Manchester, and will soon be home to an eclectic mix of high energy events, from food festivals and music events to exhibitions and theatre productions. With major broadcasters like Sky Sports already hosting events here, Love Factory is set to be a major addition to the city.”

Jake Scott-Thrale, asset manager at FEC, said: “It’s great to be working with Connecting the Dots on this initial activation and that we can use this building to bring together children from the various schools in the local community to learn more about the importance of sport in our wellbeing and how sport can connect people and communities”.

If you require further information on the press release, please contact:

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EXHIBITIONS

SURFACE WORLD LIVE
4th & 5th October 2023, NEC, Birmingham - we have everything covered

MACH 2024
15-19 April
NEC Birmingham UK
machexhibition.com

www.materials-finishing.org