

Joint ICTP-IAEA Workshop on Physics and Technology of Innovative Nuclear Energy Systems | (smr 3225)

Monday, 20 August 2018

08:30 - 09:00 REGISTRATION & ADMINISTRATIVE FORMALITIES

*Participants receiving financial support and staying in the ICTP Guest Houses are automatically registered at the time of check-in at the reception desk. Therefore, on Monday morning, please go directly to the Finance Office at the Enrico Fermi Building from 8.30 to 9.00 am, ground floor to collect your expenses.
Badges, Passports and Travel receipts are needed.*

*Additional Shuttle Bus service will be provided from the Adriatico Guest House and pick-up is available from the carpark area, main entrance of the Adriatico Guest House. Those people accommodated at the Galileo Guest House, please walk down the slope to the Enrico Fermi building. The Finance office is on the ground floor, right hand side.
Opening times:
Monday, Tuesday and Friday from 8.30 - 12.00 and 13.30 to 14.30*

PLEASE NOTE:

*To all Directors / Lecturers
Please register with the Workshop Secretary in office no. 135,
first floor at the Leonardo building.*

Location:

09:00 - 13:30 Session 1

Location: Leonardo Building - Budinich Lecture Hall

09:00 **Opening / IAEA Activities on Innovative NES 1h30'**

Speaker: Vladimir KRIVENTSEV (IAEA, Vienna, Austria)

10:30 **Coffee break & Group Photo 15'**

10:45 **History of Nuclear Energy: Young Gen Review 45'**

Speaker: Chirayu BATRA (IAEA, Vienna, Austria)

11:30 **Global Scenario for Nuclear Energy and Future of Innovative NES 1h0'**

Speaker: Massimo SALVATORES (Aix-en-Provence, France)

Material:  **Slides 1 - Salvatores**

12:30 **Lunch break 1h0'** (Leonardo Building - Cafeteria)

13:30 - 20:30 Session 2

Location: Leonardo Building - Budinich Lecture Hall

13:30 **INPRO Scenario Analysis for Development of Nuclear Energy Systems 1h30'**

Speaker: Galina FESENKO (IAEA, Vienna, Austria)

15:00 **Coffee break 15'**

15:15 **INPRO Comparative Evaluation of Nuclear Energy System Options 45'**

Speaker: Galina FESENKO

16:00 **Description and Distribution of Group Activities 1h0'**

*Konstantin MIKITYUK
Chirayu BATRA*

18:30 **Get Together Drink 2h0'**

(to be held outside on the terrace, weather permitting)

Tuesday, 21 August 2018

09:00 - 13:30 **Session 3**

Location: Leonardo Building - Budinich Lecture Hall

09:00 **Fuel Cycle options for Innovative Nuclear Energy Systems 1h30'**

Speaker: Massimo SALVATORE

Material:  **Slides 2 - Salvatores**

10:30 **Coffee break 15'**

10:45 **GIF: Gen IV Reactor Design Concepts 45'**

Speaker: Konstantin MIKITYUK (Paul Scherrer Institut, Villigen, Switzerland)

11:30 **Innovative Nuclear Energy Systems: Core Design and Neutronics 1h0'**

Speaker: Konstantin MIKITYUK

12:30 **Lunch break 1h0'** (Leonardo Cafeteria)

13:30 - 17:00 **Session 4**

Location: Leonardo Building - Budinich Lecture Hall

13:30 **Simulation of Neutronics for Advanced Reactors / Digital Nuclear Reactor 1h30'**

Speaker: Konstantin MIKITYUK / Chirayu BATRA

15:00 **Coffee break 15'**

15:15 **Group Activities 1 & 2 45'**

*Chirayu BATRA
Konstantin MIKITYUK
Adriaan BUIJS*

16:00 **Poster Session 1h0'** (Poster Gallery (behind the Budinich lecture hall)))

*Massimo SALVATORE
Konstantin MIKITYUK
Christian LATGE
Masakazu ICHIMIYA
Adriaan BUIJS*

Wednesday, 22 August 2018

09:00 - 13:30 **Session 5**

Location: Leonardo Building - Budinich Lecture Hall

09:00 **Coolant Options for Innovative Nuclear Energy Systems 1h30'**

Speaker: Christian LATGE (CEA, Saint Paul lez Durance, France)

10:30 **Coffee break 15'**

10:45 **Coolant Options for Innovative Nuclear Energy Systems 45'**

Speaker: Christian LATGE

11:30 **Innovative Nuclear Energy Systems: Reactor Design and Structural Designs** 1h0'

Speaker: Masakazu ICHIMIYA (Tokyo, Japan)

Material:  **Slides 1 - Ichimiya**

12:30 **Lunch break** 1h0' (Leonardo - Cafeteria)

13:30 - 17:00 Session 6

Location: Leonardo Building - Budinich Lecture Hall

13:30 **Innovative Nuclear Energy Systems: Reactor Design and Structural Designs** 1h30'

Speaker: Masakazu ICHIMIYA

Material:  **Slides 2 - Ichimiya**  **Slides 3 - Ichimiya**

15:00 **Coffee break** 15'

15:15 **Group Activities Discussion Session** 45'

Speaker: Chirayu BATRA

16:00 **Poster Session** 1h0'

*Konstantin MIKITYUK
Christian LATGE
Masakazu ICHIMIYA
Adriaan BUIJS*

Thursday, 23 August 2018

09:00 - 13:30 Session 7

Location: Leonardo Building - Budinich Lecture Hall

09:00 **Thermal Hydraulics of Advanced Liquid Metal Cooled Reactors** 1h30'

Speaker: Vladimir KRIVENTSEV

10:30 **Coffee break** 15'

10:45 **Thermal Hydraulics of Advanced Liquid Metal Cooled Reactors** 45'

Speaker: Vladimir KRIVENTSEV

11:30 **Interaction between Coolant and Structures of Liquid Metal Cooled Reactors** 1h0'

Speaker: Christian LATGE

12:30 **Lunch break** 1h0'

13:30 - 17:00 Session 8

Location: Leonardo Building - Budinich Lecture Hall

13:30 **Fundamentals and Innovative Designs of Molten-Salt Reactors** 1h30'

Speaker: Adriaan BUIJS (McMaster University, Ontario, Canada)

Material:  **Slides 1 - Buijs**

15:00 **Coffee break** 15'

15:15 **Group Activities** 1h0'

*Chirayu BATRA
Konstantin MIKITYUK
Christian LATGE
Masakazu ICHIMIYA*

Friday, 24 August 2018

09:00 - 13:30

Session 9

Location: Leonardo Building - Budinich Lecture Hall

09:00 **Safety of Fast Reactors: Phenomenology & Modelling Aspects** 1h30'

Speaker: Konstantin MIKITYUK

10:30 **Coffee break** 15'

10:45 **Group Presentations - 1** 45'

All Participants

11:30 **Group Presentations - 2** 1h0'

All Participants

13:30 - 15:30

Session 10 - PLEASE NOTE: CHANGE OF LECTURE HALL

Location: Leonardo Building - Euler Lecture Hall

13:30 **Final Remarks, Distribution of Certificates and Closing Session** 2h0'