

FELLOWS

SAMUEL BERNARD FRANCE



Dr. Samuel Bernard (ORCID: <u>0000-0001-5865-0047</u>) is a senior research scientist employed by the French National Center for Scientific Research (CNRS research Director). He is developing his research activity on Polymer-Derived Ceramics (PDC) at the Institute of Research for Ceramics (IRCER, Limoges). This research activity focuses on three topics – matrices and fibers, porous components and nanocomposites.

The main objective is to i) understand the role of the precursor structure and chemistry on the polymer shaping and thermal behaviors, ii) control the temperature-assisted phase transformation and microstructure evolution of derived ceramic-based materials and exploit the physicochemical features and functionality of the latter for energy and environment.

Dr. Samuel Bernard received his PhD degree in inorganic chemistry in 2002 and then held a oneyear postdoctoral appointment at the Max-Planck-Institute for Metal Research (Stuttgart, Germany); both focused on polymer-derived ceramic fibers. In Jan. 2004, he got a CNRS Research Fellow (tenure) position to join the Laboratory of Multimaterials and Interfaces (LMI, university of Lyon) to develop a research activity dedicated to PDC, before moving to the European Institute of Membrane (IEM, university of Montpellier) in 2010 and then IRCER in 2017. During this period, he successfully defended his habilitation thesis in materials chemistry (2012), received the solid-state chemistry division award by the French society of chemistry in 2014 and got the positions of Guest Professor at the Federal University of Santa Catarina (Brazil) and of associate Professor at the Nagoya Institute of Technology (Japan). He was appointed as a research director (Tenured senior scientist) by CNRS in 2016. At IRCER, he takes a proactive role as a PDC group leader in a highly collaborative environment with on-site complementary 3D printing, modelling and crystallography expertise. Dr. S. Bernard has been the supervisor of 36 PhD students and 22 postdoc fellows which are involved (mostly as PI) in more than 40 industry and publicly-funded research projects. He has been successful in maintaining a high publication profile (140 peer-reviewed publications) and a high level of citations (h-index: 49). He patented his work 10 times, he is the (co-)editor of 9 special issues devoted to ceramics and the editor of one PDC-focused book. His recognition is further highlighted in his substantial record of 95 invited lectures in major ceramic-focused conferences, his involvement in the co-organisation of 45 ceramic-focused symposia in international conferences and in the organization of two ceramic-focused international conferences. He is JSPS fellow and has been nominated in 2022 as director of the research federation 'MatV2L' bringing together mutualized service structures for the optimal operation of five research units hosted at IRCER in the materials science topic.