The International Workshop on Reliability and Safety (RaS-2023)

Vitaly Levashenko, the chair of the Program Committee

Representatives of the Institute of Information Technologies, Gdansk University of Technology, VSB - Technical University of Ostrava, University of Debrecen, and University of Žilina organized the International Workshop on Reliability and Safety (RaS 2023) from 20 to 22 June 2023 in Žilina, Slovakia. The organization of the RaS workshop was supported by the International Visegrad Fund in the frame of the ERaSEV4 (***Exchange of Reliability and Safety Experience in the*** **V4 *region***) project. The University of Žilina was selected for the organization of the workshop because the city of Žilina is near the geographic center of the V4 region.

The main workshop's objectives were (a) the establishment of collaboration between the target groups: young researchers, academic teachers, and representatives of enterprises in the RaS area; (b) the discussion of the modern trends and teaching aspects in RaS. Important participants were young researchers and PhD students who obtained invitations to participate in this event. The workshop focused on various problems of Reliability and Safety, such as Human Factor and Human Reliability, Mathematical Methods in Reliability and Safety, Safety and Risk Assessment, System and Structural Reliability, Software Reliability and Testing, Survival analysis, Quantitative Risk Assessment, and Uncertainty Analysis. All presented works were reviewed by at least two external independent experts. The organizational team would like to thank all of them for their contribution to the improvement of the quality of the accepted presentations and papers. We expect that the presented papers will be indexed in well-known scientific repositories, such as *Scopus* and *IEEEExplorer*.

Contact:
prof. Ing. Vitaly Levashenko, PhD.
Institute of Information Technologies
Univerzitná 8215/1
010 26 Žilina, Slovakia

We sent information about the RaS workshop to more than 250 potential participants. On the whole, we have obtained nearly 60 papers from them. We selected 35 presentations and lectures based on reviews of members of the Program Committee. The approved papers were organized into three plenary and five working sections. These presenters created a very creative and productive atmosphere for more than 60 participants of the plenary and working sessions and during the breaks. Each of the workshop participants obtained an official certificate of participation.

In the plenary sessions, distinguished invited speakers gave a review of the future perspectives in their research areas including safety management, reliability, information technologies, and medical informatics. In particular, the following invited lectures were delivered by the speakers:

- Self-sufficient electric energy supply at home – prof. Marko Čepin from University of Ljubljana, Slovenia;
- Benefits of Petri nets for systems modeling and probabilistic assessment in reliability engineering – prof. Nicolae Brinzei, University of Lorraine, France;
- Multi-Diagnosis Cough Classification Evaluation – prof. Martin Lukac, Hiroshima City University, Japan;
- Maintenance optimization of complex multi-component systems – prof. Radim Briš, VSB-Technical University of Ostrava, Czech Republic.

Seventeen presentations from the ERaSEV4 project partners were presented at the RaS-2023 workshop. Other workshop participants presented the next fourteen presentations. These lecturers were representatives from different universities in Belarus, Izrael, Japan, Germany, and Ukraine.

The organizing committee prepared also several cultural and social events that were held in

a pleasant atmosphere. Participants of the workshop visited the famous Bojnice Castle. The castle is now an important center of recreation and tourism located in the center of Slovakia, which benefits from its rich historical heritage. Similar cultural event support to establish personal contacts between teachers and young researchers, to organize team-building with a kindly atmosphere. Such contacts are especially important to support the ERaSEV4 project's sustainability in the future.

We are going to organize the next RaS workshop in 2025. Our organizational team will be glad to deepen cooperation with IEEE Czechoslovakia Section Reliability Society, the International Visegrad Fund, and European Safety and Reliability Agency (ESRA). New ESRA members are welcome to become a part of the program committee.

We will be glad to obtain your propositions about cooperation and new ideas for the ERaSEV4 project implementation by email to vitaly.levashenko@fri.uniza.sk All your suggestions are very important to us.