

60 years of EURATOM at JRC Geel
Past, present, and future of
nuclear research in reference measurements and materials
9-10 November 2023

The nuclear activities at the JRC site in Geel build on a legacy that began in 1960 with the establishment of Euratom's Central Bureau for Nuclear Measurements (CBNM). For over six decades, Geel has been at the forefront of Euratom's research on nuclear data, reference materials, and measurement standards. Today, the JRC's new strategy for nuclear research affirms that the laboratories in Geel are a vital hub for nuclear research, following in the footsteps of the CBNM.

As part of the JRC's Directorate for Nuclear Safety and Security, the Unit 'Nuclear Data and Measurement Standards' at the Geel site focuses on providing high-quality reference nuclear data, measurement standards, science-based policy advice, and training in support of EU policies for nuclear safety, security, and safeguards. Support extends to the International Atomic Energy Agency, the Nuclear Energy Agency of the Organisation for Economic Cooperation and Development and other stakeholders. Stakeholders actively participate in projects on the Geel site, aiming at the maximum benefit and impact of the research conducted there. They play a crucial role in determining the direction of the research programmes and the development of the highly specialized European research infrastructure of the site.

Today, working on a fair transition towards climate neutrality is a priority for the EU, taking all social, economic, and environmental aspects of the transformation process into account. In the latest proposals, the Commission includes the acknowledgement that other sources of fossil-free energy than renewable energy, in particular nuclear energy, contribute to reaching climate neutrality by 2050. This new European focus on nuclear energy calls for updated strategies for securing key research infrastructures and competences to ensure the safe management of nuclear facilities and solutions. The new JRC strategy for its nuclear activities is open to demands for a revitalised approach. Therefore, on this special occasion of the local anniversary event, it is time to reflect on the past and, more importantly, to focus on the future role and priorities of nuclear research at the JRC site in Geel.

JRC management kindly invites you to this two-day event to commemorate over 60 years of research supporting Nuclear Safety and Security on its Geel site.

On 9 November from 13:30 to 17:00, we will commemorate the past and reflect on the future. We ask our key EU, national, regional and international stakeholder representatives to reflect on the achievements and indicate the expectations for our future. The attendees are kindly invited to a reception following this event.

On 10 November, we will organize a scientific technical review of where we are and in which directions we need to develop.

Thursday 9 November

1. 13:30-14:00 Welcome, introduction and setting the scene
 - a. Introduction, Bernard Magenhann – Deputy Director General of the JRC.
 - b. Past, present and future of nuclear research in JRC Geel, Ulla Engelmann, Director of JRC.Dir.G Nuclear Safety and Security.
2. 14:00-15:00 International, national and regional directions for nuclear research in JRC Geel
 - a. Directions of nuclear research of SCK CEN and the role of Europe, Marc Schyns, Director Innovative Nuclear Systems, SCK CEN.
 - b. Directions of nuclear research in France, CEA and the role of Europe, H elo ise Goutte, Scientific Director for Energy, CEA/DES.
 - c. Directions of nuclear research in Spain, CIEMAT and the role of Europe, Enrique Gonzalez Romero, Director for Nuclear Fission, CIEMAT, Spain.
 - d. Directions of nuclear research in The Netherlands, NRG and the role of Europe, Geert-Jan de Haas, Programme manager Research NRG Consultancy & Services.
3. 15:00-15:15 Break & photo
4. 15:15-16:00 International, national and regional directions for nuclear research in JRC Geel
 - a. Directions of nuclear research of the IAEA and the role of Europe, Steven Balsley. Director of the Office of Safeguards Analytical Services, IAEA.
 - b. Directions in nuclear science and applications and the role of Europe, Michael Fleming, Head of the Databank, OECD-NEA.
 - c. Directions in nuclear energy and environmental monitoring, Vesa Tanner, DG ENER, Directorate D – Nuclear energy, safety and ITER.
5. 16:00-16:45 Research ecosystem, education and training
 - a. Mayor of Geel, Vera Celis
 - b. The role of nuclear education and training in Europe, Csilla Peszny ak, president of ENEN.
 - c. European School Mol, Maria Jos e Perez Blanco, Director and/or Tinne van Opstal, Deputy Director.
6. 16:45-17:00 Conclusion Bernard Magenhann
7. 17:00-18:00
 - a. Reception
 - b. 17:30-18:00 Tour of GELINA (optional)

Friday 10 November

1. 09:00-11:00 Review of the nuclear data program, expectations and directions for the future
 - a. Introduction, Arjan Plompen, 15'
 - b. Stakeholder positions, 75'
 - i. Robert Jacqmin, CEA
 - ii. Alexey Stankovskiy, SCK CEN
 - iii. Oscar Cabellos, UPM
 - iv. Alexandru Negreț, IFIN-HH
 - v. Maria Diakaki, NTUA
 - c. Round table, 30'
2. 11:00-11:15 break
3. 11:15-12:00 Review of the reference materials program, expectations and directions for the future
 - a. Introduction, Yetunde Aregbe, 10'
 - b. Stakeholder position, 15'
 - i. Nicole Erdmann, DG ENER
 - c. Round table 20'
4. 12:00-12:45 Review of measurements of radioactivity, expectations and directions for the future
 - a. Introduction, Mikael Hult, 15'
 - b. Stakeholder positions, 20'
 - i. Simon O'Toole, Environmental Protection Agency Ireland
 - c. Round Table 15'
5. 12:45-13:00 Conclusions
6. 13:00-14:00 Lunch (optional)
7. 14:00-15:00 Tour of GELINA (optional)