

**Is a great honor for me to have some opening remarks and to chair the first session.**

**Dear guests, dear participants, in fact, dear nuclear workers, both those with long experience and the younger ones who are at the beginning,**

First of all, I wish you well come in Romania and in Arges County, a county that in history has 2 very old capitals of our country. At the same time for Pitesti, the capital of Arges County the first documentary attestation is from 630 years ago.

**Dear participants in FISA and EURADWASTE conferences,**

**The nuclear power is an important pillar of the Europe Union energy mix having a significant contribution to the reduction of the emissions, security and stability of the supply, and to affordable prices of electricity.**

At the same time, the debate on the nuclear continued to express a set of opinions in relation with the challenges, difficulties, and opportunities of the nuclear power development in terms both of the global economy aspects and of the national contexts.

A strong stimulation of renewable (especially for the variable renewables: wind and photovoltaic), occurred

mainly in the EU, are impacting the nuclear development. Today nuclear power has not enough capabilities to support the variable production and is necessary to work complementarily with them in order to ensure a complete free-carbon electricity production.

**In Romania we discuss very openly on the equal treatment of nuclear power and renewables as energy options without carbon emissions. The Ministry of Energy proposed a common support scheme for all free carbon electricity. In this manner we intend to support nuclear on the basis of the same principle.**

Despite of the complications of the decision making process, it is clear that the nuclear represents an important solution to be managed in an appropriate way. The nuclear research and development has new opportunities such as the new systems (Gen III+, GenIV, and SMR) or challenging solutions for safety of the NPPs, geological disposal, etc.

FISA 2019 and EURADWASTE '19 conferences in Safety of Reactor System and Radioactive Waste Management represent an opportunity to find some answers to these challenges through the proposed objectives:

- To present progress since the previous conference edition in 2013
- To stimulate discussions on the state of play of R&D, key challenges addressed at national, European and international levels
- To address the latest EC proposal for a new Framework Programme for Research and Innovation for the next period 'Horizon Europe' and 'Euratom Research and Training' programme.

In 2018 the Special Report of Global Warming of 1,5°C

Done by The Intergovernmental panel on Climate Change above preindustrial levels and related global greenhouse gas emission pathways, in the context of strengthening global response of to the threat of climate change, sustainable development and efforts to eradicate poverty, the report state that limiting the global temperature increase to 1,5°C will prevent the worst impact of climate change, but will **require rapid, far-reaching and unprecedented action on decarbonisation.** Gen 4 of nuclear reactors promise to be part of solution.

**In this respect, Romania is deeply involved in the implementation of ALFRED LFR demonstrator.** As hosting country we are preparing the licensing and siting process, the education and training process for the future

workforce, and participating in finding valuable solution for the open issues.

At decision-making level the proposed funding scheme is based on a mix of European structural funds (for Romania), the national and industry contribution. Important steps were achieved by introducing ALFRED in the most important national strategic documents. **Now the main effort will be devoted to negotiate the presence of ALFRED in the future EU budget, and the declaration as major project in the future EU-Romania partnership Agreement.**

Dear participants,

The two EURATOM conferences will approach the most important achievements in the last years in nuclear RDI. Beyond of these I wish you a fruitful process to identify the best ways for new collaborations to drive the nuclear power toward a better future in the benefit of a more united Europe, based on independence in energy supply, and with zero carbon emissions.

I wish a full success for all the sessions of the conferences and to have a wonderful experience in Pitesti and Romania.