

# IMFORMATION &

### A NIGHT WITH "ALI"

A Southern Branch Seminar held at The Churchillian

— Portsdown, Portsmouth 3rd October 2019 —





YOUR INDUSTRY UNDER ONE ROOF OVER TWO DAYS SURFACE WORLD LIVE 2020 18th & 19th MARCH 2020 HALL 11, NEC, BIRMINGHAM, UK



The Neptune MI Electric Immersion heater is the newest addition to the Polaris range of Heaters



• STAINLESS STEEL, TEFLON OR TITANIUM
• LOW WATT DENSITY • SINGLE OR THREE PHASE

Contact our Sales team on: 01252 876123 • sales@braude.co.uk

MODULAR POPULAR CYLINDRICAL NEPTUNE

www.braude.co.uk

### NEXT ENROLMENT DATE FOR TRAINING COURSES IS 24th January 2020

Contact Karen Yates
Tel 0121 622 7387
Email: karen@materialsfinishing.org

# IMF DIARY

30TH, 31ST OCTOBER 2019
Advanced Engineering at the NEC

28TH NOVEMBER 2019
AGM Cobden Hotel Birmingham

24TH JANUARY 2020 Enrolment for Distance Learning

18TH, 19TH MARCH 2020 Surface World Hall 11 NEC

### **WEBINAR**

7TH NOVEMBER 2019
"Pumps And Filters And All You Need To
Know About Them"
Robert Sawyer, Serfilco



The latest technology in Plating and Lacquer Processes

Contact Paul Griffiths Schloetter Co. Ltd New Road Pershore,Worcs, UK WR10 1BY T: +44(0)1386 552331 F: +44 (0)1386 556864 Email: sales@schloetter.co.uk

www.schloetter.co.uk

#### FINAL REMINDER

Please note that if you have not paid membership fees by the 31st October you will no longer receive IMFormation or Transactions.

#### SECRETARY GENERAL'S COLUMN OCTOBER 2019



My apologies to all for the delay in your receiving this month's edition of IMformation; this is due to my delaying putting together this column so I could be as "up to date" on the position of "Brexit".

Having been on holiday with two weeks completely free from the ongoing turmoil, I felt that I needed to at least "get a feel" for where we all are. Having listened to the events on Saturday 19th October, I honestly can't believe that our supposed elected representatives can be so obstreperous. I don't think any of this rabble fully understand how their shenanigans are affecting all business in the UK. In my opinion, we are becoming the laughingstock of not only Europe, but probably the world.

So, no doubt when we all read this issue of IMFormation the situation will have changed: will we be in or out of Europe, or will there be another fudge with a further extension to prolong our agony? We must, however, try to continue with our lives, both working and personal, without letting this continuing saga totally destroy us!!

We are looking forward to an exciting Annual General Meeting in late November, again to be held at the Cobden Hotel, on the Hagley Road in Birmingham. You will have already received the calling notice and agenda from Helen, but at that time we weren't able to advise of the speakers for the morning presentations.

I can now confirm that we have a talk from the Deputy Mayor of the West Midlands, Cllr Bob Sleigh, who will give us an insight into preparations for the Commonwealth Games to be held within Birmingham and the West Midlands in 2022. Additionally, he will be able to give an update on continuing work with HS2, which will deliver transport benefits to large parts of England.

Our second presentation with be by Ellen Daniels, Head of Public Affairs and Policy at the British Coatings Federation. Ellen, speaking in her role as Chair and the Cross Sector Group, will give an update on the activities of the group, to include it's interface with Government departments, including DEFRA, BEIS and the HSE, on REACH and manufacturing/environmental issues, and what business needs to consider when and if the UK leaves Europe.

I do hope that many of you will come along on the 28th November, as I'm sure you will find these presentations both interesting and informative.

This Annual General Meeting will see the end of our current President, Barry Gay's term of office, and will see the baton passed on to our new President for the next three years, Professor Karl Ryder. Karl will give an address highlighting his thoughts on where and how our Institute will progress over the next few years, and I look forward to working with Karl to move the Institute forward.

Can I ask therefore, if you haven't already done so, to return your confirmation of attendance to Helen at Exeter House, indicating your preferences for lunch!

In my last column, I noted that I planned to join the "trailblazer" group looking at updating a level 3 Apprenticeship, to include training in surface engineering and materials finishing. As part of the operational methodology of trailblazer groups, members must be drawn from Industry, so my involvement will be through Indestructible. Meetings are now underway, and I will report progress in my next column.

The Institute have long been associated with the Engineering Council, and successful completion of our technicians' certificate allows students to apply for "Eng Tech" qualification.

Our association with the Engineering Council is due for review, and a working team has been put together, comprising our new President, Karl Ryder, Chair of the Exam and Qualifications board, David Eastham, Chair of our Science group Trevor Crichton and myself. We are due to meet with auditors from the Engineering Council in January 2020, where we expect to receive a "clean bill of health" for the next 3 years.

I do hope to catch up with many of you at the Annual General Meeting in November, but in case I don't can I wish you all an early "compliments of the season".

**Graham Armstrong**October 2019

#### **AGENDA INSTITUTE OF MATERIALS FINISHING**

# AGENDA Institute of Materials Finishing AGM 2018-19 28th November 2019 Cobden Hotel, Hagley Road, Birmingham B16 9NZ

10:30	Registration - Coffee and biscuits				
10:45	Call to take seats for the start of the AGM.				
10:55	BC as Chairman of the AGM introduces GA and NJ and PL as MC for AGM - PL explains fire regulations and sets out the format for the morning				
11:00	Presentations – There will be two presentations; speakers and subjects to be confirmed.				
12.00	Awards				
12:30	PL announces closure of morning session and lunch; a short break before taking seats in the dining area.				
12.45	Take Your Seats for Luncheon				
12.55	The Grace by the Reverend Dr Margaret Farr				
13.00	Lunch				
14.30	BC requests Members to take their seats for the afternoon session and invites KR onto the top table.				
	<ol> <li>BC calls for approval of the minutes of the ACM held 27th November 2018.</li> <li>BC introduces the President's report for the year 2018/19</li> <li>CA introduces the Report of Management Board for the year 2018/19</li> <li>NJ introduces the Statement of Accounts for the year 2018/19</li> <li>BC officially stands down as President and conducts the inauguration of the New President Prof. K Ryder.</li> <li>KR calls for the Ratification of the Secretary General and Treasurer for 2019/20</li> <li>GA announces the names of Officers, Management Board Representatives,         <ul> <li>Standing Committee, Branch and Group Chairmen to serve for the 2019/20 Institute year.</li> </ul> </li> <li>GA calls for the approval of the appointed Auditor for the current session.</li> <li>New President's Address</li> <li>AOB Meeting closes</li> </ol>				

BG-B Gay, GA - G Armstrong, NJ- N Johnson PL-P Lansdell





Leading world supplier of advanced surface treatment processes and products

#### **ATOTECH UK LTD**

William Street
West Bromwich, B70 OBE
Tel: 0121 606 7777 Fax: 0121 606 7200



FIRST FOR CHOICE

FIRST FOR VALUE

# PUMPS AND FILTERS

Siebec UK Ltd Unit 3 St Albans Rd, Stafford Staffs ST16 3DR

Tel: 01785 227700 Fax: 01785 246006

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

Anni

#### A NIGHT WITH "ALI" A SOUTHERN BRANCH SEMINAR HELD AT THE CI

The evening of 3rd October 2019 saw the Southern Branch of the IMF hold a seminar (in conjunction with the Welding Institute) entitled "A Night with "ALI"

This was our first venture to hold a seminar in conjunction with another Institute and from the many people that attended it proved to be very successful. The subject A Night with "ALI" was all about Aluminium and its alloys.



Our first speaker was Jan Lukaszewski from the Aluminium Federation (AIFED) who gave an overview of the origin of aluminium, today's use of aluminium and its predicted future growth.

Jan described the use of Aluminium in the automotive industry, the Construction industry, its physical properties such as electrical conductivity, thermal conductivity, non-magnetic and in the use of soundproofing.

Jan also talked about the ability of aluminium to alloy and described the different alloying materials and the effects that they have on the properties of the material.

Our next speaker was John Burgess who spoke about the "Electroplating of Aluminium".

John described the zincate process for plating aluminium, the importance of each stage of the operation and what to look for during each stage of the operation in order to achieve a successful finish.

The talk was broken down into a basic outline of the properties of aluminium, the preparation and pre-treatment, etching and the two different types of etch that can be used and the zincate process for laying down a thin zinc coating.



Our final speaker was Nigel Hastead from BOC who gave a talk on the Welding of Aluminium.

Nigel explained the difficulties in the welding of aluminium due to the tenacious oxide layer which is always present.

Nigel went on to talk about MIC welding (which is the most common method) and the use of an inert shielding gas such as argon, helium or a mixture. The reason for this is down to the fact that aluminium is very reactive to oxygen and this has to be kept away from the aluminium in order to prevent its formation and ruining the weld joint.

Nigel discussed the types of equipment that should be used, the various filler metals available in order to produce the weld joint and the array of shielding gases that can be used which BOC supply.

He concluded with some of the problems that can be thrown up during the welding operation and what the welder should look out for and how to overcome them.

The event also had Hitachi there who were demonstrating their latest thickness testing equipment which seemed to attract a lot of interest.

### HURCHILLIAN, PORTSDOWN, PORTSMOUTH 3RD OCTOBER 2019



The Churchillian laid on an array of sandwiches and there was also a bar available.

All in all we felt that the evening was a success and are now in the process of sorting next year's meetings.



If you would like to be able to look at the papers that were given in their entirety, then these are available through the following link which can be copied and pasted into a web browser.

https://www.youtube.com/channel/UCal3E2uHfSRpiKjZ5iXZATw?view

John Burgess

### For Salt Spray Corrosion Testing & Chemical Analysis

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





## PRECIOUS METAL RECLAMATION SPECIALISTS

Contact Paul Johnson to discuss your requirements (01327) 260581 • paul@pcm-ltd.co.uk

www.pcm-ltd.co.uk

# Innovative Measurement Technology

Fischer instruments; for when trueness, precision and reliability are essential.

#### For more information, call 01590 684100

Coating Thickness

Microhardness

www.fischergb.co.uk info@fischergb.co.uk

Material Analysis

Material Testing



#### IMF GETS THEIR OWN YOUTUBE CHANNEL



**MEETS** 



# THE INSTITUTE OF MATERIALS FINISHING NOW HAS ITS OWN YOUTUBE CHANNEL

The Channel will show Webinars that have been transmitted and also seminar presentations from events.

Presently there are papers from the "Night with Ali" seminar held on 3rd October in Portsmouth and also Webinars "Corrosion"

"The use of Paint for Corrosion Protection"
"The Hull Cell – The Plater's Friend"
There is also a video on the Hull Cell.

As time goes on the IMF will be adding to these and it is hoped that some of the videos will be beneficial to our students taking the courses offered by the Institute.

To access the Channel please copy and paste into your browser the link below: https://www.youtube.com/channel/UCal3E2uHfSRpiKjZ5iXZATw?view=

#### **BREXIT READINESS SUPPORT FROM BEIS**



You and your colleagues are invited to a special Brexit Readiness Briefing with officials from the Department of Business, Energy and Industrial Strategy (BEIS).

Our colleagues at the Aluminium Federation will be hosting BEIS at the Advanced Engineering Show on 30 and 31 October. Throughout the day, officials will be giving free consultations where they answer your technical questions about Brexit.

### Take advantage of this unique opportunity to discuss company-specific Brexit questions

Key areas to consider are:

- Importing and exporting using your EORI number, managing customs declarations, understanding applicable tariffs, and dealing with EU customers to determine where tariff liabilities lie.
- Regulation and compliance including REACH registration validity, quality testing and marking
- Employment managing your EU workforce and understanding the settlement scheme
- Personal data ensuring you have the right contractual cover for transferring personal data to and from the EU
- Access to funding including how Brexit affects grants and financing
- Intellectual property protecting your IP in EU markets after Brexit

#### Secure your place at a free Brexit Readiness Briefing

- When: 30 October (9am 5pm) and 31 October (9am 4pm)
- Where: NEC Birmingham, Stand J82e (Aluminium Pavilion)

There are 2 steps you need to take to secure your place:

- Register for your free Brexit Readiness Briefing this gets you a slot to meet with Government officials
- Get your free Advanced Engineering Show delegate pass – this gains you entry to the show itself and comes from the show organisers

BEIS and the Aluminium Federation will also be speaking as part of the seminar programme each day about Brexit and how the Covernment is building relationships with business. The Aluminium Federation has received Covernment funding to help companies prepare for a no-deal Brexit. They're working with us and the wider business community to ensure you have the support you need. If you have any questions, please contact me t\_jones@alfed.org.uk.

