

The Joint Workshop

“IPM: EMERGENCY NATURAL PHENOMENONS AND THEIR SCIENTIFIC DESCRIPTION”

(IPM2025)



**Academy of the Ministry of Emergency Situations
of the Republic of Azerbaijan**

and



ISAAC GROUP Co

(innovations in science, art, architecture and culture)

04-05 September 2025.

- Baku,
- Azerbaijan

Academy of the Ministry of Emergency Situations of the Republic of Azerbaijan and ISAAC GROUP Co (Baku, Azerbaijan) are organizing the Joint Workshop “**IPM: EMERGENCY NATURAL PHENOMENONS AND THEIR SCIENTIFIC DESCRIPTION**” (IPM2025) (September 04-05, 2025) in the series "Investigations in Physics and Mathematics (IPM)"

The purpose of this seminar is to scientifically discuss some phenomena in nature and everyday life based on the fundamental principles of physics and mathematics.

To this end the workshop will consist of **invited talks only**.



Topics to be discussed:

- Factors of Caspian Sea level change
- Problems of local regulation of precipitation in the territory of the Republic of Azerbaijan
- Natural calamities in the South Caucasus: torrents, earthquakes. Historical chronology and scientific basis
- LIDARs and their Civil and Military Applications
- Radiation Materials Science
- Radiation monitoring in the Republic of Azerbaijan
- Alternative energy sources
- Controlled thermonuclear fusion as an alternative energy source
- Plasmoid, Ball Lightning as an alternative energy source
- Green Energy
- Prospects for the use of wind energy in the territory of the Republic of Azerbaijan
- Solar cells
- Artificial intelligence
- Optimization and Control
- Mathematical modeling
- Unmanned aerial vehicles
- Problems of modeling, control and stabilization of quadcopter flight
- Robotics
- Regulation of safe and profitable exploitation of electricity, water and natural gas by producers and consumers using game theory
- Econophysics
- Medical physics and occupational diseases
- The problem of boundary states in relativistic nuclear and elementary particle physics
- History and philosophical aspects of education



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Topchubashov Scientific Surgical Center,
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Director of the Institute of Radiation Problems of the Ministry of Science and Education of the Republic of Azerbaijan

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Doctor of Mathematics



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PHD. Associate Professor

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Ministry of Digital Development and Transport of the Republic of Azerbaijan, Innovation and Digital Development Agency, Department of Nucleus Investigations
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Azerbaijan State Medical University of the Ministry of Science and Education of the Republic of Azerbaijan
PHD. Associate Professor

Faig Safarov **Secretary**
Executive Director of ISAAC GROUP Co

Shafiga AliAkbarova **Volunteer**
Bachelour student of Baku State University



Structure of the workshop

- Participation will be available both in **person and online**.
- **Speakers by invitation only.**
- Two sessions with 10-12 invited talks of **15 or 20 minutes** duration and **5 minutes** for questions (*additional time is possible by request*) and debates of a current character after each talk will be arranged every day.
- In the evening one hour will be devoted to moderated open discussion of relevant general problems.
- Poster sessions are envisaged for young participants (graduates and post graduates) as everyday last 40-min sessions.
- **Only registered participants can follow the sessions and take part in the discussions.**
- Proceedings of the workshop will be published.



IMPORTANT DATES

- **August 10, 2025 - end of abstract submission**
- **August 31, 2025 - end of registration of speakers**
- **September 04, 2025 - start of the Workshop**

- ***Participation with review talks is by invitation of the Organizing Committee.***
- In the case of a proactive request the decision is made by the Organizing Committee.
- The sessions will be **online** by appropriate software and also in person.

THERE IS NO REGISTRATION FEE.

Contact:

Contact person: Faiq F. Safarov

Behalf on prof. Rauf G. Jafarov

e-mail address: jpm.isaacgroup@gmail.com ,

r.g.jafarov@hotmail.com ,

r.g.jafarov@gmail.com

Mobile: +99455 9876254

www.raufjafarov.org.az/Home/IPMWorkshops

Address: AZ1089, Baku city, Surakhani district, Hovsan settlement, Elman Gasimov str, 8