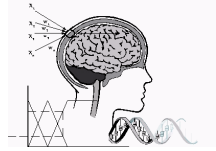




# International

*Innovation in Knowledge Based and Intelligent  
Engineering Systems*



## INVITED SESSION SUMMARY

**Title of Session:**

Advances in Intelligent Data Processing and its Applications

**Name of Chair:**

Prof. M. Favorskaya - Reshetnev Siberian State University of Science and Technology, Russian Federation

Prof. M. Sergeev - Saint Petersburg State University of Aerospace Instrumentation, Russian Federation

Prof. L. Jain - KES International and Liverpool Hope University, UK

**Details of Session:**

Intelligent data processing including different types of data is the cornerstone of tremendous amount of numerical methods and algorithms. The goal of this session is to develop the methodologies of intelligent data processing, as well as the software tools in different practical applications.

The topics of interests include but are not limited to:

- Intelligent visual and audio data processing
- Intelligent forecasting applications
- Orthogonal matrices and their applications
- Images compression and protection
- Transmission media and data encoding
- Deep learning for image processing
- Intelligent biometric algorithms and systems
- Visual question answering
- Hybrid artificial intelligent systems
- Enhanced software tools
- Evaluation and stability in intelligent systems
- Intelligent human-computer interaction systems
- Numerical modelling and software tools in engineering
- Mobility intelligence and semantic applications

**Main Contributing Researchers / Research Centres (tentative, if known at this stage):**

- Prof. Mikhail Sergeev
- Prof. Victor Krasheninnikov
- Prof. Konstantin Simonov
- Dr.Sci. Alena Favorskaya
- Dr. Anton Vostrikov
- Dr. Alexandr Zotin
- Dr. Victor Buryachenko

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