EUROPEAN FEDERATION OF CORROSION

BOARD OF ADMINISTRATORS

Sevilla, Spain

September 9, 2019

WORKING PAPERS

WORKING PAPERS

Meeting of the Board of Administrators

of the

European Federation of Corrosion

Seville, Spain, September 9, 2019

Venue of meeting:	**Barceló Sevilla Renacimiento** Av. Álvaro Alonso Barba, s/n, 41092 Sevilla - Spain **Room Triana**
Date and time of meeting:	**Monday 9 September 2019** - **13h30**
Chairman:	**Prof. J.M.C. (Arjan) MOL (EFC President)**
Secretary:	**Mrs. Pascale Bridou Buffet (Paris Office)**

EUROPEAN FEDERATION OF CORROSION
MEETING OF THE BOARD OF ADMINISTRATORS
SEVILLE, 9 SEPTEMBER 2019

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EUROPEAN FEDERATION OF CORROSION
MEETING OF THE BOARD OF ADMINISTRATORS
SEVILLE, 9 SEPTEMBER 2019

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Item 9 International activities
- 9-1 Report on activities in the Middle-East (FM, FH)
- 9-2 NACE International: Task Force on EFC Strategy (GH)
- 9-3 Report on Activities in Singapore (HI or DF)
- 9-4 WCO (World Corrosion Organisation) (WM)
- 9-5 IUPAC (International Union of Pure and Applied Chemistry) (DF)
- 9-6 Possible Cooperations in Russia (DF, AM)

Item 10 EFC Events and Calendar of Events.
- 10-1 EFC China 2019 Conference, October 9-12 2019, Chongqing, China (TP)

Item 11 Any other Business (AM)

Item 12 Date and Place of next BoA (AM)

WORKING PAPERS OF THE EFC BOARD OF ADMINISTRATORS (BOA)

Item 1 Opening of the meeting

Prof. Arjan Mol, President of the EFC and Chairman of the meeting, will welcome the delegates.

Item 2 Apologies for Absence

Mrs. Pascale Bridou Buffet, Paris Office, will announce apologies received for absence.

Item 3 Approval of the Agenda and Adoption of the Minutes of the last Meeting

3-1 BoA members will be asked to approve the proposed agenda.

3-2 BoA members will be asked to approve the minutes of the Seville meeting (1st & 2nd April 2019) and to raise any issues not covered in the present agenda.

Item 4 Report on STAC Activities

4-1 Summary of the STAC Meeting

Dr. Wolfram Fürbeth, Chairman of STAC, will review the main progress of the STAC.

4-2 Nomination by the BoA of the BoA Jury Members for the Honorary Fellow Award

BoA Members will be invited to nominate the BoA Jury Members for the Honorary Fellow Award.

Item 5 Administrative Matters

5-1 Strategic Plan (AM)

The strategic plan was designed by the EFC Strategy Group when Michael Schütze was the President of EFC (2006-2008) and has been revised and updated when Prof. Philippe Marcus (2009-2011), Prof. Lorenzo Fedrizzi (2012-2014) and Prof. Fátima Montemor were the Presidents of the EFC.
The BoA Members will be reminded that the last revision of the Strategic Plan was established for the period 2015 – 2019 during the presidency of Prof. Fátima Montemor.

On the basis of the current activities of the EFC, an action was placed on the President Advisory Committee (PAC) Meeting, scheduled on 9 July 2019 in Paris, to consider the need of such a Strategic Plan and if so, to propose the period of application (i.e. 2020-2024) as well as updating guidelines and way(s) of achievement.
During this meeting, a Task Force EFC Strategic Plan 2020-2024 composed of the Scientific Secretary, Dr. Roman Bender, the STAC Chairman, Dr. Wolfram Fürbeth and lead by the Vice-President, Dr. Jörg Vogelsang has been set up.
A report will be presented at the next spring BoA Meeting.

5-1 EFC Digital Strategy (WM)

A reflection to proceed with a Digital Strategy for the EFC was initiated by Prof. Willi Meier during the BoA Meeting in Kraków on 28 March 2018.
He underlined the necessity for the EFC to review its communication strategy with the community and to update its digital tools, including especially the website and the digital tools for EUROCORR.
During this meeting, a Task Force has been set up composed with the Scientific Secretary, the Vice-President, the Managing Officer and a representative of the Young EFC, and led by Prof. Willi Meier.
During the BoA Meeting which took place on 9 September 2018 in Kraków, Prof. Willi Meier presented the architecture of the recommended project and the costs of such scheme if realised by the Frankfurt Office.
During the General Assembly Meeting which took place on 10 September 2018 in Kraków, the BoA was asked to consider different quotations realising a call for tender to obtain comparable quotations from others providers.
During the PAC Meeting (PACM) which took place in London on 26 November 2018, an action was placed on Prof. Willi Meier to circulate a document presenting the characteristics/specifications of the EFC Digital System to BoA Members and Young EFC, and to send IOM3 and CEFRACOR a document that will allow to ask for quotations from third-parties.
During the BoA Meeting which took place on 1st and 2nd April in Seville, Prof. Willi Meier underlined that before realising a call for tenders, it is necessary to identify the key persons of the EFC who will use and manage the website, and to implement a project group with those people in order to design the detailed specifications in regard of the needs of the EFC.
He suggested that this Working Group will be led by himself and composed of representatives of the German, London and UK Offices, the Managing Officer, the Scientific Secretary and the Chairman of the STAC, and a representative of the Young EFC.
He proposed that the document with the technical specifications designed by the Working Group will be finalised at the end of June 2019 to be sent out to some competitive providers.

Prof. Willi Meier will report on progress on the establishment of these technical specifications and the implementation of the EFC Digital Strategy.

5-3 Applications for EFC Membership (FO)

The Frankfurt Office will report on the result of the e-mail voting process regarding the application to join the EFC as Affiliate Member from CIDETEC Surface Engineering, see **Appendix 1**.

An application to join the EFC as Affiliate Member has been received recently from the company "Integrated Global Services" (see **Appendix 2**).
This company is specialised in on-site corrosion protection in the power and energy sectors.
They execute 100-150 projects each year, protecting internal surfaces of pressurised vessels and boilers with High Velocity Thermal Spray coatings.
Some of their solutions have been adopted and included in corporate standards by O&G and Power sector majors as a long-term corrosion prevention measure.
We look for knowledge exchange with key corrosion experts that could lead to the development of more effective corrosion protection materials, techniques and standards.

Members of BoA are invited to decide whether to recommend to the GA acceptance of the application to join EFC from this company.

The Frankfurt Office will also report on any other new application(s) to join the EFC and resignation(s), if any.

5-4 Elections to BoA

It is reminded that, according to Article 14 of the EFC Statutes:
"The BoA shall consist of a President and Vice-President as the most powerful executives of the Association, the Immediate Past President and twelve administrators all with full voting rights, supported by the *ex officio* offices of Treasurer and Scientific Secretary who have no voting rights. The twelve administrators shall be drawn from Member Societies of the Association in good standing as follows:

a. Four administrators, one each nominated by the three countries providing the General Secretariat offices (France, Germany and UK) and one from the country of registration in law (Belgium) of the Association;
b. A minimum of three elected administrators drawn from amongst European Member Societies in countries other than the countries providing the four administrators in (a);
c. Subject to satisfying (b), five elected administrators, drawn from amongst the EFC Member Societies at large, i.e. European and International Member Societies.

The four nominated administrators are subject to ratification by the General Assembly. The eight elected administrators are subject to election by the General Assembly.

Each Member Society can nominate one candidate for election in accordance with the above BoA composition with only one administrator from a Member Society sitting on the BoA at any one time.

The General Assembly shall endeavour to maintain on the BoA a balance between representatives of industry and academia.

All elected administrators shall serve on the BoA for a period of three years in the first instance. At the expiry of this term of office, they may seek re-election/nomination to serve for one further term (3 years). After that they are not eligible to stand as an administrator until a further term (3 years) has elapsed."

The Frankfurt Office has solicited nominations for election of the new BoA from the Member Societies. At the date of writing the present Working Papers, the responses received are as follows:

Administrators nominated by the three countries providing the General Secretariat Offices and from the country of registration in law:

Belgium	Prof. Marjorie OLIVIER, *to be confirmed* (Founder Member country)
France	Prof. Philippe MARCUS (Founder Member country)
Germany	Prof. Willi Meier (Founder Member country)
UK	Mr. Gareth HINDS (Founder Member country)

Nominated by European Member Societies drawn from European Members in countries other than the four administrators:

AIM (Italy)	Prof. Edoardo PROVERBIO (proposed for re-election)
AKI (Czech Republic)	Dr. Milan KOURIL (proposed for election)
CEFRACOR (France)	Mr. Marcel ROCHE (proposed for re-election)
DECHEMA and GfKORR (Germany)	Dr. Patrick KEIL (proposed for election)
Hungarian Corrosion Society (Hungary)	Dr. Bálint MEDGYES (proposed for election)
Polish Corrosion Society (Poland)	Dr. Eng. Agnieszka KRÓLIKOWSKA (proposed for re-election)
SPM (Portugal)	Prof. Mario G. S. FERREIRA (proposed for election)
Swiss Society for Surface Treatment	Dr. Patrik SCHMUTZ (proposed for election)

The CVs of the nominated persons received at the date of writing the present Working Papers are provided in alphabetic order in Appendices 3 - 10**.**

The BoA will be requested to submit the nominations to the General Assembly (GA) for approval and election.

The GA will be invited to elect up to eight individuals who have been proposed for election or re-election.

5-5 Elections to STAC

The Frankfurt Office has solicited nominations for STAC from the Members Societies. At the date of writing the present Working Papers, the responses received are as follows:

AIM (Italy)	Dr. Pierangela CRISTIANI (proposed for election, to be confirmed)
CEFRACOR (France)	Mr. Marcel ROCHE (proposed for re-election)
DECHEMA and GfKORR (Germany)	Prof.-Ing. Ralf FESER (proposed for re-election)
Hungarian Corrosion Society (Hungary)	Dr. Bálint MEDGYES (proposed for election)
ANTIKOR (Russia)	Prof. Alexander V. MURADOV (proposed for election)

The CVs of Prof.-Ing. Ralf FESER and Prof. Alexander V. MURADOV are provided respectively in **Appendices 11 and 12**.

The BoA will be requested to submit the nominations to the GA for approval and election. The maximum number of elected representatives to the STAC is 6. The GA will be invited to elect up to six representatives of the individuals who have been proposed for election or re-election.

It is reminded that the STAC also includes all the Working Party Chairmen as full members with voting rights.

5-6 Elected Membership

In accordance with the EFC Bye-Laws, six members of the STAC are elected by the GA. However, in practice, their possible contribution to the STAC activities is not always used to its full potential and they put a burden on the yearly EUROCORR budget as they have complimentary registration. The election of STAC members (on top of the WP Chairs) stems from the early days of EFC when the number of WPs was limited and extra brain power from the elected members was welcomed. Due to the fact that more than 20 Working Parties belong to the EFC and that the WP Chairs are members of the STAC, this body may be considered to have outgrown itself.

During the PACM which took place on 9 July 2019 in Paris, the EFC President, Prof. Dr. Arjan Mol, proposed to reconsider the addition of elected members to STAC in the future starting at the end of the period 2020-2022. The PAC endorsed this proposal.
The BoA Members will be invited to consider this suggestion taking into account the necessity to update the related item of the EFC Bye-Laws which would then be modified as follows:

"*12 **THE SCIENCE AND TECHNOLOGY ADVISORY COMMITTEE***
The Science and Technology Advisory Committee shall advise the EFC on scientific, technological and educational matters and the implementation of decisions concerning these.

12.1 Membership of the Science and Technology Advisory Committee
Three ~~Four~~ groups of people may attend meetings of the Science and Technology Advisory Committee, as follows:
~~12.1.1 Elected members~~
~~The General Assembly shall elect six members from names submitted by Member Societies having Full Member status. The Frankfurt Office will issue a call for nominations at least six months before the date of the General Assembly at which the election is to be made. The nominations should be submitted by the Frankfurt Office to the BoA who will examine the list of~~

~~*candidates to ensure that at least five countries will be represented in the list for submission to the General Assembly. The BoA may not withhold any name from the list but will seek to obtain further nominations from Member Societies if the "five country representation" requirement is not being met. The list of nominations should be included in the working papers for the General Assembly.*~~

~~*The six elected members may exercise a vote in the Science and Technology Advisory Committee.*~~

~~*It is desirable that elected members include representation from industrial organisations, including consultants.*~~

~~*The elected members of STAC shall hold office for three years and may be reappointed.*~~

12.1.1~~2~~ Chairmen of EFC Working Parties are full members with ~~the same~~ voting rights ~~as elected members~~. The Scientific Secretary and the Chairmen of the STAC Task Forces are invited to attend meetings of STAC in an ex officio capacity without the right to vote.

12.1.2~~3~~ The President and Vice-President of the EFC, a representative of the Young EFC as well as representatives of the EFC Secretariat may attend meetings but without voting rights.

12.1.3~~4~~ Others who can contribute to the work of the EFC may attend meetings of the Science and Technology Advisory Committee by invitation of the STAC Chairman but without voting rights. […]"

The recommendation of the BoA will be presented at the GA.

5-7 Affiliate Membership Program

The Managing Officer, Dr. Hélène Illaire, will report on progress regarding the visibility and marketing of the Affiliate Membership programme.

5-8 UBO Register in Belgium (HI, MO)

A Royal Decree of 30 July 2018 on the operating procedures of the UBO Register entered into force in Belgium on 31 October 2018 following a European Directive whose main aim is to combat money laundering and the financing of terrorism.
Each Member State must now establish a register which will centralize adequate, accurate and current information on the beneficial owners of incorporated companies in Belgium, trusts, foundations and (international) non-profit associations, and legal entities similar to trusts. It is maintained by the SPF Finance, General Treasury Administration. The deadline for providing the information to the UBO register was first set by Belgian authorities to 31st of March 2019, but was postponed to 30 September 2019.
The Managing Officer, Dr. Hélène Illaire, underlined that the UBO is a new law in Belgium which force all societies to establish this register.
During the BoA Meeting which took place on 1st and 2nd April in Seville, she explained that she was waiting more information from the Belgium authorities in order to clarify who must be registered.

The Managing Officer, Dr. Hélène Illaire, will report on progress and consequences for the EFC and action to be undertaken.

5-9 EFC Visibility (RB)

During the BoA Meeting which took place on 1st and 2nd April in Seville, Dr. Roman Bender reported that many European people are visiting the EFC Booth each year at NACE Conference, and most do not know about EUROCORR.
The Past-President, Prof. Damien Féron suggested to make the promotion of the EFC on the occasion of other events like the EFCE Congress proposing them to present EFCCE during the EUROCORR. The same could also be done with EUROMAT.
It has to be noted that EUROCORR and EUROMAT follow each other and sometimes an overlapping of the dates exists.
It has also been proposed to advertise EFC during the ACHEMA, for example with a common booth with GfKORR.

An action was placed on Dr. Roman Bender to prepare a plan and budget on how to give more publicity for EUROCORR, to be presented at the next PACM.

Dr. Roman Bender will present proposals to the BoA Members.

Item 6 Financial Report (JB)

Appendix 13 provides the Financial Report, which will be presented by the Honorary Treasurer, Mrs. Julija Bugajeva.

6-1 Current Subscriptions Position

The Honorary Treasurer, Mrs. Julija Bugajeva, will present the status of subscriptions paid by EFC Member Societies (year-to-date)**.**

6-2 Accounts for 2018 and Budget for 2019

The Honorary Treasurer, Mrs. Julija Bugajeva, will present the provisional accounts for the year 2018 and the budget for 2019.

The BoA will be invited to approve the provisional accounts for 2018 and the budget for 2019.

6-3 EFC Subscription Fees for 2020

A proposal for the subscription fees for 2019, including branches, will be presented.

The BoA Members will be invited to approve the proposed subscription fees for recommendation to the General Assembly.

6-4 Budget for 2020

The Honorary Treasurer, Mrs. Julija Bugajeva, will present proposals for the budget for 2020.

The BoA will be invited to approve the proposed budget for 2020.

6-5 Adoption of Financial Report

The BoA will be invited to approve the Financial Report presented by Mrs. Julija Bugajeva, the Honorary Treasurer.

Item 7 EFC Activities

7-1 Report of the Scientific Secretary (RB)

The report of the Scientific Secretary, Dr. Roman Bender, covering activities since the last April 2019 BoA meeting is presented in **Appendix 14**.

The BoA will be invited to approve the Scientific Secretary Report.

7-2 Report of the Managing Officer and Approval of the Duties of the Managing Officer (HI + AM)

7-2.1 Report of the Managing Officer (HI)

The report of the Managing Officer, Dr. Hélène Illaire, covering activities since the last April 2019 BoA meeting is presented in **Appendix 15**.

The BoA will be invited to approve the Managing Officer Report.

7-2.2 Duties of the Managing Officer (AM)

In accordance with the article 17.1 of the EFC Bye-Laws, the BoA will be invited to approve the duties of the Managing Officer proposed by the PAC for the period 1st September 2019 –> 31st December 2020.

7-3 Report on Activities of Young EFC (YGG)

A report of the Young EFC network activities, covering activities since the last April 2019 BoA meeting BoA meeting will be presented by Dr. Yaiza Gonzalez-Garcia, see **Appendix 16**.

The BoA will be invited to approve this report.

7-4 European Corrosion Directory (DF, GA)

Mr. Gilbert Assant, the current publisher of the EFC Newsletter, was invited to take part in the PACM Meeting which took place in London on 26 November 2018, to present his project of European Corrosion Directory.
The idea is to gather in a book the corrosion-related companies in Europe obtained from lists collected from professional directories from each European countries.
Mr. Gilbert Assant proposed to take the financial risk of such a publication and to realise the 'issue zero" without the EFC logo and without advertisements. If this first issue proves to be successful, the future issues could be published in cooperation with the EFC who could receive percentage of the benefits.
The PAC Members asked Mr. Gilbert Assant to prepare a detailed agreement for this project, with the help of Prof. Damien Féron. This proposed agreement in English and in French was circulated by the Paris Office to the BoA Members on 22 March 2019, and given in Appendix 13 and 14 of the BoA WP for the Meeting which took place on 1st and 2nd April 2019 in Seville.

During this meeting, Prof. Damien Féron reminded that EFC Member Societies will be invited to provide the areas where people are involved in corrosion in their country. Mr. Gilbert Assant will contact companies to sell them advertisement in order to finance the edition of this directory. Even if he plans to implement offices in different areas of Europe to organise the commercial market, this company is well known by Company members of CEFRACOR because publishing the yearbook of the CEFRACOR members.

The BoA asked that this project must be described in more details on the planned process of action(s) to implement this directory.
Mr. Gilbert Assant was invited to the President Advisory Committee Meeting which took place on 9 July in Paris to present more detailed specifications of this project.

Prof. Damien Féron will report on progress regarding the proposal for this European Corrosion Directory.
Subject to the new information collected and the interest for the corrosion community, the EFC Member Societies will be informed on this proposal.

7-5 Relations with EFC Member Societies

Progress on relations of with Members Societies will be presented.

7-6 EFC Publications

7-6.1 EFC Book Series (WF, RB)

BoA Members will be informed that a new book in the EFC book series was published by Elsevier at the end of July 2019. It was edited by Working Group 13 under the lead of Marc Willms and Chris Fowler. It is entitled "Corrosion Resistant Alloys for Oil and Gas Production".

7-6.2 EFC Newsletter (RB)

Three EFC newsletters are published annually. One printed and two in electronic form. The printed version is distributed to all participants of the EUROCORR conference. The first annual electronic newsletter appears on the occasion of the Corrosion Awareness Day on 24th April. The second, usually in mid-October/early November, recapitulates EUROCORR and the prizes awarded there. In addition, this newsletter provides a second Call for Papers for the upcoming EUROCORR. The electronic newsletters are edited and sent out by the Frankfurt Office, also with the editorial support of Dr Douglas Mills and Dr Ruth Bingham. The coordination of the printed newsletter also takes place in the Frankfurt Office. The typesetting is taken over by Nouvelle page Communication, free of charge.

7-6.2 Progress with Items/Articles for Publication in the Four EFC Journals (HI, RB)

As usual, articles about the work of the EFC, collected by systematic contacts between the Scientific Secretary and the Working Party Chairmen, appear regularly in the four official journals of the EFC: "***Materials and Corrosion***", "***Corrosion Engineering, Science and Technology (CST)***", "***Matériaux et Techniques***" and "***Ochrona przed Korozją***" ("Corrosion Protection")**.**
The visibility of the EFC in the new EFC Journal "ochrona przed korozja" is particularly noteworthy.

7-7 Last News from EFC Website (RB)

The website of the EFC is maintained by the Frankfurt Office. Regular updates appear especially on the pages of the Working Parties and the Calendar of Events.

The BoA members are kindly reminded of the login and password, which allows them direct access to the restricted area of the website:

Login: **efc-boa** Password: **member2017BoA**

Item 8 EUROCORRs

8-1 EUROCORR Organisation

8-1.1 Loyalty Program for EUROCORR Exhibitors (HI)

The Managing Officer, Dr. Hélène Illaire, will report on the results of this program.

8-1.2 Evolution of EUROCORR Organisation: Task Force Report (HI)

During its meeting in Kraków on 9 September 2018, the BoA approved the creation of an EUROCORR Task Force (TF) composed with the EFC President, Prof. Arjan Mol, the Honorary Treasurer, Mrs. Julija Bugajeva, the Managing Officer, Dr. Hélène Illaire, Prof. Agnieszka Królikowska (EUROCORR 2018), Dr. Tomáš Prosek (EUROCORR 2017) and a representative of each of the EFC General Secretariats offices, to work on possible evolution(s) of the organisation of the EUROCORRs.
The first meeting of this TF took place during the lunch on Monday 1st April 2019 in Seville, just before the first half day of the BoA Meeting. The Managing Officer, Dr. Hélène Illaire, agreed to take the lead of the Task Force.
The discussions covered on how to improve the bidding procedure and the presentation of the bids.
It was agreed to use the very detailed documents sent by the ICCA, International Congress and Convention Association, received by the Manager Officer and distributed to the members of the TF, as a basis to improve the EFC Guide for Bidders including a model of congress budget streamlined as possible but efficient.

The Managing Officer, Dr. Hélène Illaire, will present progress of this TF.

8-2 EUROCORR Series: 2019 to 2022

8-2.1 EUROCORR 2019 - Sevilla (Spain) - Final Report

Prof. Juan J. de Damborenea will report on the preliminary results of **EUROCORR 2019** in **Seville**.

Appendix 17 provides the EUROCORR 2019 Report Form I.

8-2.2 EUROCORR 2020 - Brussels (Belgium) - Progress with Arrangements

EUROCORR 2020 will be held on **6th to 10th of September** in **Brussels**, Belgium, at SQUARE (Brussels Meeting Centre). The general theme will be "**Closing the Gap Industry and Academia. Corrosion Predictions by Advanced Measuring, Modelling and Monitoring**".

Prof. Marjorie Olivier will report on the progress with the arrangements for EUROCORR 2020.

8-2.3 - EUROCORR 2021 - Budapest (Hungary) - Report on Preliminary Arrangements

EUROCORR 2021 will be held on **19th to 23rd of September 2021** in **Budapest** Congress Centre, Hungary. The general theme will be "**Materials Science and Advanced Technologies for Better Corrosion Protection**".

Prof. Tamas Istvan Török will report on the preliminary arrangements for EUROCORR 2021.

8-2.4 **EUROCORR 2022** - Berlin (Germany) - ***Initial Progress Report***

EUROCORR 2022 will be held in **Berlin** at ESTREL Hotel & Congress Centre, on **4 to 8 September 2022**.
The organisers will be invited to report on the initial progress for EUROCORR 2022 including the general theme of this event not yet announced.

8-2.5 **EUROCORR 2023**

Call for Bids for EUROCORR 2023: BoA Members will be reminded that bids to host **EUROCORR 202*3*** should be submitted in writing to the EUROCORR Congress Secretariat at the Frankfurt Office **by mid-January 2020** with a copy to the Scientific Secretary and the Paris Office.

Item 9 International Activities

9-1 Report on activities in the Middle-East (FM, FH)

Prof. Fátima Montemor and Dr. Fouzia Hannour will report on evolution of the activities in the Middle East.

9-2 NACE International: Task Force on EFC Strategy (GH)

During the EFC-NACE meeting in September 2018, NACE informed that they will open an office in Europe.
During the PACM Meeting which took place in London on 26 November 2018, Dr. Gareth Hinds informed that NACE is contacting targeted EFC Member Societies in Europe regarding the Global Partnership Agreement they propose worldwide.
He expressed that the EFC should need a common strategy and policy for its members regarding NACE actions.
An action was placed to Dr. Gareth Hinds to set up a Task Force on EFC Strategy regarding NACE.

Dr. Gareth Hinds will report on progress of this TF.

9-3 Report on Activities in Singapore (HI of DF)

Progress on activities in Singapore will be presented.

9-4 WCO (World Corrosion Organization) (WM)

Prof. Willi Meier, the WCO Director General, will report on progress in the activities of the WCO.

9-5 IUPAC (International Union of Pure and Applied Chemistry) (DF)

The past-President, Prof. Damien Féron, will report on relations with IUPAC.

9-6 Possible Cooperations in Russia (DF, AM)

Possible Cooperations in Russia will be presented.

Item 10 EFC Events and Calendar of Events

BoA Members will be reminded that the Calendar of Events is regularly updated on the EFC website by DECHEMA.

The BoA will also be reminded that EFC Calendar of Events also includes non EFC-sponsored events in an attempt to draw outside interest to the EFC as a central source of information on corrosion events throughout the world.

An application form is available in the restricted area for the BoA Members to apply for an EFC Event Number.

10-1 EFC China 2019 Conference, October 9-12 2019, Chongqing, China (TP)

Dr. Tomáš Prošek previously reported that he was approached by Chinese corrosionists wishing to organise an event in China in collaboration with EFC. It was agreed that he will represent the EFC in the organisation of the EFC China 2019 1st International Conference on Corrosion Protection which will be held on 9-12 October 2019 in Chongqing, China. This event received the Number 448 as EFC Event Number, which could guarantee a good quality of the scientific level. This event would permit to promote and increase the visibility of the EFC.

During its meeting which took place on 1st and 2nd April in Seville (Spain), the BoA agreed the necessity to establish a contract in English between EFC and the Chinese organisers for which the assistance of an international lawyer would be desirable to take into consideration the Chinese laws.
The Honorary Treasurer, Mrs. Julija Bugajeva, proposed to seek assistance of some of her contacts and the EFC Vice-President, Dr. Jörg Vogelsang proposed that the translation of the contract in Chinese will be overseen by somebody of his team. During Spring 2019 it was decided to use an adapted EFC-EUROCORR agreement as the basis for the contract.
The draft agreement sent to the local organisers on 26 June 2019 is provided in **Appendix 18**.

Dr. Tomáš Prošek will report on progress on the organisation of this Conference.

Item 11 Any other Business

Members will be invited to raise any other matters.

Item 12 Date and Place of next BoA

The next BoA meeting will be held in Spring 2020, at a time and place to be announced later.

A P P E N D I C E S

Appendix 1

CIDETEC Surface Engineering: Application to join EFC as Affiliate Member

EUROPEAN FEDERATION OF CORROSION

EFC AFFILIATE MEMBERSHIP APPLICATION

The principal objective of the EFC is to contribute to the general advancement of the science of corrosion and the protection of materials by promoting cooperation in Europe between scientific and technical societies and organisations and by collaboration with similar scientific and technical societies and organisations throughout the world. Subject to the approval of the EFC Board of Administrators and the EFC General Assembly, **Affiliate Membership** of the EFC is available to organisations that support the above objective, in the following categories:

1) **Companies**
2) **Universities and Research Organisations**

EFC Affiliate Members qualify for a number of important benefits, which include the following:

- Participation in EFC Working Parties as of right; appointment of delegates; access to the Working Parties' restricted area;
- Reduced registration fee of the Affiliate's employees at annual EUROCORR conferences;
- Discounts on exhibitor booth at the annual EUROCORR conference;
- Organisation of events and courses with the EFC endorsement and logo;
- Discounted prices for EFC publications;
- Access to the restricted area containing the electronic proceedings of past EUROCORR conferences;
- Participation in the EFC General Assembly (without voting rights);
- Listing of the Affiliate Member's corrosion-related events on the EFC website and in the EFC Newsletter and publication of promotional write-ups of their corrosion-related events and activities in the EFC Newsletter.

The 2018 membership fee is EUR 1,550 + VAT for companies and EUR 1,030 + VAT for universities/research organisations. If you would like to apply to join the EFC as an Affiliate Member, please complete the form and submit it to one of the three offices of the EFC General Secretariat given below.

Note on Data Processing: All details on the processing of your data can be found in EFC's privacy policy. You can find it on the Internet using the URL: http://www.efcweb.org/privacy.html. I have also been informed on my right to object to the use of my data at any time.

Category (*please tick*):	**Company:** ☐ **University/Research Organisation:** ☑
Name of organisation:	CIDETEC Surface Engineering
Address:	Paseo Miramón 191, 20014 Donostia-San Sebastián (Spain)
Tel:	+34 943 318 212
Fax:	
E-mail:	egarcia@cidetec.es
Website:	www.cidetec.es
Organisation's representative:	Dr. Eva García-Lecina
Address (if different from organisation's address):	
Tel:	+34 669 807 228
Fax:	
E-mail:	egarcia@cidetec.es
Signature:	Eva García.
Application date:	1st of April, 2019

London Office:
Institute of Materials, Minerals & Mining
297 Euston Road
London SWIY 5DB, United Kingdom
Tel: +44 20 7451 7365
Fax: +44 20 7839 1702
E-mail: julija.bugajeva@iom3.org

Paris Office:
CEFRACOR
28, rue Saint-Dominique
75007 Paris, France
Tel: +33 1 4062 2776
Fax: +33 1 4555 4033
E-mail: p.bridou-buffet@maisondelachimie.com

Frankfurt Office:
DECHEMA e.V.
Theodor-Heuss-Allee 25
60486 Frankfurt (Main), Germany
Tel: +49 69 7564 143/209
Fax: +49 69 7564 418
E-mail: ines.honndorf@dechema.de

Appendix 2

Integrated Global Services: Application to join EFC as Affiliate Member

EUROPEAN FEDERATION OF CORROSION

EFC AFFILIATE MEMBERSHIP APPLICATION

The principal objective of the EFC is to contribute to the general advancement of the science of corrosion and the protection of materials by promoting cooperation in Europe between scientific and technical societies and organisations and by collaboration with similar scientific and technical societies and organisations throughout the world. Subject to the approval of the EFC Board of Administrators and the EFC General Assembly, **Affiliate Membership** of the EFC is available to organisations that support the above objective, in the following categories:

1) **Companies**
2) **Universities and Research Organisations**

EFC Affiliate Members qualify for a number of important benefits, which include the following:

- Participation in EFC Working Parties as of right; appointment of delegates; access to the Working Parties' restricted area;
- Reduced registration fee of the Affiliate's employees at annual EUROCORR conferences;
- Discounts on exhibitor booth at the annual EUROCORR conference;
- Organisation of events and courses with the EFC endorsement and logo;
- Discounted prices for EFC publications;
- Access to the restricted area containing the electronic proceedings of past EUROCORR conferences;
- Participation in the EFC General Assembly (without voting rights);
- Listing of the Affiliate Member's corrosion-related events on the EFC website and in the EFC Newsletter and publication of promotional write-ups of their corrosion-related events and activities in the EFC Newsletter.

The 2019 membership fee is EUR 1,550 + VAT for companies and EUR 1,030 + VAT for universities/research organisations. If you would like to apply to join the EFC as an Affiliate Member, please complete the form and submit it to one of the three offices of the EFC General Secretariat given below.

Note on Data Processing: All details on the processing of your data can be found in EFC's privacy policy. You can find it on the Internet using the URL: http://www.efcweb.org/privacy.html. I have also been informed on my right to object to the use of my data at any time.

Category (*please tick*): **Company:** ✓ **University/Research Organisation:** ☐

Name of organisation: Integrated Global Services

Address: Brněnská 289 Holasice, 664 61 Czech Republic

Tel: +420 735 750 500 **Fax:**

E-mail: vitaly.geraskin@integratedglobal.com **Website:** integratedglobal.com

Organisation's **representative:** Vitaly Geraskin

Address (if different from organisation's address):

Tel: **Fax:**

E-mail: vitaly.geraskin@integratedglobal.com **Signature:** Marina Silva Digitally signed by Marina Silva Date: 2019.07.25 19:03:16 +01'00'

Application date: 25 July 2019

London Office:
Institute of Materials, Minerals & Mining
297 Euston Road
London SWIY 5DB, United Kingdom
Tel: +44 20 7451 7365
Fax: +44 20 7839 1702
E-mail: julija.bugajeva@iom3.org

Paris Office:
CEFRACOR
28, rue Saint-Dominique
75007 Paris, France
Tel: +33 1 4062 2776
Fax: +33 1 4555 4033
E-mail: p.bridou-buffet@maisondelachimie.com

Frankfurt Office:
DECHEMA e.V.
Theodor-Heuss-Allee 25
60486 Frankfurt (Main), Germany
Tel: +49 69 7564 143/209
Fax: +49 69 7564 418
E-mail: ines.honndorf@dechema.de

Appendix 3 - Page 1

Nomination Prof. Milan KOUŘIL (for election to the BoA)

ASSOCIATION
OF CZECH AND SLOVAK
CORROSION ENGINEERS

Association of Czech and Slovak Corosion Engineers
Technická 5, 166 28 Praha 6, Czech Republic

Nomination Letter

On behalf of the Association of Czech and Slovak Corosion Engineers (AKI), I would like to nominate professor Milan Kouřil, Ph.D. for the member of the Board of Administrators for the period from 2019 to 2022. I atach his CV.

Best regards,

Tomáš Prošek, prezident AKI

CV of Prof. Milan KOUŘIL (Nominated for election to the BoA)

CURRICULUM VITAE

Milan KOURIL

Born: April 4, 1977 in Prague, Czech Republic
Affiliation: University of Chemistry and Technology, Prague
Technicka 5, 166 28 Prague
Phone: +420 220 444 275
E-mail: kourilm@vscht.cz

EDUCATION

- **M.Sc.** University of Chemistry and Technology, Prague, 2000; thesis: *"Corrosion of PdAgCu dental alloys"*
- **Ph.D.** University of Chemistry and Technology, Prague, 2004; thesis: *"Corrosion of alternative metallic materials in concrete pore solution"*

EXPERIENCE

- **Associate professor** University of Chemistry and Technology, Prague (UCT), Metallurgy 2017.
- 2010 - 2017 Assistant professor at Department of Metals and Corrosion Engineering (UCT)
- 2017 – present Associate professor at Department of Metals and Corrosion Engineering (UCT)

Workload

- Fundamental and applied research on corrosion and corrosion protection
- Teaching in university courses on corrosion
- Supervising students' projects

Research projects

- Rehabilitation of Reinforced Concrete Structures by Simultaneous Chloride Removal and Nanoparticle Injection (Czech Science Foundation, 2016-18)
- PaC-NG Fuel Cells with Low Platinum Content (European Commission, 2018-22)
- Methodology of corrosivity classification of indoor environments for lead collection objects (Czech Ministry of Culture, 2018-22)
- Development of conservation methods for seals and textile materials used for their attachment (Czech Ministry of Culture, 2016-20)

CV of Prof. Milan KOUŘIL (Nominated for election to the BoA) (Continued)

- The kinetics of corrosion processes and corrosion media transport in advanced ultra-high performance concretes (UHPC) (Czech Science Foundation, 2014-16)
- Utilization of electrochemical noise in study of passivity defects (Czech Science Foundation, 2005-2007)
- CORRLOG Automated corrosion sensors as on-line real time process control tool (European Commission, 2005-8)
- MUSECORR Protection of cultural heritage by real-time corrosion monitoring (European Commission, 2009-12)
- WELTEMP Water electrolysis at elevated temperatures (European Commission, 2008 – 11)

OTHER ACTIVITIES

- Secretary and past vice-president of AKI – Association of Czech and Slovak Corrosion Engineers
- Chairman of the Local Organizing Committee of EUROCORR 2017 in Prague
- Reviewer of *Sensors, Construction & Building Materials, Corrosion Engineering Science and Technology, Applied Surface Science*
- AKI delegate at EFC and ICC

PUBLICATIONS

- Published over 100 original papers in journals and conference proceedings (32 of them registered at ISI Web of Knowledge)
- H-index of Milan Kouril according to ISI Web of Knowledge: 9
- Total number of citations according to ISI Web of Knowledge: 170

SELECTED PUBLICATIONS

- M. Kouril, P. Pokorny, J. Stoulil, Corrosion Mechanism and Bond-Strength Study on Galvanized Steel in Concrete Environment, *Corrosion Science and Technology – Korea*, 16 (2017) 69-75.
- R. Kodym, D. Snita, V. Fila, K. Bouzek, M. Kouril, Investigation of processes occurring at cathodically protected underground installations: Experimental study of pH alteration and mathematical modeling of oxygen transport in soil, *Corrosion Science*, 120 (2017) 14-27.
- M. Kouril, P. Novak, M. Bojko, Limitations of the linear polarization method to determine stainless steel corrosion rate in concrete environment, *Cement and Concrete Composites*, 28 (2006) 220- 225.
- M. Kouril, P. Novak, M. Bojko, Threshold chloride concentration for stainless steels activation in concrete pore solutions, *Cement and Concrete Research*, 40 (2010) 431-436.
- M. Kouril, T. Prosek, B. Scheffel, F. Dubois, High sensitivity electrical resistance sensors for indoor corrosion monitoring, *Corrosion Engineering Science and Technology*, 48 (2013) 282-287.
- T. Prosek, M. Kouril, L.R. Hilbert, Y. Degres, V. Blazek, D. Thierry, M.Ø. Hansen, Real time corrosion monitoring in atmosphere using automated battery driven corrosion loggers, *Corrosion Engineering Science and Technology*, 43 (2008) 129-133.

CV of Prof. Milan KOUŘIL (Nominated for election to the BoA) (Continued)

- M. Kouril, T. Prosek, B. Scheffel, Y. Degres, Corrosion monitoring in archives by the electrical resistance technique, *Journal of Cultural Heritage*, 15 (2014) 99-103.
- J. Stoulil, A. Fialová, T. Jamborová, M. Kouřil, Combined tannate/decanoate coatings, *Journal of Cultural Heritage*, 15 (2014) 339-344.
- J. Stoulil, J. Kaňok, M. Kouřil, H. Parschová, P. Novák, Influence of temperature on corrosion rate and porosity of corrosion products of carbon steel in anoxic bentonite environment, *Journal of Nuclear Materials*, 443 (2013) 20-25.
- M. Kouril, E. Christensen, S. Eriksen, B. Gillesberg, Corrosion rate of construction materials in hot phosphoric acid with the contribution of anodic polarization, *Materials and Corrosion*, 63 (2012) 310-316.
- T. Prosek, M. Kouril, M. Dubus, M. Taube, V. Hubert, B. Scheffel, Y. Degres, M. Jouannic, D. Thierry, Real-time monitoring of indoor air corrosivity in cultural heritage institutions with metallic electrical resistance sensors, *Studies in Conservation*, 58 (2013) 117-128.

LANGUAGE PRIFICIENCY

- Czech – Mother tongue
- English – Advanced knowledge, including reading, writing and speaking
- Russian, German – Basic knowledge

Appendix 4

CV of Prof. Mario G. S. FERREIRA (Nominated for election to the BoA) (Continued)

Mario Ferreira has made contributions in a number of areas of surfaces and corrosion, such as electronic structure of passive films, corrosion in concrete, galvanized steel, aluminum and magnesium alloys, paints, anodizing, biomaterials, atmospheric corrosion, hybrid sol-gel films, inhibitors, self-healing and nanostructured coatings, smart surfaces, localized electrochemical techniques.

He is Full Professor (at the present, Honorous) at University of Aveiro. He is a member of an Associate Laboratory, Aveiro Institute of Materials (CICECO), University of Aveiro. He was Head of the Department of Materials and Ceramic Engineering of the University of Aveiro (Portugal) in the period 2011-2017.

Mario Ferreira has been active in the field of surfaces/corrosion for 40 years and has made major contributions in corrosion through teaching and research.

Mario Ferreira's publications are in top journals that publish on his subjects; his work is uniformly of the highest quality. The *Scopus database* reports an h-index=73 (May 2019), which is an extremely high number for his area and reflects the impact of his work. He is also co-author of 18 book chapters and 5 patents. In his career, he has trained a considerable number of M.Sc. and Ph.D. students and post-docs, many of whom are now making major contributions on their own. He has been frequently invited for keynote and plenary talks.

He has been extremely active in scientific societies, representing Portugal in the International Corrosion Council, participating in different working parties of the European Federation of Corrosion, and for 2 years a member of its Board of Administrators. He was also Member of the "Steel Advisory Group" of the "Research Steel and Coal Fund" of European Union (2010- 2019). He was Deputy Director-General for Higher Education (Ministry of Science and Higher Education of Portugal) (2003-2007) and Member of the Scientific Council for Exact Sciences and Engineering of "The Foundation for Science and Technology" (FCT), Portugal (2013-2016).

Mario Ferreira received the "H.H. Uhlig Award" of Corrosion Division of The Electrochemical Society (2013), CAVALLARO Gold Medal, Univ. Ferrara / EFC (2014), Fellow of ISE (2017), Fellow of The Electrochemical Society (2017), European Corrosion Medal, EFC (2017), Engineers Association Award, Senior Adviser Member, (2015).

Appendix 5

CV of Dr. Patrick KEIL (Nominated for election to the BoA)

Patrick Keil studied physics at the universities of Düsseldorf and Wuppertal (Germany) and obtained his PhD in Experimental Physics in 2005. The topic of his PhD thesis was the development of a new synchrotron radiation-based technique for studying corrosion phenomena. From 2005 to 2011, Patrick worked as a researcher and later on as a senior scientist at the Max-Planck Institut für Eisenforschung GmbH in the department of Prof. Martin Stratmann. He was responsible and involved in many corrosion and surface science related R&D projects together with the steel industry. Patrick joined BASF in Münster as a laboratory manager and researcher in 2011. He is heading the corrosion research at BASF Coatings since 2014, was appointed to Principal Scientist in 2017 and to Senior Principal Scientist in 2018.

His current research is in the area of coatings, metal pre-treatment, applied electrochemistry and corrosion, with the focus on the development of new protection technologies, understanding the relationship between corrosion and resulting material performance and the development of methodologies to assess corrosion.

Patrick is a member several scientific societies including the Electrochemical Society (ECS) and the German Society of Corrosion Protection (GfKORR). He is a member of the board of the German Society of Corrosion Protection since 2016.

Work Experience

2018 – present	Senior Principal Scientist – Corrosion, BASF Coatings GmbH
2017 – 2018	Principal Scientist – Corrosion, BASF Coatings GmbH
2015 – 2017	Head of Corrosion Research, BASF Coatings GmbH
2011 – 2015	Laboratory Manger & Researcher, BASF Coatings GmbH Subject: Corrosion and Corrosion Protection
2009 – 2011	Scientific Head of Surface Analysis, Max-Planck-Institut für Eisenforschung GmbH (in the department of Prof. Stratmann)
2008 – 2011	Visiting Lecturer at the Universities of Bochum and Paderborn
2005 – 2009	Research Team Leader, Max-Planck-Institut für Eisenforschung GmbH (in the department of Prof. Stratmann)

Education

2005	PhD (Dr. rer. nat.) at the University of Wuppertal, Germany Grade: summa cum laude
2000	Diploma in physics at the University of Düsseldorf, Germany Grade: sehr gut

Scientific Societies

2016 – present	GfKORR: Member of the board
2014 – present	GfKORR: Chairperson of the working party „Korrosionsschutz durch Beschichtungen”

CV of Dr. Bálint MEDGYES (Nominated for election to the BoA and the STAC)

PERSONAL DATA

Surname	**Bálint**
Name	**Medgyes (Dr.)**
Nationality	Hungarian
Address	Egry József Street 18, Budapest 1111, Hungary
Telephone	+36-70-361-01-18
E-mail	medgyes@ett.bme.hu / bmedgyes@gmail.com

EDUCATION

2006	**M. Sc. in Electrical Engineering at** Budapest University of Technology and Economics (**BME**)
2011	**Engineer-Economist (post-graduation)** at Corvinus University of Budapest (Corvinus)
2014	**Ph.D. in Electrical Engineering Sciences at BME** (electrochemical migration in the microelectronics)

WORK EXPERIENCE

2004 –	**Conformal Coatings on Printed Circuit Boards (PCBs)** **Quality/Reliability engineering on PCBs** **Production engineering on PCBs** **Electrochemical Migration on the Electronics** **Electrochemical Corrosion on the Electronics**

WORKPLACES

2006-2012	**Technical Instructor** at BME, Department of Electronics Technology (BME-ETT)
2012-2013	**Research Assistant** at Mobile Innovation Center (BME)
2013-2014	**Assistant Lecturer** at BME-ETT
2014-2017	**Senior Lecturer** at BME-ETT
2017-	**Associate Professor** at BME-ETT

CV of Dr. Bálint MEDGYES (Nominated for election to the BoA and the STAC) (Continued)

AWARDS

2013.feb.-2013.oct.	**International Cooperative Graduate School** (ICGS) **Fellowship,** by: **National Institute for Materials Science** (NIMS), **Tsukuba, Ibaraki, Japan**
2015-2018	**János Bolyai Research Scholar**ship by: **Hungarian Academy of Sciences**
2016	**Invited Speaker** by: **Technical University of Denmark (DTU)** Achievement: Electrochemical migration mechanisms
2016-2019	**National Post Doc Program** by: **National Research, Development and Innovation Ministry**
2017	**Dean's Award** by: BME - Faculty of Electronic Engineering and Informatics
2018	**Outstanding Reviewer Award - Microelectronics Reliability** by: Elsevier
2018	**Outstanding Reviewer Award** - **Corrosion Science** by: Elsevier
2018	**Invited Speaker** by: Technical University of Denmark (DTU) Title: **Electrochemical corrosion on lead-free solder alloys**
2018	**Invited Speaker** by: Zestron Academy, Ingolstadt, Germany Title: **Electrochemical migration - protection**
2019	**Invited Speaker** by: Zestron Academy, Ingolstadt, Germany Title: **Electrochemical migration - models**
2019	**Excellent Lecturer Award** by: BME - Faculty of Electronic Engineering and Informatics

ROLE IN SCIENTIFIC COMMITTEES

2014 -	**International Steering Committee membe**r at SIITME conference, http://siitme.ro/
2015 -	**Public office member** of the **Hungarian Academy of Sciences**
2015 -	**Vice Editor in Lean Corrosion**,
2016 -	**Hungarian Federation of Corrosion**, HUNKOR Member, www.hunkor.hu

LIST OF PUBLICATIONS

https://m2.mtmt.hu/gui2/?type=authors&mode=browse&sel=authors10042094

CV of Prof. Marjorie OLIVIER (Founder Member Country)

Born in Belgium on the 3th of November 1967
Civil Chemical Engineer – Faculty of Engineering of Mons (Belgium) in 1991 PhD in Applied Science – Faculty of Engineering of Mons (Belgium) in 1996

UMONS Université de Mons

Scientific career:

- **From 15/07/1991 to 31/12/1996:** PhD student in the Thermodynamics and Physical Mathematics department of the Faculty of Engineering of Mons -(PAI)
- **From 01/01/1997 to 30/03/2000:** Postdoctoral researcher in the Materia Nova research centre in Mons (Scientific business support)
- **From 01/04/2000 to 30/06/2003:** Senior researcher – Materia Nova research centre
- **From 01/07/2003 to 25/12/2003:** Research Assistant - General Chemistry and Electrochemistry department of the Faculty of Engineering of Mons and senior researcher - Materia Nova research centre
- **From 26/12/2003 to 30/09/2006:** Assistant Professor - General Chemistry and Electrochemistry Department of the Faculty of Engineering of Mons
- **From 01/10/2006 to 30/09/2011:** Associate Professor in the Materials Science department of Faculty of Engineering of Mons.
- **From 01/10/2007 to now:** Head of the Materials Science Department at the University of Mons; Scientific Director of the Materia Nova research centre, Scientific coordinator of the Centre in Materials Engineering of Faculty of engineering of University of Mons
- **From 01/10/2011 to now:** Full Professor in the Materials Science Department at the Faculty of engineering of University of Mons.
- **From 01/10/2012 to 30/09/2016:** President of the Research Institute for Materials Science and Engineering of UMONS.
- **From 1/10/2016 to 30/09/2018:** Vice-President of the Research Institute for Materials Science and Engineering of UMONS
- **From 1/10/2018 to now:** Advisor to the Rector's College on Applied Sciences and Engineering

External responsibilities:

- **From 2012 to now:** member of Board of Administrators of INISMa (Materials research center in ceramics) and member of Board of Administrators of the spin-off Nano 4
- **From 2014 to now**: member of Board of Administrators of EFC (European Federation of Corrosion) and co-chairman of coatings session (Annual Eurocorr Congress)
- **From September 2018 to now**: Member of Board of Administrators of Materia Nova Research Center

Teaching activities at the Faculty of Engineering of the University of Mons

- Electrochemistry and applicationsSurface Physicochemistry
- Rheology
- Corrosion and Surface Treatments

CV of Prof. Marjorie OLIVIER (Founder Member Country) (Continued)

Research Topics

- Study of the corrosion mechanisms
- Metals: steel, stainless steel, galvanized steel, aluminium alloys, magnesium alloys
- Surface treatments: sol-gel, anodic layers, organic coatings
- Synthesis of inhibitor nanocontainers
- Electrochemical characterization of coatings Etude des mécanismes de corrosion
- Dispersion phenomena
- Multifunctional and smart coatings (wear, bacterial properties…)

Industrial partners: AGC, ArcelorMittal, Galva Power Group, SONACA, Nanoxid, Matrio, Saint Roch Couvin, IONICS, Symbiose, Deleuze, Realco, Arceo, Mecar, FNHerstal, SAFRAN, …

Ongoing Research Projects: Programme d'Excellence FLYCOAT; Projet FEDER Hybritimesurf, Pôle MecaTech: Nanosol et BIO-AFP; Projet ARES-CCD – PRD (ITT Hanoï Vietnam), INTERREG Projects : TRANSPORT, SEALCERA (ARC), BENZOSEAL

Main Scientific Collaborations

- University of Trento (Italy) – Prof. F. Deflorian
- University of Udine (Italy) – Prof. L. Fedrizzi
- Corrosion Institute of Brest (France) – Dr A. Nazarov
- Institute for Tropical Technology (ITT, Vietnam) – Dr To Thi Xuan Hang and Dr Trinh Anh Truc
- Ecole Polytechnique de Toulouse (ENSIACET) (Toulouse, France) – Dr N. Pébère
- Université Libre de Bruxelles (Belgium) – Prof. C. Buess
- University of Delft (The Nederlands) – Prof. J.M.C. Mol
- Vrije Universiteit Brussel (VUB - Belgium) – Prof. H. Terryn
- Université de La Rochelle (France) – Prof. S. Touzain and Prof. Juan Creus
- University of Sao Paulo (Brazil) – Prof. H. de Melo
- University of Duïsburg-Essen (Germany), Prof. Mayer
- University of Lisbon (Portugal), Prof. F. Montemor
- University of Lille (France): Prof. Alex Montagne
- University of Valenciennes (France): Prof. A. Tricoteaux
- Fraunhöfer IFAM et IPA (Germany)
- Research centres (Belgium): CRM, INISMa/CRIBC, SIRRIS, CENTEXBEL

Scientific Events

- **AETOC2011- Mons (Belgium) -** "Application of Electrochemical Techniques to Organic Coatings", main organizer
- **Member of the Scientific Committee of the AETOC workshop:** 2011, 2013, 2015, 2017, 2019 editions
- **ENMT2016- Bruxelles (Belgium) - "**11th International Symposium on Electrochemical Micro & Nanosystem Technologies", member of the scientific committee
- **SOL-GEL2017-Liège (Belgium) –** member of the scientific committee
- **EUROCORR2020:** Selected Belgian Bid

CV of Prof. Marjorie OLIVIER (Founder Member Country) (Continued)

PhD supervisor:
3 defended PhD in 2012
1 defended PhD in 2013
3 defended PhD in 2014
3 defended PhD in 2017
4 defended PhD in 2018 Ongoing
supervised PhD : 4

Scopus indicators (2sd of May 2019)
Publications: 128
Citation number: 1981
h-index: 26

List of the peer-reviewed Publications (Five last years)

1. Ramirez Oscar, Queiroz Fernanda, Terada Maysa, Donatus Uyime, Cosa Isolda, Olivier Marjorie, De Melo Gomez Hercilio, "EIS investigation of a Ce-based post-treatment step on the corrosion behaviour of Alclad AA2024 anodized in TSA", Surface and Interface Analysis (in Press)
2. Coelho Betolucci Leonardo, Taryba Marina, Alves M., Noirfalise Xavier, Montemor Fatima, Olivier Marie-Georges, "The corrosion inhibition mechanisms of Ce(III) ions and triethanolamine on graphite—AA2024-T3 galvanic couples revealed by localised electrochemical techniques", Corrosion Science (2019) in press
3. Fedel Michele, Mireille Poelman, Olivier Marie-Georges, Deflorian Flavio, "Sebacic acid as corrosion inhibitor for hot-dip galvanized (HDG) steel in 0.1 M NaCl », Surface and interface Analysis (2019), in press
4. Geng Xin, Lu Pengfei, Zhang Chao, Lahem Driss, Olivier Marie-Georges, Debliquy Marc, "Room-temperature NO2 gas sensors based on rGO@ZnO1-x composites: Experiments and molecular dynamics simulation", Sensors and Actuators. B, Chemical, (2019) 282, 690-702
5. Andreatta Francesco, Rodriguez Justine, Mouanga Maixent, Lanzutti Alex, Olivier Marie- Georges, "Corrosion protection by zinc-magnesium coatings on steel studied by electrochemical methods", Materials and Corrosion (2019), in press
6. Geng Xin, Lahem Driss, Zhang Chao, Li Chang-Jiu, Olivier Marie-Georges, Debliquy Marc, "Visible light enhanced black NiO sensors for ppb-level NO2 detection at room temperature", Ceramics International (2019) 45, 4253-4261
7. Renaud Alexis, Bonnaud Leila, Dumas Ludovic, Zhang Tao, Paint Yoann, Fasano Francesco, Kulyk Olesia, Pospisilova Eva, Nysten Bernard, Delcorte Arnaud, Bonifazi Davide, Dubois Philippe, Olivier Marie-Georges, Poorteman Marc, "A benzoxazine/substituted borazine composite coating: A new resin for improving the corrosion resistance of the pristine benzoxazine coating applied on aluminum", European Polymer Journal, 109 (2018) 460-472
8. Christophe Jennifer, Guilbert Grégory, Rayée Quentin, Poelman Mireille, Olivier Marie- Georges, Buess-Herman Claudine, "Cyanide-Free Silver Electrochemical Deposition on Copper and Nickel", Journal of the Electrochemical Society, 165 (13), D1-D5 (2018)
9. Cerchier P., Pezzato L., Moschin E, Bertolucci Coelho Leonardo, Olivier Marie-Georges, Moro L., Magrini M., "Antifouling properties of different Plasma Electrolytic Oxidation coatings on 7075 aluminium alloy", International Biodeterioration and Biodegradation, 133 (2018) 70-78
10. Druart Marie-Eve, Recloux Isaline, Derouaux Adeline, Van De Weerdt Cecile, Olivier Marie-Georges, "Development of mesoporous sol–gel films for antifingerprint applications on glass" in Journal of Sol-Gel Science and Technology, 88 (2018) 334-344

CV of Prof. Marjorie OLIVIER (Founder Member Country) (Continued)

11. Bertolucci Coelho Leonardo, Taryba Marina, Alves M., Montemor Maria Fatima, Marie- Georges Olivier, “Unveiling the effect of the electrodes area on the corrosion mechanism of a graphite - AA2024-T3 galvanic couple by localised electrochemistry”, Electrochimica Acta 277 (2018) 9-19
12. Thai Thu Thuy, Druart Marie-Eve, Paint Yoann, Trinh Anh Truc, Olivier Marie-Georges, "Influence of the sol-gel mesoporosity on the corrosion protection given by an epoxy primer applied on aluminum alloy 2024 -T3", Progress in Organic Coatings 121 (2018) 53-63
13. Nguyen Thuy Duong, To Thi Xuan Hang, Gervasi Julien, Paint Yoann, Olivier Marie- Georges, "Corrosion inhibition of carbon steel by hydrotalcites modified with different organic carboxylic acids for organic coatings", Progress in Organic Coatings 124 (2018) 256-266
14. Bertolucci Coelho Leonardo, Olivier Marie-Georges, "The inhibition efficiency of different species on AA2024/graphite galvanic coupling models depicted by SVET", Corrosion Science 136 (2018) 292-303;
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Appendix 7 - Page 5

CV of Prof. Marjorie OLIVIER (Founder Member Country) (Continued)

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33. Dumas Ludovic, Bonnaud Leila, Olivier Marie-Georges, Poorteman Marc, Dubois Philippe. "High performance bio-based benzoxazine networks from resorcinol and hydroquinone", European Polymer Journal 75 (2016) 486-494
34. Romano Anne-Pascale, Olivier Marie-Georges, "Investigation by electrochemical impedance spectroscopy of filiform corrosion of electrocoated steel substrates" Progress in Organic Coatings 89 (2015) 1-7
35. Recloux Isaline, Mouanga Maixent, Druart Marie-Eve, Yoann Paint, Olivier Marie- Georges, "Silica mesoporous thin films as containers for benzotriazole for corrosion protection of 2024 aluminium alloys" Applied Surface Science 346 (2015) 124-133
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37. Fedel M., Poelman Mireille, Zago Mirko, Vandermiers Catherine, Cossement Damien, Olivier Marie-Georges, Deflorian F., "Influence of formulation and application parameters on the performances of a sol-gel/clay nanocomposite on the corrosion resistance of hot-dip galvanized steel. Part II. Effect of curing temperature and time", Surface & Coatings Technology 274 (2015) 9-17
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CV of Prof. Marjorie OLIVIER (Founder Member Country) (Continued)

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45. Khelifa Farid, Ershov Sergey, Druart M.E., Habibi Youssef, Olivier Marie-Georges, Snyders Rony, Dubois Philippe, "Free radical-induced grafting from plasma polymers for the synthesis of thin barrier coatings", RSC Advances 5 (2015) 14256-14265
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More than 140 oral communications to international conferences.

CV of Prof. Dr. Edoardo PROVERBIO (Nominated for re-election to the BoA)

PERSONAL INFORMATION
Edoardo Proverbio Via Consolare Pompea 1, 98166 MESSINA (Italy)
(+39) 0906765243
eproverbio@unime.it

CURRICULUM VITAE

Prof. Eng. Edoardo Proverbio is full professor of Science and Technology of Materials at the University of Messina, Italy. Actually is also responsible for the Degree Course in Industrial Engineering (BEng) at the same University. From November 2010 he was Head of the Department of Industrial Chemistry and Materials Engineering, then from October 2012 until July 2014 Head of the Department of Electronic Engineering, Industrial Chemistry and Engineering.

Actually he is President of the Technical Committee on Metal Corrosion of the AIM (Italian Metallurgy Association - EFC member); Italian Delegation Leader and Member of the Board of Directors (2015-2018) of the CEOCOR European Committee on the Study of Pipe Corrosion and Protection; Member of the Board of Administrators and AIM delegate in the General Assembly (2016-2019) ofthe EFC European Federation of Corrosion.

In the past years he was:

Coordinator of the Working Group "New Assessment Method" (2002-2007) in the frame of the European Science Foundation – COST action 534 Materials "New Materials and System for prestressed concrete system" (2002-2007) and Group leader of the Group Project "Acoustic non destructive techniques as new methods for evaluation of damages in prestressed concrete structures";

Vice President Sector B (Internal corrosion and water treatment), CEOCOR, European Committee on the Study of Pipe Corrosion and Protection (1997-2000);

Coordinator of the Working Group "Water corrosivity vs metallic materials", Sector B CEOCOR, European Committee on the Study of Pipe Corrosion and Protection (1995- 1998).

Prof. Eng. Edoardo Proverbio was responsible of several research projects in the field of materials for energy and durability of materials among which:

- PON R&I 2014-2020 project "ARS01_00293 THALASSA - TecHnology And materials for safe Low consumption And low life cycle cost veSSels And craft" (2019-2021). Project Manager.
- Project PON02_00153_2939568 "Innovative low-consumption and high comfort hydrofoil for passenger transportation" (2012-2016), Research responsible for the University of Messina.

CV of Prof. Dr. Edoardo PROVERBIO (Nominated for re-election to the BoA) (Continued)

- Department of Engineering, ICT and Energy and Transport Technologies (CNR DIITET) Project "Solar Adsorption Air Conditioning" - MSE Program Agreement (2012-14). Local Project Manager.
- CNR-DET Project: Solar Energy Utilization for Summer Conditioning 5.4.1.3, Thematic Group: Innovative Components and Installations (2010-2011).Local Project Manager.
- Ministry of the Environment and the Protection of the Territory and the Sea, research projects aiming at energy efficiency and the use of renewable energy sources in urban areas (GU Serie V No. 150 of 21 December 2009) I-Win Intelligent Project WINdow - code 91, (2011-2013), ProjectManager.

His research activity is focused on Corrosion and protection of metals (corrosion monitoring, refinery corrosion, corrosion of metals in concrete, stress corrosion cracking, failure analysis); Durability of structures and materials (metal materials, composite materials); Materials Science (materials for energy, synthesis and characterization of oxide ceramic materials and complex ceramic systems, functional coatings, corrosion of non- oxidic ceramic materials, synthesis and characterization of cellular metallic materials). He is author and co-author of more than 150 publications among journal papers and papers on conference proceedings, book chapters. His Scopus bibliometric indexes (at 21.06.2019) are the following: h-index 22, cited documents 131, total citations 1368, while the Google Scholar bibliometric indexes (at 21.06.2019) are the following: citations 1773, h-index 26, i10-index 5.

In compliance with the GDPR UE n. 2016/679 and the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document

Messina, 21.06.2019

prof. Eng. Edoardo Proverbio

CV of Mr. Marcel ROCHE (Nominated for re-election to the BoA and to the STAC)

ROCHE Marcel Georges Louis.

French, born on Oct. 8, 1945 at Valence, Drôme, France.

EDUCATION

Chemical Engineering degree from INSA-Lyon (1967).

Refining and Chemical Engineering degree from ENSPM (1968).

PRESENT POSITION

Consultant in Cathodic Protection, affiliated to the French regime of "Micro-company" (N° SIRET: 818 796 633 00019, APE: 7112B Engineering, technical studies) since April 2016.

PAST PROFESSIONAL EXPERIENCE RECORD

- 1970 to 1979: Corrosion Engineer (Technip Engineering, seconded to IFP).
- 1979 to 1987: Corrosion Engineer in the Corrosion Department of SNEA(P).
- 1987 to 1990: Head of Inspection- Corrosion-Treatments Department of Elf Gabon (Port-Gentil).
- 1990 to 1995: Head of Corrosion Department at SNEA(P), then EAP (Elf Aquitaine Group).
- 1995 to 2000: Coordinator for Static Equipment in the Technology Department of the Refining Direction at headquarters of Elf Antar France.
- 2000 to end Aug. 2007: Head of Corrosion Department in the Technology Division of the Exploration & Production branch of TotalFinaElf, then Total, in charge of corrosion prevention and control in all oil and gas production, storage and transport facilities, including selection of materials and design of protection systems (paint systems, coatings, cathodic protection, inhibition, etc.) and corrosion monitoring systems.
- From September 2007 to end June 2008: Corrosion Expert at the Technology Division of the Exploration & Production branch of Total.
- Retired from Total SA since July 1st, 2008.
- Corrosion Consultant through Ad'missions from July 2008 to December 2015.

PROFESSIONAL BODIES

- President of CEFRACOR (Centre Français de l'Anticorrosion) from July 2011 to June 2017, now Honorary President and responsible for its Certification Pole coordinating the various activities of Certification in CEFRACOR.
- Past Chairman of the "Cathodic Protection & Associated Coatings" Committee of CEFRACOR.
- Chairman of the Organising Committee for Eurocorr 2016, Montpellier, Sept. 11 – 15, 2016.
- First Chairman of the EFC WP 16 on Cathodic Protection from 1998 to 2012.
- Elected Member of the Board of Administrators (BoA) and of the « Scientific and Technical Advisory Committee » (STAC) of the EFC (European Federation of Corrosion) from 2016.
- Member of NACE International since 1982.
- CEFRACOR Talbot Award in 2007.
- EFC Honorary Fellow Award in 2019.

CV of Mr. Marcel ROCHE (Nominated for re-election to the BoA and to the STAC) Continued)

STANDARDISATION

- Chairman of the standardization commission on Cathodic Protection (A05L) of AFNOR until 2013, then coordinator of the subjects of Cathodic Protection in the standardization commission "Corrosion and protection of metallic materials - Metallic and inorganic coatings" (A05AG).
- Member of standardization working groups in cathodic protection: CEN TC219 WG1 for Buried applications, WG3 for Seawater applications (past-Convenor), WG4 for Internal of equipment, ISO TC156 WG10, ISO TC67 SC2 WG11 for Pipelines.
- Project Leader of standardization working group for pipeline field joint coatings (ISO TC67 SC2 WG14-3) from 2002 to June 2015 and again from June 2018.

CERTIFICATION AND ACCREDITATION

- Certified level 3 (expert) CEFRACOR CERTIFICATION - protection cathodique in agreement with NF EN 15257 for land (since 2002) and marine (since 2003) application sectors.
- Technical evaluator in cathodic protection for COFRAC from 2000 to 2015.

GIVEN TRAINING AND COMMUNICATION

- Teacher in corrosion in Oil & Gas industries and cathodic protection topics, especially for IFP Training, TPA (Total Professeurs Associés), Institut de la Corrosion (subsidiary of KEMAB from Sweden), UNI Strategic (Kuala Lumpur), IDC (Kuala Lumpur), Top Link Asia (Perth).
- Author or co-author of more than 80 papers presented at national and international levels. Most recent papers have been presented at NACE Conferences, EUROCORR's, SPE Conferences and BHR Conferences and were dealing with onshore and offshore CP and coatings as well as more general corrosion topics mainly related to pipelines.

Participation to books

- « La protection électrochimique – Protection cathodique et passivation anodique » : Chapter 13 in book « Prévention et lutte contre la corrosion, une approche scientifique et technique » edited by B. Normand, N. Pébère, C. Richard and M. Wery. Presses Polytechniques et Universitaires Romandes, 2004
- « La protection cathodique et ses applications industrielles » : Chapter 14 in volume 2 « Pratique industrielle » of book « Corrosion et anticorrosion » edited by G. Béranger and H. Mazille, Lavoisier, 2002, Editions Hermes Science
- Participation to the CD-ROM «Multimedia Corrosion Guide» edited by INSA de Lyon, June 1999. 2nd edition (in english) edited in 2002
- Participation to the 2nd edition of the book « La protection cathodique, guide pratique », 1986, Editions Technip, Paris
- "Protection contre la corrosion des ouvrages maritimes pétroliers": book in 2 parts (880 and 250 pages) edited by IFP and published by Editions Technip (Dec. 1978, March 1979)

Most recent papers:

- Efficiency of cathodic protection applied to buried LPG tanks (co-auteur André Duclos, Henri François), EUROCORR 2016, 11 au 15 septembre 2016, Montpellier
- We need better standards for paint systems protecting buried tanks in conjunction with cathodic protection, EUROCORR 2016, 11 au 15 septembre 2016, MontpellierEnsure effectiveness of marine applications of cathodic protection by using standardization and certification of competence, 18th International Congress on Marine Corrosion and Fouling (ICMCF), 19 au 24 juin 2016, Toulon.

CV of Mr. Marcel ROCHE (Nominated for re-election to the BoA and to the STAC) (Continued)

- Peintures et protection cathodique : une combinaison efficace contre la corrosion des réservoirs enterrés, 4èmes Rencontres de la Peinture Anticorrosion, CEFRACOR – OHGPI, 2 avril 2015, Paris
- L'apport de la modélisation dans l'étude de l'efficacité et du contrôle de la protection cathodique des réservoirs de GPL sous talus, 6èmes Journées Protection Cathodique du CEFRACOR, Antibes Juan-les-Pins, France, 14-16 juin 2014
- Normalisation et certification du personnel pour une protection cathodique plus efficace, Matériaux et Techniques, Vol. 101, N° 18, 2013
- Cathodic Protection in Seawater: Principles, Standardisation, Training and Certification (co- auteur Anne-Marie Grolleau), SeaTechWeek, Workshop "Materials & Corrosion in Marine and Offshore Wind Energy Industry", Brest, 9 Oct. 2012
- Understanding the ISO 21809 – 3 Standard for Field Joint Coatings, 1st International Seminar on Advances in Field Joint Coatings Technology - Offshore and Onshore Pipelines, Milton Keynes, UK, November 23 - 24, 2011
- La protection cathodique : une technique mature mais à employer avec compétence, Matériaux et Techniques, Vol. 99, N° 1, 2011
- Corrosion Management: A key issue in Pipeline Integrity, IPTC 11385-PP, International Petroleum Technology Conference, Dubai, UAE, 4-6 Dec. 2007
- Disbondments of pipeline coatings and their consequence on corrosion risks, 17th International Conference on Pipeline Protection, Oct. 17-19, 2007, Edinburgh, UK, BHR Group, (co-auteurs D. Mélot et G. Paugam)
- External corrosion prevention of offshore pipelines: the trends in international standards and company specifications, Rio Pipeline 2007, Rio-de-Janeiro, Brasil, 2-4 Oct. 2007, IBP-1186_07
- Competence of personnel active in cathodic protection and progress in certification systems, EUROCORR 2007, Freiburg-im-Bresgau, Germany, 9-13 Sept. 2007
- External Coatings of Pipelines: Challenges related to Corrosion Risks, ICIC, Iranian Corrosion/2007, ICA International Congress, Tehran, Iran, 14-15 May 2007
- Recent experience with pipeline coating failures, 16th International Conference on Pipeline Protection, Nov. 2-4, 2005, Paphos, Cyprus, BHR Group – Protective Coatings Europe et Journal of Protective Coatings & Linings, oct. 2006, (co-auteurs D. Mélot et G. Paugam)
- The problematic of pipeline external corrosion and its contribution to integrity management, IIC 2005, Beijing, China, Sept. 19-23, 2005
- Half a century of progress in Cathodic Protection, EUROCORR 2005, Keynote Lecture K-716- O, 5-8 Sept. 2005, Lisbon, Portugal
- Long-term experience with external corrosion prevention of pipelines, GTS-2005, Gas Transportation systems: Present and future, Gazprom-VNIIGAZ, 12-13 April 2005, Moscow
- Offshore cathodic protection: the lessons of long-term experience, OMC 2005, Offshore Mediterranean Conference and Exhibition in Ravenna, Italy, March 16-18, 2005
- External corrosion of pipelines: What risk?, 14th SPE Middle East Oil & Gas Show and Conference, March 12-15, 2005, Bahrain
- An experience in offshore pipeline coatings, Corrosion'2004, New-Orleans, USA, March 27 – April 1, 2004, NACE International
- How Total manages pipeline integrity, 15th International Conference on Pipeline Protection, BHR Group, Oct. 29-31, 2003, Aachen, Germany
- TotalFinaElf experience in corrosion management of pipelines, 2nd Conference of Corrosion in Oil Industry, Tehran, Iran, 18-19 Feb., 2003

Nomination of Dr. Patrik SCHMUTZ for election to the BoA

European Federation of Corrosion
Dr. Roman BENDER

DECHEMA e.V.
Theodor-Heuss-Allee 25
60486 Frankfurt a.M.
Germany

Grenchen, 24.07.2019

To whom it concern,

with this letter, I would like to express my interest as candidate for the Board of Administrators of the European Federation of Corrosion (EFC). My motivation for joining the BoA is, on one hand, to strengthen the collaboration between the EFC and Switzerland where I'm currently acting as president of the Swiss Society for Surface treatment (SGO-SST) and, on the other hand, to increase the EFC visibility towards the Swiss authorities. Switzerland still has significant activities in corrosion research and management with a few active groups, but the field is neglected by the authorities at the different levels (federal and state). Different actions will need to be undertaken in the near future to increase the awareness and support of our politicians.

From a personal point of view, I have been involved in corrosion research in different academic institutions for more than 20 years and I'm currently leading a research group at the Empa (Swiss Federal Laboratories for Materials Science and Technology) and I am lecturer at the ETH IZ (Swiss Institute of Technology in Zürich).

Please do not hesitate to contact me, if additional information are needed from your side.

Best regards

Dr. Patrik Schmutz, President of the Swiss Society for Surface Treatment
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Tel: +41 79 214 1921

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CV of Dr. Patrik SCHMUTZ (Nominated for election to the BoA)

Curriculum Vitae - Patrik SCHMUTZ
Laboratory of Joining Technologies and Corrosion, Empa, Materials Science and Technology
Group leader for "Functional Surfaces in Reactive Environments" and Deputy Laboratory head of "Laboratory for Joining Technologies and Corrosion;
EMPA Dübendorf, Abt. 202, Ueberlandstrasse 129, CH-8600 Dübendorf; Phone: +41-58-765-4845, Fax: +41-58-765-4015, E-Mail: patrik.schmutz@empa.ch
Research ID: http://www.researcherid.com/rid/D-6263-2014; Currently: H-factor: 27 (Scopus), citation numbers: 3270 Publications of 75 SCI/SCIE papers and one book chapter (complete list is found on Research ID). In addition, a series of referred proceeding papers and non-indexed articles can be mentioned.

Higher Education

- PhD in Technical Science (1992- 1996) Dec. 1996
  Department of Material Science, EPFL (Swiss Federal Institute of Technology), Lausanne, Switzerland
  PhD Thesis "Study of the Passive Film Formed on Iron-Chromium Based Alloys by Means of Surface Analytical Methods and In Solution Quartz Crystal Microgravimetry"
  Thesis Jury: Prof. N. Setter, president; Prof. P. Bruesch, Prof. H. Girault, Prof. H.-H. Strehblow
- Diploma in Experimental Physics (1986 - 1991) Nov. 1991
  Institute of Solid State and Surface Physics, University of Fribourg, Switzerland
  Diploma Thesis: "Study of the Adhesion of Thin Metallic Films on Polypropylene"
- Scientific Federal Diploma and "Baccalaureat Cantonal" June 1986
  College St-Michel, Fribourg, Switzerland

Employment history including current position(s) and institutional responsabilities

2003–2019: EMPA, Materials Science and Technology
- Deputy Laboratory head and Group leader (from 02/2012)
- Head (a.i.) of Laboratory for Corrosion and Materials Integrity (10/2009 – 01/2012)
- Group leader for "microscale corrosion research" (10/2003 – 9/2009)

2000– 2003: ETHZ, Institute of Material Chemistry & Corrosion and Department of Materials Science, Zürich
- Research Scientist with Prof. S. Virtanen. Project Title: "Study of the corrosion and protection mechanisms of New Mg-Al Alloys produced by New Rheocasting (NRC) process"

1997– 2000: Ohio State University, Fontana Corrosion Centre, Columbus, USA,
- Research Scientist/ Post Doctoral Fellow (first two years) with Prof. G.S. Frankel. Project Title: "Mechanism of Al Alloy Corrosion and the Role of Chromate Inhibitors" Multidisciplinary University Research Initiative (MURI) sponsored by the Air Force Office of Scientific Research.

Research management and approved research projects (selected)

NCCR (SNF) – MARVEL (co-applicant)
2015 – 2018: Structural /in-situ electrochemical characterization of oxide phase transformation at oxide-liquid interface

Latest CTI Projects/Innosuisse projects (Applicant or co-applicant):
2019 – 2012: AAC – Active corrosion control of WC-Co based Hardmetals (AGIE Charmilles SA)
2014 – 2017: TISBA -Tailored Interface for Structural Bonding of Aluminium (Novelis Switzerland)
2014 – 2016: EloMemTech - Electroosmotic Membrane Technology (Osmotex AG)
2017 – 2018: High-content screening-compatible in vitro model for Alzheimer's disease in 3DProSeedTM microtiter plate and innovations in the 3DProSeedTM manufacturing technology (Ectica Technologies)
2018 – 2019: Biocompatible wear resistant thick ceramic coating (Orchid Orthopedics Switzerland)

CV of Dr. Patrik SCHMUTZ (Nominated for election to the BoA) (Continued)

SCIEX: (Main Applicant)
2010 – 2011: Mechanistical and mathematical modeling of oxidation/corrosion processes in Cu-Sn as function of temperature and relative humidity. (Dr. Magdalena Pawelkiewicz)
2012 – 2013: Corrosion resistant self-assembled monolayers of functionalized dicarba-closo-dodecaborane clusters on Au, Ag and Cu surfaces (CoSAMDoc) (Dr. Aliaksei Vetushka)

COST / SERI:
2011 - 2013: Electrochemical approach for the development of multifunctional intermetallic nano-particles (C11.0045)

SNF (co-applicant):
2015 - 2018: Predicting deterioration phenomena at coating/implant interfaces in-vivo (200021_156085, Division II)
2009 – 2012: MICORRANA II - Development of a hyphenated online-technique for spatially resolved chemical element analysis of micro corrosion processes (200020_125121, Division II) **(+ follow up project 2012-2013)**
2006 - 2009: MICORRANA Development of a hyphenated online-technique for spatially resolved chemical element analysis of micro corrosion processes (200021-109355, Division II)

CCMX (Co applicant):
2006 - 2009: Bio-functionalized, bio-degradable, nano-structured magnesium implant for biomedical applications (CCMX – ERU Materials for Life Science)
2010 – 2013: Low Wear Articulating Implants Employing DLC Coatings on CoCrMo and TiAlNb with predictable, long-lasting coating adhesion lifetime (CCMX – ERU Materials for Life Science)

EU-FP6-STREP (co-applicant, scientific coordination, Lead: EADS-Airbus)
2006 – 2009: Simulation Based Corrosion Management (SICOM)

Supervision of junior researchers

PhD Thesis supervised:

1) **Sabine Hochstrasser**, Mechanistic Study of the Corrosion Reactions on WC-Co Hardmetal in Aqueous Solution – An Investigation by Electrochemical Methods and Elemental Solution Analysis, ETHZ (2006)
2) **Valentina Tassoti,** Modelling and simulation of microarc oxidation, Babes Bolyai University, Cluj-Napoca (2006),RO
3) **Fabian Eckermann,** Microscopic Structural and Electrochemical Aspects of Al-Mg-Si Corrosion, ETHZ (2008)
4) **Eva Ura,** Fundamental Understanding of the Corrosion Mechanism of Aluminium Based Quasicrystalline alloys, Warsaw University of Technology, PL (2010)
5) **Ming Liu,** Corrosion Mechanism of Mg and Mg Alloys, University of Queensland (2010), AUS
6) **Magdalena Pawelkiewicz,** Unified description of mass transport and reactions in lead-free solders joints during formation and service (oxidation), Berg und Hüttenakademie Krakau (2011), PL
7) **Noemie Ott,** From degradable Mg to passive Al-Cr-Fe alloys – element specific investigation of corrosion processes using flow microcapillary plasma mass spectroscopy , EPFL (2013)

+ 4 ongoing thesis: Lars Dörner, ETHZ; Emilija Ilic, EPFL; Martina Cihova, ETHZ and Ruohan Zhang, ETHZ.

Teaching activities

ETHZ Lecturer, Department of Materials Science, (since 2003)
- Corrosion and Corrosion Protection (2003)
- Corrosion and Durability of Engineering Materials (2006- 2011)
- Surface, Interface and their Applications (2012- 2017): Core Master course + laboratory practical work

CV of Dr. Patrik SCHMUTZ (Nominated for election to the BoA) (Continued)

Other appointments, memberships and professional activities

- President since 2004 of the Swiss Society for Surface Treatment (SGO-SST) and member of the executive committee
- Expert for the ANR (Agence Nationale de la Recherche) and AERES (Agence d'évaluation de la recherche et de l'enseignement supérieur) in France (since 2010)
- Swiss representative at the European Federation of Corrosion (EFC) (Since 2006)
- Member of the International Corrosion Council (ICC) scientific board (Since 2008)
- Member of the scientific board of C-MAC (European Integrated Centre for the Development of New Metallic Alloys and Compounds) and Co-speaker of an RAD (Research and Activity domain) on "Coatings technologies for barrier and functional applications: properties related surface phenomena"

Organisation of conference and seminars – selected

2003: Electrochemical Society meeting: "Mechanistic Models / Transport Aspects of Cathodic and Anodic Processes
2003: NACE meeting in San-Diego: Symposium on Advanced Localized Characterization Methods in Corrosion
2007: Nanoelectrochem: "2nd Summer school on Nanotechnology and Electrochemistry", Lozari, Corsica, Scientific
Committee
2010: Electrochemical Society ECS fall meeting: "High Resolution Characterization of Corrosion Processes"
2012: Electrochemical Society ECS fall meeting: "High Resolution Characterization of Corrosion Processes3"
2014: International Society of Electrochemistry (ISE) meeting in Lausanne, member of the local organizing committee

Award

- SNF (Swiss National Research Foundation) Young Researcher Grant (1996)

Major Scientific Achievements

As a group leader at Empa and ETHZ lecturer, I perform a constant effort to transfer the scientific results of our research to a broader community. For this purpose, besides conference presentations, I am actively involved and organise yearly courses in "electrochemical characterization in corrosion science" (Empa-FSRM and Metrohm-EPFL courses). The audience ranges from representative from industry to PhD students working in electrochemistry related fields. My major research achievements consist, on one side, of different pioneering work on the use of Atomic force microscopy coupled to Scanning Kelvin Probe Force Microscopy (AFM/SKPFM) to characterize solid-liquid interfaces and of the investigation of oxide growth, stability and properties in aggressive electrolytes by means of Electrochemical methods and in particular Quartz Crystal Nanogravimetry. My previous works are found in earlier publications but are still very much integrated in my group key research topics described below (publication indexing 1.X link them to the described achievements)

Achievement 1: Implementation of the AFM based Scanning Kelvin Probe Force Microscopy (SKPFM) in the local investigation of electrochemical surface reactivity and double layers.
Contribution: The feasibility and interpretation of an electrochemical potential measurement with an AFM method on laterally heterogeneous materials with phases of different reactivity has been demonstrated. With the development of controlled atmosphere chamber for the AFM setup, microscale galvanic coupling and electronic properties under controlled humidity or influence of surface diffusion at elevated temperatures were investigated.

CV of Dr. Patrik SCHMUTZ (Nominated for election to the BoA) (Continued)

Impact of the work:

- Summarized in a book chapter by M. Rohwerder et al, "Application of Scanning Kelvin Probe in Corrosion Science",606-640,in Analytical Methods in Corrosion Science and Engineering, CRC Taylor and Francis (2005)
- The methodology, scientific approach and concepts presented in our papers (since 1998) is still the reference (more than 650 citations) in the corrosion science community when investigating local surface reactivity in atmospheric and aqueous environments

Achievement 2: New experimental approaches to characterize the structure-properties relationship of thin amorphous oxide

Contribution: Oxide properties and their chemical stability are often considered to be known based on published data for bulk and crystalline phases. For numerous metals, nm-thick amorphous oxide (passive film) are in fact responsible for their environmental stability and corrosion resistance. Their surface properties are also completely different from bulk-crystalline analogs and their analysis require very sensitive characterization methods. In the last years, I have introduced with my group AFM/SKPFM, HAXPES, photoelectrochemical characterization and in collaboration with EPFL (Marvel project) mathematical modelling of amorphous structures to better understand properties and chemical reactivity of ultrathin oxides. The oxides considered are: Al, Si, Ti, W and Mg, relevant in many applications, and more and more also as functional sensors and materials.

Impact of the work:

- Fundamental investigation of oxide surface stability/properties allows identification of many conceptual mistakes in new materials and devices (like the use of Si interlayer in DLC implants)
- Identified as research highlight in NCCR "Marvel" project (http://nccr-marvel.ch/highlights/2018-02-amorphous- aluminum-oxide-tuned-by-electrochemical-anodizing) and in "Advances in Engineering" (https://advanceseng.com/si-incorporation-anodic-growth-barrier-type-al-oxide)

Achievement 3: Formulation of surface reactivity and passivation mechanisms (corrosion protection) of Al-based complex metallic alloys (CMA) – Since 2006 in EU-CMA network of excellence

Contribution: Quasicrystals and CMA have gained interest because of their outstanding bulk and surface properties. I'm currently Co-speaker of a Research and Activity domain on "Coatings technologies for barrier and functional applications" of **C-MAC** (European Integrated Centre for the Development of New Metallic Alloys and Compounds). In this RAD, the electrochemical surface reactivity, electronic properties and oxidation of Al_3Mg_2 and Al-Cr(Cu)-Fe complex phases has been investigated by electrochemical methods. The oxidation mechanisms of Al-Cr-Fe have further been investigated from the initial stage in UHV to a high resolution HAXPES study.

Impact of the work:

- Summarized in a book chapter: C M.G. Barthes, A. Beni, **P. Schmutz** , **"**Surface Chemistry of CMAs", 243-272, in "COMPLEX METALIC ALLOYS, A PRIMER", WILEY- VCH (2011)
- A large scientific network (9 Universities and ESRF) created around our activities and C-MAC RAD

Research Output list **– Patrik SCHMUTZ**

Last five years and numbered in relation to the expertise mentioned in the major achievements section (for example, referred as 1.x for a publication related to achievement 1). The papers highlighted in yellow are linked to characterization of surface oxidation processes with methodologies directly linked to the proposal activities. A full publication list can be found here: http://www.researcherid.com/rid/D-6263-2014

CV of Dr. Patrik SCHMUTZ (Nominated for election to the BoA) (Continued)

Peer reviewed international articles

2.1) B. Ozdirik, T. Suter,T. Depover, K. Verbeken, P. Schmutz, L.P.H. Jeurgens, H. Terryn, I. De Graeve; "Study of the hydrogen uptake in deformed steel using the microcapillary cell technique"; *Corrosion Science, 155, 55-66* ***(2019)***

2.2) E. Ilic, A. Pardo, R. Hauert, **P. Schmutz**, S. Mischler; "Silicon Corrosion in Neutral Media: The Influence of Confined Geometries and Crevice Corrosion in Simulated Physiological Solutions"; *Journal of the Electrochemical Society*, 166(6), C125-C133 **(2019)**

2.3) S. Siol, C. Beall, N. Ott, M. Döbeli, M. Gonzalez-Castano, R. Wick-Joliat, S.D. Tilley, L.P.H Jeurgens**, P. Schmutz**, C. Cancellieri"; "Anodizing of Self-Passivating $W_x Ti_{1-x}$ Precursors for $W_x Ti_{1-x} O_n$ Oxide Alloys with Tailored Stability"; *ACS Applied Materials and Interface, 11(9), 9510-9518 (2019)*

1.1) M. González-Castaño, M. Döbeli, V. Araullo-Peters, L.P.H. Jeurgens, **P. Schmutz**, C. Cancellieri; "Substrate purity effect on the defect formation and properties of amorphous anodic barrier Al_2O_3", Journal of the Electrochemical Society, 166 (7), C422-C431 (**2018**)

2.4) E. Bonyadi Rad, S. Mostofi, M. Katschnig, **P. Schmutz**, M. Pawelkiewicz, R. Willumeit-Römer, U.Schäfer, A. Weinberg; "Differential apoptotic response of MC3T3-E1 pre-osteoblasts to biodegradable magnesium alloys in an in vitro direct culture model", Journal of Materials Science: Materials in Medicine, 28, 155-166 (**2017**)

2.5) C. Cancellieri, F. Evangelisti, T. Geldmacher, V. Araullo-Peters, N. Ott, M. Chiodi, M. Döbeli, **P. Schmutz**; "The role of Si incorporation on the anodic growth of barrier-type Al oxide", Materials Science & Engineering B, 226, 120-131 (**2017**)

1.2) F. Evangelisti, M. Stiefel, O. Guseva, R. Partovi Nia, R. Hauert, E. Hack, L.P.H. Jeurgens, **P. Schmutz**, C. Cancellieri; "Electronic and structural characterization of barrier-type amorphous aluminium oxide", Electrochimica Acta, 224, 503-516 (**2017**)

1.3) A. Vetushka, L. Bernard, O. Guseva, Z. Bastl, J. Plocek, I. Tomandl, A. Fejfar, T. Baše, **P. Schmutz**; "Adsorption of oriented carborane dipoles on a silver surface", Physica Status Solidi (B) Basic Research, 253 (3), 591-600 (**2016**)

3.1) A. Beni, N. Ott, S. Caporali, O. Guseva, **P. Schmutz**; "Passivation/precipitation mechanisms of Al-Cr-Fe Complex Metallic Alloys in acidic chloride containing electrolyte", Electrochimica Acta, 179, 411-422 (**2015**)

2.6) J. Hofstetter, E. Martinelli, S. Pogatscher, **P. Schmutz,** E. Povoden-Karadeniz, A.M. Weinberg, P.J. Uggowitzer, J.F. Löffler; "Influence of trace impurities on the in vitro and in vivo degradation of biodegradable Mg-5Zn-0.3Ca alloys", Acta Biomaterialia, 23, 347-353 (**2015**)

3.2) A. Beni, N. Ott, M. Pawelkiewicz, M. Wardé, K. Young, B. Bauer, P. Rajput, B. Detlefs, J. Zegenhagen, R. McGrath, M.G. Barthés-Labrousse, L.P.H. Jeurgens, **P. Schmutz**; "Hard X-ray Photoelectron Spectroscopy (HAXPES) characterisation of electrochemical passivation oxide layers on Al-Cr-Fe complex metallic alloys (CMAs)", Electrochemistry Communications, 46, 13-17 (**2014**)

3.3) E. Ura-Binczyk, A. Beni, M. Lewandowska, **P. Schmutz**; "Passive oxide film characterisation on Al-Cr-Fe and Al-Cu-Fe-Cr complex metallic alloys in neutral to alkaline electrolytes by photo- and electrochemical methods", Electrochimica Acta, 139, 289-301 (**2014**)

1.4) K. Gałazka, S. Populoh, L. Sagarna, L. Karvonen, W. Xie, A. Beni, **P. Schmutz**, J. Hulliger, A. Weidenkaff; "Phase formation, stability, and oxidation in (Ti, Zr, Hf)NiSn half-Heusler compounds", Physica Status Solidi (A) Applications and Materials Science, 211 (6), 1259-1266 (**2014**)

3.4) R. Gaspari, R. Erni, Y.Arroyo, M. Parlinska-Wojtan, J. Dshemuchadse, J., C.A. Pignedol, D. Passerone, **P. Schmutz**, A. Beni,; "Real space crystallography of a complex metallic alloy: High-angle annular dark-field scanning transmission electron microscopy of o-Al4 (Cr,Fe)", Journal of Applied Crystallography, 47 (3), 1026-1031 (**2014**)

3.5) N. Ott, A. Beni, A. Ulrich, C. Ludwig, **P. Schmutz**; "Flow microcapillary plasma mass spectrometry-based investigation of new Al- Cr-Fe complex metallic alloy passivation", Talanta, 120, 230-238 (**2014**)

2.7) G. Pigozzi, D. Mukherji, Y. Elerman, P. Strunz, R. Gilles, M. Hoelzel, B. Barbier, **P. Schmutz**; "Effects of size reduction on the structure and magnetic properties of core-shell Ni_3Si/silica nanoparticles prepared by electrochemical synthesis", Journal of Alloys and Compounds, 584, 119-127 (**2014**)

CV of Dr. Patrik SCHMUTZ (Nominated for election to the BoA) (Continued)

Book Chapters

- M.G. Barthes, A. Beni, **P. Schmutz; "**Surface Chemistry of CMAs", 243-272 (2011) in "COMPLEX METALIC ALLOYS, A PRIMER", Ed. J.M. Dubois and E. Belin, WILEY- VCH GmbH, Weinheim, ISBN: 978-3-527-32523-8

Patent

Co-applicant on 1 filed patent concerning coated biomedical devices: Topic is "biodegradable polymers and microparticles with sizes in the range of 0.5 to 400 mm on metallic implants". Patent number: EP 1917984 A1 (2008), Main inventors are: Arie Bruinink, Katharina Maniura, Empa

International Conferences (symposium organizer)

2003: Electrochemical Society ECS fall meeting: "Characterization, Mechanistic Models, and Transport Aspects of Cathodic and Anodic Processes

2003: NACE meeting in San-Diego: Research Symposium on Advanced Localized Characterization Methods in Corrosion

2007: Nanoelectrochem: "2nd Summer school on Nanotechnology and Electrochemistry", Lozari, Corsica, Scientific Committee

2009: Eurointerfinish: "Pulse plating and other electrochemical techniques", Bremen, Scientific Committee

2010: Electrochemical Society ECS fall meeting: "High Resolution Characterization of Corrosion Processes"

2012: Electrochemical Society ECS fall meeting: "High Resolution Characterization of Corrosion Processes 3"

2014: International Society of Electrochemistry (ISE) meeting in Lausanne, member of the local organizing committee

Oral contributions to international conferences (invited speaker)

- **Invited lecture:** P. Schmutz, "Corrosion issues and "dedicated" electrochemical methodologies", International Summer School in Nanoscale Physics, 12 June 2014, Devet Skal, Czech Republic
- **Invited lecture:** P. Schmutz, "Biodegradable Magnesium implants electrochemical characterization - a case study -", International Summer School in Nanoscale Physics, 13 June 2014, Devet Skal, Czech Republic
- **Invited lecture:** P. Schmutz, C. Cancellieri, F. Evangelisti, A. Beni, L.P.H. Jeurgens, "Electrochemical reactivity and corrosion of Al-based Complex Metallic Alloys and amorphous oxides", NACE Corrosion meeting, 26-30 March 2017, New Orleans, USA
- **Keynote lecture:** P. Schmutz, "Barrier anodic amorphous oxide growth: defect structure and related properties", Aluminium Anodizer Council annual conference; 2-4 October 2018, Minneapolis USA

Outreach Activities

There is a constant effort to transfer the results of our research to a broader community. For this purpose, I'm actively involved and organise yearly courses in "electrochemical characterization in corrosion science" (Empa-FSRM and Metrohm courses). The audience ranges from representative from industry to young PhD students working in electrochemistry related fields. The major research achievements (see related document) consisting of different pioneering work on: i) the use of Atomic force microscopy coupled to Scanning Kelving Probe Force Microscopy (AFM/SKPFM) to characterize solid-liquid interfaces, ii) the investigation of oxide growth and stability in aggressive electrolytes by Electrochemical Quartz Crystal Nanobalance (EQCN) and iii) the surface chemistry and corrosion resistance of Complex Metallic Alloys (CMA) have been published in book chapters.

General contributions to science

- Member of the scientific board of C-MAC (European Integrated Centre for the Development of New Metallic Alloys and Compounds) and Co-speaker of an RAD (Research and Activity domain) on "Coatings technologies for barrier and functional applications: properties related surface phenomena"
- Expert for the ANR (Agence Nationale de la Recherche) and AERES (Agence d'évaluation de la recherche et de l'enseignement supérieur) in France (since 2010)
- Swiss representative at the European Federation of Corrosion (EFC) (Since 2006)
- Member of the International Corrosion Council (ICC) scientific board (Since 2008)

Appendix 11

CV of Prof. Dr.-Ing. Ralf FESER (Nominated for re-election to the STAC)

University of Applied Sciences
Laboratory for Corrosion Proetection
Frauenstuhlweg 31
D-58644 Iserlohn
Germany
Tel.: +49 2371 566147
E-mail: feser.ralf@fh-swf.de

Private:
Am Südenberg 74
D-58644 Iserlohn
Germany

28.3.1960	Born in Würzburg, Germany Since 1989 married with Dr. Jutta Küpper-Feser, 1 son
1979	Finalizing High school, Würzburg, Germany
1979-80	Military service in Koblenz and Veitshöchheim, Germany
1980 - 85	Study of materials sciences at the Friedrich-Alexander-University Erlangen-Nürnberg, Germany, specializing corrosion and surface technology (Prof. Kaesche)
1986	Diploma examination materials sciences
1986 - 90	Research assistant Max-Planck-Institut für Eisenforschung in Düsseldorf, Germany in the working group Corrosion PhD-work "Corrosion of polymer coated iron" under supervision of Prof. H.-J. Engell, Prof. Dr. M. Stratmann and Prof. K. Heusler, Clausthal-Zellerfeld , Germany
1991	Group leader corrosion and material at the research laboratory of Metallgesellschaft in Frankfurt am Main, Germany
since 1995	Lectureship at the University Erlangen-Nürnberg, Germany
since 1996	Professor for corrosion and corrosion protection at the University of applied sciences in Iserlohn, Germany
since 2005	CEO of Institute for Maintenance and Corrosion Protection gGmbH at the University of applied sciences in Iserlohn, Germany
since 2008	Lectureship at the RWTH Aachen University, Germany

Other activities:

- President GfKORR (Gesellschaft für Korrosion und Korrosionsschutz e.V., Frankfurt, Germany)
- Convenor GfKORR working group Corrosion and corrosion protection of copper alloy (1997 – 2018)
- (2003 - 2012) President of the research board of the hot dip galvanizing industry GAV (Gemeinschaftsausschuss Verzinken e.V., Düsseldorf, Germany)
- Member of the board of WCO (World Corrosion Organisation)
- Federal Environment Agency, member of working party “Materials in drinking water”

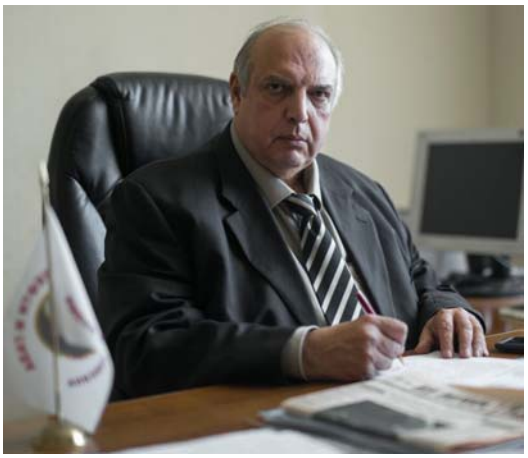
Special experience and knowledge in:

Corrosion of non-ferrous metals, corrosion in tap water, corrosion protection by hot dip galvanizing, pretreatment of metals failure analysis, corrosion measurement techniques, electrochemistry

Hobbys

Sport (biking, swimming, hiking, skiing)

CV of Prof. Dr. Alexander V. MURADOV (Nominated for election to the STAC) (Continued)



Personal information

Dr. Alexander V. Muradov Director General
ANTIKOR - International Scientific & Educational Corrosion Centre
Pro-rector in scientific activities
Gubkin Russian State University of Oil & Gas
Lenin Avenue, 65
119991 Moscow, Russian Federation Tel. +7 (499) 507 88 35
E-Mail: muradov@gubkin.ru Date of birth: 14/11/1950
Place of birth: Baku, Azerbaidjan, USSR Citizen of Russian Federation

Education history

2002 Doctor in technical sciences, thesis "Bases of a Choice of a Design of Paint & Varnish and the Polymeric Coating with the Specific Anticorrosive Action and Planned Service Life for the External Surfaces of Oil & Gas Pipelines"
1979 PhD, dissertation "Development and Research of a Composite Polymeric Coating for the Protection of Oil & Gas Producing Equipment"
1968 1973 Azerbaidjan Institute of Oil and Chemistry named after M.Azizbekov, Engineer"s Diploma in Physical Chemistry

Employment history

Since 2008 Pro-rector in scientific activities, Gubkin Russian State University of Oil and Gas
Since 2007 Vice Chairman of Scientific Council of Gubkin Russian State University of Oil and Gas
Since 2005 Professor of Metals and Non-Metallics Materials Science, Gubkin Russian State University of Oil and Gas
Since 1988 Director General of .ANTIKOR, International Scientific & Educational Corrosion Centre
Since 1986 Deputy Dean, Engineering Mechanics Faculty, Moscow Institute of Oil, Gas and Refinery Industry named after I.M.Gubkin, later Gubkin Russian State University of Oil and Gas
1985 - 1986 leading researcher, Moscow Institute of Oil, Gas and Refinery Industry named after I.M.Gubkin
1983 - 1985 senior researcher, Moscow Institute of Oil, Gas and Refinery Industry named after I.M.Gubkin
1981 - 1983 junior researcher, Moscow Institute of Oil, Gas and Refinery Industry named after I.M.Gubkin
1979 - 1981 senior engineer, Moscow Institute of Oil, Gas and Refinery Industry named after I.M.Gubkin
1976 - 1979 post graduate student, Moscow Institute of Oil, Gas and Refinery Industry named after I.M.Gubkin
1975 - 1976 junior researcher Azerbaidjan Institute of Oil Refinery Equipment Construction
1973 - 1975 Engineer of Chemistry Department in Azerbaidjan Institute of Oil and Chemistry named after M.Azizbekov

Awards

Prof. Muradov has been awarded with Russian State order and medals, he has received Gubkin Award three times (1996, 2002, 2012), Shukhov Golden Medal (2008), Honoured Gas Industry Worker (2000), Honoured Oil Industry Worker (2000), Badge of Honour by Russian Academy of Natural Sciences "Knight of Science and Art"

CV of Prof. Dr. Alexander V. MURADOV (Nominated for election to the STAC) (Continued)

Professional & Scientific Activities

Prof. Muradov has been working in the field of corrosion since 1976.
He has published 7 monographs and over 170 scientific articles, he has 4 certificates of authorship and 8 patents. Member of National Organisation of Corrosion Engineers (NACE) since 2001.
Full member of Russian Academy of Natural Sciences since 2008, member of its Presidium and chairman of Oil & Gas Section since 2010.

At present Prof. Muradov is the Director General of ANTIKOR, International Scientific & Educational Corrosion centre and a pro-rector in scientific activities of Gubkin Russian State University of Oil & Gas. He coordinates activities in the field of corrosion in oil and gas industry in Russia.

EFC Activities

2001-2007, 2010-2013 EFC STAC elected member
2001-2010, 2014-2019 EFC BoA elected member
2010 – EUROCORR'2010 International Scientific Committee Chairman

Scientific Interests

Electrochemistry Adhesion
Corrosion in oil and gas industry Buried pipelines
- corrosion protection Protective coatings -
lifetime prediction Cathodic protection
Diagnostics Corrosion
Education

EUROPEAN FEDERATION OF CORROSION

HONORARY TREASURER'S REPORT

The enclosed finance report covers results for 2018, proposed 2020 budget and membership subscriptions fees.

Annex 1 – Results for 2018

As it can be seen in Annex 1, EFC finished year with a surplus of €3,399. BOA members are reminded that 2018 was a fist year when EFC was registered for VAT in Belgium and as a result all income and expenditure are shown exclusive of VAT and results are not directly comparable with 2017 ones.

A total income of €83,006 excluding VAT was generated during the year with Eurocorr levy accounting for €30,853.

On expenditure side, reduction in a number of costs compared to 2017 is attributable to the VAT registration and EFC's ability to take advantage of the EU reverse charge mechanism. Overall expenditure level is similar to that of 2017 with significant reductions attributable to legal fees incurred in Belgium and spending on medals and awards, which at €1,602 appears to be low. Reduction in awards expenditure is due to some of the Young EFC grant winners not claiming full amount of the grants awarded and in some cases delaying their claims by a year or so.

All other expenditure items are in line with those incurred in prior years and no additional invoices for 2018 were received since results were presented to BOA in April.

Annex 2 – Budget for 2020

Proposed budget for 2020 is shown in Annex 2 and main proposed changes are explained below.

It is assumed that income will remain in line with 2019 budgeted income.

On the expenditure side,

- Small increase was applied to support for working parties (from €2,000 to €4,000);
- Newsletter printing and distribution has now been handed over to the French publisher and Dechema newsletter coordination fee is yet to be agreed, it is expected to be somewhat lower than fee charged in 2018;
- Small inflationary increases were applied to regular expenditure items, such Paris office fee and Managing officer's fee.
- It was assumed that EFC will continue paying VAT on behalf of 5 member societies that are not registered for VAT in 2020.

When regular income and expenditure are taken into account, EFC is budgeted to have an operating surplus of €2,700 in 2020.

HONORARY TREASURER'S REPORT TO BOA (Continued)

In addition, a number of strategic actions are currently being planned for 2020 and €45,000 were allocated in the budget as result. Strategic actions include:

- redevelopment of EFC website to a more modern and mobile friendly version (approx. cost €40,000), and
- development of common standards for corrosion training courses, particularly in the countries where courses are not offered by member societies (approx. cost €5,000).

As a result of the changes described above, it is expected that a deficit of €42,300 will be generated in 2020. BOA members are asked to vote on 2020 budget and its proposal to the General Assembly.

Annex 3 – Membership subscriptions

Status of 2019 subscriptions is shown in Annex 3. 2019 membership subscription invoices were sent to member societies in May and an update on subscription collection will be provided at the meeting. Societies are reminded that 2019 fees need to be paid in order for the society's representative to be eligible to vote at the General Assembly.

Given the increased income arising from EUROCORR levy, we propose to keep membership fees at the same level in 2020.

Julija Bugajeva
EFC Honorary Treasurer
22 July 2019

EUROPEAN FEDERATION OF CORROSION Treasurer's report

Income and expenditure account for the year ended 31 December 2018 Annex 1 - Page 1

	2018 budget		2018 results		2017 results	
	€	€	€	€	€	€
Income	*Excl VAT*		*Excl VAT*		*Inc VAT*	
Net subscriptions receivable		46 500		48 014		54 215
Eurocorr levy		25 000		30 853		31 308
Publishing income		8 000		4 140		13 069
Sponsorship		500				
Total		80 000		83 006		98 592
Expenditure						
Membership services						
Science secretary costs	10 000		9 341		8 925	
Support for working parties	2 000		0		0	
Newsletter (inc Editor's travel costs)	8 000		11 361		13 368	
Website	5 000		5 000		5 950	
Medals and awards	6 000		1 602		4 803	
		31 000		27 304		33 047
Membership/product development growth						
Publicity	500		476		0	
EFC visibility (inc Qatar)	6 000		301		0	
Young EFC expenses	2 000		124		100	
President's dinner at Eurocorr	2 000		2 188		2 329	
		10 500		3 089		2 429
International visibility						
NACE participation costs	2 000		1 670		1 670	
World Corrosion Organisation	3 000		2 941		3 069	
International Union of Chemistry	50		44		82	
		5 050		4 655		4 820
Administrative costs						
Paris secretariat fee & travel costs	7 800		10 876		7 298	
Advisory committee meeting costs	2 500		1 382		254	
Honorary Treasurer travel costs	1 500		1 884		1 405	
Managing officer fee & travel costs	25 000		25 541		22 973	
PO Box in Brussels	1 200		1 336		1 569	
Legal & professional fees in Belgium	4 200		2 464		17 499	
		42 200		43 484		50 998

EUROPEAN FEDERATION OF CORROSION Treasurer's report

Income and expenditure account for the year ended 31 December 2018Annex 1 - Page 1 (Continued)

	2018 budget		2018 results		2017 results	
	€	€	€	€	€	€
	Excl VAT		*Excl VAT*		*Inc VAT*	
Other costs						
Sundry expenses	100		0		30	
Bank charges	150		188		108	
		250		188		138
Belgium VAT						
VAT payable on membership fees	3 850		1 821			
VAT reclaimable on expenses in Belgium	(1 130)		(934)			
		2 720		887		
Total		91 720		79 607		91 432
Surplus for the year		**(11 720)**		**3 399**		**7 160**
Surplus brought forward		279 059		279 059		271 899
Surplus carried forward		267 339		282 458		279 059

EUROPEAN FEDERATION OF CORROSION Treasurer's report

Balance sheet as at 31 December 2018 and 2017 Annex 1 - Page 2

	Note	**Balance at 31/12/18 €**	**Balance at 31/12/17 €**
Current assets			
Outstanding subscriptions	(1)	0	0
Other debtors	(2)	20 928	291
UK bank balance		283 464	298 587
Belgium bank balance		1 905	1 979
		306 297	300 856
Current liabilities			
Creditors and accruals	(3)	19 814	17 773
Net assets		286 483	283 084
General fund		282 458	279 059
Education fund		4 025	4 025
Total funds		286 483	283 084

EUROPEAN FEDERATION OF CORROSION Treasurer's report

Notes to the financial statements for the year ended 31 December 2018 Annex 1 - Page 3

		2018	2017
		€	€
1)	**Subscriptions outstanding**		
	This represents subscriptions due prior to 31 December 2018 that have been received by June 2019.	0	0
2)	**Other debtors**		
	EUROCORR 2018 balance	20 853	
	Prepayment for 2019 expenses	75	
	Prepayment for 2017 expenses		291
		20 928	291
3)	**Creditors and accruals**		
	Managing officer fees and expenses	1 875	1 833
	2018 subscriptions received in advance	140	1 550
	Grants & prizes awarded - to be claimed	1 500	3 850
	Young EFC expenses		100
	Paris secretariat fees and expenses		7 551
	Legal fees in Belgium	1 688	2 806
	International Union of Chemistry	44	82
	Presindent's dinner at EuroCorr	2 188	
	NACE Eurocorr fee	1 670	
	Newsletter	10 000	
	Travel & meeting costs	40	
	Science Secretary costs	669	
		19 814	17 773

EUROPEAN FEDERATION OF CORROSION Treasurer's report

Budget for 2020 Annex 2 - Page 1

	2018 results		2019 budget		2020 budget	
	€	€	€	€	€	€
Income	*Excl VAT*		*Excl VAT*		*Excl VAT*	
Membership subscriptions	48 014		50 000		50 000	
Eurocorr levy	30 853		45 000		45 000	
Publishing income	4 140		6 000		6 000	
Total		83 006		101 000		101 000
Expenditure						
Membership services						
Science secretary fee & travel costs	9 341		10 000		10 000	
Support for working parties	0		2 000		4 000	
Newsletter fee & Editor's Eurocorr attendance	11 361		8 000		9 500	
Website	5 000		5 000		5 000	
Medals and awards	1 602		6 500		6 500	
		27 304		31 500		35 000
Membership/product development growth						
Publicity costs	476		500		500	
EFC visibility (inc Qatar)	301		3 000		2 000	
Young EFC activities	124		4 000		4 000	
President's dinner at Eurocorr	2 188		2 500		3 000	
		3 089		10 000		9 500
International visibility						
NACE participation costs	1 670		2 000		2 000	
World Corrosion Organisation	2 941		3 000		3 000	
International Union of Chemistry	44		50		50	
		4 655		5 050		5 050
Administrative costs						
Paris secretariat fee & travel costs	10 876		7 800		11 500	
Advisory committee meeting costs	1 382		2 500		2 500	
Honorary Treasurer travel costs	1 884		1 500		1 500	
Managing officer fee & travel costs	25 541		25 500		27 500	
PO Box in Brussels	1 336		1 200		1 500	
Legal & professional fees in Belgium	2 464		2 500		3 000	
		43 484		41 000		47 500

EUROPEAN FEDERATION OF CORROSION Treasurer's report

Budget for 2020 Annex 2 - Page 1 Page 1 (Continued)

	2018 results		2019 budget		2020 budget	
	€	€	€	€	€	€
Income	*Excl VAT*		*Excl VAT*		*Excl VAT*	
Other costs						
Miscellaneous expenses	0		100		100	
Bank charges	188		150		150	
		188		250		250
Belgium VAT						
VAT payable on membership fees	1 821		1 500		2 000	
VAT reclaimable on expenses in Belgium	(934)		(550)		(1 000)	
		887		950		1 000
Strategic actions						
Development of website & training courses			12 000		45 000	
				12 000		45 000
Total		79 607		100 750		143 300
Surplus/(deficit) for the year		**3 399**		**250**		**(42 300)**
Surplus brought forward		279 059		282 458		282 708
Surplus carried forward		282 458		282 708		240 408

EUROPEAN FEDERATION OF CORROSION Treasurer's report to BoA

STATUS OF 2019 SUBSCRIPTIONS Annex 3 - Page 1

INVOICE	SOCIETY	COUNTRY	Fees 2019	Arrears b/fwd	Received 2019	Write off	Owing	Type of member	Comments
			€	€	€	€	€		
EFC/17/1	The Austrian Society of Metallurgy & Materials	Austria	1 690,00		1 690,00		0,00	Regular	
EFC/17/6	CEFRACOR	France	1 690,00		1 690,00		0,00	Regular	
EFC/17/8	GfKORR	Germany	1 690,00		1 690,00		0,00	Regular	
EFC/17/9	DECHEMA eV	Germany	1 690,00		1 690,00		0,00	Regular	
EFC/17/10	Associazione Italiana di Metallurgia AIM	Italy	1 690,00				1 690,00	Regular	
EFC/17/15	Norsk Korrosjionsteknisk Forening	Norway	1 690,00		1 690,00		0,00	Regular	
EFC/17/17	Sociedade Portuguesa de Materiais	Portugal	1 690,00		1 690,00		0,00	Regular	
EFC/17/19	Swedish Corrosion Institute	Sweden	1 690,00		1 690,00		0,00	Regular	
EFC/17/21	SGO	Switzerland	1 690,00		1 690,00		0,00	Regular	
EFC/17/22	Institute of Corrosion	UK	1 690,00		1 690,00		0,00	Regular	
EFC/17/23	The Institute of Materials, Minerals and Mining	UK	1 690,00		1 690,00		0,00	Regular	
EFC/17/25	Croatian Society for Materials Protection	Croatia	1 690,00		1 690,00		0,00	Regular	
EFC/17/26	Czech Association of Corrosion Engineers	Czech Republic	1 690,00		1 690,00		0,00	Regular	
EFC/17/28	Hungarian Corrosion Society	Hungary	1 690,00				1 690,00	Regular	
EFC/17/30	Polskie Stowarzyszenie Korozyjne	Poland	1 690,00		1 690,00		0,00	Regular	
EFC/17/32	Institute of Metals and Technologies	Slovenia	1 690,00		1 690,00		0,00	Regular	
EFC/17/37	ANTIKOR – Int. Sci. & Educ. Corr. Centre	Russia	1 690,00				1 690,00	Regular	
EFC/17/38	The Corrosion Association	Turkey	1 690,00	1 690,00			3 380,00	Regular	
EFC/17/43	Gdansk University of Technology	Poland	1 030,00		1 030,00		0,00	Affil U/RO	
EFC/17/44	NACE Europe	Europe	1 690,00				1 690,00	Regular	
EFC/17/47	Oerlikon Metco Europe GmbH	Germany	1 550,00		1 550,00		0,00	Affil Company	

EUROPEAN FEDERATION OF CORROSION Treasurer's report to BoA

STATUS OF 2019 SUBSCRIPTIONS Annex 3 - Page 1 (Continued)

INVOICE	SOCIETY	COUNTRY	Fees 2019	Arrears b/fwd	Received 2019	Write off	Owing	Type of member	Comments
			€	€	€	€	€		
EFC/17/49	Stopaq BV	The Netherlands	1 550,00		1 550,00		0,00	Affil Company	
EFC/17/51	Bond voor Materialenkennis	The Netherlands	1 690,00		1 690,00		0,00	Regular	
EFC/17/54	ATV-SEMAPP	Denmark	1 690,00		1 690,00		0,00	Regular	
EFC/17/55	The Australasian Corrosion Association Inc	Australia	1 690,00	1 690,00			3 380,00	Regular	
EFC/17/56	ABRACO	Brazil					0,00	Regular	suspended membership
EFC/17/57	APCE	Italy	1 690,00				1 690,00	Regular	
EFC/17/58	Serbian Society of Corrosion & Materials Protection	Serbia	0,00				0,00	Regular	possibly reinstating
EFC/17/59	VOM vzw	Belgium	1 690,00		1 690,00		0,00	Regular	
EFC/17/60	SOCIEMAT	Spain	1 690,00				1 690,00	Regular	
EFC/17/62	Water Technologies Laboratory Ltd	Russia	1 550,00				1 550,00	Affil Company	
EFC/17/63	National Institute for Nuclear Science and Technology	France	1 030,00		1 030,00		0,00	Affil U/RO	
EFC/17/64	Chinese Society for Corrosion and Protection (CSCP)	China	1 690,00				1 690,00	Regular	
EFC/17/65	fkks-Fachverband Kathodischer Korrosionsschutz e.V	Germany	1 690,00				1 690,00	Regular	
EFC/17/68	Expartech BVBA	Belgium	1 550,00				1 550,00	Affil Company	
			53 890,00	**3 380,00**	**33 890,00**	**0,00**	**23 380,00**		

Appendix 14

REPORT OF THE SCIENTIFIC SECRETARY TO BOARD OF ADMINISTRATORS
(March 2019 - July 2019)

During the CORROSION Conference in Nashville I was able to present the goals and work areas of the EFC to many visitors at the EFC booth. Surprisingly, many European visitors know neither the EFC nor its main event the EUROCORR conference.
The Paper Selection Meeting for EUROCORR took place in Seville immediately afterwards. This meeting was prepared by my colleague Christiane Hirsch and myself based on the paper submissions. On the basis of these submissions I prepared a draft programme which was sent to all Working Party Chairs together with the paper submissions of their topics. At the end of the Paper Selection Meeting, which I chaired, the scientific programme of EUROCORR was finalised.

For several years the session titled "CO2-Corrosion in CCS-Applications" has been organised during EUROCORR. Up until now this has been organised as a temporary Task Force. Since it turned out that it is not just a short-term topic, the activities shall continue in the future.
In order to ensure this success in the long term, conversion into a working party seemed to make sense. For this the support of the member associations is required. One of my tasks is to inform the EFC member associations about this wish from the Task Force and to ask for their statement.
For this purpose I have prepared a letter together with the Task Force Chair in which the previous work is reported and the reasons for a transformation into a Working Party are presented. I have sent this letter to all member associations and asked for their response.

In mid June I contacted the Working Party Chairs announcing the upcoming STAC Meeting during the EUROCORR in Seville. In this e-mail the respective WP Activity Reports from 2018 were included with the request to update these for the time period from September 2019 until August 2021.

On 9th July I attended the President’s Advisory Committee meeting in Paris.

I drew up an initial agenda and the Working Papers for the upcoming STAC Meeting during the EUROCORR in Seville. After the STAC Chairman Wolfram Fürbeth agreed upon the content, the documents were circulated to all Working Party Chairs, the elected STAC members and guests.

Throughout the whole period from March 2018 I have been in continuous contact with different colleagues from EFC and other corrosion related organisations. The day-to-day work has been occupied with administrative matters including the allocation of EFC Event numbers, maintaining and updating the EFC homepage including the EFC Calendar of Events, the Working Party pages and the restricted areas. I also tried to encourage the people who had applied for an EFC Event number to deliver a report of the event to be included in the EFC Newsletter.

Roman Bender
EFC Scientific Secretary July 2019

Appendix 15

Report of the Managing Officer to the Board of Administrators (Period April 2019 to September 2019)

Since April 2019, I have focused my work on actions improving the attractiveness and visibility of the membership to EFC, and especially on the implementation of the Loyalty Programme and of the offer "Exhibition booth & EFC Affiliate Membership" to be launched in September 2019. In close cooperation with local organisers of EUROCORR 2020 and with the Frankfurt Office (responsible for membership applications), I defined the planning related to these programmes and the organisation needed to treat applications to the offer.

In order to improve the visibility of the memberships to EFC and of their benefits, I updated the EFC flyers according to the feedback received during the BoA meeting in April 2019.

Also, I wrote 3 articles presenting the Loyalty Programme, the offer "Exhibition booth & EFC Affiliate Membership" and the memberships to EFC in the EFC Newsletter to be issued in September 2019.

Part of my work was dedicated to the improvement of the continuity and organisation of EUROCORR. Actions included mainly the preparation and implementation of the Loyalty Programme, already mentioned above.

The part of my work related to the development of EFC activities during the period in question included exchanges with Dr. Wijesinghe in Singapore regarding the establishment of an International Member Society in this area.

A significant part of my work is dedicated to administrative tasks and to support to the EFC offices. Regular tasks include the responsibility for the logistics and documents of the PAC meeting, the planning of extra meetings during EUROCORR, the logistics and documents of some of these extra meetings, the contribution to the preparation of the documents of the BoA and GA meetings, the EUROCORR Young Scientist Grant (YSG) (call for applications, interface with applicants and winners, printing of the diplomas), and support to the Belgian office for the registration of the annual accounts of the EFC to Belgian authorities.

During the period April - Sept. 2019, I also took action on various matters such as the obligations related to the new law on UBO register in Belgium, the management of access to the Belgian bank account, the interface with the publisher of the EFC Newsletter (accreditation letters, sample letter for prospects), the preparation of a notice with practical information for winners of the YSG and the coordination needed for the publication of the reports of these winners on the EFC website and in the EFC newsletter.

Hélène Illaire
22 July 2019

Young-EFC Report Activities April 2019- September 2019

A) Plan of activities for Eurocorr2019

1. Scientific Dissemination Workshop: Explaining Science

Activity: 3 h workshop organized by the Y-EFC and conducted by 2 scientist from The Big Van Science (www.bigvanciencia.com) with the aim to improve communication skills and encourage the young community to organize outreach activities in the near future.

Fees: 20 € for the attendants (*the collected fees can be used for the together activity after the Young EFC meeting*)

Number of attendants: 20 (following registration order). Registration for this workshop is available on the web.

Time/Location: Monday 9 from 14.00-17.00 in the Venue

Short Description of Big Van Science: Big Van Science is one of the most recognized groups in the field of science communication. They are a group of active scientists and researchers with the clear objective of transforming scientific culture into an attractive product for different types of public

Short Description of workshop: Within research, development, and innovation activities, it's increasingly important to communicate and disseminate scientific projects and their results efficiently and with the largest possible impact on citizens. However, people who work in science and research typically don't receive any specific training in this area. For this reason, here at Big Van Science, we've developed a methodology that allows this type of student to transform the science they are researching in their laboratories into stories that truly appeal to the general public.

General content of the workshop:

● Dynamic speech techniques: strengthening the necessary stage skills for oral science communication, such as stage presence, gaze, gesturing, the use of the voice, and awareness of the audience.
● Specific methodology to define the scientific content to be explained: choice of general theme and the specific content, to relate them to each other and to the type of audience they are directed at.
● Contextualisation of scientific content: implications of science on society and reflection upon the social challenges being addressed.
● Storytelling: narrative techniques for the construction of oral stories that allow the scientific content to be brought closer to the audience, and vice-versa.

2. Young-EFC meeting/ together activity

Activity: The 4th young EFC meeting to show new initiatives (mentoring program), talks from the Eurocorr Scientist Grant winners 2018 and interaction from senior/young communities.

Number of attendants: 60-70 based on last years

Time/Location: Tuesday 10 from 17.30-20.00 in the Venue

Young-EFC Report Activities April 2019- September 2019 (Continued)

3. Poster Prize Eurocorr 2019

● Registration for competition has been asked during online registration for people under 35.
● The posters into competition will have a sticker (EFC Poster Prize Competition) in the frame.
● A list with the posters into competition and their location will be provided to the jury.

4. Y-EFC support to the Corrosion Science Course organized by Johan Tidbald and Christofer Leygraf

The Course was cancelled by local organizers and the course organizers due to the low number of attendants (only 1 attendant by June 2019)

B) Elsevier Authors/Reviewers Workshops and Webminars

First steps to support Authors/Reviewers Workshop and/or Webminars organized by Elsevier.

- The EFC Board will be informed and asked for possible events to conduct presential Workshops
- We were informed that the EFC website could not be used as a platform for webminars.

C) Other activities

● Contribution in the E-EFC Newsletter (April 2019), summarizing the YEFC activities
● Active interaction with the local organizers of the coming Eurocorr in 2019 (Seville) and 2020 (Brussels)
● Active exchange of news and advertisement of events (conferences, doctoral schools) with the YEFC network

D) Budget

Young EFC Financial Report

	Income	Item
BUDGET 2018		
Income	2 000	Allocated by BoA
Expenses	124	Flyers & Posters for EUROCORR 2018
Surplus Year 2018	**1 876**	
BUDGET 2019		
Income	2 000	Allocated by BoA
Surplus year 2018	1 876	Approved by BoA
Total Budget 2019	**3 876**	
Expenses Expected	2200	
	200	Flyers & Posters for EUROCORR 2019
	1 050	Big Van Science Workshop
	950	Social Event – YEFC meeting
Surplus Year 2019	**1676**	

Appendix 17

EUROCORR 2019 REPORT FORM 1

(TO BE COMPLETED BEFORE THE EVENT)

DATES OF EVENT 2019, 9 / 13 September **VENUE** Barceló Renacimiento Sevilla Hotel

OVERALL THEME OF THE CONFERENCE:

New times, new materials, new corrosion challenges

ANTICIPATED NUMBERS OF DELEGATES:

CATEGORY		REGISTRATION FEES (excluding VAT)		TARGET NUMBERS
Early / late registration:		Early	Late	
Committee Members, etc. (Invited):	41	0,00 €	0,00 €	50
Invited Speakers:	4	0,00 €	0,00 €	4
Member Delegates:	186	578,51€	652,89€	210
Non-Member Delegates:	470	661,16€	735,54€	520
Students:	264	247,93€	314,05€	300
Day tickets (and others):	26	433,88€	475,21€	35
Exhibitors:	72	0,00€	0,00€	82
			Total:	1.201

ITEMS INCLUDED IN THE FEES:

The full registration fee includes:

- Admission to all scientific sessions and to the exhibition area
- Welcome Drink on Monday, September 10, 2019,
- Exhibition Party on Tuesday, September 11, 2019,
- Poster Party on Wednesday, September 12, 2019,
- Choir Concert in Church on Wednesday, September 12, 2019,
- Congress materials,
- Refreshments during coffee breaks and lunch breaks.

NUMBERS OF PAPERS:

ORAL PRESENTATIONS:	**707**
POSTERS:	**219**
TOTAL	**926**

TOTAL NUMBER OF TOPICS **36**

NUMBER OF PARALLEL SESSIONS **34**

Draft Agreement for EFC China 2019

EFC-China 2019

1st International Conference on Corrosion Protection and Application (ICCPA)

Oct. 9-12, 2019

Chongqing, China

AGREEMENT

on Hosting and Organisation of ICCPA 2019 in

Chongqing, China

Draft Agreement for EFC China 2019 (Continued)

THIS AGREEMENT IS MADE BETWEEN

A. **The European Federation of Corrosion** (hereinafter called EFC)

The EFC shall fulfil its obligations deriving from the present agreement through the following office of its General Secretariat

European Federation of Corrosion, General Secretariat - London Office c/o The Institute of Materials, Minerals and Mining
297 Euston Road, London NW1 3AQ, United Kingdom Phone: +44
20 7451 7332; Fax: +44 20-7839 2289
E-mail: EFC@iom3.org

B. **HOST SOCIETY** (hereinafter called HOST)

Please add the name/address

WHERE AS

i) ICCPA is a conference event of EFC, Chongqing Association for Science and Technology and Chinese Society for Corrosion and Protection.
ii) The HOST is an EFC Affiliate Member Chongqing Wujiu Periodicals Press selected by EFC to organise ICCPA 2019.
iii) ICCPA 2019 will take place in Chongqing, China on October 9–12, 2019.
iv) The International Scientific Committee which may be named Academic Committee and which consists of selected representatives of EFC and members selected by Chongqing Wujiu Periodicals Press.

v) The Organising Committee which consists of members selected by the HOST and must include a representative of EFC, is responsible for the preparation of the Conference. For the duration of this agreement, the HOST shall hold a permanent secretariat through:

Name:_____
Address:_____
Phone: _____
E-mail: _____

Draft Agreement for EFC China 2019 (Continued)

1. The Agreement

EFC and the HOST agree to organise ICCPA 2019. The parties to the agreement shall cooperate to ensure that the Conference provides a high- quality and representative international forum for corrosion experts from academia and industry.

2. Use of Intellectual Property Rights

The EFC shall grant to the Organising Committee the right to use the name "EFC Event No. 448" and the EFC logo and to issue all documentation for the Conference with such insignia and on behalf of the European Federation of Corrosion.

3. Responsibilities of the International Scientific Committee

The International Scientific Committee shall determine the content, structure and duration of the scientific programme and guarantee the quality of contributions.

This committee may be involved in the following areas, in connection with the Organising Committee:

- the themes and speakers for keynote addresses and plenary sessions;
- the number and choice of topics and speakers of parallel sessions;
- the selection of poster displays.

5. Responsibilities of the Organising Committee

The Organising Committee shall oversee and control the planning and running of the Conference (in association with the HOST):

- financing (budget, expenditures, search for sponsors, registration fees, etc.);
- conference facilities (conference halls, meeting rooms, poster display areas, press, communications, etc.);
- technical installations (video, LCD projection, etc.);
- accommodation (hotel reservations for participants, special arrangements for students, etc);
- conference documentation (announcements, information leaflets, calls for papers, abstracts, conference programmes, press releases, city maps/guides for foreign participants, etc.); all the electronic and printed versions must acknowledge the EFC and the conference programme must dedicate one full page to the EFC.
- the social programme of the Conference (welcome cocktail, conference dinner, excursions, etc).

6. Responsibilities of the HOST

The HOST shall assume the financial responsibility and risk of the conference. As such the HOST will have total control of the budget and no expenditure can be incurred without its prior agreement.

The HOST will pay EFC a levy of 10% of the total fees paid by delegates. The levy will be payable within six months after the end of ICCPA.

The HOST shall provide complimentary registrations including the conference dinner, cover travel and accommodation costs and provide speech reward to 20 (twenty) experts selected by the EFC, who will give speeches during ICCPA.

Draft Agreement for EFC China 2019 (Continued)

Any other complimentary registrations will be at the discretion of the HOST.

Reduced registration fee must be offered to EFC members (members of EFC Member Societies and employees of EFC Affiliates).

The HOST shall ensure that a discount (of approx. 25%) on the complete exhibition package is offered to all EFC Affiliate Members and Member Societies wishing to be an exhibitor at the ICCPA 2019 exhibition.

7. Responsibilities of the EFC

The EFC, by granting the use of its name to the event, is responsible for the scientific quality of the Conference and for the efforts deployed to ensure its success, notably by:

- providing substantial contributions to the scientific programme from the EFC Working Parties;
- promoting the Conference which must be enhanced by the supportive action of the EFC (provision of mailing lists, newsletter, systematic announcement of the Conference, for example via Internet, etc.) in order to achieve for the event a genuine international dimension;

8. Duration of this Agreement

This agreement shall take effect upon signature by all parties. It shall end after payment of the levy by HOST.

9. Changes

This agreement may only be varied if such variation is in writing and signed by a duly authorised officer of each of the parties.

Signatures:

Date _____ Date _____

_____ _____

Name *Name*

EFC President HOST