

# CFP: The 17th International Conference on Knowledge Science, Engineering and Management (KSEM 2024)

August 16-18th, 2024

Birmingham

<https://ksem24.ai-edge.net/>

The 17th International Conference on Knowledge Science, Engineering and Management (KSEM 2024) will be held in Birmingham on August 16th-18th, 2024. The aim of this interdisciplinary conference is to provide a forum for researchers in the broad areas of knowledge science, knowledge engineering, and knowledge management to exchange ideas and to report state-of-the-art research results. KSEM is on the list of CCF (China Computer Federation) recommended Conferences (C series, Artificial Intelligence).

## Submission Process:

EasyChair System: <https://easychair.org/my/conference?conf=ksem2024>

## Steering Committees

- Ruqian Lu (Honorary Chair), Chinese Academy of Sciences, China
- Dimitris Karagiannis (Chair), University of Vienna, Austria
- Bo Yang, Jilin University, China
- Chengqi Zhang, University of Technology Sydney, Australia
- Christos Douligeris, University of Piraeus, Greece
- Claudiu Kifor, "Lucian Blaga" University of Sibiu, Romania
- Gang Li, Deakin University, Australia
- Hui Xiong, The State University of New Jersey, USA
- Jörg Siekmann, German Research Centre of Artificial Intelligence, Germany
- Martin Wirsing, Ludwig-Maximilians-Universität München, Germany
- Meikang Qiu, Augusta University, USA
- Xiaoyang Wang, Zhejiang Gongshang University, China
- Yaxin Bi, Ulster University, UK
- Yoshiteru Nakamori, Japan Advanced Institute of Science and Technology, Japan
- Yuncheng Jiang, South China Normal University, China
- Zhi Jin, Peking University, China
- Zili Zhang, Southwest University, China

## Organizing Committee

### - Honor General Chairs

- Ruqian Lu, Chinese Academy of Sciences, China
- Dimitris Karagiannis (Chair), University of Vienna, Austria

### - General Co-Chairs

- Yonghao Leo Wang, Birmingham City University, UK
- Gerard Memmi, Telecom Paris, France
- Meikang Qiu, Augusta University, USA

### - PC Co-Chairs

- Sun-Yuan Kung, Princeton University, USA
- Junaid Arshad, Birmingham City University, UK
- Taufiq Asyhari, Monash University, Australia

### - Publicity Co-Chairs

- Hua Zhou, UCLA, USA
- Yu Huang, Peking University, China
- De Mi, Birmingham City University, UK

## Important Dates

Paper submission: January 15<sup>th</sup>, 2024

Author notification: March 1<sup>st</sup>, 2024

Camera-Ready: May 1<sup>st</sup>, 2024

Registration: May 1<sup>st</sup>, 2024

Conference date: August 16<sup>th</sup> – 18<sup>th</sup>, 2024

## Contact Information

If you have any questions or queries on KSEM 2024, please contact us by email. Email address:

[ksem24@outlook.com](mailto:ksem24@outlook.com)

## Topics

The conference committee invites submissions of applied or theoretical research as well as of application-oriented papers on all the topics of KSEM. Topics include, but are not limited to the following:

### Knowledge Science

- Knowledge representation and reasoning
- Formal analysis of knowledge; reasoning about knowledge
- Knowledge complexity and knowledge metrics
- Uncertainty in knowledge (randomness, fuzziness, roughness, vagueness)
- Knowledge fusion for decision making
- Formal ontologies
- Reasoning about knowledge in the presence of inconsistency, incompleteness and context-dependency
- Belief propagation, revision and aggregation
- Cognitive foundations of knowledge
- Integration of machine learning and knowledge representation
- Knowledge-driven learning
- Knowledge for cognitive robotics
- Knowledge for cognitive analytics
- Knowledge in complex systems (e.g. manufacture assembling, economical and quantum systems)
- Game-theoretical aspects of knowledge; knowledge in multi-agent systems

### Knowledge Engineering

- Knowledge modeling
- Knowledge acquisition, such as knowledge modules, temporal knowledge, etc.
- Knowledge extraction from texts/videos, big data/Web
- Knowledge discovery from very large databases
- Knowledge integration
- Knowledge-based software engineering
- Knowledge-based systems for smart homes
- Conceptual modeling in knowledge-based systems
- Semantic database systems
- Semantic Web: Content and ontological engineering
- Knowledge engineering applications
- Knowledge modeling for digital twins
- Knowledge-based system for Chatbot
- Knowledge-based system and Large Language Models (LLMs)

### Knowledge Management

- Knowledge management best practices and applications
- Knowledge verification and validation (e.g. Blockchain)
- Knowledge protection and attack detection
- Knowledge-Based Systems in Cybersecurity Threat Detection and Intelligent Decision-Making
- Smart knowledge and resource optimization
- Knowledge dissemination
- Knowledge management systems
- Knowledge and data integration
- Knowledge adaptation

### Knowledge Graphs

- Probabilistic Knowledge Graphs
- Knowledge graph construction
- Knowledge graph embedding

