

Dr. Nakamae received her PhD in Physics from National High Magnetic Field Laboratory and Florida State University in 1999. She has worked in a wide spectrum of subjects in condensed matter physics from high-T_c superconductors, giant magneto-resistive materials, biomolecules to magnetic nanoparticles, etc. In recent years, her research has focused on thermoelectric effects in complex liquids and supermagnetism of interacting nanoparticles. She has coordinated several regional, national and European research projects, most recently an Horizon 2020's FET-Proactive project MAGENTA (MAGnetic nanoparticle based liquid ENergy materials for Thermoelectric device Applications) to develop brand new thermoelectric materials based on ionic ferrofluids; i.e., colloidal dispersions of magnetic nanoparticles in ionic liquids. Since November 2020, she is the acting coordinator of the European Energy Research Alliance's Joint Programme AMPEA - Advanced Material and Processes for Energy Applications.