

Florian Fichot, IRSN, France



Florian is a research engineer and expert at the Institute of Radioprotection and Nuclear Safety (IRSN, France). His expertise covers several areas related to the physical processes occurring in case of a severe accident in a nuclear power plant (core damage, safety injection of water, in-vessel corium retention).

He graduated from Ecole Centrale Paris (1989), with a specialty in Mechanical Engineering, Heat Transfers and Combustion, and obtained a Ph.D. in Mechanical Engineering at Ecole Centrale Paris (1994) on the topic of "Modelling of the ignition of a turbulent diffusion flame: Application to cryogenic rocket engines". He was a visiting scientist at the Jet

Propulsion Laboratory of NASA, Pasadena (California). Florian has been working at IRSN for 25 years, mostly developing physical models for codes used to predict the behaviour of core materials, thermalhydraulics and the evaluation of corium cooling strategies in case of severe accident in a nuclear reactor. He supervises Ph.D. and post-doctoral students, as well as visiting foreign scientists (India, Russia, China, USA).

He has coordinated several international projects sponsored by OECD or EURATOM, in particular the recent H2020 project IVMR, dealing with in-vessel corium retention strategy. He was coordinator and writer of the chapter 'In-vessel phenomena' of the book 'Nuclear Safety in Light Water Reactors' (published by Academic Press in 2012) and gives lectures organised by international organisations European Network of Excellence SARNET, IAEA).