Session Program

24–30 May 2026



32nd International Seminar on Interaction of Neutrons with Nuclei: Fundamental Interactions & Neutrons, Nuclear Structure, Ultracold Neutrons, Related Topics (ISINN-32)

Nuclear analytical methods and Life Sciences

Wednesday 27 May

09:00

Nuclear analytical methods and Life Sciences

Session | **Location:** Main Hall, 3d floor

09:00–09:20 **(Invited talk) Milestones in neutron activation analysis history– celebrating 90 years**

Speaker
Dr Marina Frontasyeva

09:20–09:40
The characterization of later stone age pottery from the Oakhurst site, South Africa using analytical techniques

Speaker
Shaheeda Adonis

09:40–10:00
Geochemical reference groups using neutron activation analysis of pottery from Oakhurst shelter, South Africa

Speaker
Dr Ваель Бадави

10:00–10:20
Levels of heavy metals in hair of pregnant women with fetal cardiovascular system anomalies

Speaker
Safa Abdo

10:20–10:40
Crystallographic texture and elemental analysis of mussel shell minerals from the west coast of South Africa

Speaker
Alexey Pakhnevich

10:45

11:05

Nuclear analytical methods and Life Sciences

Session | **Location:** Main Hall, 3d floor

11:05–11:25
(Invited talk) Nuclear methods in modern geochemical analysis: some observations and trends

Speaker
Владимир Колотов

11:25–11:45
Synthesis of Sn-doped CeO_2 nanoparticles from pineapple leaf waste for perovskite solar cells

Speaker
Zikhona Tywabi-Ngeva

11:45–12:05
Macro- and microelements in the leaves of Olea europaea L. and features of their extraction into infusion

Speaker
Alexandra Kravtsova

12:05–12:25

Quantum diode-like behavior in hydrated ZrO_2 nanopowder junctions under neutron flux and humidity control

Speaker
mahmoud Ibrahim

12:30

14:00

Nuclear analytical methods and Life Sciences

Session | **Location:** Main Hall, 3d floor

14:00–14:20

(Invited talk) Atmospheric deposition of 7Be measured using terrestrial mosses: seasonal changes in three successive years

Speaker
Dragan Radnović

14:20–14:40

Some features of atmospheric deposits of potentially toxic elements in moss biomonitoring on the territory of Perm region

Speaker
Evgeniya Gatina

14:40–15:00

Ecological and geographical zoning of industrial development potential based on moss biomonitoring data: the case of Ryazan region

Speaker
Eleonora Blinova

15:05

Friday 29 May

09:00

Nuclear analytical methods and Life Sciences: Nuclear analytical methods and Life Sciences

Session | **Location:** Main Hall, 3d floor

09:00–09:20

(Invited talk) Improving k0-NAA accuracy at Dalat Research Reactor: Integrated methodological refinement

Speaker
Dung M. Ho

09:20–09:40

Neutron activation analysis used to monitor air polluting agents in Egypt using active moss biomonitoring techniques

Speaker
Noha Nassar

09:40–10:00

Attribution of the ceramic base of 17th-19th centuries stove tiles using neutron activation analysis and statistical treatment

Speaker
Valerij Lobachev

10:00–10:20

Application of INAA to assessing resource potential and environmental risks of industrial sites: a case study of the Baley gold enrichment tailings dump

Speaker
Nikita Markin

10:20–10:40

Nicotine and minerals content in Moldavian tobacco using UV-Vis, UHPLC and ICP-OES

Speaker
Margarita Shvetsova

10:45

11:05

Nuclear analytical methods and Life Sciences: Nuclear analytical methods and Life Sciences

Session | **Location:** Main Hall, 3d floor

11:05–11:30

(Invited talk) Spatial and temporal patterns in potentially toxic and other elements in wild mussels from South Africa

Speakers
P. Nekhoroshkov, Pavel Nekhoroshkov

11:30–11:50

A comparative NAA-based assessment of elemental composition of Mentha spicata L. plants, exposed to silver in ionic and nanoforms

Speaker
Alexandra Peshkova

11:50–12:10

X-ray diffraction, instrumental neutron activation analysis, X-ray fluorescence, and optical microscopy investigation of unconsolidated sediments of Serbian Danube sector and its main tributaries

Speaker
Отилиа Куликов

12:10–12:30

Assessment of air pollution in the vicinity of thermal power plants using active biomonitoring

Speaker
Konstantin Vergel

12:30

14:00

Nuclear analytical methods and Life Sciences: Nuclear analytical methods and Life Sciences

Session | **Location:** Main Hall, 3d floor

14:00–14:25

(Invited talk) Radionuclide distribution and radiological hazard in soils of East Antarctic coastal oases

Speaker
Омари Чалигава

14:25–14:45

Radiological and geochemical assessment of beach sands in Dubna urban recreational areas

Speaker
Konstantin Birkle

14:45–15:05

Vertical (re)distribution of radiocesium in soil under natural and semi-natural areas of Vojvodina 40 years after the Chernobyl accident: a case study from the Bavanište settlement (South Banat, Vojvodina)

Speaker
Kristina Kalkan

15:05–15:25

Optimization of fast neutron doses for seed priming in triticale: initial physiological effects and prospects for inducing stress tolerance

Speaker
Mrs Анастасия Кругляк

15:25–15:45

Eco-engineered hollow spherical nanocomposites: hematite/carbon spheres for fast lead removal from water

Speaker
islam gomaa

15:45