

## **JRC Deputy Director General Charlina Vitcheva welcome remarks.**

### **Introduction**

Dear Minister,

Dear Senator,

Distinguished guests,

Ladies and gentlemen:

I am very glad to be here today in this joint opening session of the FISA 2019 and EURADWASTE'19 conferences.

I sincerely believe that bringing together the key stakeholders in nuclear research under these conferences, to discuss on where we stand with regards nuclear research, to identify the key challenges (at national, European and international levels) on research and innovation policies, as well as to exchange on synergies, partnerships, and future perspectives is fundamental to shape the future of European nuclear research.

Thank you, Honourable Minister Hurduc for Research and Innovation of Romania, and also to the Institute for Nuclear Research for hosting and making it possible.

### **The European Commission's Joint Research Centre**

My name is Charlina Vitcheva and I am Deputy Director-General of the European Commission's science and knowledge service: the Joint Research Centre.

We support EU policies with independent multidisciplinary evidence throughout the whole policy cycle, as part the European Commission, in areas such as agriculture, food security, environment, climate change, innovation, growth, as well as in nuclear safety, safeguards and security.

Our researchers provide EU and national authorities with solid facts and independent support to help tackle the big challenges facing our societies today.

Established as the Joint Nuclear Research Centre by the Euratom Treaty 60 years ago, the JRC has broadened its field of research to non-nuclear disciplines, which now cover around 75 % of its research programme. We are dealing with large spectrum of activities such as Growth and Innovation; Energy, Transport and Climate; Sustainable Resources; Space, Security and Migration; Health, Consumers and Reference Materials; and Nuclear Safety and Security; We have a new focus on Knowledge Management and Competences..

The JRC is spread across six sites in five different countries within the EU: Brussels and Geel in Belgium, Petten in The Netherlands, Karlsruhe in Germany, Ispra in Italy, and Seville in Spain.

The JRC is funded by the EU's framework programme for research and innovation: Horizon 2020, and by its EURATOM Research and Training Programme for its work in the nuclear field.

## **JRC research in nuclear safety, safeguards and security.**

Our Directorate for Nuclear Safety and Security employs about 460 scientists, technicians and administrative personnel in Petten, Karlsruhe, Geel and Ispra.

The JRC multi-annual work programme for nuclear activities fully reflects the specific objectives of the Direct Actions of the Euratom programme. It is structured in about 20 projects, allocating:

- 48 % of its resources to nuclear safety, waste management, decommissioning and emergency preparedness;
- 33% to nuclear security, safeguards and non-proliferation,
- 12% to reference standards, nuclear science and non-energy applications and
- 7% to education, training and knowledge management.
- From these areas of activity, one part is dedicated to supporting the policy of the Union on nuclear safety and security.

But we do not work alone. We do not work in silos, in an isolated fashion. Collaboration is the essence of the scientific effort.

And in our case, it is not just for the sake of scientific curiosity, but to align with and complement research and training in the Member States. Indeed, the JRC is continuously interacting with the main research and scientific institutions in the EU, such as the Technology Platforms SNETP, IGDTP, and ESARDA; with research institutions of Member States and third countries, and with international organisations such as the IAEA.

Globally, we work together with over a thousand organisations worldwide in more than 150 networks, both nuclear and non-nuclear.

JRC carries out research, training and knowledge management activities in nuclear safety, radioactive waste management, nuclear security and safeguards, nuclear data, reference materials and measurements, standardisation, and nuclear science applications.

JRC is the Euratom implementing agent of the Generation IV International Forum.

In addition to its competent staff, the JRC owns and operates scientific research infrastructure which is rare, and in occasions unique.

Students and researchers can access JRC nuclear research facilities through several programmes enabling them to perform research projects as part of their curricula. This will be enhanced in the future Horizon Europe framework programme.

Based on its relevant competence, infrastructures, its independence and neutrality of judgement, the JRC provides the scientific basis for nuclear-related Union policies across entire EU policy-making cycle, from policy anticipation and impact assessment up to policy implementation, monitoring and evaluation.

## **What lies ahead of us?**

In spite of the different national options regarding the electricity mix, all scenarios considered in the forward looking for a low carbon economy in Europe include nuclear energy as a source of electricity generation in the long term.

The long-term safe, secure and sustainable use of nuclear energy must be ensured by a consistent approach to safety (implementation of appropriate and commensurate common principles, rules and standards); safeguards (verification, reporting and non-proliferation commitments such as export controls) and security (prevention, detection and response), as well as international acceptance and mutual trust (transparency).

This can only be based on sound scientific evidence, reliable nuclear measurements and appropriate control tools, as well as on public involvement, which at the same time can only be guaranteed if competence and technology leadership are maintained within the EU (research, education, training, and knowledge management).

The Commission's proposal for the next Euratom Research and Training Programme, which is currently being discussed at the Council aims at focusing in the same key research areas as the current programme, i.e. nuclear safety, security, radioactive waste and spent fuel management, radiation protection and fusion energy.

At the same time, the programme intends to expand research into non-power applications of ionising radiation, and make improvements in the areas of education, training and access to research infrastructure (including JRC's), as well as to better exploit the complementarity between research carried out by Member States scientific institutions, and research carried out by the Joint Research Centre.

Ladies and gentlemen, we are ready for that. We are ready to continue our cutting-edge research in nuclear safety, security and safeguards, putting at the disposition of the research community our competence, and our infrastructure. Ready to work together with you, the scientific community, in these very important topics for the future of Europe.

I wish you very successful conferences, and I am looking forward to hear from their outcomes.

Thank you very much.