— Milan Skocic, PhD —

— Electrochemistry and Materials —

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Work Experience

May 2017 — Now: PhD, Electrochemist
Framatome – France

- *Project Management*
- *High temperature electrochemistry*
- *Corrosion of Zr-based and Ni-based alloys in aqueous high temperature environment*

Oct. 2015 — Feb. 2017: PhD, Metallic Material
Areva NP – France

- *Project Management*
- *Stress corrosion cracking in Inconel 718: HT/HP slow tensile tests*
- *Corrosion of Zr-based alloys: HT/HP electrochemistry*

Oct.2012 — Oct. 2015: PhD Project - "Photoelectrochemical study of the Shadow Corrosion"
Areva/SIMaP Lab – France

- *Design and realization of a new electrochemical cell for HT/HP corrosion tests*
- *Validation of the HT/HP electrochemical cell*
- *HT/ HP (photo-)electrochemical characterizations*
- *Classical corrosion tests in autoclaves at HT and HP*
- *Coupling with chemistry loop*

Feb. 2012 — Aug. 2012: Master Intership - "Metallic bipolar plates for PEMFC"
Air Liquide – France

- *State of the art of the coated stainless steels*
- *Set-up of the electrochemical tests*
- *Measurement of the interfacial contact resistance*
- *TEM/SEM observations*
- *Go between the different partners involved in the project*

Apr. 2011 — Aug. 2011: Master Internship - "Compositionally graded steels"
McMaster University, Materials Engineering Department – Canada

- *Carburization of microtruss samples*
- *Prepared and characterized the samples (phase fraction)*
- *Modelling of compressive peak stress*

2007 — 2009: Technician
ArcelorMittal R&D center – France

- *Prepared samples: cutting, mounting, polishing*
- *Used microstructural characterization devices: SEM-FEG, TEM, RX diffractometer*
- *Used thermo-mechanical treatment devices: Gleeble, hot rolling pilot, tensile tests*

Aug. 2005 — Jun. 2006: Technician
Pyrolisis Center (CPM) – France

- *Carried out pyrolysis tests on pilot furnace*
- *Prepared and characterized coke and coal samples*

Education

2012 — 2015: PhD, Materials and Electrochemistry – University of Grenoble – France

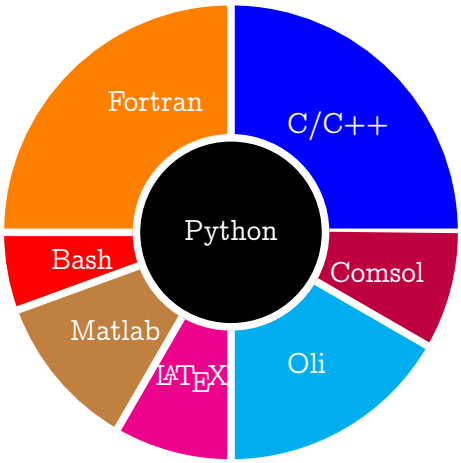
2012 — 2015: Engineer, Electrochemistry – Grenoble INP (PHELMA) – France

2003 — 2005: Technician, Analytical Chemistry – University of Metz – France

Language Skills

Serbian ★★★★★ French ★★★★★ English ★★★★☆

Computer Skills



PhDs - Technical Mentoring

S. El Euch, "Recherche d'une corrélation entre caractéristiques électrochimiques et relâchement en nickel de l'alliage 690 en milieu primaire d'un réacteur à eau pressurisée," Université Sorbonne, Paris, 2019.

F. Da Fonseca, "Etude du phénomène de shadow corrosion des alliages de zirconium dans les réacteurs à eau bouillante (REB)," Université de Grenoble Alpes, Grenoble, 2021.

J. Ben Mohamed, "Etude des mécanismes de Corrosion sous contrainte des alliages 600/690 en milieu secondaire des réacteurs REP en présence de plomb et de soufre.," Ecole Nationale Supérieure des Mines de Saint-Etienne, Saint-Etienne, 2021.

D. Peyret, "Mécanismes électrochimiques de la corrosion des alliages de type ZrNbX en condition simulées de réacteur à eau pressurisée," Université Sorbonne, Paris, 2023.

Publications

[1] K. Abu Samk, M. Skocic, H. Zurob, and O. Bouaziz, „Microtruss Cellular Nanocomposites", *TMS Annual Meeting*, vol. 1, pp. 337–344, May 2012.

[2] M. Skocic, D. Kaczorowski, D. Perche, and J.-C. Nuguet, „Paper Number 83: High Temperature (Photo-)Electrochemical setup for Studying Zr-based and Ni-based Alloys in Simulated LWR Conditions", in *NPC 2016*, Brighton, UK: Nuclear Institute, Oct. 3, 2016.

[3] P. Barberis, M. Skocic, D. Kaczorowski, D. Perche, Y. Wouters, and K. Nowotka, „Shadow corrosion: Experiments and modeling", *Journal of Nuclear Materials*, vol. 523, pp. 310–319, Sep. 1, 2019.

[4] S. E. Euch, D. Bricault, H. Cachet, E. M. Sutter, M. T. Tran, V. Vivier, N. Engler, A. Marion, M. Skocic, and B. Huerta-Ortega, „Temperature dependence of the electrochemical behavior of the 690 Ni-base alloy between 25 and 325 °C", *Electrochimica Acta*, vol. 317, pp. 509–520, Sep. 10, 2019.

[5] N. Ribière, N. Engler, D. Brimbal, M. Skocic, É. Andrieu, C. Blanc, and L. Laffont, „Multi-scale characterization of the inner surface of as-received steam generator tubes and correlation with the ni release in primary water", *Corrosion Science*, vol. 218, p. 111 205, 2023.

[6] D. Peyret, D. Kaczorowski, M. Skocic, B. Tribollet, and V. Vivier, „Electrochemical and modelling study of zrnbo alloys aged under high temperature and high pressure pwr simulated conditions", *Corrosion Science*, vol. 224, p. 111 505, 2023.

[7] N. Ribière, J. Esvan, N. Engler, D. Brimbal, M. Skocic, É. Andrieu, C. Blanc, and L. Laffont, „An XPS and TEM study of the composition and structure of native oxides on the inner surface of as-received Ni base alloy steam generator tubes", *Applied Surface Science*, vol. 654, p. 159 514, May 1, 2024.