Philippe PAREIGE

Pr. Philippe Pareige is the director of the laboratory "Physics of Materials Group" (GPM - UMR CNRS 6634, University and INSA Rouen – 130 people).

He is a doctor of Rouen University, he carried out his PhD work at GPM in close collaboration with the research center of EDF (92-94). The subject of his PhD was: Studies of neutron irradiation effects in French pressure vessel steels with the Atom Probe technique. After this work, he spent one year at the Oak Ridge National Laboratory (Tennessee, USA) under the supervision of Dr. Roger Stoller and Dr Mike Miller. His project was to identify the neutron irradiation effects in the microstructure of American pressure vessel steels and to study model alloys (binary or ternary) thermally aged or neutron irradiated.

In September 1995 he was hired as Assistant professor at Rouen University and GPM laboratory. His research program was to develop fundamental research on irradiation effects in materials. The main technique used for this work is the Atom probe Tomography. The GPM is the largest world renowned laboratory to develop and to use the atom probe technique. In 2000, Pr. Pareige created a Technological Research Team (ERT n°1000: Relation between Nanostructure and Properties of Materials). This research team focused its researches on the link between nanostructures and properties of materials with a large activity on irradiation effects in structural materials of nuclear reactors. In 2004, Pr. Pareige passed his HDR diploma (Capacity to Supervise Researches) and was named University Professor in 2005.

In 2006, in collaboration with other local laboratories he created the CARNOT INSTITUT ESP: Energy and System for Propulsion. The Energy term is closely linked to Nuclear Energy. Also in 2006, due to his parallel researches in the field of Nanosciences and Nanotechnologies he was named director of the GDR-PRC (Group of Researches-Coordinated Research Projects) n°2975: Nanosciences and Nanotechnologies National Competence Centre (North-West of France). This Group gathers all the competences in Nanosciences and Nanotechnologies in eight regions: Nord Pas de Calais, Picardie, Haute et Basse Normandie, Bretagne, Pays de la Loire, Poitou Charente et Centre. This represents more than 30 research laboratories and 650 researchers.

In 2007, he was named director of the Regional Research Network in Material Sciences in the framework of the CPER (Contract of Projects between Ministry of Research and Region Haute Normandie). The main objective of the network is to organize the research in Material Sciences in Haute Normandie, to organize the call for projects and to select projects and associated funding. In 2008 he created a new research team inside GPM: Research team on phase transformations and nanostructures. The team is constituted of more than 15 permanents researchers-Lecturers and 10 PhD students and Post Docs (ranked A^+ by the AERES evaluation committee in 2011). The same year, the GPM (in association with CRISMAT UMR CNRS, Caen) became one of the 7 research centers for the National Network for Transmission Electron Microscopy and Atom Probe studies (Toulouse, Grenoble, Paris, Strasbourg, Lyon, Marseille, Rouen/Caen). Pr. Pareige is a member of the national committee of this National Network.

After more than 15 years of scientific collaborations with EDF research centre on the ageing of structural materials for nuclear reactor, Pr. Pareige created in 2008, and has been named its Director, a join CNRS-EDF laboratory : EM2VM (Studies and Modelling of Microstructures for the ageing of Nuclear Materials). This laboratory gathers more than 30 researchers between EDF R&D, GPM and UMET Lille.

Pr. Pareige was named deputy director of the GPM in December 2008 and named its Director in January 2012. Pr. Pareige received in 2010 the CHEVENARD medal from the French Society for Materials and Metallurgy. He is also at the origin of the Laboratory of Excellence EMC3 (Energy materials and Clean Combustion Center) created in 2011.

P. Pareige is the scientific leader of the new research platform dedicated to analyses of radioactive materials: GENESIS (14 M€).

During the period 1995 to 2012, Pr. Pareige was in charge of 25 projects with industrial partners (including EDF or CEA), participated to 7 European contracts, 2 ANR, 1 DGA program. He organized or co-organized 13 international or national meetings and directed 19 PhD students. He is author or co-author of 100 articles (Webofsciences), has been invited to 15 congresses, presented 42 regular lectures and 24 seminars. Pr. Pareige is a member of the International Field Emission Society and is the vice-chairman of the executive committee of the International Group on Radiation Damage Mechanism (IGRDM) in RPV steels. He is in the advisory editorial board of the review Journal of Nuclear Materials. Pr. Pareige is teaching 192 hours/year, Physical Metallurgy and is in charge of a Master Diploma at the Rouen University.