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Newsletter No. 18

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Dear Members of the International Corrosion Council,

before the 21st ICC Congress scheduled for 10 – 14 May, 2020, in São Paulo, Brazil, it is time to recall the last ICC Congress in 2017 and what has happened in the meantime.

The **20th ICC congress** was held from September 3 – 7, 2017, in Prague, Czech Republic, as a joint event with the EUROCORR 2017, the annual conference of the European Federation of Corrosion. With more than 1400 participants from 62 countries this became the largest scientific event on corrosion and corrosion mitigation ever organized in Europe covering all aspects of corrosion engineering, protection and science in 760 oral presentations under the slogan **Corrosion Control for Safer Living**. The organizers, Czech Association of Corrosion Engineers (AKI) and DECHEMA, Frankfurt/Main, Germany, with advice of the ICC Executive Committee produced a unique platform for networking with representatives of universities, research institutions, industry and graduate students. More details are given in the Draft Minutes of the General Assembly of the ICC in Prague published on the ICC homepage (icc-net.org).

At the **General Assembly (GA)** in Prague the ICC President, Prof. Carlos Arroyave (CA), Colombia, announced that the ICC included 60 member countries represented by a total number of 109 delegates nominated by national nominating bodies. As only 69 delegates of the total appeared to be active CA encouraged the nominating bodies to nominate and re-nominate the maximum of two prominent corrosionists from their country for the coming term 2017 to 2023. He further invited all those countries, so far not formerly represented in the ICC, to join into this great scientific community.

President CA announced the winner of the **2017 ICC awards** and congratulated for the
Marcel Pourbaix Award: Prof. Christofer Leygraf.
Past President Award: Prof. Manuel Morcillo.
Edward Greco Award: Dr. Thomas Prošek
Young Researcher Travel Award: Dr. Pauliina Rajala (Finland).

The GA elected as **new Vice-Chairpersons** of the ICC for the period 2017-2020:

- E. Angelini (Italy) as First Vice-Chairperson, and
- V.S. Raja (India) as Second Vice-Chairperson.

The last version of the **ICC Bylaws** from 1993 was updated and modified on the GA. The 2017 issue is published on the ICC-homepage (icc-net.org).

The GA made an important move to a higher visibility and efficiency of **the ICC** by agreeing to become a **member of the World Corrosion Organization (WCO)** (www.corrosion.org) with a permanent seat in the board. The WCO is a not-for-profit organization functioning as an umbrella organization for not-for-profit organizations that have a significant interest in corrosion control and/or corrosion research. The WCO was founded in 2007 by the European Federation of Corrosion (EFC), NACE International (USA), the Chinese Society for Corrosion and Protection (CSCP) and the Australasian Corrosion Association and includes presently more than 30 corrosion related associations, institutions and industrial partners as members from all parts of the world. In 2009 WCO became a non-governmental organization (NGO) of the United Nations (UN).

WCO's vision is the implementation of effective corrosion control measures by corporations and governments globally. The mission is to facilitate global implementation of best practices in corrosion protection for public welfare. The WCO strives for raising the public awareness of corrosion and corrosion control by promoting the World Corrosion Awareness Day, every year on the 24th of April, and fosters world-wide activities of member organizations to create visibility for corrosion in the public press which is important to support government actions. WCO promotes education programs in the field of corrosion and prevention for elementary and high schools taking into account socio-economic considerations. WCO makes use of existing social media and sponsors WCO sessions at member organization conferences. WCO lobbies continuously at the UN for corrosion control issues world-wide.

ICC and WCO share the same vision and operate globally. Both organizations can take advantage of global networks. The UN membership of the WCO as an NGO opens great opportunities for ICC member organizations to articulate globally on the UN level the need for research and development (R&D) in the wide and interdisciplinary field of corrosion and asset protection. This opens unique opportunities to highlight special local situations as they exist e.g. in developing countries. A simple example demonstrating the enormous impact of corrosion in everyday life on human health was contributed by Prof. Lucien Bonou from Burkina Faso, Africa, (presented at the 17th International Corrosion Congress in 2008 in Las Vegas, USA) by examining the metal composition of cooking pots produced in his country from recycled aluminium alloys. He found that besides some aluminium the material contained 32% iron, 10% copper and considerable amounts of other heavy metals (10% zinc, 2.5% lead, and 0.12% cadmium). For a corrosionist it is clear that such "aluminium" pots corrode heavily during cooking of ordinary meals, and all the poisonous heavy metal corrosion products are eaten with the meals, making people

ill. This was one of the examples in the “White Paper” issued by WCO in 2008 (Global Needs for Knowledge Dissemination, Research, and Development in Materials Deterioration and Corrosion Control, www.corrosion.org) which convinced the UN to accept the application of WCO as a NGO. There are much more similar examples out there which could be made publicly aware by ICC member societies in the future using WCO channels to the UN.

Joining forces between ICC and WCO is a win-win-situation as it considerably increases the opportunities of both organizations to realize their common global visions. It includes the cooperation with other powerful corrosion organizations like the European Federation of Corrosions (EFC) and Chinese Society for Corrosion and Protection (CSCP) and, thus, significantly increases the visibility of the ICC. It underlines the individuality of the ICC as a global association of organizations with interest in corrosion, corrosion research and asset protection. This is comparable to the status of the EFC which is as well an association of organizations, however in this case of European organizations.

The members of the ICC are highly recommended to make use of the information contained in the WCO webpage, specifically publications, videos, photos and other information under “Corrosion Resources”, which can be used as educational aids and stimulate to engage in public actions on the Corrosion Awareness Day.



ICC Executive Committee at 20th ICC in Prague, September 2017: (f.r.t.l.): Prof. Carlos Arroyave/Columbia (President), Prof. Emma Angelini/Italy (2nd Vice-President), Prof. Günter Schmitt/Germany (1st Vice-President), Dr. Jorge Calderon/Columbia (Secretary/Treasurer)



20th ICC, Prague, 2017: Presentation of the Past President Award to Prof. Manuel Morcillo by Prof. Carlos Arroyave



20th ICC, Prague, 2017: Presentation of the Edward Greco Award to Dr. Thomas Prošek, Czech Republic, by Prof. Günter Schmitt



20th ICC, Prague, 2017: Executive Committee and awards recipients (f.r.t.l.): Prof. Morcillo/Spain (Past President's Award), Dr. Pauliina Rajala/Finland (Young Researcher Travel Award), Prof. Arroyave, Dr. Prošek/Czech Republic (Edward Greco Award), Prof. Schmitt, Dr. Calderon

The bidding for organizing the **21st ICC International Corrosion Congress in 2020** was won by the Brazil Corrosion Association (ABRACO) with only one vote more than Canada (NACE International). Thus, Prof. Zehbour Panossian, Brazil, announced the venue of the next ICC to be São Paulo, Brazil, and the congress time 10-14 May, 2020.



20th ICC, Prague, 2017: Handing over the ICC flag (f.r.t.l.) Prof. Carlos Arroyave, (President), Prof. Günter Schmitt (1st Vice-President), Prof. Zehbour Panossian (President of 21st ICC in São Paulo, Brazil)



20th ICC, Prague, 2017: Enfolding the ICC-flag inviting to the 21st ICC in São Paulo, Brazil

EC meetings since Prague

The EC of the ICC met in

- September 13, 2018, at the EUROCORR 2018 in Krakow, Poland
- March 26, 2019, at the NACE International corrosion conference in Nashville, Tennessee, USA.

The next meeting will be held on

- September 13, 2019, at the EUROCORR 2019 in Seville, Spain.

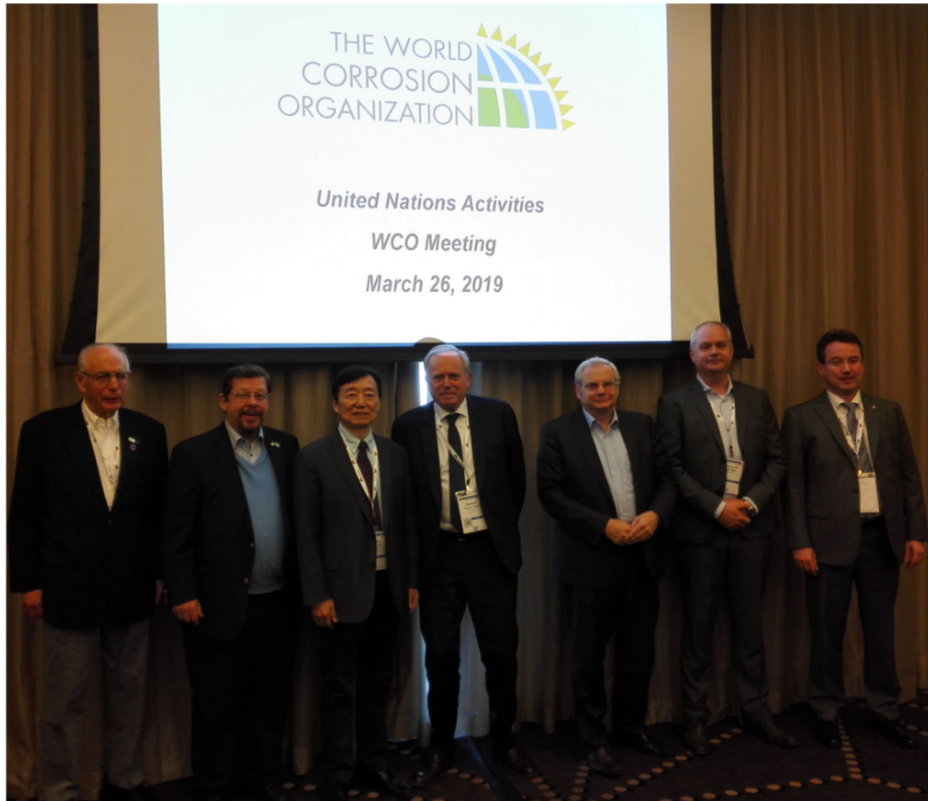
Representation of ICC

The ICC was represented by its president at the meetings of the Board of Administrators (BoA) of the World Corrosion Organization (WCO) on

- April 17, 2018, in Phoenix, Arizona, USA, at the NACE International corrosion conference
- September 11, 2018, at the EUROCORR 2018 in Krakow, Poland
- March 26, 2019, at the NACE International corrosion conference in Nashville, Tennessee, USA.

In my capacity as president of the ICC and board member of the WCO I was invited to the conference “Corrosion Prevention Balkans 2018” held 28 – 30 June, 2018 in Plovdiv, Bulgaria, to give a presentation on “Global Needs for Knowledge Dissemination, Research and Development”, basically the contents of the first WCO White Book. The conference was organized as a starting point to educate and increase the knowledge of engineers working in Bulgaria in corrosion related businesses, e.g. cathodic protection. The aim of the conference was to produce networks of corrosionists in Bulgaria as a nucleus for a corrosion related professional

organization in Bulgaria. It was agreed on this successful conference that with the help of corrosion experts from outside Bulgaria the education and training in corrosion and corrosion protection could be improved in the future. Discussions were started with professors at the university of Sofia how to found a so far not existing Bulgarian Corrosion Society and later become member of the ICC.



WCO Board Meeting, 2019, Nashville (f.r.t.l.): Roman Bender, Arjan Mol, Willi Meier, Damien Feron, En-Hou Han, Günter Schmitt, George Hays

In my capacity as ICC president I was invited to the Conference “Corrosion Russia: Corrosion in the Oil and Gas Industry” in May 2019 in St. Petersburg, Russia, to represent the ICC and explain the aims of this great corrosion community. Likewise represented were the EFC and NACE International as international corrosion associations. At the corrosion conference in Warsaw, Poland, in the week after the St. Petersburg conference, the ICC was again represented by its president.

21st ICC

Now, the international corrosion community is warmly invited to attend the 21st ICC conference in May 2020 in São Paulo, to present new insights and achievements in the field of corrosion and materials protection, to meet and communicate with renowned experts around the world and discuss with colleagues from academia and industry on methodologies and practical solutions for sustainable protection of health, environment, and assets.

The abstract submission is open with a deadline of 30 October, 2019. Please visit the conference webpage via icc-net.org and www.abraco.org.br.

Following an idea of Prof. Damien Ferron, president of the WCO and past-president of the EFC, activities have been started to implement into the agenda of the 21st ICC a **WCO-workshop/session** with the working title “**Corrosion and Green Energies**”: Papers are invited focusing on corrosion problems and possible solutions encountered in "green" energy production (using wind, water, sun, geothermal heat, biological waste, etc.), energy storage (e.g. batteries, fuel cells, hydrogen, molten salts, etc.) and energy transportation [electricity grids (onshore, offshore) and pipeline grids, e.g. for hydrogen]. This is a highly actual and burning global topic where new technologies are producing new corrosion problems and at the same time open up new fields of fundamental and applied research creating new and innovative ideas. It is intended to summarize the messages of the workshop/session papers in a **new White Book of the WCO**. Contributions are highly welcome.

Call for the Young Research Travel Award

The ICC offers two travel awards oriented to support the attendance of two young researchers at the 21st ICC Congress. The Executive Committee of the ICC asks for applications for this award. Basic conditions for the applicants are: i) to be author and presenter of an accepted oral paper, ii) to be owner of a Ph.D. degree recently obtained (less than two years ago) and iii) to be properly accredited by the respective university. The award winners will be selected based on the CV and financial needs of the applicants. Preference will generally be given to applicants from less developed countries. The award consists of an amount of money to cover an economy-fare air flight ticket between the individual's home place and São Paulo, and the registration fees of the Congress. Winners must buy their flight tickets by their own. These costs will be reimbursed after the Congress. Please encourage young corrosionists of your country to apply for this award. For more information please visit the ICC webpage. **Applications** shall be sent via email to all members of the ICC-Executive Committee **before Tuesday, March 3, 2020**.

Call for supporting the attendance of senior corrosionists

The EC of the ICC decided to open a call oriented to reimburse the registration fees of one or two recognized senior corrosionists who are currently retired with a proven participation in at least three previous ICC congresses. Applications shall be sent via email to all members of the ICC-Executive Committee before **Tuesday, March 3, 2020**.

Call for the 21st ICC Poster Award

As in previous events, the ICC will give an award to the best poster presented in the 21st ICC Congress. A commission of recognized senior researchers will be the jury.

Marcel Pourbaix Award

The Marcel Pourbaix Award was established in April 20, 1995 to honor corrosion scientists for outstanding contributions to the international cooperation in the field of metallic corrosion. No restrictions as to membership in the ICC or in other societies apply in order to qualify for the Marcel Pourbaix Award. The awardee receives a medal and a certificate at the Gala Dinner of the ICC congress. For more information see the ICC webpage.

General Assembly in 2020

The EC of the ICC invites all the current national delegates of the ICC to attend and actively participate in the General Assembly (GA) to be held in May, 2020, along the 21st ICC Congress. The GA is scheduled for Sunday, May 10, 2020, from 16:00 to 18:00 h (Part 1), and for Tuesday, May 12, 2020, from 17:00 to 19:00 h (Part 2).

Renewal and nomination of new delegates

The EC of the ICC invites all former delegates, national nomination bodies and the international corrosion community in general, to nominate new names for continuing or starting the integration of those countries that are not formally represented at the ICC. It is intended to increase the number of member countries to 66 by May 2020. Nominations are to be confirmed in the coming GA.

Final remarks

Looking back into the time elapsed since the last ICC conference 2017 in Prague it appears that much has been done to increase the visibility of the ICC in the world and to cooperate and join forces with other great corrosion organizations. New great opportunities have been created through the cooperation with the WCO. The corrosion community world-wide is encouraged to make use of the existing international scientific and technical networks in order to raise funds for research and development and to increase the public awareness for the paramount impact of corrosion and materials protection in all fields of our daily technical and personal life.

Please register for the 21st ICC in Brazil as soon as possible and join us in São Paulo in May 2020.

Best regards



Prof. Günter Schmitt
President



Dr. Tim Gommlich
Secretary