

GENERAL INFORMATION

HOW TO REACH US

LANGUAGE

The course will be held in English.

SCHEDULE

The course is a two day event.

Start: Thursday, 5 November 2015, 10:15 am,

End: Friday, 6 November 2015, 4:30 pm

VENUE

DECHEMA Building
Theodor-Heuss-Allee 25
60486 Frankfurt am Main
Germany

REGISTRATION

Please complete and return the registration form or contact:

DECHEMA-Forschungsinstitut
Training department
P.O. Box 17 03 52
D-60077 Frankfurt am Main

Tel.: +49 69 7564-253/202
Fax: +49 69 7564-414
E-Mail: gruss@dechema.de
E-Mail: weber-heun@dechema.de
Internet: www.dechema-dfi.de

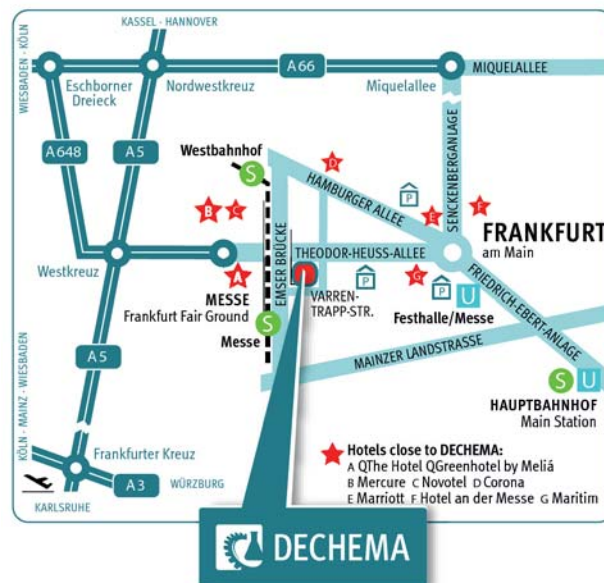
REGISTRATION FEE

1.200,- €

1.185,- € (personal DECHEMA members)

(including course materials, certificate of attendance, get-together, lunch and coffee breaks)

The number of participants is limited.

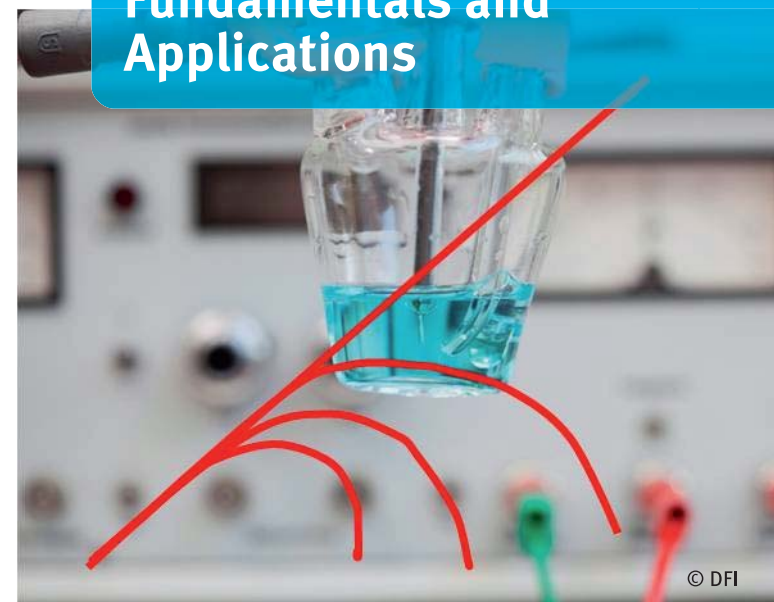


More information on how to reach us can be found here:
<http://dechema-dfi.de/en/directions.html>.

TRAINING COURSE

5 - 6 November 2015
Frankfurt am Main / Germany

Electrochemical Impedance Spectroscopy - Fundamentals and Applications



SCOPE AND CONTENT

Electrochemical impedance spectroscopy EIS is a powerful and non-destructive analytical technique to characterize bulk material, surfaces and electrochemical systems. The application of EIS in several research areas has rapidly developed. Examples are sensors, battery and fuel cell research, corrosion science, characterization of coatings and materials, electroorganic and bioelectrochemical science.

Effective application of EIS requires knowledge of the experimental method and of the systematic interpretation of measured data. The objective of this course is to provide an introduction for scientists and engineers who are newcomers in EIS. The fundamentals of measurement technique and interpretation of data are presented in seminars. In the experimental part the participants get hands-on experience. Application of EIS in coatings, fuel cells, batteries and corrosion science are presented by experts from industry and academia.

LECTURERS

Dr. Dirk Bublitz
C3 Prozess- und Analysetechnik GmbH, Haar, Germany

Dr. Sonia Dsoke
ZSW Ulm, Germany

Dr. Klaus-Michael Mangold (course organizer)
DECHEMA-Forschungsinstitut, Frankfurt am Main, Germany

Dr.-Ing. Michael Schneider
IKTS, Dresden, Germany

Dr. Jörg Vogelsang
Sika AG, Zürich, Switzerland

Dr. Norbert Wagner
DLR, Stuttgart, Germany

Dipl.-Wirt.-Ing. Heiko Witzhausen
RWTH Aachen, Germany

(subject to modifications)

SCHEDULE

THURSDAY, 5 NOVEMBER 2015

10:15	Welcome
10:20	Fundamentals of electrochemical impedance spectroscopy EIS Klaus-Michael Mangold
11:30	Coffee break
11:50	Characterization of corrosion protective coatings by EIS Jörg Vogelsang
13:00	Lunch
14:00	EIS in corrosion science Michael Schneider
15:10	Introduction in EIS instrumentation Dirk Bublitz
15:30	Experiments
17:00	End of experimental part
18:00	Get-together

FRIDAY, 6 NOVEMBER 2015

09:00	Experiments
10:00	Coffee break
10:20	EIS in fuel cell and battery science - introductory examples Sonia Dsoke
11:30	Coffee break
11:50	EIS in fuel cell science Norbert Wagner
13:00	Lunch
14:00	EIS on battery systems - model parameterization and aging Heiko Witzhausen
15:10	Experiments
16:30	End of the course

(subject to modifications)

REGISTRATION

to the DECHEMA training course 7173
Electrochemical Impedance Spectroscopy
Frankfurt am Main, 5 - 6 November 2015
Deadline for registration: 15 October 2015

Participant

Ms Mr Academic degree _____

Name, Surname _____

Company _____

Department _____

Street/POB _____

Code/Place _____

Phone/Fax _____

E-Mail _____

Invoice Address (if different)

Company _____

Department _____

Street/POB _____

Code/Place _____

I am a personal DECHEMA member: yes no

If we receive a notice of withdrawal at least two weeks prior to the beginning of the course, the participation fee less 10% for administration expenses will be reimbursed. Thereafter, a reimbursement will not be possible.

(Place, date, signature + company stamp)