Generation IV International Forum SM

EDUCATION AND TRAINING TASK FORCE

Join us on July 31, 2019
for the next GEN IV webinar

Security Study of Sodium Gas Heat Exchangers in the Frame of Sodium-cooled Fast Reactors

This webinar provides an overview of a Sodium Fast Reactor system and presents an accident scenario in Compact plates Sodium-Gas heat Exchangers (ECSG) of SFR. The overpressure (180 bar in the nitrogen loop while 5 bar in the sodium loop) could result in nitrogen leaking into the liquid sodium. The present work focuses on the analysis of the predominant physical phenomena in the jet (the viscous diffusion, the momentum exchange between the two fluids) and supersonic gas jet, the development of the compressible multiphase flow model (Baer-Nunziato model) and its numerical schemes. In addition, the model is implemented using the numerical tool CANOP that enables researchers to generate the Adaptive Mesh Refinement and to calculate in parallel.

Free webcast

July 31, 2019 at 8:30 am EST (UTC-4)

Register NOW at https://attendee.gotowebinar.com/register/4900883265024320780

Who should attend: policy makers, managers, regulators, students, general public

Volunteer Communication Event. Help us create a mosaic showing attendees from all over the world during this webinar by sending us a «selfie» which shows the presentation in the background. We will prepare a mosaic and post it to the GIF website.

Meet the Presenter...

Dr. Fang Chen recently earned her PhD titled: "Numerical study of the under-expanded nitrogen jets submerged into liquid sodium in the frame of sodium-cooled fast reactor (SFRs)" from the university of Aix Marseille, France. She pursued her research at the CEA Cadarache, Service de Technologie des Composants et des Procédés (STCP), Laboratoire de Technologie, Procédés et Risques Sodium (LTPS).

In 2016, she double majored as an Engineer in Energetics, Mechanics and received a Master in Physics of Multiphase Flow from the University of Aix-Marseille, France.

The Generation IV International Forum invites you to attend web-based lectures on the next generation of nuclear energy systems and other cross-cutting subjects. Join internationally recognized subject matter experts and leading scientists in the nuclear energy arena for these short presentations.

Upcoming Webinars	
29 August 2019	Lead containing mainly isotope ^{208}Pb: new reflector for improving safety of fast reactors, Dr. Evgeny Kulikov
25 September 2019	Gen IV coolants quality control, Dr. Christian Latge
23 October 2019	Passive Decay Heat Removal System, Dr. Mitchel Farmer

For more information, please contact: Patricia Paviet at Patricia.Paviet@pnnl.gov or visit the GIF website at www.gen-4.org