

David Portehault has been a fellow of the Ecole Normale Supérieure (Paris). He completed his PhD in soft chemistry and nanomaterials at Université Pierre et Marie Curie (UPMC, Paris). He has been nominated by the Excellence CNRS – Max Planck Society post-doctoral program for Nanomaterials to perform a senior post-doctorate at the Max Planck Institute for colloids and Interfaces (Potsdam) over the period 2008-2010. He was recruited by the CNRS in 2010 as full researcher in the Lab Chimie de la Matière Condensée de Paris affiliated to Sorbonne Universités-UPMC, CNRS and Collège de France.

His core expertise is nanomaterials synthesis. He is focusing on the design of functional nanomaterials, their formation mechanisms and the exploration of new territories in inorganic compositions at the nanoscale, which provide access to properties without equivalent among common compositions. To move away from regular nanomaterials (metals, simple metal oxides), he is developing novel synthesis methods, including original instrumentation, and the use of new liquid and gel media. One of his specificities is the wide range of nanomaterials he is exploring, from oxides to borides, polycationics, metals and nitrides, spanning a wide range of properties, from batteries, thermoelectricity, to spin transport and plasmonics. He is author of more than 40 publications, often in high impact journals, 5 patents and 2 book chapters. He has been awarded in 2016 by the French Chemical Society for his achievements in nanoscale solid state chemistry.

