
Workshop 2: **Local Probe Techniques for Corrosion Research.**
organisers: R. Oltra, R. Akid, V. Maurice, Ph. Marcus

Poster Sessions **Monday 13 September: 18:00 – 19:30**
 Tuesday 14 September: 18:00 – 19:30

List of Posters: see at the end of this Workshop Program

Tuesday 14 September

Co-chairs: R. Oltra, H.H. Strehblow

- 08:40** **02-KN-472**
Quantification and Deconvolution of SVET Cartographies.
Kevin OGLE
- 09:20** **02-O-469**
Application of Scanning Vibrating Electrode Technique (SVET) to the study of weld corrosion.
Robert AKID
- 09:40** **02-O-332**
Microstructural changes in Zinc Aluminium alloy galvanising as a function of processing parameters and their influence on corrosion.
David WORSLEY
- 10:00** **02-O-304**
Local analysis by SVET of the involvement of biological systems in aerobic biocorrosion.
Régine BASSEGUY
- 10:20** *Coffee break*
- 10:50** **02-O-289**
Initial stages of the localized corrosion by pitting of passivated metal surfaces studied by STM and AFM.
Vincent MAURICE
- 11:10** **02-O-430**
Constant-distance scanning electrochemical microscopy: a tool for studying localized corrosion with nanoelectrodes.
Kathrin ECKHARD
- 11:30** **02-O-088**
In situ AFM study of pitting corrosion and corrosion under strain on a 304L stainless steel.
Frantz MARTIN

- 11:50** **02-O-496**
Etching processes of ZnO(0001) surface in solution studied by in situ scanning tunnelling microscopy.
Junji INUKAI
- 12:10** **02-O-558**
In-situ study localized corrosion of Al-alloys in chloride solutions by electrochemical AFM and SECM.
Jinshan PAN
- 12:30** *Lunch*
- Co-chairs: R. Akid, D. Worsley
- 14:00** **02-KN-051**
The influence of microstructure on the corrosion behaviour of AZ91D by Scanning Kelvin Probe Force Microscopy and Scanning Kelvin Probe.
Dominique THIERRY
- 14:40** **02-O-213**
SKPFM applied on different conversion coated Al surfaces.
Otto LUNDER
- 15:00** **02-O-219**
Crime and Corrosion: Fingerprint detection using a scanning Kelvin probe.
Geraint WILLIAMS
- 15:20** **02-O-103**
Atmospheric corrosion of low alloy steels near seashore environment under high relative humidity condition.
Hiroyuki MASUDA
- 15:40** *Coffee break*
- 16:10** **02-O-154**
Application of scanning Kelvin probe, XANES and FTIR micro-spectroscopy for investigating the mechanisms of filiform corrosion on coated aluminium alloys.
Nathalie LE BOZEC
- 16:30** **02-O-067**
Use of SVET to study Local Effects in Coatings on Metals.
Herman TERRYN
- 16:50** **02-O-471**
Observation of self healing functions on the cut edge of galvanized steel using SVET and pH Microscopy.
Kevin OGLE
- 17:10** **02-O-418**
Study of the delamination of organic coatings by local electrochemical impedance spectroscopy.
Nadine PÉBÈRE

- 17:30** **02-O-489**
Modelling The Local Electrochemical Impedance Response From Surface Heterogeneities
In Organic Coatings.
Stuart LYON
- 18:00 - 19:30** **Poster Session - List of Posters: see at the end of this Workshop Program**

Wednesday 15 September

Co-chairs: V. Maurice, J. Pan

- 08:40** **02-O-413**
Contribution of local probes in the understanding of mechanical effect on localized corrosion.
Vincent VIGNAL
- 09:00** **02-O-085**
The use of the Scanning Kelvin Probe Force Microscopy and Micro Capillary Cell to investigate
the local corrosion behaviour of 7xxx aluminium alloys.
Herman TERRYN
- 09:20** **02-O-350**
Localised Corrosion Measurements on Aluminium Alloys via a Microelectrochemical Cell.
Brian CONNOLLY
- 09:40** **02-O-208**
Design of an Electrochemical Microcell and its Application to Welded Joins of Austenitic Stainless
Steel Type AISI 316L.
Fernando MARTÍN
- 10:00** **02-O-411**
In-situ detection of the galvanic coupling during pitting : a combination of Scanning Vibrating
Electrode Technique and Microcapillary Electrochemical Cell.
Roland OLTRA
- 10:20** *Coffee break*
- 10:50** **02-O-319**
Photoelectrochemical imaging of thermally grown oxide scales.
Yves WOUTERS
- 11:10** **02-O-290**
A new way to study transition metal corrosion by in-situ micro-Raman spectroscopy.
Suzanne JOIRET
- 11:30** **02-O-560**
Detection of corrosion processes beneath applied coatings utilizing the scanning Kelvin probe
technique.
Douglas HANSEN
- 11:50** **Round Table**

12:30 *Lunch*

Workshop 2: List of Posters

- 02-P-054** An FTIR Microscopic Base Imaging System: Applications to Corrosion Layer Characterisation.
Samuel JOUEN
- 02-P-055** Improvement of IR Microspectroscopy for Data Analysis of Corroded Surfaces.
Béatrice HANNOYER
- 02-P-269** Role of Fe (II)-containing compounds during pitting processes of carbon steels in NaHCO₃/NaCl electrolytes.
René SABOT