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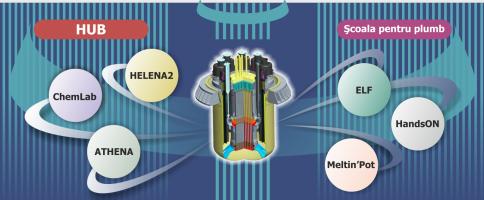
# ALFRED Research Infrastructure: Looking ahead

#### Hybrid Conference:

http://zoom.us/j/251 251 2724

Organized by the Institute for Nuclear Research in cooperation with the FALCON Consortium in the frame of the PRO ALFRED project financed by the Romanian Ministry of Education and Research

# PRO ALFRED



# October 22-23, 2020

# Context

The construction of the ALFRED infrastructure in Romania is part of the national and European efforts for climate change mitigation and energy supply security through innovative solutions, and represents a national R&D priority included in the National Strategy for Research-Development-Innovation and in the Smart Specializations Strategy of the South Muntenia Region.

ALFRED is a complex infrastructure grouping the lead fast reactor demonstrator, six large experimental support facilities, the coordination hub and the "Lead School" training centre, all together devoted to the demonstration of the technical and economic viability of pure lead-cooled fast reactor technology.

PRO ALFRED and ATHENA&CHEMLAB Projects are currently supporting its implementation by activities dedicated to strengthen the Romanian contribution to ALFRED and respectively by the construction of two put the six large experimental installations in support to demonstrator licensing.

## Objectives

The conference will present the major outcomes of the PRO ALFRED project and their contribution to the advancement of the ALFRED Project, as well as the perspectives in stimulating the national research-development-innovation potential and the Romanian industry involvement.

#### Topics

- European and national policies in nuclear energy and research;
- ALFRED infrastructure and associated research, education and training needs;
- Licensing of the ALFRED demonstrator;
- Long-term sustainability of the ALFRED Infrastructure;
- Benefits and opportunities for collaboration and participation in building ALFRED infrastructure.

#### Registration

Online registration, available on the PRO ALFRED site <u>proalfred.nuclear.ro</u>, <u>is mandatory</u> to receive communications of logistic aspects and to get access to the meeting.

#### Format

The event is organized as a 2-half day event combining the online participation with physical presence (at RATEN ICN headquarters, Conference Hall), in strict compliance with the rules for preventing the spread of COVID-19.

The conference It is structured in 4 topical sessions, in which oral presentations will be followed by open discussions mediated by a Chairperson. Presentations will be made available prior the conference on the PRO ALFRED project website prior the conference.

#### Audience

The conference is addressed to European and national decision makers, scientific communities, universities, industry and business environment, as well as to the public involved or interested in the energy field and advanced technologies development.

Representatives of the European Commission and international organizations in the nuclear field, representatives of national and local authorities and specialists from the FALCON consortium and the PRO ALFRED project will highlight the last developments in the conference topics.

#### Contact

Further information on this conference could be found on: <u>www.nuclear.ro</u>, proalfred.nuclear.ro or from daniela.diaconu@nuclear.ro

# Day 1, 22 October 2020, 9:30 – 11:30 (CET time)

# Session 1 - ALFRED: a sound project with international scope

Chair: Şerban Constantin Valeca		Co-chair: Maria Roth
5 min	Welcome	Alexandru Toma - RATEN ICN, Romania
25 min	Key Notes	Mayor of Pitesti; Mayor of Mioveni; Representatives of MEC; MEECMA; MFE; ADR
20 min	Nuclear energy and nuclear energy research in Europe	Roger Garbil - European Commission, DG RTD, Belgium
20 min	Priorities of the national strategy for research-development and innovation in Romania	Representative of Ministry of Education and Research, Romania
20 min	Opportunities and benefits of the ALFRED demonstrator	Michele Frignani - ANSALDO NUCLEARE, Italy
20 min	Key achievements through the PRO-ALFRED project	Daniela Diaconu - RATEN, Romania
10 min	Discussions	

# Coffee break

## Day 1, 22 October 2020, 11:45 – 13:30 (CET time)

Session 2 - ALFRED support infrastructure: research and education needs		
Chair: Concetta Fazio		Co-chair: Dumitru Chirlesan
30 min	ALFRED RDQ&D Infrastructure	
	Why? What? How?	Giacomo Grasso - ENEA, Italy Mariano Tarantino - ENEA, Italy Marin Constantin - RATEN ICN, Romania
30 min	30 min RD&Q Programme on LFR and its implementation on ALFRED Infrastructure	
	RD&Q needs for LFR	Francesco Lodi - ENEA, Italy Marco Caramello - ANSALDO NUCLEARE, Italy
	Romanian R&D Agenda for ALFRED Infrastructure	Daniela Gugiu - RATEN ICN, Romania
30 min	Ensuring the Human Resource for ALFRED Infrastructure	
Discussions	Needs, solutions and future actions towards competence building for ALFRED Infrastructure	Minodora Apostol - RATEN ICN, Romania
	Tailoring the educational programme	Gabriela Plaiasu - University of Pitesti, Romania; Daniel Dupleac - University Politehnica Bucharest, Romania
	Challenges in the pandemic crisis	Francesca Papa – ENEA, Italy Ana Ivan - RATEN ICN, Romania
15 min	Discussions	

# Day 2, 23 October 2020, 9:30 – 11:10 (CET time)

# Session 3 - The vision to materialize ALFRED: global industrial opportunities

Chair: Teodor Chirica		Co-chair: Giovanni Villabruna	
35 min	ALFRED in the European and International context		
	Updates on Gen IV LFR technologies development	Alessandro Alemberti - ANSALDO NUCLEARE – Italy	
	IAEA activities in LFR technology development	Vladimir Kriventsev - IAEA, Austria	
45 min	Paving the way for ALFRED Licensing		
	Safety Approach	Giacomo Grasso - ENEA, Italy	
	Milestones in ALFRED licensing pathway	Mirela Nitoi - RATEN ICN, Romania	
	Decommissioning	Mitica Dragusin - IFIN HH, Romania	
20 min	Discussions	ALFRED: a tool for an international standard development of an LFR licensing framework of global reference	
	Coffee break		

Day 2, 23 October 2020, 11:30 – 13:00 (CET time)					
Session 4 - The vision to materialize ALFRED: national socio-economic opportunities					
Chair: Ilie Turcu		Co-chair: Marin Constantin			
30 min	Sustainability and funding				
	LFR SMR technology in the Romanian energy mix	Cristina Margeanu - RATEN ICN, Romania			
	Implementing ALFRED technology in the Romanian energy market Funding scheme	Ionut Purica - Institute for Economic Prognosis, Romania			
40 min	Opportunities for national and international collaboration				
	Aims and ambitions of the Romanian supply chain ROMATOM views	Teodor Chirica - ROMATOM, Romania			
		Corina Truica – Automatica,RomaniaLigia Ligia Ionescu - INSAT,Romania			
		Massimiliano Tacconelli - Walter Tosto Bucharest, Romania			
	SNN activities on innovation and development in nuclear sector	Dan Serbanescu – SNN, Romania			
15 min					
5 min	Closing remarks				