

## **E-Newsletter**

Issue February 2017 <a href="http://www.efcweb.org">http://www.efcweb.org</a>

Dear Fellow Corrosionists,

There is so much going on in the EFC that we have had to produce an extra electronic newsletter!. This one includes information on the recently made changes to the leadership of the organisation. The new President, Damien Féron has written a letter outlining his vision for the two years of his presidency. We also have information about him, the new Vice-President, Arjan Mol and the new chair of STAC, Wolfram Fürbeth. Also there are facts about forthcoming events e.g. those whose deadlines are before April including EUROCORR 2017 in Prague (Sept 3<sup>rd</sup>-7<sup>th</sup>) being combined this year with the 20<sup>th</sup> ICC and the Process Safety Congress. There are a couple of reports on recent meetings and there is some news from working parties. Note that the World Corrosion Day (24<sup>th</sup> April) newsletter will still be issued. If receiving this interim one catalyses you into action to give us reports on previous meetings and/or information about upcoming meetings then it will have served a useful dual purpose!

I hope you find this newsletter interesting and informative.

Regards

Douglas Mills

**EFC Newsletter Editor** 

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## A FEW WORDS FROM THE PRESIDENT

To all the members of the European Federation of Corrosion

## Dear members,

As the new President of the European Federation of Corrosion, it is both a great honour and a great pleasure for me to follow in the footsteps of Professor Fatima Montemor. The EFC is an original, interesting, effective and efficient organisation, which I hope to be instrumental in developing into one of the largest corrosion organisations in the world. The creation of EFC branches, a major initiative which was launched by our former President, is now in our statutes, having been approved during the last General Assembly at Montpellier in September 2016. This initiative must be actively pursued and the EFC branches should be proactive in promoting the EFC worldwide.



Last year, the EFC also launched the "Young EFC" network and implemented the "EUROCORR Young Scientist Grant". These initiatives will be continued and improved to make the EFC more and more attractive to the younger generation.

The 20 active working parties (WPs) form the backbone of our Federation, being responsible for most of the scientific and technical work covering a wide range of corrosion topics and issues. I would like to express my support and appreciation to the WP chairs. The coordination of their activities is the responsibility of the Scientific and Technical Advisory Committee (STAC). My sincere thanks to Prof Arjan Mol for having successfully carried out the responsibilities of STAC Chairman for the last three years, for his actions towards the younger generations and for agreeing to serve the EFC now as Vice-President. All my encouragement and thanks to Dr-Ing Wolfram Fürbeth for his kind agreement to act as STAC Chairman for the next three years. It is a great challenge and a fine opportunity to consolidate and to galvanise the European corrosion community under our Federation which serves as an interactive platform providing scientific and technological knowledge, exchanges, cooperation and collaboration.

The administration and management of the EFC are the responsibility of the Board of Administrators (BoA). Administrators were (re)elected and (re)nominated last September by the General Assembly for the next three year term of office. Willingly and freely, they give their time to support, improve and change (if needed) the EFC policy, process and organisation.

The role of BoA is most critical in keeping a close eye on the future to ensure any necessary changes. I am confident in acting upon their informed support and advice.

The EFC needs a secretariat to carry out the daily work: there are three offices, strategically located in Frankfurt, London and Paris: so the EFC is truly a European Federation! Each of the offices has its specific tasks. One must first and foremost acknowledge the significant in-kind support provided by DECHEMA, IOM<sup>3</sup> and FFC in the past. Our thanks must be expressed to all of them. Due mainly to changes in the European legislation, some works realised practically free of charge by these three founding member societies are no longer possible. This will cause some financial pressures and may lead to better practice and, with the help of the BoA, to some developments and new solutions.

The EFC is a society of societies: I would like to express my gratitude to the European and International member societies and to the Affiliate members. They provide the basis and the support of the Federation. The dynamic and powerful mix of science and technology within our Federation is a significant benefit for our member societies and affiliate organisations and also for you as an individual member of your national corrosion society. Other services are given by the EFC, such as reduced fees for EFC congress or workshops and discount rates for EFC publications.

The heart of the EFC beats strongly due to active volunteers (WP chairs, STAC and BoA elected members, STAC chairman, Vice and Past Presidents) who devote their time and talent for the Federation. The business of the EFC continues thanks to the highly professional people working in its three offices and their commitment to EFC matters (Julija Bugajeva, EFC Honorary Treasurer, Marcel Roche and Pascale Bridou Buffet, Willi Meier, Ines Honndorf and many others). I would like to express my thanks to all of them. With their help and support, and with the efforts of Roman Bender, Scientific Secretary, and of Hélène Illaire, Managing Officer, I look forward to these two coming years with confidence. Nothing could be done without their generosity.

In conclusion, I invite you to be proactive on Corrosion Awareness Day (April 24<sup>th</sup>) and I am looking forward to meeting you in Prague at EUROCORR 2017 this coming September

Damien Féron

11th President of EFC (2017-2018)

#### WHO'S WHO

#### New EFC President, Vice-President and STAC Chairman

The start of 2017 has brought various changes to the leadership at the European Federation of Corrosion (EFC) with the appointment of the **Professor Damien Féron** as the new EFC President, **Professor Arjan Mol**, as the new EFC Vice-President, and **Priv.-Doz. Dr.-Ing. Wolfram Fürbeth**, in the position of STAC Chairman.

Damien Féron graduated in chemical engineering at the Institute of Chemical Engineering of Toulouse in 1976 and obtained his PhD in chemical engineering from the National Polytechnic Institute of Toulouse (1979). He was nominated Professor at the INSTN (National Institute for Nuclear Science and Technology) in 2010. He is Director of Research at the Nuclear Energy Division of the French alternative energies and atomic energy commission (CEA) since 2007. He has also been the Deputy Head of the "Service of Corrosion" (SCCME) since 2002 at CEA-Saclay. He was previously head of the Laboratory of Aqueous Corrosion (LECA /1998-2002) at CEA-Saclay and of the Laboratory of Physico-Chemistry and Corrosion (LPCC / 1994-1998) at CEA-Fontenay-aux-Roses, and deputy head of the Laboratory of Corrosion Technological Testing (LETC / 1985-1994) at CEA-La Hague. He has been working in the field of corrosion for nearly 40 years, starting with liquid metal and moving towards aqueous media (including seawater corrosion and microbial corrosion) and is more generally involved today in the various fields of nuclear corrosion (metals and alloys in aqueous and non-aqueous environments).

He owns six patents; he is the author or the co-author of around 70 articles in international scientific and technical journals and of more than 100 papers presented during national and international conferences. He has been Editor or Co-Editor of 20 books or special issues of journals (including 9 "green books" of the EFC series), mainly in the field of microbial corrosion, seawater corrosion and nuclear corrosion.

Damien Féron has been involved in the activities of the EFC Working Party on Marine Corrosion (WP 9) and of the EFC Working Party on Microbial Corrosion (WP 10). From 2003 to the end of 2016 he chaired EFC Working Party on Nuclear Corrosion (WP4). Furthermore, he was Chairman of the EFC Science and Technology Advisory Committee (STAC) between 2007 and 2013 and held the position of EFC Vice-President from 1 January 2015 to 31 December 2016.

**Arjan Mol** has been Associate Professor of 'Corrosion Technology and Electrochemistry' at the Materials Science and Engineering Department of Delft University of Technology, The Netherlands, since 2006. After finishing his MSc in Aerospace Engineering in 1996, he obtained his PhD at Delft University of Technology in 2000 on "The effect of microstructural inhomogeneities on filiform corrosion of aluminium alloys". In the period of 2000-2006 he was project and team leader at the Dutch Institute of Applied Scientific Research TNO in the area of lifetime performance of materials.

Nowadays he is research leader of several fundamental projects in the areas of local corrosion and electrochemistry, surface pretreatment, (de)adhesion of organic coatings, and performance evaluation of corrosion inhibitors and active protective coatings. Since 2010 Arjan Mol is also the Dutch Representative Member of the International Corrosion Council ICC and currently Member of the Editorial Boards of "Corrosion Engineering, Science and Technology", "Transactions of the Institute of Metal Finishing" and "Materials and Corrosion". Furthermore, he is the Chairman of Working Party 8 'Physicochemical Methods of Corrosion Testing' and a Member of the Science and Technology Advisory Committee (STAC) of the European Federation of Corrosion, and a Member of the Scientific Committee of the yearly European Corrosion Congress - EUROCORR. From 2014 to 2016 he held the position of STAC Chairman.

Wolfram Fürbeth got his Diploma in Chemistry from the University of Dortmund in 1992. He then went to the Max-Planck-Institute for Iron Research, Düsseldorf, to to start his corrosion career in the group of Martin Stratmann. In 1994 the group had to move to Erlangen where Stratmann took the chair for Corrosion and Surface Technology. There Wolfram Fürbeth finished his Ph.D in Materials Sciences in 1997 with a thesis about investigations on the delamination of polymeric coatings on galvanized steel surfaces. In the same year he joined DECHEMA as a research scientist, being appointed as head of the corrosion research group at DECHEMA-Forschungsinstitut in 2005. Finally in 2012 he completed his doctorate in materials technology at the Technical University of Aachen where he is giving lectures on corrosion and corrosion protection as well as surface technology. His doctoral thesis was about new ways of corrosion protection for metals using nanoparticulate coating systems and nano-scaled polymer films. Current research interests in his group are still focused on the area of new coating systems (nanoparticulate, self-healing, biopolymeric) as well as corrosion investigations with high local resolution (especially on light metals). Starting from March 2017 he has been appointed as a member of the Institute Directorate of DECHEMA-Forschungsinstitut. Concerning the scientific community, after being a member of the Scientific Advisory Board of the German Corrosion Society GfKORR for several years, Wolfram Fürbeth began to serve as head this year. In the EFC, Wolfram Fürbeth was Vice Chair of the Working Party Coatings, alongside Lorenzo Fedrizzi, from 2007 to 2012 and has been serving as its Chairman since 2012.

#### Appointment of BoA and STAC members for the next term of office

The members of the **Board of Administrators (BoA)** for the current three-year term of office (2017-2019) are *(in alphabetical order)*:

Ms Julija Bugajeva (Honorary Treasurer), United Kingdom; Prof. Joao Salvador Fernandes, Portugal; Prof. Damien Féron (EFC President) France; Dr. Gareth Hinds, United Kingdom; Dr.Eng. Agnieszka Kròlikowska, Poland; Prof. Philippe Marcus, France; Prof. Willi Meier, Germany; Prof. Arjan Mol (EFC Vice-President), The Netherlands; Prof. Fatima Montemor (EFC Past President), Portugal; Prof. Alexander V. Muradov, Russia; Prof. Marie-Georges Olivier, Belgium; Prof. Tomáš Prošek, Czech Republic; Prof. Edoardo Proverbio, Italy; Mr. Marcel Roche, France; Prof. Tamás István Török, Hungary; Dr. Jörg Vogelsang, Switzerland.

The elected members of the **Science and Technology Advisory Committee (STAC)** for the current three-year term of office (2017-2019) are *(in alphabetical order)*:

Prof. Ralf Feser, Germany; Mr. Don Harrop, United Kingdom; Mr. Marcel Roche, Paris, France; Prof. Alda Simoes, Portugal; Prof. Tamás István Török, Hungary, Prof. Tunc Tüken, Turkey.

All Working Party Chairs are members of the STAC with the same rights as elected members.

EFC Administration: http://efcweb.org/Administration.html

## EUROCORR 2017 & 20<sup>TH</sup> ICC & PROCESS SAFETY CONGRESS 2017

# Joint EUROCORR 2017 & 20<sup>th</sup> ICC and Process Safety Congress 2017 3<sup>rd</sup> to 7<sup>th</sup> September 2017 in Prague, Czech Republic



Theme: Corrosion Control for Safer Living

Organised on behalf of EFC and ICC by the Czech Association of Corrosion Engineers (AKI) and DECHEMA e.V., in cooperation with the Center of Chemical Process Safety (CCPS) at the Prague Congress Centre.

## EUROCORR 2017 & 20th ICC

This has attracted great interest and, by the closing date for submission of abstracts, more than **1,000** had been submitted. This is the highest number of abstracts ever reached. Many thanks to all authors for their contributions.

**Plenary Lecturers** will be: Tetsuo Shoji, Japan; Ivan Cole, Australia; John R. Scully, USA; Arne Leetz, Czech Republic.

#### Important dates:

31 May 2017 - Deadline for early registration

20 June 2017 - Deadline for submission of full manuscripts

Online registration will open on 10 February 2017.

#### **Process Safety Congress 2017**

**Topics:** Process Safety Case Studies and Lessons Learned; Process Safety Leadership and Culture; Process Safety Integrity Management; Human Factors Analysis; Hazard identification and risk analysis/management; Process Safety Management Implementation; Special emphasis will be given to sharing process safety learning from corrosion in the Process Industries.

#### Please submit your abstract **HERE**.

The deadline has been extended to 10 April 2017.

#### **Exhibition & Sponsorship:**

The Joint EUROCORR 2017, 20<sup>th</sup> ICC & Process Safety Congress is a unique opportunity for companies and organizations to present their products, services and the latest developments in the fields of corrosion science, electrochemical methods, surface analysis, spectroscopy and microscopy, corrosion monitoring, non-destructive testing and corrosion protection by means of coatings, advanced corrosion resistant materials, inhibitors, electrochemical ways of protection, and others. Furthermore, various sponsorship opportunities are offered which guarantee a maximum visibility, promotion of your services and products, and efficient communication with current and new partners.

For further information on the exhibition, please visit: <a href="http://www.prague-corrosion-2017.com/sponsors/exhibition/">http://www.prague-corrosion-2017.com/sponsors/exhibition/</a> For information on sponsorship opportunities, see <a href="http://www.prague-corrosion-2017.com/sponsors/">http://www.prague-corrosion-2017.com/sponsors/exhibition/</a>

For further information concerning EUROCORR 2017, 20<sup>th</sup> ICC & Process Safety Congress, please visit the congress website at: <a href="http://www.prague-corrosion-2017.com">http://www.prague-corrosion-2017.com</a>

## **EUROCORR Young Scientist Grant**

At EUROCORR 2017, the EUROCORR Young Scientist Grant will be presented for the second time. The grant will provide financial support to junior corrosionists to enable them to visit and interact with other corrosionists at their respective institutes and to discuss research issues of mutual concern relevant to the field. Each EUROCORR Young Scientist Grant recipient will be given the opportunity to present a brief outcome of the research visit at the EUROCORR 2017 Conference. The Deadline for submission of applications is 1 March 2017.

For further details, see: http://efcweb.org/EUROCORR+Young+Scientist+Grant.html

### **NEW MEMBERS**

#### The EFC welcomes on board its newest Affiliate Members (since January 2017):

## • Egyptian Petroleum Research Institute (EPRI), Nasr City, Cairo, Egypt

The Egyptian Petroleum Research Institute, EPRI, is a governmental organization founded by the Presidential Decree 541 of the year 1974, under the umbrella of the Ministry of Scientific Research and Technology, to develop studies & applications within the Petroleum sector and to find solutions to both long and short term technical problems. Its R&D activities are supported by state of the art facilities and include analytical service, technical consultation, training programs, technical inspection, production of local oil field chemicals as a replacement for imported ones and solution for environmental problems.

Website: http://www.epri.sci.eq

## Magna International Pte Ltd., Singapore

Vappro-CRI products have been developed by Magna to combat corrosion, rehabilitate and repair concrete structures. Vappro Preservation Solution: Vappro's system employs the most effective and latest technology in corrosion prevention for protective storage. In technical terms, the system is based on "temporary" corrosion inhibitors -- inhibitors that can easily be removed while providing extended protection for indoor or outdoor storage of both exterior and interior surfaces of equipment for predetermined time intervals.

Website: http://www.vapprovci.com

## **EFC Membership Enquiries**

For European, international and Affiliate EFC membership inquiries please contact the EFC Frankfurt office (<a href="https://encount.com/honndorf@dechema.de">honndorf@dechema.de</a>). EFC Members include European and Non-European national corrosion societies, research institutes, universities, and private and public entities. Further details and application forms are available at: <a href="https://efcweb.org/EFC+Membership.html">https://efcweb.org/EFC+Membership.html</a>

For a listing of current EFC Member Societies and Affiliate Members, go to the EFC website at: <a href="http://www.efcweb.org/Who+we+are">http://www.efcweb.org/Who+we+are</a>

#### **NEWS FROM WORKING PARTIES AND TASK FORCES**

#### **Changes of Chairmanship**

On 1 January 2017, **Stefan Ritter**, Paul Scherrer Institut, Nuclear Energy and Safety Research Department, Lab for Nuclear Materials, Villigen PSI, Switzerland, succeeded Prof. Damien Féron in the position of Chair of the EFC Working Party on Nuclear Corrosion (WP 4). The mission of WP 4 is: (1) To provide links between European teams and EU-funded programs in the nuclear corrosion field, with an opening on to the world; (2) To initiate and stimulate opportunities of exchange of scientific and technical subjects related to nuclear corrosion, particularly on today's main nuclear research areas (waste systems, water reactors, generation IV and fusion reactors); (3) To promote corrosion science and technical developments through events such as seminars, workshops, publications, etc. >> more...

In September 2016, **PD Dr. Mathias Galetz**, DECHEMA-Forschungsinstitut, Frankfurt am Main, Germany, was elected as the new Chair of the EFC Working Party on Corrosion by Hot Gases and Combustion Products (WP 3). He succeeds Prof. Michael Schütze, who held the position for eighteen years. The mission of WP 3 is to develop tools for a more precise assessment of high temperature corrosion resistance and for lifetime prediction of materials and components under high temperature conditions. **>> more...** 

Also in September 2016, **Prof. Dr.-Ing. Daniela Zander**, Foundry Institute (GI), RWTH Aachen University, Aachen, Germany, succeeded Prof. Andreas Heyn in the position of Chair of the EFC Working Party on Education (WP 7). The Working Party on Corrosion Education encourage all colleagues to actively participate in WP7 on to any of the topics listed below of which the corrosion scientific community should be aware: The state of corrosion education in their own country; Their own experiences with corrosion education; Introduction of corrosion courses; Introduction of corrosion groups; E-learning and other tools for spreading corrosion basics for students; Copyrights and today's usage of corrosion related media content. >> more...

#### Ongoing activities of working parties

To view the ongoing activities of all 20 of the EFC's working party corrosion specialty areas, please go to the individual Working Party web pages on the EFC website at: http://www.efcweb.org/wp.html

#### FORTHCOMING EFC EVENTS

25-28 April 2017, Billerbeck, Germany (EFC Event No. 420)

AETOC 2017 - 10<sup>th</sup> International Workshop on Application of Electrochemical Techniques to Organic Coatings AETOC deals with all the topics related to recent developments in the application of electrochemical techniques to the study and monitoring of coatings, including electrochemical investigations for the development of novel hybrid, silane, sol-gel or self-healing coating systems. The workshop is held under the auspices of the EFC Working Party Coatings. Website: http://www.gfkorr.de/aetoc2017.html

5-7 July 2017, University of Mons, Belgium (EFC Event No. 421)

#### SMT31 - 31<sup>st</sup> International Conference on Surface Modification Technologies

Topics of this conference are: Coatings synthesis and surface treatment: - Electro and electroless plating - Sol-gel coatings - Conversion coating, anodizing and electrolytic arc oxidation - Gas phase surface treatment - Thermal spraying, cold spraying and plasma-based surface modification - Surface modification of non-metallic materials. Website: http://www.umons.ac.be/smt31

22-27 July 2018, Cambridge, United Kingdom (EFC Event No. 418)

#### EMCR 2018 - Electrochemical Methods in Corrosion Research

The triennial conference covers all aspects of electrochemistry as applied to corrosion. Save the date!

9-13 September 2018, Krakow, Poland

#### **EUROCORR 2018**

Save the date!

9-13 September 2019, Seville, Spain

#### **EUROCORR 2019**

Save the date!

For full details of these and a complete listing of many other future corrosion events held in Europe and throughout the world, go to the EFC Calendar of Events at: <a href="http://www.efcweb.org/Events.html">http://www.efcweb.org/Events.html</a>

#### **EFC EVENT REPORT**

#### LongTermCorr 2016

#### an event of the European Federation of Corrosion (EFC Event No. 403) in Canada

by Damien Féron, Chairman of the Working Party on Nuclear Corrosion (EFC WP4)

Among the options considering how to deal with radioactive wastes, geological disposal is the internationally preferred method. Observing the degradation process and predicting the lifetime of the metallic barrier in a robust and reliable manner represents one of the greatest scientific and technical challenges for the manmade structures, since the required period for their integrity largely exceeds that of any industrial application. This issue was already explored during five previous successful workshops: Cadarache (France, 2001 - EFC Event No. 256), Nice (France, 2004 - in conjunction with EUROCORR 2004), Pennsylvania State University (USA, 2007 - EFC Event No. 301), Bruges (Belgium, 2010 - EFC Event No. 329) and Asahikawa (Japan, 2013 - EFC Event No. 360).

The 6<sup>th</sup> international workshop on long-term prediction of corrosion damage in nuclear waste systems (LongTermCorr 2016 or LTC2016 in short, EFC Event No. 403) took place in Toronto (Canada), from May 9 to May 12, 2016. It has been organized by the nuclear waste management organization (NWMO) of Canada. The local scientific committee included well-known Canadian scientists (David Shoesmith from Western U., Fraser King from Integrity Corrosion Consulting and Peter Keech from NWMO) and succeeded to gather more than 70 participants from 15 different countries for this workshop where 38 oral presentations and 30 posters were presented. A conference first, three students (Charly Carrière, Joseph Turnbull and Taylor Martino) were awarded prizes for their posters and invited to give oral presentations. The one-day technical tour to the NWMO facilities of Oakville (Ontario) was a part of the official workshop program. This technical tour included viewing of a Canadian transportation container and transportation vehicle, an Ontario power generation dry storage container, bentonite blocks fabricated via isostatic methods, the NWMO adobe brick maker, copper coated used fuel container prototypes, destructive test results from pressure testing, crushed laser weld rings, and much more. The visit of a full-scale demonstration facility for engineering barrier systems was very instructive and very well organized by the staff.

Following the NWMO tour, conferees proceeded to Niagara, where a short excursion to Niagara Falls was organised, prior to a conference networking opportunity and dinner at a local Ontario winery, the Trius Pavilion, of Peller Estates. The wines and landscapes were greatly enjoyed together with friendly exchanges and a warm atmosphere.

more...

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The statements and opinions expressed in the e-newsletter are those of the contributors and EFC assumes no responsibility for them.

## **Legal Notice**

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