

Rachel Desfeux received his PhD Degree from the University of Caen, France in 1994 in the field of Materials Science, working on the growth and characterization of High  $T_c$  superconducting thin films. In the period 1994-1995, He was a post-doc at the Solid State Physics Laboratory of the University of Rome «Tor Vergata», Italy, working on the synthesis of novel superconductors in thin films. In 1996, He was promoted Associate Professor at the University of Artois, France and joined the Laboratory of Physics/Chemistry of Interfaces and Applications, which became the Unit of Catalyst and Solid Chemistry (UCCS) from 2008. In 2003, he defended his Accreditation to Supervise Research. Then, in 2008, He was promoted Full Professor. From 2007 to 2020, He was the Head of the “Thin Films and NanoMaterials” team of the UCCS lab. His research activities cover the field of growth, characterization of microstructure and surface morphology as well as measurement of physical properties of thin films with specific properties (ferromagnetic, piezoelectric, ferroelectric, optical...), keeping in mind their integration in (nano-)devices. His work specially involves micro- and nanoscale investigations using various techniques and tools of Atomic Force Microscopy (AFM, MFM, PFM, piezoloops...). He is working on innovative inorganic lead-free ferroelectric thin films including lanthanide titanates and tungstates; He focuses works on energy harvesting. Currently, He is the local coordinator of two projects funded by the French National Research Agency (ANR) [ i) <https://anr.fr/Project-ANR-16-CE08-0025> - <http://nanopic.univ-lille.fr/> ; ii) <https://anr.fr/Project-ANR-18-CE24-0017> ] and based on hybrid nanostructured thin films/heterostructures which combine inorganic and polymers materials with piezoelectric/ferroelectric properties. Since 2000, He is the Head of the Chemistry Master Degree of the University of Artois. In 2020, He was appointed to the rank of “Chevalier dans l’ordre des Palmes Académiques” from the French “Ministère de l’Education Nationale, de la Jeunesse et des Sports”.