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**Room: Auditorium Hermès****Session 6:** *Surface Science and Mechanisms of Corrosion and Protection.*  
*organiser: Ph. Marcus*

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**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 Session Program*

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**Wednesday 15 September**

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Co-chairs: P. Marcus, E. Kálmán

**14:00** **06-KN-549**  
Self-assembling molecules as corrosion inhibitors on nanoscale.  
*Erika KÁLMÁN*

“Aluminium and Aluminium Alloys”

**14:40** **06-O-179**  
Effects of Sulphate and Molybdate Ion Addition on the Pitting Corrosion of Pure Aluminium in 0.1 M NaCl Solution.  
*Su-II PYUN***15:00** **06-O-089**  
Conversion Coatings Formation on 2024 Aluminium Alloy: The Effect of Cleaning Pre-treatments.  
*Carmen M. RANGEL***15:20** **06-O-271**  
Studies on Sulphuric-Boric Acid Anodising Processes for Aluminium and 2024 Aluminium Alloy.  
*Joao C. S. FERNANDES***15:40** *Coffee break*

“Stainless Steels”

**16:10** **06-O-172**  
Predicting The Long-Term Localized Corrosion of Alloys in Complex Industrial Environments.  
*Narasi SRIDHAR***16:30** **06-O-283**  
Modelling crevice corrosion of stainless steel Effect of industrial surface finishes.  
*Brahim MALKI***16:50** **06-O-007**  
Effect of Nitrogen on the Corrosion Behavior of Austenitic Stainless Steel in chloride solutions.  
*Wafaa GHANEM*

- 17:10**      **06-O-028**  
The effect of alloyed nitrogen or dissolved nitrate ions on the anodic behavior of Austenitic stainless steel in hydrochloric acid.  
*Taghi SHAHRABI*
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**Thursday 16 September**

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“Combined Electrochemical and Surface Analytical Methods for Passivity and Corrosion Research”

Co-chairs: H.H. Strehblow, S. Virtanen

- 08:40**      **06-O-247**  
Investigation of Passivity of Sn and CuSn Alloys.  
*Hans-Henning STREHBLOW*
- 09:00**      **06-O-369**  
Chemical and structural surface analysis of nickel-chromium-iron alloys oxidised in high pressure and high temperature water.  
*Anouk GALTAYRIES*
- 09:20**      **06-O-216**  
The Use of BTESPT Films as Chromate substitute for Pre-Treatments on AA2024-T3.  
*M.G.S. FERREIRA*
- 09:40**      **06-O-286**  
Elucidating the inhibitive properties of 3-Amino- 1,2,4-Triazole on copper corrosion by in-situ Raman spectroscopy.  
*Suzanne JOIRET*
- 10:00**      **06-O-070**  
2-mercapto-3-amino-5-methyltriazene, a new corrosion inhibitor for copper in aqueous environment.  
*Appa Rao BOYAPATI*
- 10:20**      *Coffee break*
- 10:50**      **06-KN-134**  
Dissolution Behavior of Passive Films on Ti and Ti Alloys.  
*Sannakaisa VIRTANEN*
- 11:30**      **06-O-196**  
In Situ STM study of the initial stages of oxidation of Ni(111) in 10<sup>-3</sup> M NaOH.  
*Antoine SEYEUX*
- 11:50**      **06-O-234**  
Fundamental characterization of the corrosion behaviour of WC-Co hardmetal.  
*Sabine HOCHSTRASSER*

- 12:10**      **06-O-439**  
In Situ Observation of Initial Rust Formation Process on Carbon Steel Under Wet/Dry Cycles Using Synchrotron Radiation X-Rays.  
*Masato YAMASHITA*
- 12:30**      *Lunch*
- 14:00**      **06-O-243**  
Applications of thin layers of iron oxidation products for corrosion studies.  
*Ludovic LEGRAND*
- “Metallurgical Effects and Modelling”
- 14:20**      **06-O-282**  
Localised corrosion of passive metals: A meeting point of Physics and Metallurgy.  
*Bernard BAROUX*
- 14:40**      **06-O-306**  
Corrosion and Mechanical Properties of a New High-Strength Ni-Cr-Mo Alloy.  
*Patrice HOULLE*
- 15:00**      **06-O-486**  
A Holistic Model of Atmospheric Corrosion: Extending a microclimatic model into a true corrosion model.  
*Ivan COLE*
- 15:20**      **06-O-041**  
Mangrove tannins as corrosion inhibitors in acidic medium - Study of flavanoid monomers.  
*Afidah ABDUL RAHIM*
- 15:40**      *Coffee break*

**Session 6: List of Posters**

- 06-P-003**      Influence of C, N and Ti concentration on the intergranular corrosion resistance of AISI 316 stainless steel.  
*Angel PARDO*
- 06-P-005**      Effect of Temperature and Heat fluxes on the Corrosion Damage Nature for Mild and Stainless Steels in Neutral Chloride Solutions.  
*Svetlana KALUZHINA*
- 06-P-009**      Modeling and diagnostics of metals corrosion under tangential and normal temperature gradients conditions.  
*Svetlana KALUZHINA*
- 06-P-011**      Effect of sulphide polluted water irrigation on the copper corrosion resistance.  
*Rachid SALGHI*
- 06-P-013**      Corrosion Behaviour of Heat Treated Microalloyed Steel in Chloride Environment.  
*Abdullah AL MARSHAD*
- 06-P-020**      Effect of Cold Working On The Aging and Corrosion Behavior of Fe-MnAl Stainless Steel.  
*Wafaa GHANEM*

- 06-P-023** Role of Heat Tint on Pitting Corrosion of 304 Austenitic Stainless Steel in Chloride Environment.  
*A. ELHOUD*
- 06-P-036** XPS investigation of copper corrosion in hydrocarbonate electrolytes.  
*Svetlana KALUZHINA*
- 06-P-037** Structural and chemical properties of sputtered Al-Cu deposits.  
*Mohamed DRAISSIA*
- 06-P-098** Effect of Surface Oxidization on Magnetic Recording Properties of Media.  
*An Hung TAN*
- 06-P-100** Conjugation of the partial anodic processes under anodic dissolution and corrosion of intermetallic phases in active state.  
*Vladimir KONDRASHIN*
- 06-P-104** Chaotic Analysis of Electrochemical Noise Response of Copper.  
*Edgar Arturo CAZARES IBAÑEZ*
- 06-P-106** Anodic dissolution of Ag-Au, Cu-Au and Ag-Zn alloys with rough surface under limited capacity of vacancy sinks.  
*Oleg KOZADEROV*
- 06-P-111** Passivation and Corrosion of the high performance materials alloy 33, alloy 31 and nickel in LiBr solution at different temperatures.  
*José GARCÍA ANTÓN*
- 06-P-113** Effect of cavitation on corrosion behaviour of welded and non-welded duplex stainless steel in aqueous LiBr solutions.  
*José GARCÍA ANTÓN*
- 06-P-114** Corrosion behaviour of austenitic stainless steel, nickel-base alloy and its weldments in aqueous LiBr solutions.  
*José GARCÍA ANTÓN*
- 06-P-116** Corrosion rate of copper in aqueous lithium bromide concentrated solutions at room temperature by immersion tests.  
*José GARCÍA ANTÓN*
- 06-P-141** An EIS and XPS study of the corrosion layers on ferrous and nickel-base alloys in molten NaOH - Li<sub>2</sub>CO<sub>3</sub> mixtures.  
*Tzvety TZVETKOFF*
- 06-P-142** Mechanism of transpassive dissolution of ferritic steels in nearly-anhydrous electrolytes.  
*Tzvety TZVETKOFF*
- 06-P-217** Electrochemical Behavior of Stainless Steel AISI-420 in NaCl Aqueous Solutions. Influence of a Corrosion Inhibitor Addition.  
*Ghania NEZZAL*
- 06-P-240** Electrochemical reduction of ferric corrosion products and evaluation of galvanic coupling with iron.  
*Ludovic LEGRAND*
- 06-P-284** Study of the influence of alloying elements on the metastable pitting of Austenitic Stainless Steels by computer simulations.  
*Brahim MALKI*

- 06-P-285** Effect of cold-rolling on pitting corrosion of 304 austenitic stainless steel.  
*Lionel PEGUET*
- 06-P-297** Role of some intermetallic particles in the galvanostatic oxidation of passivated AA6063.  
*Carlos M. MÜLLER*
- 06-P-357** Effect of the electrochemical passivation on the corrosion behaviour of austenitic stainless steel.  
*Antonio BARBUCCI*
- 06-P-425** Electrochemical properties and nano-hardness of anodic oxide film grown over Al-Cu alloy.  
*Margarita BALLESTER*
- 06-P-451** Protective Mechanism of patina against atmospheric corrosion.  
*Eduardo AYLLÓN*
- 06-P-509** Sulphide film formation under alkaline conditions.  
*Tor HEMMINGSEN*
- 06-P-533** Ageing of passivated Fe-Ni and Fe-Cr alloys : study of formation and growth's mechanisms of passive films.  
*Muriel BOUTTEMY*
- 06-P-562** Study of the electrochemical behaviour of CP Titanium and Ti6Al4V before and after passivation.  
*Mohamed MASMOUDI*
- 06-P-565** The electrochemical behavior of Cr-Co and Ni-Cr alloys in some artificial lactid acid base biofluids.  
*Alexandra BANU*

Withdrawn