

General Information

Contact and Registration

For organizational reasons we kindly ask you to register until 01 November 2021 at

IFINKOR – Institut für Instandhaltung und Korrosionsschutztechnik gGmbH

(Institute for Maintenance and Corrosion Protection Technologies n.f.p.Ltd)

Course office: Mrs. A. Ernst, Prof. G. Schmitt

Kalkofen 4, D-58638 Iserlohn, Germany

Tel.: +49-2371-95970

Fax: +49-2371-959722

Email: office@ifinkor.de

Internet: <http://www.ifinkor.de>

Registration Fee ^{*)}

The registration fee is EURO 450 which includes course notes

^{*)}The registration fee is VAT-free according to § 4.22 UStG

Registration conditions

The receipt of the registration is considered a binding confirmation of the course participant. Following the receipt of the registration a confirmation and the invoice is sent to the course participant. For registered participants a cancellation is possible until 05 November 2021 free of charge. After this date 80% of the registration fee will be charged. The ZOOM-access code will be sent to the participant 3 days before the virtual event.

The GfKORR

The GfKORR – Gesellschaft für Korrosionsschutz e.V. (German Society for Corrosion Protection) is an interdisciplinary association of experts from industry and R&D, aiming at reducing corrosion and consequential damages in all eligible areas of life and technology. The GfKORR dedicates itself to comprehensive route cause analysis and supports efficient knowledge transfer in all areas of corrosion to improve integrity of assets, safer living and environmental protection.

The IFINKOR

The Institute for Maintenance and Corrosion Protection Technologies n.f.p.Ltd. (IFINKOR) is based in Iserlohn in the state Northrhine-Westfalia of Germany. It was founded in 1990 as an independent non-for-profit company at the South-Westfalia University of Applied Sciences. for bridging the gap between academia and industry and to offer knowledge, expertise, experimental services and innovation in the field of maintenance and corrosion protection. The focus is on investigation, testing and monitoring of materials corrosion performance and the durability of protection methods.

Further information at IFINKOR or GfKORR

**GfKORR –
Gesellschaft für Korrosionsschutz e.V.**

Geschäftsstelle

Theodor-Heuss-Allee 25

60486 Frankfurt am Main

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GfKORR – Gesellschaft für Korrosionsschutz e.V.

Intensive Course on Corrosion and Scale Inhibition Theory, Testing, Application



9 - 10 November 2021

Virtual Event

organized by the
Working Party on Corrosion and Scale Inhibition of the
European Federation of Corrosion (EFC-Event-No. 482)

in cooperation with GfKORR, IFINKOR
and the World Corrosion Organization



Introduction

Corrosion and scale inhibitors are functional chemicals which are added to corrosion systems in order to prevent corrosion failures, loss of technical efficiency, production downtime and unexpected maintenance costs. They are effective already at low concentrations in a wide range of environmental conditions and can be used in aqueous and non-aqueous media. Thus, in oil and gas production and transport, energy production and distribution, production of metallic materials (specifically steel) and in many other technical branches, the use of inhibitors is today indispensable to assure the integrity, safety, sustainability, and economy of plants and installations and constitute a smart solution in protecting industrial assets. The selection of appropriate chemicals or mixtures of functional substances is no “black magic”, but has a sound scientific basis.

The course summarizes the present day knowledge in theory, testing and application of corrosion and scale inhibitors. The emphasis is on application in selected technical fields and discussion of environmental aspects. After explaining the registration of inhibitor chemicals within the European REACH regulation (**Registration, Evaluation, Authorisation and Restriction of CHemicals**) the questions will be discussed which chemicals will remain in future in the list environmentally accepted substances and what strategies are available to select alternatives for presently still needed, however environmentally less-friendly inhibitor compounds. In this context the hype for “green inhibitors” based on natural products will be discussed critically. Overall, the aim of the course is to provide enough information to enable course participants to tackle inhibitor problems efficiently.

Programme – 9 November 2021

The starting times relate to the time in Amsterdam, Berlin, Rome, Stockholm, Vienna (CET+1h)

- 08:25 **Opening**
Prof. Dr. Günter Schmitt
IFINKOR-Institute for Maintenance and Corrosion Protection Technologies gGmbH, Iserlohn, Germany
- 08:30 **Basics on electrochemical corrosion**
Prof. Dr. Helena Otmačić-Ćurković,
Department of Electrochemistry,
University of Zagreb, Croatia
- 09:45 **Break**
- 10:15 **Mechanisms of corrosion inhibition**
Dr. Robert Lindsay
Corrosion & Protection Center, University of Manchester, United Kingdom
- 11:15 **Scale Inhibition (1)**
Prof. Dr. Kostas Demadis
Department of Chemistry, University of Crete, Greece
- 12:00 **Break**
- 13:30 **Scale Inhibition (2)**
Prof. Dr. Kostas Demadis
Department of Chemistry, University of Crete, Greece
- 14:15 **Inhibition in concrete**
Prof. Dr. Kostas Demadis
Department of Chemistry, University of Crete, Greece
- 15:00 **Break**
- 15:30 **Inhibition in neutral and alkaline media**
Dr. Wolfgang Hater, Germany
- 17:00 **Discussions**
End of Day 1

Programme – 10 November 2021

- 08:30 **Investigation, testing & monitoring of corrosion inhibitor efficiency**
Dr. Tim Gommlich
IFINKOR-Institute for Maintenance and Corrosion Protection Technologies gGmbH, Iserlohn, Germany
- 09:45 **Break**
- 10:15 **Inhibition in acids, oil & gas technology, flow systems**
Prof. Dr. Günter Schmitt
IFINKOR-Institute for Maintenance and Corrosion Protection Technologies gGmbH, Iserlohn, Germany
- 11:15 **Inhibitors for temporary protection, VCI.**
Prof. Dr. Günter Schmitt
IFINKOR-Institute for Maintenance and Corrosion Protection Technologies gGmbH, Iserlohn, Germany
- 12:00 **Break**
- 13:30 **Inhibitors in organic coatings**
Prof. Dr. Fatima Montemor
Department of Chemical Engineering,
University of Lisbon, Portugal
- 14:15 **Green inhibition**
Dr. Wolfgang Hater, Germany
- 15:15 **Break**
- 15:45 **REACH – Environmental aspects of corrosion and scale inhibitors**
Dr. Wolfgang Hater, Germany
- 17:00 **Final discussions**
End of course