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**Workshop 5:**     *Environment Sensitive Fracture, Corrosion Deformation Interactions.*  
                  organisers: *J.-M. Olive, J.-M. Boursier, D. Delafosse*

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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 Workshop Program*

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### Monday 13 September

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- 10:00**            **Opening Ceremony**
- 10:30**            **PL-473**  
Predicting the Future From the Past in Corrosion Science and Engineering.  
*Digby MACDONALD*
- 11:15**            **PL-563**  
An Overview of Materials Degradation by Stress Corrosion in PWRs.  
*Peter SCOTT*
- 12:00**            Cavallaro Medal Lecture.  
From the empirical approach to corrosion science - A retrospect on fifty years corrosion research.  
*Hubert GRÄFEN*
- 12:30**            **Lunch**
- 14:00**            **05-KN-540**  
Mechanisms of Irradiation Assisted Stress Corrosion Cracking in Austenitic Stainless Steels.  
*Gary WAS*
- 14:40**            **05-KN-566**  
Numerical simulations of coupled environment-mechanics processes.  
*Georges CAILLETAUD*
- 15:20**            **05-O-386**  
Effect of cold work hardening on stress corrosion cracking of Stainless steels in primary water of PWR.  
*Olivier RAQUET*
- 15:40**            **Coffee break**
- 16:10**            **05-O-453**  
Effect of strain path on stress corrosion cracking of AISI 304L stainless steel in PWR environment.  
*Thierry COUVANT*

- 16:30**      **05-O-491**  
Laboratory Results Update of Stress Corrosion Cracking of Steam Generator Tubes in a "Complex" Environment.  
*Olivier HORNER*
- 16:50**      **05-O-384**  
Stress Corrosion Cracking of Kori 1 Retired Steam Generator Tubing.  
*Hong Pyo KIM*
- 17:10**      **05-O-467**  
Effect of cyclic loadings on the stress corrosion crack growth rate in Alloy 600 in PWR primary water.  
*Catherine GUERRE*
- 17:30**      **05-O-539**  
Pattern Recognition Model to Estimate Intergranular Stress Corrosion Cracking (IGSCC) at Crevices and Pit Sites of 304 SS in BWR Environments.  
*Mirna URQUIDI-MACDONALD*
- 18:00 - 19:30**    **Poster Session - List of Posters: see at the end of this Workshop Program**
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## Tuesday 14 September

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- 08:40**      **05-O-222**  
Dynamic Strain Aging of Deformed Nitrogen-alloyed AISI 316 Stainless Steels.  
*Ulla EHRNSTÉN*
- 09:00**      **05-O-321**  
Effect of gaseous, sub and supercritical water on fatigue crack growth in Ti 6242 alloy.  
*Frédéric LOUBAT*
- 09:20**      **05-O-118**  
Acoustic emission detection of environmentally assisted cracking in zircaloy-4 alloy.  
*Lionel FOURNIER*
- 09:40**      **05-O-195**  
Mechanism of intergranular stress corrosion cracking in HAZ for supermartensitic stainless steel.  
*Yukio MIYATA*
- 10:00**      **05-O-398**  
Stress corrosion cracking of supermartensitic stainless steel in a H<sub>2</sub>S free environment.  
*Bertrand HOERNER*
- 10:20**      *Coffee break*
- 10:50**      **05-O-022**  
Fatigue Failure of Off-shore 825 Incoloy Flare Gas Expansion Joints.  
*A. ELHOUD*

- 11:10**            **05-O-183**  
Develop new magnesium alloys for stress corrosion applications.  
*Guy BEN-HAMU*
- 12:30**            **Lunch**
- 14:00**            **05-KN-470**  
Experimental investigation and atomistic simulation of stress corrosion cracking caused by corrosion-induced stress.  
*Kewei GAO*
- 14:40**            **05-O-349**  
The effects of straining on oxide films and passivity of copper in nitrite solution at ambient temperature.  
*Ulla EHRNSTÉN*
- 15:00**            **05-O-122**  
The effect of plasticity on the dissolution process of polycrystalline nickel: experimental investigation and modelling.  
*Xavier FEAUGAS*
- 15:20**            **05-O-090**  
Stress Corrosion Cracking: Capacitance Measurements in the Study of the Electronic Structure of Passive films on stainless Steels.  
*Carmen M. RANGEL*
- 15:40**            **Coffee break**
- 16:10**            **05-O-251**  
The Electrochemical Properties of Cyclic Deformed Passive Metals.  
*Vasyl POKHMURSKII*
- 16:30**            **05-O-324**  
Effects of absorbed hydrogen on the surface slip band morphology of a stable type 316L stainless steel.  
*Magalie MENARD*
- 16:50**            **05-O-435**  
Micro mechanical study of the stress corrosion cracking of the 316L austenitic stainless steel in chloride medium.  
*Jean-Philippe TINNES*
- 17:10**            **05-O-345**  
Corrosion Fatigue of Magnesium alloys in Oil.  
*Ofer MEDLINSKY*
- 17:30**            **Discussion**
- 18:00 - 19:30** **Poster Session - List of Posters: see at the end of this Workshop Program**

*Workshop 5: List of Posters*

- 05-P-301**      The Influence of Niobium on SSC Resistance in API Steels.  
*Jadranka MALINA*
- 05-P-352**      Study of stress corrosion cracking initiation of high alloy materials.  
*Marie BLAHETOVA*
- 05-P-504**      Study on corrosion of thermal power plant condenser tubes.  
*Abdolreza RASHIDI MOHAMMADI*