



1<sup>st</sup> circular – March 8, 2019

The 38<sup>th</sup> edition of the Joliot-Curie International School, entitled “*Nuclear Energy and the Interfaces with the Environment*”, will cover the latest scientific achievements in physics and chemistry of nuclear energy and the associated environmental issues within a new perspective of energy transition.

The future evolution of nuclear energy is uncertain. While some countries favor its development, the international context puts in jeopardy the deployment of fast reactors on a short term, whereas long term waste disposal projects are under debate in several European countries. This year’s edition of the school will address the present scientific issues and research programs under this new perspective. Topics from front-end to back-end fuel cycle, nuclear system studies, materials under irradiation, nuclear waste storage, radionuclides speciation in the environment and their possible transfer to the biotope will be treated, focusing on the recent achievements in both physics and chemistry. This global perspective should lead to rich discussions on a topic which is still under debate in the socio-economic sphere.

The research subjects linked to nuclear energy are by nature interdisciplinary. The school is organized under four thematic tracks, each of them treated following an interdisciplinary approach: nuclear systems, fuel reprocessing, environment issues and socio-economic related questions. The school will be an opportunity to gather all the different disciplines and offer a large view of different scientific questions linked to nuclear energy and to the associated environmental issues. The students will therefore be able to put into perspective their own research projects into a wider context, as well as present their work within two poster sessions during the first days of the school.

The school will take place from September 22 to 27 at *La Vieille Perrotine*, a CNRS resort located on the Oléron island along the French Atlantic coast, accessible from the TGV train station of La Rochelle and the airports of La Rochelle and Bordeaux:

<https://www.caes.cnrs.fr/sejours/la-vieille-perrotine/>

Participants are expected to arrive on the afternoon of Sunday 22 from noon and leave on Friday 27 after lunch. **Pre-registration is open from March 8 to May 15.** Details on the registration procedure, and the school in general, can be found at:

<https://ejc2019.sciencesconf.org/>



Acceptance will be communicated by e-mail before May 31, along with the procedure to follow for the final registration and payment. The school will cover the registration and accommodation costs of participants from institutions that support EJC2019, and if the final budget allows we might also help some participants from other institutions. If you would like to benefit from such support, please ask for it in your pre-registration.

On behalf of the Organizing Committee: Jean Aupiais, Annick Billebaud, Xavier Doligez, Aurélie Gontier (secretary), Maëlle Kerveno, Grégoire Kessedjian, Miguel Marqués (chair), Soizic Milhoud-Aussant (communication), Philippe Moisy, Tomo Suzuki-Muresan.

PS/ List of confirmed speakers (more details to come on the website):

- Bernard Boullis (CEA-Saclay, France)  
*“Fuel cycle and fuel reprocessing”*
- Rudy Konings (EC-JRC-Karlsruhe, Germany)  
*“Fuel fabrication and evolution of structural properties under irradiation”*
- Arjan Plompen (EC-JRC-Geel, Belgium)  
*“Nuclear Data for nuclear energy”*
- Nicolas Thiollière (IMTA/SUBATECH, France)  
*“From neutronics to nuclear scenarios”*
- Pascal Yvon (CEA-Saclay, France)  
*“Structural material for nuclear reactors”*
- Boris Solier (Univ. Montpellier, France)  
*“Economy of nuclear energy”*
- Kastriot Spahiu (SKB, Sweden)  
*“Spent fuel evolution in deep geological disposal site”*
- Mireille del Nero (IPHC, France)  
*“Behavior of natural and anthropogenic RNs in ecosystems: sources, ecodynamics and impacts”*