SHORT BIO

Maylise Nastar is Director of Research and a Fellow at the Physical Metallurgy Research Laboratory, CEA Saclay, France. She earned a Ph.D. in Physics from Sorbonne University, the “Jean-Rist” award from the French Society of Metallurgy and Materials and a Habilitation (HdR) from Université Paris-Saclay. She spent a year and a half as a postdoctoral researcher at MIT before joining CEA Saclay, where she developed the Self-Consistent Mean Field theory of diffusion and initiated the development of KineCluE, a kinetic cluster expansion code for computing transport coefficients beyond the dilute limit.

Her research topics are on thermodynamic and diffusion properties, phase transformations in far from equilibrium metallic alloys and materials for Li-ion batteries, in thermal, irradiation and (de)lithiation charge cycling conditions. She has authored around 100 papers in international peer-reviewed journals and delivered 50 invited talks at international conferences.