



Raymonda DIAB is a final-year Ph.D. researcher in Electrical Engineering at Nantes Université, specializing in electrochemical modeling of Li-ion batteries. Her work is conducted in collaboration with two research institutes—IREENA (Institut de Recherche en Énergie Électrique de Nantes Atlantique) and IMN (Institut des Matériaux Jean Rouxel)—as well as the company One-sixone in Nantes, France.

Her research combines electrochemistry and battery modeling to address critical challenges in energy storage and fast-charging dynamics. It includes model parameterization supported by experimental characterization of Li-ion cells through cell teardown and reconstruction in a three-electrode configuration to extract key parameters. She has also worked on the thermal management of Li-ion battery packs, including cooling system design for an electric ULM

application, and investigated the thermal behavior of different cell types, focusing on properties such as entropy variation, thermal conductivity, and heat capacity.

She holds a dual degree in Mechanical Engineering and Energy Sciences, jointly awarded by Polytech Nantes, the engineering school of Nantes Université and the Lebanese University, providing her with a strong interdisciplinary foundation for addressing complex problems in energy systems.