

Program of EFC Summer School

CORROSION IN GREEN ENERGY TECHNOLOGIES

Wednesday, 28 08 2024. Phenomena and basic principles of characterization

9h - 9h30	Registration / Welcome / Introduction to Green Energy
9h30 - 10 h50	Aqueous Corrosion & Basics of Electrochemical Techniques (K. Ogle, ENSCP)
10h50 – 11h05	Coffee break
11h05 – 12h30	Atmospheric Corrosion (C. Leygraf, KTH)
12h30 – 13h30	Lunch
13h30 – 15h30	Visit of IPVF (labs and roof) or Climatic Observatory with AgriPV installation
15h30 – 16h45	Ex-situ Surface Analysis Techniques (D. Mercier, ENSCP & M. Bouttemy / S. Béchu, ILV)
16h45 – 18 h	<u>Tea time and Workshops Activities on "How to test long term stability ?"</u> <u>[Basics and Problems of Accelerated Tests]</u>

Thursday, 29 08 2024. Advanced Analytical approaches

8h30 – 12h45	Half day in Horiba (group 1) - Lecture: In situ and in operando coupled techniques for chemical & morphological analysis (Raman microscopy: P. Volovitch, ENSCP & Optical microscopy: V. Shkirskiy, ParisCité) - Coffee break - Practical work at Horiba France: Raman, GD OES, ellipsometry: application to CIGS solar cells, fuel cells & batteries (P. Chapon, A. Maltseva, T. Brule, R. Omar, Horiba).
8h30 – 12h45	Half day in Horiba (group 2) - Practical work at Horiba France: Raman, GD OES, ellipsometry: application to CIGS solar cells, fuel cells & batteries (P. Chapon, A. Maltseva, T. Brule, R. Omar, Horiba). - Coffee break - Lecture: In situ and in operando coupled techniques for chemical & morphological analysis (Raman microscopy: P. Volovitch, ENSCP & Optical microscopy: V. Shkirskiy, ParisCité)
12h45 – 13h45	Lunch
13h45 – 18h30	Visits (Synchrotron Soleil / CEA / AgriPV demonstrator at SIRTa)
19 h	SOCIAL EVENT (Young EFC)

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Friday, 30 08 2024. Corrosion mitigation needs in Green Energy Technologies

8h30 – 8h 45	Attendance certificate delivery
8h45 - 10h15	Principle and corrosion problems in Wind energy : (A. Momber, Muehlan)
10h15 – 11h00	Principles and stability issues in Thermal Solar (both molten salt and low T°C parts, E. Mielgo Garcia, Idonial)
11h00– 11h15	Coffee break
11h15- 12h45	Principles and stability issues in PhotoVoltaics (D. Suchet, IPVF & M.J. Theelen, TNO)
12h45 –14 h	Lunch
14h – 14h45	Common corrosion issues in Green Technology Systems: Electronic devices (R. Ambat, DTU)
14h45 – 15h30	Common corrosion issues in Green Technology Systems: Batteries (J. Swiatowska, ENSCP)
15h30– 15h45	Coffee break
15h 45 – 17h45	Tea time and Working groups activities around “R&D opportunities and new jobs in green energy sector” with animation by industrial and academic partners (lecturers, organizers & invited persons (N. Birbilis (ANU), J. F. Guillemoles (IPVF), J. DUPUIS (EDF), E. Drahri (Total Energies), J. Badosa (SIRTA), M. Wimms (Shell), P. Chapon (Horiba), A. Erbe (NTNU)...).



Taking place at :
Institut Photovoltaïque d'Île-de-France (IPVF)
 18, Boulevard Thomas Gobert
 91120 Palaiseau (France)

More information available on

<https://eurocorr2024.org/efc-summer-school>

<https://www.cefracor.org/fr/formations/formation-efc-summer-school>



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