

## MOBILITY MISSION REPORT

*This work has been partially supported by the EURAD project that has received funding from H2020-EURATOM 1.2 under grant agreement ID 847593.*

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**KLIKNETE NEBO KLEPNETE SEM A ZADEJTE TEXT.**

### MISSION TITLE

Conference Attendance

### DESCRIPTION

#### Concerned organisations

10th FEMS Congress of European Microbiologists

- Association for General and Applied Microbiology (VAAM)
- German Society of Hygiene and Microbiology

#### Concerned infrastructures or facilities

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#### Concerned phases

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#### Themes and topics

Theme 3: Engineered barrier system (EBS) properties, function and long-term performance

- Spent Fuel and high-level waste disposal canisters

- Clay-based backfills, plugs and seals

## Keywords

DGR; Compacted bentonite; Microbial diversity; Radioactive waste; Copper MIC

## EXECUTIVE SUMMARY

The proposed activity was to attend and to participate in the 10th FEMS Congress of European Microbiologists. The congress took place in Hamburg (Germany) from July 9 – 13th, 2023. The event was dedicated to showcasing the latest developments in microbiology and connect to microbiologists from all over the world. FEMS2023 is the biggest event in Europe dedicated to showcasing the latest developments across the broad scope of microbiology including microbial ecology and impact of microbial processes in different topic including the microbiology related to the DGRs.

The poster titled 'Copper Corrosion and Microbial Community Shifts in Compacted Bentonite: in View of a Safe Deep Geological Repository of Radioactive Waste' aimed to update the audience on the latest research regarding the microbiology of Spanish bentonite in the context of a Deep Geological Repository. The presentation strived to deepen the audience's understanding of this important topic.

In addition, the presence of companies related to the sector helped to update new materials and methodologies carried out in microbiology research.

## 1. MISSION BACKGROUND

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### 1.1. R&D background

The proposed activity is the attendance and participation in the 10th FEMS Congress of European Microbiologists. The congress took place in Hamburg (Germany) from July 9 – 13th, 2023. The event is dedicated to showcasing the latest developments in microbiology and connect to microbiologists from all over the world.

FEMS2023 (<https://www.fems2023.org/>) is the biggest event in Europe dedicated to showcasing the latest developments across the broad scope of microbiology including microbial ecology and impact of microbial processes in different topics including the microbiology of deep geological disposal of radioactive wastes. It presents a valuable opportunity to showcase the research in this field to a related audience, such as researches in the field of microbiology, and raise awareness for the importance of this work.

### 1.2. Mission objectives

The presentation titled 'Copper Corrosion and Microbial Community Shifts in Compacted Bentonite: in View of a Safe Deep Geological Repository of Radioactive Waste' aims to update the audience on the latest research regarding the microbiology of Spanish bentonite in the context of a Deep Geological Repository. The presentation strives to deepen the audience's understanding of this important topic.

### 1.3. Mission request

Conference Attendance

### 1.4. Mission composition

#### Host organisation

Federation of European Microbiological Societies (FEMS)

- Association for General and Applied Microbiology (VAAM)
- German Society of Hygiene and Microbiology.

#### Host facility

CCH – Congress Center Hamburg.

Hamburg (Germany).

#### Mission dates

9 – 13 July 2023



## 2. MAJOR PRACTICES, TECHNIQUES, METHODS, TOOLS OR SYSTEMS OPERATED OR STUDIED

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### 2.1. Practice, technique, method, tool or system operated or studied during the mission

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#### Description

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#### Usage

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#### Benefits

Klikněte nebo klepněte sem a zadejte text.

#### Limitations

Klikněte nebo klepněte sem a zadejte text.

#### Applicability

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### 2.2. Practice, technique, method, tool or system operated or studied during the mission

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## Limitations

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## Applicability

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### 2.4. Practice, technique, method, tool or system operated or studied during the mission

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## Usage

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## Benefits

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## Limitations

Klikněte nebo klepněte sem a zadejte text.

## Applicability

Klikněte nebo klepněte sem a zadejte text.

### 3. MISSION FINDINGS AND CONCLUSIONS

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#### 3.1. Lessons learned and conclusions

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#### 3.2. Relevant findings and conclusions for home organisation

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#### 3.3. Relevant findings and conclusions for host organisation

Klikněte nebo klepněte sem a zadejte text.

#### 3.4. Relevant findings and conclusions for other organisations

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## 4. POTENTIALS FOR IMPROVEMENT OR DEVELOPMENT

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### 4.1. Generic potentials

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### 4.2. Potentials for home organisation

Klikněte nebo klepněte sem a zadejte text.

### 4.3. Potentials for host organisation

Klikněte nebo klepněte sem a zadejte text.

## APPENDICES

### Mission journal

Daily attendance (from July 9 to 13th) to the talks and activities organized by the FEMS 2023 conference.

On July 12th, the poster networking session took place (congress topic: Environmental Microbiology and Ecology). Here the exhibition of the poster was held, and doubts of the interested public were resolved.

### Mission bibliography

Martinez-Moreno, Marcos F.\*; Povedano-Priego, Cristina; Morales-Hidalgo, Mar; Mumford, Adam; Ojeda, Jesus J., Jroundi, Fadwa; Merroun, Mohamed L. (July 9th – 13th, 2023). Copper corrosion and microbial communities shifts in compacted bentonite: in view of a safe Deep Geological Repository of radioactive waste. [Poster]. FEMS2023. Hamburgo (Germany).

## MISSION BENEFICIARY

Marcos Felipe Martínez Moreno  
PhD student.  
Department of Microbiology, Faculty of Science.  
University of Granada, Granada, Spain.

## PARTNER EXPERTS CONTRIBUTING TO THE MISSION

### Host organisation experts

Klikněte nebo klepněte sem a zadejte text.

### Home organisation experts

Communication participants (position between brackets):

> Department of Microbiology, University of Granada, Granada, Spain

- Cristina Povedano-Priego (Dr)
- Mar Morales-Hidalgo (PhD student)
- Fadwa Jroundi (Dr – Assistant Prof)
- Mohamed L. Merroun (Dr – Full Prof)



### Other organisations experts

Communication participants (position in parentheses):

> Department of Chemical Engineering, Swansea University, Swansea, United Kingdom

- Adam D. Mumford (PhD student)
- Jesus J. Ojeda (Dr - Associate Prof)

## REPORT APPROVAL

Date	Beneficiary	Home mentor/supervisor	Host mentor/supervisor
04_09_2022	Marcos F. Martínez Moreno 	Mohamed L Merroun 	Klikněte nebo klepněte sem a zadejte text.
	Visa	Visa 