

**Cataldo Simari** is Research Associate (RTDa) at the Department of Chemistry and Chemical Technologies of University of Calabria. He is currently joining the PCAM-Laboratory (Physical Chemistry and Applied Materials). His main research topic concerns Energetics sector, specifically materials for conversion and electrochemical energy storage devices, with particular reference to hydrogen and lithium (fuel cells, electrolyzers, batteries). The scientific knowledge therefore focusses on the synthesis and evaluation of new materials, hybrid and nano-structured with specific properties and transport, aimed at the development of polymer electrolyte membranes for fuel cells and for solid state batteries.

The advanced techniques of the laboratory allow chemical-physical, rheological, electrochemical characterization of materials, and finally studies of the ionic and molecular transport mechanism through NMR spectroscopy (PFG technique, Relaxometry, micro-Imaging, solid state MAS-NMR). In the course of his research activity he established national and international collaborations with several research groups, as highlights from his publications, and he was involved in National and European research projects, some of them concerning conversion and storage of energy. He is author of over 30 publications on international refereed journals and over 25 contributions to national and international Conferences.