

« Corrosion Day: From Corrosion Science to Material Design”

Chaired by Distinguished Professors **Digby D. Macdonald** and **Tetsuo Shoji**

Moderator: *Roland Oltra, Université de Bourgogne*

Program

- | | |
|---------------|---|
| 09h20 - 09h30 | Welcome - Bernard Normand , INSA Lyon |
| 09h30 - 10h00 | Tatsuo Kondo (Tohoku University – Japan)
Impacts of a Cracking Event in an Early LWR Plant and Their Propagation to Cooperative International Research. |
| 10h00 - 10h20 | Philippe Marcus (ENSCP - Paris),
Passivity of Metals and Alloys at the Nanoscale |
| 10h20 - 10h40 | Michel Keddam (Université Pierre et Marie Curie - Paris)
Some issues in electrochemistry applied to corrosion science: An informal survey... |
| 10h40 - 11h00 | <i>Break</i> |
| 11h00 - 11h20 | Bernard Baroux (Phelma - INP Grenoble)
In between Physics and Metallurgy... |
| 11h20 - 11h50 | Thomas Devine (University of California- USA)
Passive Films Formed on Alloy 600 and Alloy 690 in Primary Water of Pressurized Water Reactors. |
| 11h50 - 12h00 | Allocution du Président du CEFARCOR Mr. G. Pinard-Legry |
| 11h50 - 14h00 | <i>Lunch</i> |
| 14h00 - 14h30 | Tim Burstein (University de Cambridge - UK)
Passivity and Temperature |
| 14h30 - 14h50 | Thierry Couvant (EDF – Les Renardières)
Stress corrosion cracking of austenitic alloys exposed to primary water in nuclear power plants. |
| 14h50 - 15h10 | Marc Vankeerberghen (SKN-CEN)
Further along the road of oxide film and crack growth rate models as developed by Profs. Digby Macdonald and Tetsuo Shoji” |
| 15h10 - 15h30 | <i>Break</i> |
| 15h30 - 16h00 | Mirna Urquidi-Macdonald (Pennsylvania State University)
Extended Point Defect Model on NiO/Ni(OH) ₂ -Cr(OH) ₃
Effect of Chromium on film Nickel base oxide passive films |
| 16h00 - 16h20 | Damien Feron (CEA – Saclay)
Nuclear corrosion: achievements and challenges |
| 16h20 - 16h30 | Conclusion – Philippe Marcus
Président de l’European Federation of Corrosion |
| 17h30 | Honoris Causa ceremony dedicated to Distinguished Professors Digby D. Macdonald and Tetsuo Shoji |