

Global Symposium on Lead and Lead Alloy Cooled Nuclear Energy Science and Technology 2024 (GLANST 2024)

30 September - 2 October 2024

ENEA Brasimone Research Centre (Villa Ruggeri)
Località Brasimone, 40032 Camugnano (Bologna), Italy

Jointly organized by GIF LFR pSSC and ENEA, Supported by OECD/NEA

Agenda

<i>Day One</i>		Monday, 30 September 2024
13:00	<i>Registration</i>	
Opening Remarks and Introductory Lectures		Chairperson: M. Tarantino (ENEA, Italy)
13:30	Welcome Message and Presentation of ENEA Activities	A. Dodaro <i>(ENEA, Italy)</i>
13:55	"GIF contribution to LFR development: the role of LFR pSSC"	A. Alemberti <i>(Chair of GLANST Scientific Committee)</i>
14:20	Invited Talk on Other Applications of Lead Technologies: "Development of Liquid Pb Technologies for Beam Intercepting Devices at CERN: A Case Study for Muon Collider Target and FCCee Beamstrahlung Absorber"	M. Calviani <i>(CERN)</i>
14.45	Q&A – Discussion	
15:00 -18:00	Visit to the Brasimone Facilities	M. Tarantino <i>(ENEA, Italy)</i>

<i>Day Two</i>		Tuesday, 1 October 2024
08:30	Registration	
09:00	Opening Remarks	M. Tarantino (ENEA, Italy)
SESSION 1: Modelling and Simulation		Chairperson: A. Moiseyev (ANL, USA)
09:15	Invited Talk: "Status and Prospective of <i>newcleo</i> project"	L. Cinotti (<i>newcleo</i>)
09:45	"Validation of a CFD-STH coupled tool against experiment on TALL3D"	P. Cioli Puviani (PoliTO /ENEA, Italy)
10:05	"Thermodynamic Properties of Pure Lead in the SIMMER-III Code: A Comparative Review and New Evaluation Proposal"	A. Bellomo (University of Pisa, Italy)
10:25	"Numerical investigation on influencing mechanism of thermal stratification in hot pool of a lead-based SMR"	L. Wenbo (Chinese Academy of Sciences, China)
10:45	Q&A – Discussion	
11:10	<i>Coffee Break and Group Photograph</i>	
11:30	Invited Talk: "Roadmap to a commercial LFR: the ALFRED demonstrator"	M. Frignani (Ansaldo, Italy)
12:00	"Flow blockage analysis for START transmutation reactor core"	G. Morresi (Transmutex SA)
12:20	"Designing the LLWAA-LFR code to assess the radiological inventory of non-fuel waste from LFR reactors"	F. De Dortan (TRACTEBEL, Belgium)
12:40	Q&A – Discussion	
13:00	<i>Buffet Lunch</i>	
SESSION 2: Coolant, Materials and Fuel		Chairperson: M. Tarantino (ENEA, Italy)
13:45	Invited Talk: "R&D roadmap to LFR demonstrator: the experimental infrastructure, support for ALFRED"	C. Ducu (RATEN ICN, Romania)
14:15	"Development of Test Facility to Study Erosion and Corrosion of Materials"	J.K. Lee (University of Pittsburgh, USA)
14:35	"Lead Coolant Chemistry Program Development at <i>newcleo</i> : Roadmap, Achievements and Perspectives"	G. Gregori (<i>newcleo</i>)
14:55	Q&A – Discussion	
15:15	<i>Coffee Break</i>	
15:35	"LEad fast reactor Safety design and Tools – the LESTO project"	S. Gianfelici (ENEA, Italy)
15:55	"Feasibility of Innovative Lead-Bismuth-cooled Fast Reactor Core Design Using Metallic Fuel"	X. Zhao (Tokyo Institute of Technology, Japan)
16:15	"LMTH24: A Python package for the implementation of Liquid Metal Thermal-Hydraulics correlations"	G. Ottino (<i>newcleo</i>)
16:35	Q&A – Discussion	
16:55	Day Two Wrap-up	A. Alemberti (Chair of GLANST Scientific Committee)

<i>Day Three</i>		Wednesday, 2 October 2024
08:30	<i>Registration</i>	
08:45	Opening Remarks	M. Tarantino (<i>ENEA, Italy</i>)
SESSION 3: Experiments and Code Validation		Chairperson: I.S. Hwang (<i>Seoul National University, Korea</i>)
09:00	Invited Talk: "MYRRHA contribution to LFR Development"	P. Schuurmans (<i>SCK-CEN</i>)
09:30	"Loss Of Heat Sink RELAP5 Simulation in the ATHENA Facility"	T. Del Moro (<i>Sapienza University of Rome, Italy</i>)
09:50	"Thermal-hydraulic modelling of a bayonet tube heat exchanger using AC2 ATHLET system code"	D. Caterino (<i>PoliTO, Italy</i>)
10:10	"Numerical study of the influence of contact treatment method on flow of pin-wire components based on NACIE-UP"	S. Ouyang (<i>University of Science and Technology of China, China</i>)
10:30	Q&A – Discussion	
10:55	<i>Coffee Break</i>	
11:15	"Numerical Analyses in support of the CIRCE-THETIS experimental campaign"	P. Stefanini (<i>University of Pisa, Italy</i>)
11:35	Invited Talk: "An analytical approach to station blackout management in LFRs"	J. Wallenius (<i>Blykalla</i>)
12:05	"newcleo LFR R&D programme: key test facilities"	N. Garelli (<i>newcleo</i>)
12:25	Q&A – Discussion	
12:45	<i>Buffet Lunch</i>	
SESSION 4: Design of Systems & Components		Chairperson: T. Obara (<i>Tokyo Tech, Japan</i>)
13:30	Invited Talk: "LFR Core design and impact on primary system layout"	G. Grasso (<i>ENEA, Italy</i>)
14:00	"Calculation of the kinetic parameters for LFR with OpenMC"	D.A. Olivares (<i>newcleo</i>)
14:20	"MicroURANUS Leveraged on Inert Coolant for Maritime Safety"	I.S. Hwang (<i>Seoul National University, Korea</i>)
14:40	Q&A – Discussion	
15:00	<i>Coffee Break</i>	
15:20	"CFD Modeling Approaches and Uncertainty Quantification in LBE Wire-Wrapped Bundles"	O.M.M. Abdelhalim (<i>University of Pisa, Italy</i>)
15:40	"Advances in Control Rods homogenization by the Reactivity Equivalence Method"	M. Falabino (<i>newcleo</i>)
16:00	"Numerical investigation of ALFRED under seismic scenario"	G. Khalil Youssef (<i>Sapienza University of Rome, Italy</i>)
16:20	Q&A – Discussion	
16:40	Day Three Wrap-up and Closing Remarks	A. Alemberti (<i>Chair of GLANST Scientific Committee</i>)
19:00	<i>Dinner offered by newcleo</i>	