

NOMATEN WINTER SCHOOL

13-14.10.2026

PROGRAMME

Programme overview

All scientific sessions take place in the “Ewa” room at PNT. Coffee breaks and buffet lunches are served in the neighboring “Maria” room.

Monday, 12 October · Day 0

TIME	PROGRAMME
17:30 – 19:30	Guided tour of Warsaw · <i>pre-registration required</i> Meeting point: Novotel Warszawa Centrum

Tuesday, 13 October · Day 1

TIME	PROGRAMME
07:10 – 07:15	Pick-up from the hotel · <i>exact location to be confirmed</i>
07:15 – 08:30	Transfer to NCBJ and entrance procedures
08:30 – 09:00	Registration at PNT and welcome coffee
09:00 – 12:15	Session 1 · Introductions
12:15 – 13:30	<i>Lunch break and discussions</i>
13:30 – 16:00	Session 2 · Radiopharmaceutical Sciences
16:00 – 18:15	Laboratory visits, scientific exchange and coffee
18:15 – 18:30	Summary of Day 1
18:30 – 19:30	Transfer to Warsaw
19:30	Welcome dinner · Restaurant “Słoi”, Żłota 11, Warsaw https://restauracjasloi.pl/

Wednesday, 14 October · Day 2

TIME	PROGRAMME
07:10 – 07:15	Pick-up from the hotel · <i>exact location to be confirmed</i>
07:15 – 08:30	Transfer to NCBJ, entrance procedures and welcome coffee
08:30 – 12:15	Session 3 · PhD Session – Part 1 and 2
12:15 – 13:00	<i>Lunch break and discussions</i>
13:00 – 15:30	Session 4 · Materials Science — Nuclear
15:45 – 18:15	Session 5 · Materials Science — Non-nuclear
18:15 – 18:30	Closing of the School
18:30	Departure to Warsaw

Please remember to bring your passport or national ID card for access to the NCBJ site.

Tuesday, 13 October · Day 1

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TIME	PROGRAMME
07:10 – 07:15	Pick-up from the hotel · <i>exact location to be confirmed</i>
07:15 – 08:30	Transfer to NCBJ and entrance procedures
08:30 – 09:00	Registration at PNT and welcome coffee
SESSION 1 · INTRODUCTIONS Chairs: Iwona Jóźwik (NCBJ) · Jacek Jagielski (NCBJ)	
09:00 – 09:15	Welcome and opening of the School Iwona Jóźwik (NCBJ) · Remarks by Prof. Jakub Kupecki, Director of NCBJ
09:15 – 09:30	NOMATEN — the EU Teaming project: latest news Jacek Jagielski (NCBJ)
09:30 – 09:45	Recent activities of the NOMATEN Centre of Excellence Łukasz Kurpaska (NCBJ)
09:45 – 10:00	Collaboration activities and opportunities — VTT Maria Oksa (VTT)
10:00 – 10:15	Collaboration activities and opportunities — CEA Frédéric Dollé and Christophe Gallé (CEA)
10:15 – 10:30	Collaboration activities and opportunities — NCBJ Jacek Jagielski (NCBJ)
10:30 – 11:00	<i>Coffee break</i>
11:00 – 11:15	Research Group: Materials Design and Manufacturing Silvia Bonfanti (NCBJ)
11:15 – 11:30	Research Group: Multiscale Hybrid Modelling of Materials Francisco Javier Dominguez-Gutierrez (NCBJ)
11:30 – 11:45	Research Group: Functional Properties of Materials Łukasz Kurpaska (NCBJ)
11:45 – 12:00	Research Group: Materials Characterization Iwona Jóźwik (NCBJ)
12:00 – 12:15	Research Group: Novel Radiopharmaceuticals for Medical Purposes Marek Pruszyński (NCBJ)
12:15 – 13:30	<i>Lunch break and discussions</i>

SESSION 2 · RADIOPHARMACEUTICAL SCIENCES

Chairs: Frédéric Dollé (CEA) · Marek Pruszyński (NCBJ)

13:30 – 14:00	Radiopharmaceuticals Research at the Institute of Nuclear Chemistry and Technology · <i>Invited talk</i> Rafał Walczak (Institute of Nuclear Chemistry and Technology, Warsaw, Poland)
14:00 – 14:15	Fluorinated nanohybrid micelles carrying ^{177}Lu , gold, and oxygen for potentiated internal radiotherapy Eric Doris (CEA)
14:15 – 14:30	Activatable micelles for cancer therapy Edmond Gravel (CEA)
14:30 – 14:45	Novel Theranostic Radiopharmaceuticals: Exploring New Collaboration Opportunities with CEA and VTT Marek Pruszyński (NCBJ)
14:45 – 15:00	<i>Coffee break</i>
15:00 – 15:15	Bambusurils: Efficient Receptors for Halides and Radiohalides Marie-Pierre Heck (CEA) and Gopi Elumalai (NCBJ)
15:15 – 15:30	Fast bioorthogonal reactions for efficient radiolabeling of biologics Frédéric Taran (CEA)
15:30 – 15:45	SONATA project: Radioiodinated PD-L1 inhibitors for targeted radionuclide therapy Anna Krzyczmonik (NCBJ)
15:45 – 16:00	Study of cellular responses to ultra-high doses of electron radiation: in search of biological mechanisms of the FLASH effect — NCN SONATA-BIS proposal Marcin Zieliński (NCBJ)
16:00 – 18:15	Laboratory visits, scientific exchange and coffee
18:15 – 18:30	Summary of Day 1
18:30	Departure from NCBJ to Warsaw
19:30	Welcome dinner · Restaurant “SłoiK”, Złota 11, Warsaw https://restauracjasloiK.pl/

Wednesday, 14 October · Day 2

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TIME	PROGRAMME
07:10 – 07:15	Pick-up from the hotel · <i>exact location to be confirmed</i>
07:15 – 08:30	Transfer to NCBJ, entrance procedures and welcome coffee
SESSION 3 · PhD SESSION — PART 1 Chairs: Frédéric Dollé (CEA) · Łukasz Kurpaska (NCBJ) · Jenna Järvenpää (VTT)	
08:30 – 08:45	Microstructure Stability and Corrosion Behavior of Co-Free CrFeMnNiAl High-Entropy Alloys Katarzyna Ciporska (NCBJ)
08:45 – 09:00	Activatable micelles for the treatment of radioresistant tumors Lea Cotel (CEA)
09:00 – 09:15	Modeling laser powder bed fusion (LPBF) of metallic glasses Anna Dziarmaga-Działyńska (NCBJ)
09:15 – 09:30	Metal–Organic Frameworks for Radioactive Iodine Capture and Actinide Adsorption: Candidate Selection for the HERA Project Suvi Lamminmäki (VTT)
09:30 – 09:45	New C–H activation strategies combined with fluorine-18 labeling to accelerate the development of radiotracers for PET imaging Jean-Baptiste Lecomte (CEA)
09:45 – 10:00	Bambusurils as Supramolecular Carriers for Radiohalogens Marion Mainetti (CEA)
10:00 – 10:15	Development of new bioconjugation techniques for efficient radiopharmaceuticals preparation and for pretargeting approaches Clémence Marre (CEA)
10:15 – 10:30	<i>Coffee break</i>
SESSION 3 · PhD SESSION — PART 2 Chairs: Frédéric Dollé (CEA) · Łukasz Kurpaska (NCBJ) · Kristiina Iljin (VTT)	
10:30 – 10:45	Stabilization of secondary phases in nano-reinforced ferritic steels: a high-throughput screening approach for chemical compositions Florian Pouyllau (CEA)
10:45 – 11:00	Novel prosthetic groups for radioiodination of octreotide via disulfide rebridging Ihab Shokair (NCBJ)

11:00 – 11:15	Influence of the microstructure of 316L steel produced by L-PBF process on its mechanical properties: characterization and modelling of creep and fatigue behaviour César Villatoro (CEA)
11:15 – 11:30	Foundation Potentials and Metallic Glasses Antoni Wadowski (NCBJ)
11:30 – 11:45	Understanding ion-irradiation effects on Ni43.5Fe33.5Mn6Cr11Al6 and Ni70Mo10Cr13Al7 alloys via nanoindentation Peichen Wang (NCBJ)
11:45 – 12:00	Microstructural exploration of a compositional gradient in W-Ta-Cr-V high-entropy alloy thin films for fusion applications Magdalena Wilczopolska (NCBJ)
12:00 – 12:15	Study of ion implantation and material damage in Cantor-like alloys Maciej Wilczyński (NCBJ)
12:15 – 13:00	<i>Lunch break and discussions</i>
SESSION 4 · MATERIALS SCIENCE — NUCLEAR Chairs: Christophe Gallé (CEA) · Tymofii Khvan (NCBJ)	
13:00 – 13:30	An experimental-based multiscale method for calculating radiation-enhanced mobility in solids: application to radiation-induced microstructure in FeCr · <i>Invited talk</i> David Simeone (CEA)
13:30 – 13:45	Radiation-induced defect evolution and high-temperature stability of a Co-free FCC FeCrMnNiAl high-entropy alloy Agata Zaborowska (NCBJ)
13:45 – 14:00	Irradiation damage in W and WTaCrV from molecular dynamics simulations Mark Fedorov (NCBJ)
14:00 – 14:15	Quantification of grain-scale localized plasticity by micro-DIC for developing physical models of IASCC Wade Karlsen (VTT)
14:15 – 14:30	<i>Coffee break</i>
14:30 – 14:45	New NOMATEN facilities for testing high-pressure/high-temperature corrosion Agata Sotniczuk (NCBJ)
14:45 – 15:00	Impact of lead corrosion on austenitic stainless steels before and after ion irradiation for Gen IV reactors Salomé Parent (CEA)
15:00 – 15:15	Study of the Behaviour of a Titanium Alloy (TA6V) under Physico-Chemical Conditions of a Pressurized Water Reactor Romain Abadie (CEA)

15:15 – 15:30

Neutron activation and nuclear decommissioning
Antti Rätty (VTT)

15:30 – 15:45

Coffee break

SESSION 5 · MATERIALS SCIENCE — NON-NUCLEAR

Chairs: Maria Oksa (VTT) · Silvia Bonfanti (NCBJ)

15:45 – 16:15

From First Principles to Large-Scale Atomistic Simulations:
Multiscale Modelling of High-Entropy Alloys · *Invited talk*
Jan Wróbel (Warsaw University of Technology, Warsaw, Poland)

16:15 – 16:30

Design of bcc-superalloys. From phase diagrams to mechanical
properties optimization of Fe-Al base alloys
Pedro A. Ferreira (VTT)

16:30 – 16:45

Cobalt-free high-entropy alloys with enhanced strength–
ductility synergy and reduced thermal diffusivity
Wenyi Huo (NCBJ)

16:45 – 17:00

CALPHAD-assisted design of reduced critical rare-earth
permanent magnets
Agustin Flores (CEA)

17:00 – 17:15

Coffee break

17:15 – 17:30

Two-scale FEM modeling of the recyclable, woven FRP
composite
Karol Frydrych (NCBJ)

17:30 – 17:45

Tuning dynamics and mechanics of disordered systems via
structural constraints
Anshul D. S. Parmar (NCBJ)

17:45 – 18:00

Electrically Conductive 2D Metal–Organic Frameworks for
Electrochemical Sensors
Mikko Vepsäläinen (VTT)

18:00 – 18:15

Next-generation hydrogen technology: fast detection & passive
neutralization for industrial applications
Mewenn Yvin (CEA)

18:15 – 18:30

End of Day 2 and closing of the School

18:30

Departure from NCBJ to Warsaw