

# Preliminary Program of EFC Summer School

(updated on 26/01/2024)

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

9h - 9h30 Registration / Welcome/Introduction to Green Energy

9h30 - 10 h30 **Aqueous Corrosion & Basics of Electrochemical Techniques** (K. Ogle, ENSCP)

10h30 – 10h45 – Coffee break

10h45 – 12h15 **Atmospheric Corrosion** (C. Leygraf, KTH)

12h30 – 14h45 **Lunch and Visit of IPVF (labs and roof) / AgriPV demonstrator at climatic station**

14h45 – 15 h – Coffee break

15 h – 16h15 **Ex-situ Surface Analysis Techniques** (D. Mercier, ENSCP & M. Buttemy / S. Béchou, ILV)

16h30 – 18 h **Tea time and Round table / Workshops “How to test long term stability ?”**

**[Basics and Problems of Accelerated Tests]**

## Thursday, 29 08 2024. Advanced Analytical approaches

8h30 – 10h30 **In situ and in operando chemical & morphological analysis and coupled techniques** (K. Ogle, P. Volovitch, ENSCP & V. Shkirskiy, ParisCité)

**10h30-11h – Coffee break and working to Horiba (5 minuts)**

11 h – 13 h Practical work at Horiba France: in situ Raman and GD OES, application to CIGS solar cells, fuel cells & batteries (P. Chapon & A. Maltseva (Horiba) with help of M. Bouttemy & P. Volovitch).

**13 h – 14 h Lunch**

**14 – 17 h Visits** (2 among Synchrotron Soleil / CEA / AgriPV demonstrator at SIRTa)

**18 h or later – SOCIAL EVENT (Young EFC)**

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

8h30 – 9h45 Principles and stability issues in **PhotoVoltaics** (D. Suchet, IPVF & M.J. Theelen, TNO)

10 h – 11h15 Principles and stability issues in **Thermal Solar** (both molten salt and low T°C parts, E. Mielgo Garcia, Idonial)

11h30 -12h45 Principle and corrosion problems in **Wind energy**: (A. Momber, Muehlan)

13h – 14 h lunch

14h – 15h30 : Common corrosion issues in Green Technology Systems: **Electronic devices** (R. Ambat, TU, Denmark) **and Batteries** (J. Swiatowska, ENSCP)

**15h 45 – 17h45 Tea time and Round table / Working groups about R&D opportunities and new jobs in green energy sector** with animation by industrial and academic partners (lecturers & invited persons: P. Keil (BASF), A. Erbe (NTNU), N. Birbilis (ANU), J. F. Guillemoles (IPVF), J. DUPUIS (EDF), E. Drahri (Total Energies), J. Badosa (SIRTa)).