## **Preface**

The XXII International Conference on "Enterprise Engineering and Knowledge management" (EEKM'2019) took place from 2019 April 24 to 26 in the Plekhanov Russian University of Economics (Moscow). By tradition, the "Enterprise Engineering and Knowledge management" (EEKM) conference is planned as a multidisciplinary forum of researchers and practitioners from various domains, promoting cooperation and exchange of ideas in different areas. The objectives of the EEKM '2019 scientific conference were: analysis and development of promising approaches, methods and tools to improve the efficiency of enterprise digital transformation (based on modern Artificial Intelligence technologies), risk management, BPMS-based business process management tools, service-oriented architecture and knowledge management. The EEKM conference is more focused on specific models, technologies and their effectiveness, in addition to great attention to the correct interpretation of the concepts.

## The main themes of the conference were:

- 1. Enterprise architecture based on end-to-end digital technologies
- 2. BPMS and business process management in the context of dynamic changes in business processes and enterprise architectures
- 3. Analysis of the requirements for new Artificial Intelligence and social networking technologies, considering new ways of communication in the enterprise and its ecosystem
- 4. System analysis and integrated architectural modeling of enterprises
- 5. Analysis and design of means of intellectual support for the activities and development of enterprises, taking into account their value and economic aspects
- 6. Models and methods for determining the effectiveness and efficiency of intelligent / "smart" technologies
- 7. Cognitive decision-making technologies
- 8. Knowledge management in a dynamic business environment and ontological engineering
- 9. Multimedia information systems and Semantic Web.
- 10. Service-oriented enterprise architectures and information systems.
- 11. Multi-agent systems of teamwork and decision making
- 12. Dynamic creation of digital, virtual and SMART enterprises
- 13. Big Data Processing Technologies and Machine Learning
- 14. The creation and management of the information and educational space of universities

## Tracks of the conference:

- Cognitive and intelligent decision-making technologies
- Knowledge management and enterprises ontological engineering
- Digital enterprise transformation, architecture and transformation risk management
- Modeling and of business processes management in the digital economy
- Formation of new professions and educational programs in the digital economy
- Student section
- Student Research Competition
- All-Russian Student Olympiad "APPLIED INFORMATICS" for undergraduate students;
- Meeting of the Methodological Council on the "Applied Informatics" of the Federal Training and Methodological Association in the direction 09.00.00 "Computer science and computing";

The overall number of works presented at the conference was 92 plus 51 works at the student section. Most of the presentations are dedicated to the results of researches conducted in the organizations located on the territory of the Russian Federation including Moscow, St.Petersbug, Novosibirsk, Ulianovsk, Ekaterinburg, Kazan, Tomsk, Tver, as well as abroad: Kiel, Hamburg and Coburg (Gemany), Sofia (Bulgaria), Thohoyandou (South Africa). The conference Program Committee has reviewed 47 submissions in English language and selected 23 papers, rejecting 24.

The chairs of the Program Committee and Organizing Committee of the XXII International Conference on "Enterprise Engineering and Knowledge management" (EEKM'2019) express their gratitude to supporting organizations:

- Plekhanov Russian University of Economics;
- Russian Association on Artificial Intelligence;
- Foundation for The Support of System Design, Standardization and Project Management;
- Methodological Council on the "Applied Informatics" of the Federal Training and Methodological Association in the direction 09.00.00 "Computer science and computing";
- Fund for Promotion of Internet media, IT education, and Human development «League Internet Media».

Co-chairs of the Program committee

Co-chair of the Organizing committee

Osipov Gennady,

Dr., professor, Deputy director, Federal Research Center «Computer Science and Control» of Russian Academy of Sciences, President of Russian Association of Artificial Intelligence Telnov Yuri

Dr., professor, chair of Applied Informatics, Faculty «Institute of Digital Economics And Information Technologies», Plekhanov Russian University of Economics, member of the board of Russian Association of Artificial Intelligence