



Univerza v Mariboru

**FACULTY OF CHEMISTRY AND  
CHEMICAL ENGINEERING**

Smetanova 17

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## Open Access Policy for Research Infrastructure at the Faculty of Chemistry and Chemical Engineering, University of Maribor

### 1. Definition

The research infrastructure<sup>1</sup> of the Faculty of Chemistry and Chemical Engineering, University of Maribor (hereinafter referred to as RI FKKT UM) denotes the whole of the multi-purpose and multi-dimensional facilities, laboratory environments, research equipment, complex digital research systems and databases used for research purposes, as well as the dedicated research groups. RI FKKT UM is a prerequisite for research work, and, at the same time, essential for achieving both excellence in research, as well as the wider social development.

RI FKKT UM may comprise fundamental RI (buildings, equipment, etc.), and/or a RI for knowledge transfer (researchers, laboratories, databases, etc.). RI FKKT UM is organised across various entities. In certain cases it can also be defined as a virtual infrastructure or a virtual research environment, where the service is provided electronically.

A list of the reasearch equipment RI FKKT UM is in attachment 1 and it is refreshed periodically.

Research entities of the Faculty of Chemistry and Chemical Engineering, University of Maribor:

- Laboratory for Analytical Chemistry and Industrial Analysis  
Head: Assoc. Prof. Dr. Matjaž Finšgar
- Laboratory of Inorganic Chemistry  
Head: Doc. Dr. Irena Ban
- Laboratory for Biochemistry, Molecular Biology and Genomics  
Head: Assoc. Prof. Dr. Uroš Potočnik
- Laboratory of Physical Chemistry and Chemical Thermodynamics  
Head: Assoc. Prof. Dr. Urban Bren
- Laboratory for Organic and Polymer Chemistry and Technology  
Head: Prof. Dr. Peter Krajnc
- Laboratory for Process Systems Engineering and Sustainable Development  
Head: Prof. Dr. Zdravko Kravanja
- Laboratory of Separation Processes and Product Design  
Head: Prof. Dr. Željko Knez

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<sup>1</sup> According to the definition of the European Strategy Forum for Research Infrastructures (ESFRI), research infrastructures (RI) are facilities, resources or services that represent larger equipment or sets of instruments, and represent or complement knowledge sources such as collections, archives and databases. Examples of RI according to the ESFRI definition: large research installations, collections, libraries, databases, biological archives and collections, high-performance or broadband communication networks, research vessels, telescopes, satellite and aircraft observation capacities, high performance computing networks (HPC), clean rooms, coastal observation stations, synchrotrons and accelerators, etc.



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- Group for Separation Analysis
- Laboratory of Thermoenergetics  
Head: Assoc. Prof. Dr. Darko Goričanec
- Laboratory for Water Biophysics and Membrane Processes  
Head: Assoc. Prof. Dr. Claus Helix-Nielsen
- Group for Experimental Physics  
Head: Prof. Dr. Samo Korpar
- Group for Mathematics  
Head: Prof. Dr. Petra Žigert Pleteršek

The UM manages RI FKKT UM as a single legal entity.

## 2. Users

The RI FKKT UM is publicly accessible to researchers, research groups or research organisations within the framework of UM research activities (employees, including researchers of different stages, postdoctoral researchers, technicians and Doctors of Science) and research activities outside FKKT UM (external users, such as researchers of various research organisations, commercial or other). Within the framework of research, users are involved in designing or creating new knowledge, products, processes, methods and systems.

The FKKT may require from external users that they demonstrate that they have the knowledge and skills required to use the RI. Where external, the user does not have the required knowledge and skills for professional operation of the RI FKKT, the entity can provide a complete service by employing its internal staff. The entity may also offer and provide training for new external users. The cost of such training is borne by the external user.

Users need to abide by the relevant principles, strategies, Directives and other regulatory FKKT documents in their collaboration or when using RI FKKT UM.

## 3. Access

Access means a legitimate and authorised admission to interactions and use of RI FKKT UM and the services provided by RI FKKT UM to users. Access can be physical, remote or virtual (allowing access through communication channels, usually online network facilities).

The RI FKKT UM access modes comprise the excellence-driven access mode and market-driven access mode. The excellence-driven access mode is dependent on the scientific excellence, originality, quality, technical and ethical feasibility of the work. The market-driven access mode is possible in the case of an agreement between the user and the research entity of FKKT UM which will lead to a fee for access. This mode is also possible when there is a market need demanding technical or scientific solutions that can be achieved through access to the RI. Both modes are granted based on application, evaluated internally or through peer review.



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Individual research entities are responsible for determining the scope of their own RI which is to be accessible to external users, under clear, transparent and fair terms and conditions. They also have the right to propose internal access policies which are approved at the FKKT UM level.

The RI FKKT UM offers users a certain amount of access, which is measured in access units defined by individual entities. Access units may vary, depending on the different types of RI. Some access units are precise values, e.g., hours of infrastructure operation, gigabytes generated and stored while conducting complex experiments, etc.

The processes and interactions involved in access to the RI FKKT UM may vary according to the different types of RI within individual entities (e.g., application, negotiation, evaluation, etc.), but the decisions on the access requests have to be clear and justified.

#### **4. Costs and fees**

Access to the RI FKKT may be provided free of charge, or may require payment. All terms and conditions associated with the use of the RI have to be transparent and publicly available. In the case of paid access, the user is charged a fee which has to be linked clearly to the actual use of the RI itself. Access fees may vary for different types of RI, but all have to abide by the following principles:

- auditability,
- traceability to the work done on the RI FKKT UM, including maintaining appropriate records outlining access requests (successful and unsuccessful), reasons for declining access (if relevant), usage data, etc.,
- prohibition of duplicate funding,
- compliance with all relevant national and EU funding terms and conditions, and with competition legislation.

Market-driven access costs should be recovered at full commercial rates.

The unit of cost depends on the amount of use of a particular access unit.

#### **5. Training and Education**

The RI FKKT UM open access policy encourages collaboration with other institutions and organisations that benefit from RI FKKT UM for their research, education and training.

#### **6. Restrictions**

Access to RI UM can be limited by national security and defence, privacy and confidentiality, commercial sensitivity, intellectual property rights, and ethical consideration following the applicable laws and regulations.



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## 7. Ethical conduct, research integrity, and non-discrimination

The RI FKKT UM open access policy follows the Code of Ethical Conduct of the University of Maribor, as well as the eight principles laid down in The European Code of Conduct for Research Integrity drafted by the European Science Foundation (ESF) and the European Federation of National Academies of Sciences and Humanities (ALLEA). The eight principles that researchers need to abide by are honesty in communication, reliability in performing research, objectivity, impartiality and independence, openness and accessibility, duty of care, fairness in providing references and giving credit, and responsibility towards the scientists and researchers of the future.

When considering granting RI FKKT UM access to a user, the user should not be discriminated against on any personal grounds.

## 8. Quality Assurance

The quality of the RI FKKT UM open access will be ensured by establishing quality assessing mechanisms for RI access within individual entities. The mechanisms will follow the general principles defined by the European Commission. These principles are denoted in English by the acronym "RACER" (Relevant, Accepted, Credible, Easy, Robust):

- **Relevant** and closely linked to the objectives to be reached. They should not be overambitious and should measure the right element.
- **Accepted** by the RI and the stakeholders. The role and responsibilities for the indicator need to be well-defined.
- **Credible** for non-experts, unambiguous, and easy to interpret. Indicators should be as simple and robust as possible.
- **Easy** to monitor at low cost and effort.
- **Robust** against manipulation.

The set mechanisms should include the following metrics:

- user metrics (e.g., user access, user base and relevance to users),
- RI operational metrics (e.g., access provision, service, central management, reliability, visibility, user community size and evolution),
- strategic indicators (e.g., publications and other products, cross-disciplinarity, economic impact), and
- financial metrics (e.g. service, resources, cost, returns).



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## 9. Research data management

The Data Management policy provides clear guidance on how and where to store the generated data for a reasonable period, and on how the user should provide these data for reuse. Instructions may vary, depending on the type of RI FKKT within each individual entity. The data should follow the FAIR principles (findability, accessibility, interoperability and reusability). Research data management is laid out in a separate regulatory document.

## 10. Transparency

The Department for Research and Art of the University of Maribor (ORUD UM) provides information on the RI UM open access policy, general information on RI UM and the RI UM entities' contacts.

However, the coordinator of the Faculty open access policy provides information on the RI FKKT UM open access policy, general information on RI FKKT UM and FKKT entities' contacts.

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