

## Introduction

An electronic module is only suitable for a specific purpose if it guarantees safe function for a defined time. A large number of modules are installed in the terminal devices without protective coatings and operate fault-free throughout their entire service life. In an increasing number of cases, the module is used with greater electrical sensitivity or even under difficult conditions. The safe function of an assembly is then only ensured by means of a protective coating.

In the German-speaking area, there is only the GfKORR guideline for the application and properties of a protective coating available. The GfKORR working group "Corrosion protection in electronics and micro engineering" produced this guideline in cooperation of designers, producers, coaters and users of electronic construction groups.

The aim of the seminar is to teach the participants about this guideline and the collected knowledge from the working group, so that a comprehensive and fundamental understanding of coatings and their possible applications for the functionality of electronic assemblies is achieved.

## Target Groups

Production engineering, quality assurance, process technology, analytics, design and construction as well as all users of coated assemblies

## Organisation

### Registration

For organisational reasons, please send your registration to:

GfKORR - Gesellschaft für Korrosionsschutz e.V.  
Theodor-Heuss-Allee 25  
60486 Frankfurt / Main  
Phone: +49 (0) 69 7564-360 /-436  
Fax: +49 (0) 69 7564-391  
E-Mail: [gfkorr@dechema.de](mailto:gfkorr@dechema.de)  
Web: <https://gfkorr.de/Veranstaltungen>

### Participation fees <sup>\*)</sup>

Members of GfKORR	940,- €
Non-Members	980,- €
Students (under 30 years)	150,- €

<sup>\*)</sup> no VAT requested according to § 4.22 UStG

The registration fees include the guidelines for the Utilisation and Fabrication of Protective Coatings for Electronic Assemblies.

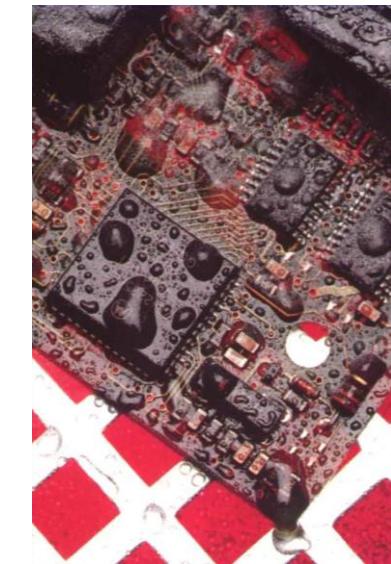
### Conditions of participation

The receipt of the registration is considered as binding confirmation of the participant. Upon receipt, you will receive confirmation and an invoice for the order due. Registered participants can cancel in writing free of charge no later than 11 October 2022. After this date 80% of the participation fee will be charged. In case of absence or cancellation of participation, the full participation fee is to be paid. Furthermore, you may nominate a substitute participant.



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

## Seminar Application and Utilisation of Protective Coatings for Electronic Assemblies



**25 - 26 October 2022  
Online-Event**

in cooperation with

**FED**  
Fachverband für Design,  
Leiterplatten- & Elektronikfertigung

**ZESTRON  
ACADEMY**

## Programme – 25 October 2022

09:30 **Welcome and introduction of participants**  
Dr.-Ing. Helmut Schweigart  
Dr. O.K. Wack Chemie GmbH, Ingolstadt, Germany

10:10 **Requirements of protective coatings for use on assemblies**  
General requirements, requirements for environmental impact, regulations for protective coatings  
Beth Turner  
Electrolube, Leicestershire, United Kingdom

10:55 **Discussion**

11:05 **Classification of protective lacquers**  
Subdivision according to the binder or solvent, subdivision according to drying or curing mechanism, subdivision according to layer thickness  
Jens Bürger  
ELANTAS Europe GmbH, Hamburg, Germany

11:30 **Discussion**

11:40 **Break**

13:00 **Film properties of protective coatings**  
Mechanical, electrical and thermal properties, condensation, water absorption and water vapour permeability, thermal resistance, flexibility (modulus of elasticity) and CTE  
Beth Turner  
Electrolube, Leicestershire, United Kingdom

14:00 **Discussion**

14:10 **Impact of the assembly on protective coatings**  
Base material, assembly or printed circuit board layout, solder resist, soldering materials and parameters, drying parameters, keeping and uncovering areas  
Jens Gruse  
Stannol GmbH & Co. KG, Velbert, Germany

15:10 **Discussion**

15:20 **Break**

## Programme – 25 October 2022

15:50 **Surface and preparation prior to protective coating**  
Requirements for module cleaning, decision on cleaning, minimum surface cleanliness before protective coating, measurement / analysis of ionic impurities, implementation / optimization of cleaning processes  
Helmut Schweigart  
Dr. O.K. Wack Chemie GmbH, Ingolstadt, Germany

16:50 **Discussion**

17:00 **End of first day**

## Programme – 26 October 2022

09:00 **Welcome and summary of day 1**  
Dr.-Ing. Helmut Schweigart  
Dr. O.K. Wack Chemie GmbH, Ingolstadt, Germany

09:30 **Application procedures for protective coatings**  
Subdivision of the application processes, application by brush, coating or spray can, application by spraying, dipping, flooding or spraying process, automatic and selective coating in casting process, application by dispensing or vacuum process  
Gerd Schulze  
Nordson B.V., Maastricht, Netherlands

10:30 **Discussion**

10:40 **Break**

11:15 **Handling of protective lacquers**  
Requirements for coating rooms and equipment, monitoring of processing parameters, contamination, maintenance of immersion systems, aging of protective coatings, environmental protection during protective coating  
Jens Bürger  
ELANTAS Europe GmbH, Hamburg, Germany

## Programme – 26 October 2022

12:00 **Discussion**

12:10 **Break**

13:30 **Prevention of typical coating defects**  
Application of excessive layer thicknesses, double coating, early hermetic encapsulation of coated printed circuit boards, avoidance of defects and typical abnormalities in protective coatings  
Jens H. Klingel  
KC Kunststoff-Chemische Produkte GmbH, Friolzheim, Germany

14:30 **Discussion**

14:40 **Coating inspection methods**  
General proof of the protective coating, verification of climate resistance, verification of the coating result  
Gerd Schulze  
Nordson B.V., Maastricht, Netherlands

15:40 **Discussion**

15:50 **Break**

16:20 **Repair of coated assemblies**  
Paint stripping of assemblies, sound soldering of coatings, repair coating  
Jens H. Klingel  
KC Kunststoff-Chemische Produkte GmbH, Friolzheim, Germany

16:50 **Discussion**

17:00 **Summary and end of seminar**

Unforeseen program changes are reserved.