CEIDEN
PLATAFORMA TECNOLÓGICA DE ENERGÍA NUCLEAR DE FISIÓN

INDUSTRIALES
ETSII | UPM

POLITÉCNICA

4th Workshop of Spanish Users on Nuclear Data on "Neutronic Design of Small Modular Reactors"

Welcome by Prof. Oscar Cabellos

May 19, 2022

Universidad Politécnica de Madrid
Instituto de Fusion Nuclear "Guillermo Velarde"
ETS de Ingenieros Industriales de Madrid, Madrid, Spain

What 'INGENIA-NUCLEAR' course is?

- INGENIA-NUCLEAR is focused "on design & simulation of PWRs
- Course within in the "Master in Industrial Engineering" and "Master in Nuclear Science an Technology" Programs at the Polytechnical University of Madrid (UPM)
- 12 ECTS : 5hours/week – 2 semesters
- INGENIA is based on the CDIO (Conceive-Design-Implement-Operate) initiative, which has been also adopted by other Universities: Delft, Politecnico di Milano, MIT, Stanford…
- See more information about CDIO at: **www.cdio.org**

Other INGENIA projects at UPM (in total 14)

PV facility

Videogame development

Design of Daily-life products

Automotive Engineers

4th Edition 'INGENIA-NUCLEAR': course 2021-2022

Participants in the 4th Workshop on "Neutronic Design in SMRS"

Statistics of the Workshop

by Country

#	Country	Participants	#	Country	Participants
1	Argentina		11	Japan	
2	Australia		12	Perú	
3	Austria		13	South Korea	
4	Belgium		14	Spain	
5	Bolivia		15	Sweden	
6	Finland		16	Switzerland	
7	France		17	UAE	
8	Germany		18	UK	
9	Iran		19	USA	
10	Italy				
				TOTAL	

Statistics of the Workshop

	#	Institution	P.	#	Institution	P.	#	Institution	P.
by Institution	1	-			IFIC (CSIC-UV)			UAM	
	2	Agencia Bolivia de Energía Nuclear			INGENIA/UPM			UCM	
	3	AIT Austrian Institute of Technology			Instituto Balseiro			UKAEA	
	4	Azad University			INVAP			UNED	
	5	BYLOR JV			IRSN			Universidad de Sevilla	
	6	CDTI			JAEA			Universita di Pisa	
	7	CEA			Jyvaskyla University			University of Sharjah	
	8	CEIDEN			KIT/INR			University of Tennessee	
	9	CIEMAT			Kyushu University			University of York	
	10	CIMNE			LANL			UNSW Sydney	
	11	CNEA			LUT University			UPC	
	12	CSN			NCSU			UPM	
	13	EDF-ENERGY			NFQ			Uppsala University	
	14	ENDESA			Nuclear Energy Agency			UPV	
	15	ENUSA			Pont. Univ. Católica del Perú			UV	
	16	EURECAT			PSI				
	17	GD Energy Services			SCK·CEN				
	18	IAEA			SNU Nuclear Energy Policy Center				
	19	Iberdrola			Technical University of Munich				
	20	IDOM			TECNATOM				
								TOTAL	

Agenda (14 technical presentations)

Start – End	Presenter (Institution)	Title
9:00 – 9:05	O. Cabellos (UPM)	Welcome
9:05 – 9:15	J. Dies (CSN)	Introduction
9:15 – 9:35	C. Queral (UPM)	The EU/H2020 MacSafer Project
9:35 – 9:55	V. Sánchez-Espinoza (INR/KIT)	KIT neutronics computational tools for SMR-design
9:55 – 10:15	V.J. Casas and E. Redondo (UPM)	Simulation SMR-NuScale with PARCS code
10:15 – 10:35	L.F. Durán (UPM)	Simulation SMR-NuScale with COBAYA code
10:35 – 10:55	INGENIA (UPM)	Simulation PWR-type SMR with SEANAP system
10:55 – 11:15	A. Jiménez-Carrascosa (UPM)	Sensitivity/Uncertainty Analysis in NuScale
10:15 – 11:30	All	Discussion
11:30 – 11:35	V. Martínez (ENSO)	Hands on training on NPP simulations with TH codes: Building up a full model of an SMR reactor. Barcelona, June 27 - July 1, 2022
11:35	AOB	

Some kind remarks

❑ For all participants

- During the meeting ….**please** … mute your microphones by default and unmute to speak
- Use of headphones is recommended to prevent audio feedback loops
- Please, type your questions in the chat or ask a question out loud by using Zoom's 'raise hand', if time allows.

❑ For speakers

- You will be asked to **share your screen** and present through your desktop using Zoom
- The format of the presentation is **12min** + 2min questions
- Please, keep the presentations within the allotted time. This will allow to keep the session running to schedule
- Send your final presentation file for distributing to all participants

Many thanks for your attention!

ENJOY THE WORKSHOP!