

## SECOND ANNOUNCEMENT

International Conference  
on

# "Sustainability, risk assessment and revitalization of post-mining pits and spoil dumps"

*RAFF and SUMAD projects' achievements*

**6 - 7 October 2022**  
**Wrocław, Poland**

Starting with the achievements of the RAFF and SUMAD RFCS/EU projects, this conference will provide an opportunity to discuss and disseminate how best to rehabilitate and transform the areas where coal was formerly mined on a large scale.

**RAFF** ("Risk assessment of final pits during flooding") and **SUMAD** ("Sustainable Use of Mining Waste Dumps") are European Commission Research Fund for Coal and Steel (RFCS) funded projects. The **RAFF** project deals with issues related to pit lakes, which are one of the most common uses of post-exploitation areas, while the **SUMAD** project aims at optimizing the sustainable use and long-term management of mining spoil dumps. Both projects unite European experts to investigate the future use of coal post-mining areas with a focus on geotechnical, sustainability, safety, environmental and socio-economic challenges.

The Conference will connect European stakeholders of different disciplines interested in coordinating efforts towards a better future for coal regions in transition. A two-day event will provide focused disciplinary panels and keynote speeches in the broad field of post-mining rehabilitation and development of former mining communities. All accepted papers will be published in the conference proceedings.

The official working language of the Conference is English. The event will be open to all the contributing authors and attendees without contribution with no participation fee. **Presentation slots are still available!**

### MAIN CONFERENCE TOPICS

Geotechnical and hydrogeological conditions in coal post-mining areas  
Hazards related to formation of mine pit lakes  
Heterogeneity and a time-dependent mechanical behaviour of mine spoil material  
Modelling techniques  
Risk management guidelines and tools  
Opportunities for land disturbed by coal mining

### KEY DATES AND REGISTRATION

**20 Aug 2022:** Paper submission deadline  
**5 Sept 2022:** Speaker registration deadline  
**12 Sept 2022:** 3rd announcement/full programme  
**26 Sept 2022:** Attendee registration closes  
**6-7 Oct 2022:** Conference  
Please visit the online registration form to join the event as a speaker or participant:  
<https://ec.europa.eu/eusurvey/runner/RAFFSUMADFinalConference>.

### INFORMATION FOR AUTHORS

Participants are given an option to present their work at the conference and/or in an accompanying paper. The submitted text should be at least 2000 words plus figures, tables and references. The first page should include a title, all authors' names and affiliations, an abstract of about 100 words and at least 3 keywords. The paper will be published in a special issue of "Górnictwo Odkrywkowe" ISSN 0043-2075.

### CONFERENCE VENUE

Novotel Ibis Wrocław Centrum  
7 Powstańców Śląskich Street  
53-332 Wrocław, POLAND

### DRAFT SCHEDULE

**6th October**

**9:00 - 10:00 Registration and welcome coffee**  
**10:00 - 12:00 Conference opening and session I**

**A. Bajcar** – Poltegor- Institute, Poland  
*RAFF – The genesis of the project*  
**C. Heron** - University of Nottingham, Great Britain  
*Introduction to the objectives and highlights of the RFCS SUMAD project*  
**A. Wrana, J. Całus Moszko, A. Klupa, D. Sobczak** - Central Mining Institute, GIG, Poland  
*"New life of post-mining areas" - assessment of the post-mining waste dump "Bogdanka"*  
**M. Al Heib** - Institut national de l'environnement industriel et des risques, INERIS, France  
*Advantages and limitations of installing photovoltaic panels on dumps – European feedback*

**12:00 - 13:00 Lunch break**  
**13:00 - 15:00 Session II**

**J. Benndorf, D. A. Restrepo** - TU Bergakademie Freiberg, Germany  
*TRIM4Post-Mining: Transition Information Modelling for Attractive Post-Mining Landscapes*  
**M. Woszczyński, D. Jasiulek** - KOMAG Institute of Mining Technology, Poland, **B. Marciniak** - Lubelski Węgiel „Bogdanka” S.A., Poland  
*Monitoring of a mine waste neutralization facility in terms of supporting decisions on optimal revitalization methods*  
**J. Całus Moszko, A. Klupa, M. Cempa** - Central Mining Institute, GIG, Poland  
*Dump remediation and possibilities for grass cultivation*  
**I.M. Apostu, M. Lazar** - University of Petrosani, Romania  
*Consideration regarding the aquatic ecosystems developed in the open pit lakes from Oltenia mining region*

15:00 - 15:30 Coffee break

15:30 - 17:30 Session III

**K. Niedbalska, P. Bukowski** - Central Mining Institute, GIG, Poland

*Selected hydrogeological and geomechanical properties of post-mining wastes used in the reclamation of the open-pit excavation - a case study of the Maczki-Bór mine filled with Carboniferous waste rocks*

**U. Nienuch, S. Szymanowicz, K. Piróg** – Poltegor-Institute, Poland

*Geological and geotechnical characteristics of the overburden disposal areas in lignite open pits in central Poland*

**I. Zevgolis, A. Theocharis, N. Koukoulas** - Centre for Research and Technology Hellas – CERTH, Greece, **C. Roumpos, T. Barmpas** - Public Power Corporation of Greece

*Valorization potential of spoil heaps: from testing and geotechnical characterization to numerical modelling*

**G. V. Quintana, D. de Paz Ruiz** - SUBTERRA Ingeniería, Spain

*Geohydromechanical behaviour of flooded open pit and pit walls employing numerical models*

19:00 – Conference dinner

7th October

9:00 - 10:45 Session IV

**A. Theocharis, I. Zevgolis, N. Koukoulas**- Centre for Research and Technology Hellas – CERTH, Greece, **C. Roumpos, T. Barmpas** - Public Power Corporation of Greece

*Statistical characterization, probability distributions and spatial variability of lignite spoils*

**A. Bajcar** – Poltegor- Institute, Poland

*Geometric changes occurring in the final pits of lignite mines while flooding them to form pit lakes*

**J. Lašek, V. Kopecký** - DIAMO s.p., Czech Republic

*Lessons learnt from the RAFF project*

**C. Heron, A. Marshall, G. Cui, N. Kantesaria, T. Garala, N. P. Doan, K. Halder** - University of Nottingham, Great Britain

*Numerical modelling of revitalization options for reclamation of high-plasticity spoil dumps.*

10:45 - 11:15 Coffee break

11:15 - 13:00 Session V

**I. Zevgolis, A. Theocharis, N. Koukoulas** - Centre for Research and Technology Hellas, CERTH, Greece

*Slope stability of deep surface coal mines in the presence of a weak zone*

**A. Theocharis, I. Zevgolis, N. Koukoulas** - Centre for Research and Technology Hellas, CERTH, Greece

*Slope stability of reclaimed coal mines through a new water filling index*

**C. Heron, A. Marshall, G. Cui, N. Kantesaria, T. Garala, N. P. Doan, K. Halder** - University of Nottingham, Great Britain

*The challenges associated with laboratory scale physical modelling of high-plasticity spoil materials*

**C. Heron, A. Marshall, G. Cui, N. Kantesaria, T. Garala, N. P. Doan, K. Halder** - University of Nottingham, Great Britain

*Physical modelling of revitalization options for reclamation of high-plasticity spoil dumps.*

13:00 - 14:00 Lunch break

14:00 - 16:00 Session VI

**A. Białas**- Łukasiewicz Research Network – Institute of Innovative Technologies EMAG, Poland  
*Risk management tool to support spoil dumps revitalization*

**M. Galetakis, V. Deligiorgis, E. Steiakakis, S. Raka** - Technical University of Crete, Greece, **M. Al Heib**- Institut national de l'environnement industriel et des risques, INERIS, France  
*Probabilistic Risk Assessment and Mapping of Pit Lakes Instabilities*

**F. Faur, I. M. Apostu** - University of Petrosani, Romania

*Geotechnical risks associated with the flooding of former lignite open pits from Oltenia mining region*

**V. Renaud, M. Al Heib**- Institut national de l'environnement industriel et des risques, INERIS, France, **J. Burda** - Vedoucí útvaru geotechnický a hydrogeologie Výzkumný ústav pro hnědé uhlí, VUHU, Czech Republic

*Risk assessment of open pit lake using in situ observations and advanced numerical modelling – application on Most Lake*

16:00 - 16:15 Conference closing

## CONTACT

For details specific to the conference location, registration and programme, please visit <https://www.igo.wroc.pl/portfolio-item/2022-sustainability-risk-assessment-and-revitalization/> or contact:

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