**Call for Papers**

**4th International Workshop (MROL 2020)**

Methods, Resources and Technologies for Open Learning and Research

Co-located with the 16th International Conference on ICT in Education, Research, and Industrial Applications: Integration, Harmonization, and Knowledge Transfer (ICTERI 2020)

June 16, 2020, Kharkiv – Ukraine

http://icteri.org/icteri-2020

Venue: V.N. Karazin Kharkiv National University

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**MROL 2020 at a Glance**

This Workshop is designed to consider the state of the art and potential benefit of new and emerging technologies application within the open systems of higher education. The aim is to explore the use of open education and research tools, resources and methods for forming the creative and ICT competent person in view of European Research Area development. That have to meet the priorities of open science, open communication and open data access and delivery, the wide use of cloud-based learning resources, platforms and infrastructures to support learning and research within the open systems of higher education. The subject matter of the Workshop deals with big data, smart data, European Open Science Cloud (EOSC) data and resources, adaptive data processing and analytics, smart learning and research environment to provide breakthrough technologies of data access and elaboration.

The Workshop aims at:

(i) Exploration and use of open education and open research tools, resources and methods for forming the creative and ICT competent person in view of European Research Area development.

(ii) Considering and evaluating the prospects of higher education open systems design and development.

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**Important Dates**

(23:59 Hawaii time)

Monday, 30.03.2020 – submission of workshop papers

Monday, 20.04.2020 – acceptance notification for workshop papers

Monday, 11.05.2020 – submission of camera-ready papers

Monday, 11.05.2020 – registration deadline for workshop authors

Tuesday, 16.06.2020 – workshop day

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**No Fees**

The Workshop does not charge any conference fee. Participation is FREE, expenses are covered by ICTERI 2020 sponsors.

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**The Scope of MROL**

Nowadays, an effective and promising approach to open pedagogical systems design is the use of the cloud computing technologies to provide ICT support for the functioning and development of the computer-based educational and research environment. Innovative technological solutions for learning environment organisation and design using cloud computing (CC) and ICT outsourcing show promise and usefulness. The challenges of making the ICT infrastructure of the university environment fit the needs of its users, taking maximum advantage of modern network technologies, and ensuring the best pedagogical outcomes leads to the search for the most reasonable ways of its modernization.

The open science processes are related to open access to research data, open discussion and analysis of research results and open communication with society. To support these processes, the corporate or hybrid cloud-based university environments are useful as the essential components (accomplishments) for the resources of the various public information networks such as research infrastructures and social networks. Thus, the analysis of the principles and essential features of the structure and design of the cloud-based learning and research university environment becomes additionally valuable because of its the open science processes support. Topics of interest include, but are not limited to:

- Cloud-based Educational and Research Environment Design
- ICT and Methods of Distance and Enhanced Learning
- Smart-systems: Models, Technologies and Resources – STEM Education, Learning Robotics, Knowledge Extraction, Engineering and Management, Internet of Things for Open Learning
- Methods, Technologies and Resources for Virtual and Remote Laboratories, Virtual and Augmented Reality in Open Learning,
- ICT Competence in Open Systems Design and Development
- Quality Assurance of ICT Education: Methods, Resources and Technologies
- Research Infrastructures for Open Science
- Mobile Resources and Ubiquitous Computing in Open Education
- Multimedia, Simulation, Virtualization and Open Learning Resources
- Data Computing for Open Education and Research etc.

**Submission Types and Requirements**

MROL solicits:

(i) Regular (full) research papers,

(ii) Short research papers,

(iii) Discussion or problem analysis papers.
Submission Instructions and Publication

The language of the Workshop is English. All submissions shall be annotated by the key words/phrases freely chosen by the authors. At least three and at most five key phrases should be provided. All submissions must comply with the Springer CCIS format guidelines. Formatting instructions and template as well as submission guidelines are provided for your convenience at the ICTERI 2020 web site: http://icteri.org/icteri-2020. Submissions must be made in .pdf by using EasyChair System: https://easychair.org/conferences/?conf=icteri2020. Please submit your paper to the MROL 2020 Workshop Track. The papers accepted for MROL will be published as a part of the proceedings of ICTERI 2020 online at CEUR-WS (indexed by Scopus).

The best Workshop papers selected by the ICTERI 2020 Steering Committee may be invited to be revised and extended for the ICTERI post-proceedings volume. The post-proceedings of ICTERI are traditionally published by Springer Communications in Computer and Information Science (CCIS) series.

Evaluation and Presentation

Every submission will be evaluated by at least three members of the MROL Program Committee. Based on evaluation results, the best papers will be accepted for their presentation at the workshop.

It is strongly required that at least one author of an accepted paper attends the workshop in person and presents their paper. Workshop organizers will withdraw the paper from the publication in CEUR-WS proceedings if the author(s) do not attend the workshop. The paper evaluation system is described in more detail at the link: http://icteri.org/icteri-2020/evaluation-criteria.

Chairs

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The Program Committee may be expanded.

How to Get to Kharkiv

Kharkiv is the regional capital city in the East of Ukraine and is a large industrial, scientific, and educational center. This is a modern, cozy and comfortable metropolis with convenient logistics. Kharkiv region remains stable and calm, with the national police ensuring safety and security in the city. The air gate of the city is the international airport «Kharkiv», which provides international flights to Vienna, Warsaw, Minsk, Istanbul, Tel Aviv, Thessaloniki, Amman, Beirut and so on, as well as domestic Ukrainian flights (https://hrk.aero/en/). More details are available at the Conference Venue page at the ICTERI 2020 web site: http://icteri.org/icteri-2020/conference-venue/.