Well, time has flown since the last IMFormation, so what has been happening at your Institute since the June 2020 edition?

This month’s edition is larger than usual and we welcome some newcomers as contributors and advertorial/advertisers. Enjoy this copy of IMFormation and have the best holiday you can have, probably at home.

New Website
Launching on 1st September 2020 there will be a new and revised IMF Website which will have lots of new pages including a “Members Area” which will allow members of the IMF to log in to extra material such as webinars, seminars and other useful information.

Next Distance Learning Course Start Date is 4th September 2020
You can enrol from the 1st August 2020
Contact karen@materialsfinishing.org

Institute of Materials Finishing
Exeter House, Birmingham B1 1NQ
Email— info@materialsfinishing.org
Website— www.materialsfinishing.org
Tel — 0044(0)121 6227387
IMF DIARY

4th SEPTEMBER 2020

Distance Learning Start Date
(but you can enrol from 1st AUGUST)

karen@materialsfinishing.org

UPCOMING WEBINARS

18th August 2020
Zinc, Zinc Alloy & Cadmium Plating

22nd September 2020
Plant & Equipment

20th October 2020
Principles of Electroplating

Everyone is invited and if you wish to attend, please contact John Burgess—
JohnB_IMF@btinternet.com

UPCOMING SEMINAR

7th October 2020.
Southern Branch Seminar
“Paint Applications”

This will be held via a “Zoom” meeting and anyone interested please contact
John Burgess (JohnB_IMF@btinternet.com) to obtain an invitation
I don’t know whether it is purely a factor of getting older, but here we are well into the second half of 2020, with no idea where the first seven months have gone. As I write this at the very end of July, I cannot help but reflect on the past 4 to 5 months of lockdown and where the time has gone. Having now been working from home since mid-March, having seen what we have had so far of summer through my office window, and with a significant birthday rapidly approaching, I cant help but think that before we know it, we’ll be welcoming 2021(and all that entails)! We can only hope that it will be a better year than this has been!

Its welcoming to live with a reduced lockdown, although recent events make me think we could return to the dark days of not going out? I personally have a couple of “day’s out” to look forward to in August, having a day’s training arranged in the labs at Indestructible and an actual face to face meeting with a client in their factory! The simple joy of being able to be away from the home office is immeasurable!

Whilst we have all been coping with zoom and other video conferencing systems, the world of materials finishing has been going on around us, and our friends in the European Commission have finally agreed the authorisation of chrome products.

First to receive the authorisation were the chrome salts covered by the CCST consortium and includes six chrome salts. In all cases the review period is 7 years. For Sodium Dichromate and Potassium Dichromate, both of which had a sunset date of September 21st, 2017, the review period as September 21st, 2024. For the other substances, including Strontium Chromate, the review period ends on January 22nd, 2026.

Secondly, but not before some political shenanigans’, an authorisation has now been granted for chromium trioxide. At the final hour, an objection to authorisation was raised by the German MEP’s belonging to the S&D party. The vote in the commission for the authorisation was carried only on the casting vote of the President! This does mean that use of chromium trioxide, in limited technology areas can continue until September 2024! There are now, certain obligations the downstream users of these chemicals, and products containing these chemicals must adhere to, to include reporting data from workers exposure measurements and air and wastewater monitoring to ECHA, under Art.66 of REACH. It may be worthwhile for members to check with their suppliers for more information on their obligations.

Whilst all this has been going on, we are still galloping towards the UK final exit from Europe, with, as I write, no signs of any trade agreements being finalised? Whilst this will mean we are no longer under the total control of European regulations, if we wish to continue to trade with clients within the EU, we still have to comply with regulations such as REACH. And then there’s UK REACH to consider, which as I understand it, will mirror EU REACH! As far as I’m aware UK REACH is not written in stone, and it’s not known when suppliers will have to register chemicals under this UK regulation, and how we will cope with our versions of SVHC’s and any necessary authorisations?

All a complete minefield, and not helped by the reduced communication with the relevant authorities due to the pandemic!

So with August approaching, I think many of you will be thinking more about holidays, so if you are going away, please enjoy yourselves, but remember, keep safe and well!

Graham Armstrong
July 30th, 2020.
A New Company

Armadillo Metal Coatings Ltd.

The Technology:

Armadillo has invented an electroplating bath additive that forms regular and well-dispersed deposits within the metal coating matrix.

The effect of the Armadillo additive:

**Impact:** Many industries, infrastructures and products are adversely affected by corrosion and tarnishing.

**Cost Advantage:** By decreasing corrosion, maintenance periods are extended and product lifecycles are longer, saving significant resources and budget.

**Effect:** Product life, quality and durability increased providing a competitive advantage.

Please direct all enquiries to:

Dr. Alex Nielsen
alex.nielsen@armadillomc.com
+44 (0)7975593821
https://armadillomc.com/

A cross-section of a metal coating incorporating the Armadillo technology

The additive comprises nano-containers carrying functional molecules that release under corrosive and erosive conditions to protect an entire metallic coating, right down to the substrate. Armadillo products are manufactured using non-toxic, environmentally friendly and cost-effective materials.
Surface Engineering Leadership Forum (SELF): Apprenticeship Standards.

Over the past 2 to 3 years, members of the Surface Engineering Leadership Forum team have been involved in several trailblazer groups, to help put together apprenticeship standards for engineers employed within the surface coatings and surface engineering disciplines.

These have included standards at various levels of proficiency, including levels 2, 3, 6 and 7. The first standard approved is at Master Degree level 7, where post graduate engineers will learn specialised skills particular to Surface Engineering and Coatings, Heat Treatments, and Surface Treatments with a specific emphasis on helping your business.

The introduction of these valuable new apprenticeship standards is fully supported by the Institute of Materials Finishing, along with many other key technology Institutes and Associations.

The first course meeting the level 7 standard is planned to commence in January 2021 and will be offered through Cranfield University. The delivery will consist of taught modules, group and individual project, case studies, to be followed by an end point assessment. Duration will be 30 months part time.

At the present time, in light of the Coronavirus situation, it has not yet been decided as to whether taught sessions will take place at the University or via electronic distance learning. In either case, sessions will be delivered by both senior academics and high-ranking professionals from industry. There will be plenty of time set aside for group discussions.

The full cost for this apprenticeship will be £17000, which can be funded through the Apprenticeship levy. However, of special interest to SME’s will be the option of co-investment; the Government pay 95% of the apprenticeship cost with the employer paying just £850.

Much of the work required will be able to be conducted within the apprentice’s workplace, and it is predicted this will take up about no more than 20% of their time. The individual case study will, almost certainly, involve a project within the employers’ organisation, so there will be immediate benefit to the business. Tools and techniques learnt whilst studying can, of course, also be immediately applied to your business.

The outcome of the apprenticeship will be a qualified engineer ready to help lead your company forward through digital manufacturing to become World Class.

More information can be obtained through contact with SELF, or the organisers at Cranfield University: Jeff Rao: J.Rao@cranfield.ac.uk; 01234 754185

Contact for Further Information: Graham Armstrong; Vice-Chairman, The Surface Engineering Leadership Forum (graham@indestructible.co.uk)
Gardens up and down the country are getting a colourful make-over thanks to Fence and Shed Paint from HMG Paints, the UK’s Largest Independent Paint Manufacturer. The new product which only launched in April has seen incredible demand from consumers and professionals who’ve utilised their time during the lockdown period to breathe new life into their gardens and homes.

Where previously decorators and homeowners have been limited to a select pallet of colours HMG Fence and Shed Paint is available in a virtually unlimited colour pallet. Thanks to HMG’s decorative partners such as Hemel Hempstead based TopDec Decorating Suppliers, customers have taken advantage of bespoke colour matching and next day delivery.

“Our customers have loved the Fence Paint and the choice of colours.” Commented Brian Green, Owner of TopDec Decorating Supplies. “Our close partnership with HMG has allowed us to also rapidly launch 4 new colours to the range including a Light Grey, Slate Grey, Forest Green and Prestwich Blue based on requests from our customers.”

The companies Essentials Colour Collection offers a great colour choice for decorators or home owners to choose from but HMG haven’t stopped there. The product is available in any RAL or British Standard colour and with HMG’s innovative UNIT mixing scheme virtually any decorative shade.

The Fence and Shed Paint offers a premium quality water-based, protective finish for use on roughly sawn wood and can be used on fences, sheds and other garden areas and furniture. The company’s new innovative water-based colourants provide excellent colour retention and weatherfastness to ensure the colour stays brighter for longer, as well as superior coverage meaning users get more value for their money. The Fence and Shed paint can be applied by brush, roller, or spray application. HMG Fence and Shed Paint is available for purchase at https://shop.hmgpaint.com and through distributor TopDec Decorating Supplies at their new high street location or via www.topdecbrush.co.uk.

Features and benefits

- Fast drying
- Water based
- Low Odour
- Safe to use around plants and pets
- Made in Britain

If you require further information on the press release, please contact:
Graciennne Ikin or Stephen Dyson
HMG Paints Communications
gikin@hmgpaint.com or sdyson@hmgpaint.com
0161 205 7631
Distance Learning

Our next start date for all Distance learning courses is 4th September 2020.

You may enrol from 1st August 2020.

Foundation Certificate in basic surface finishing

Choose a Technical block either Electroplating, Aerospace or Organic and then another 3 units of your choice, further details available on our website [http://www.materialsfinishing.org/education.htm](http://www.materialsfinishing.org/education.htm).

If you have already achieved the IMF Foundation Certificate why not enhance your skills further with one of our Technician Modules -

There are 8 modules to choose from:

- Principles of Electroplating
- Electroplating Practice
- Electroforming
- Paint, Lacquer & Varnish
- Powder Coating
- Automotive Surface Engineering
- Health, Safety & Environmental

If you pass two Technician modules* you would be eligible for the Award of Technician Certificate, this qualification is recognised by the Engineering Council.

*The Automotive and PLV modules cannot be chosen together towards receipt of a Technician Certificate.

For further details and costs please contact Karen Yates - [karen@materialsfinishing.org](mailto:karen@materialsfinishing.org)

Or telephone 0121 622 7387.
Brexit and its Effect on the UK Chemical Industry

We have to assume that the UK will finally leave the European Union as of the 1st January 2021. After the end of the transition period, EU legislation will no longer apply to the UK.

So, what will happen with any REACH registrations and authorisations held by UK companies? It is planned that UK REACH will go ahead on the 1st January 2021.

It is understood that these EU REACH registrations and authorisations will be automatically transferred (Grandfathered) from the EU to the UK system, and that there will be no fee.

There are likely to be legal problems, including costs, in obtaining all the data held by ECHA from the original evaluations, so that these can be incorporated into the UK system. This is likely to apply even to UK companies who are part of a relevant consortia.

UK REACH legislation involves a two-stage process under which companies are required to provide information to the Health & Safety Executive (HSE) to support “Grandfathered” EU registrations:

Within 120 days, UK companies with EU registrations will have to notify the HSE, to provide basic data to include company name; company details; substances registered, and quantities produced, together with evidence of the existing ECHA registration.

Within 2 years, such companies would need to submit full information to support the registration, to include data on the properties of the substance and its safety. The data required would be as needed for EU REACH.

There will be new registration obligations for companies importing chemicals from the EEA into the UK under the new UK REACH regime. Previously whilst the UK was within the EEA, the movement of chemicals was within the single market.
A different timeframe for notification is therefore provided for such importation:

Within 180 days, companies would be required to notify the HSE of the substances imported from the EEA, to include basic information on the substance and its safe use.

Within 2 years, it will be necessary to provide a full information package to support the registration.

**Authorisations**

Where completed implementation decisions and/or legal documents have been signed, which have been put into the EU legislation/published in the official journal, then these will be passed into UK law.

However, under the UK REACH statutory instrument (SI) and the withdrawal bill, any authorisation application still going through AfA’s under evaluation will not be recognised under UK law.

If your company holds or is covered by a REACH authorisation for certain uses of an Annex XIV substance, then the conditions of this authorisation no longer apply. Authorisations granted to UK companies will no longer exist.

A UK company can transfer its authorisation to an EU based “Only Representative”, to continue use of the substance within Europe. The transfer must be notified as soon as possible in REACH-IT.

A series of “Readiness Notices” have been published on the EC website, which include how EU REACH registrations with work after 31st December 2020 between the EU, UK and NI. These notices can be found at: https://ec.europa.eu/info/european-union-and-united-kingdom-forging-new-partnerships/future-partnership/getting-ready-end-transition-period

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The vast expertise and experience in some of the most challenging environments that has underpinned the success of performance painting and coating specialists, Indestructible Paint Ltd., is now being applied directly to the rail industry. The Birmingham-based company has created a dedicated operating department to bring its coating systems to a range of rail sector applications— from rolling stock to track and station infrastructure.

Mike Booth, who has a comprehensive background in the market, is now Rail Product Specialist at the company and highlights key factors that enable customers in the rail sector to optimise their painting and coating operations.

“Because Indestructible Paint has long operated in demanding sectors such as the aerospace and offshore industries, we have not only developed a range of products that meet many of the needs within the rail sector but we can also provide a highly experienced and focused research and development capability,” he says. He points out that this enables the company to work closely with customers to develop, test and supply coating systems that match precise operational needs. “Importantly,” adds Mike Booth, “we are able to do so in quantities and order patterns that can be tailored to each customer’s exact requirements.”

Indestructible Paint points to a range of coating product examples which are already bringing gains to its rail industry customers. With rolling stock, for example, these encompass both undercarriage and livery applications that meet performance, protection and aesthetic objectives.

“Our RWIP120 coating system is a prime example,” continues Mike Booth. “Fully compliant with CR/PE0102 Repainting of Rail Vehicles specification, it offers a range of performance benefits and, significantly, is available as either a one or two coat system.

Undercarriage coating objectives can often be achieved by the use of the system as a single 120 micron primer/finish coating,” explains Mike Booth, “particularly as there are no specific aesthetic considerations while, in other areas, it can com-
prise a separate 60 micron primer with an additional 60 micron finish coat. Where appropriate, it can also then be over-coated with other Indestructible Paint finishes, epoxies and polyurethanes while customer needs can be further met by a choice of colours in a matt, semi-matt, semi-gloss or gloss finish.”

He says that RWIP120 has been proven on a range of substrates, many of which are a common feature in the rail sector. These include steel, aluminium, galvanised and composite surfaces which all gain from the composition of the epoxy and its chemical bonding characteristics.

The performance capability of the RWIP120 range covers a long list of challenges faced by rail operators. From impact, chip and scratch resistance to the ability to withstand high humidity environments, all are key benefits as are proven resistance to abrasion, salt spray and wash plant operations.

The commitment to developing coatings to meet exact requirements is further demonstrated by two associated systems – RWIP1000, a single component water-based intumescent coating developed to enhance fire resistance on timber flooring inside the carriage, and RWIP3000, a two component epoxy-based air drying or forced drying intumescent coating which has been developed to provide enhanced fire resistance for metallic, timber and composite substrates. Both products have been specially developed for use in the rail industry on vehicle components and civil installations and both are particularly resistant to high air movement while maintaining excellent adhesion after they have intumesced.

Other examples of products that offer key gains in the rail sector range from RWIPAPF – a high quality alkyd primer finish coat which delivers excellent corrosion and weather resistance – to RWThin, which provides a cleaner and thinner performance for both greasy and corrosion protected parts.

“There is a clear link between our methods and technology and the ongoing build and maintenance needs of the rail operating field,” adds Brian Norton, Indestructible Paint’s Managing Director. “By applying experience and methodology that has enabled us to work closely with major global manufacturers in fields such as aerospace, we are confident that we will be able to bring important performance, cost and safety benefits to the full list of rail industry organisations.”
UPCOMING EXHIBITIONS

ADVANCED ENGINEERING 2020
4 & 5 November 2020 | NEC, Birmingham

SURFACE WORLD LIVE
SUPPORTED BY THE INSTITUTE OF MATERIALS FINISHING - we have everything covered
Revised dates: 24th & 25th February 2021, NEC, Birmingham

SURFEX
The complete event for surface & coatings technology
EXHIBITION INDUSTRY INSIGHT SURFACING SCIENCE TECHFOCUS THE CUTTING EDGE 8-9 June 2021
Ricoh Arena, Coventry, UK

NEW DATES
MACH 2021
25-28 January
NEC Birmingham UK
machexhibition.com