

## 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

## CONFERENCE VENUE

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

## CONFERENCE DINNER

Restauracja CK  
Rynek 19  
50-101 Wrocław

## GETTING TO THE RESTAURANT

- walk 1,5 km north to RYNEK (MARKET SQUARE)

- take tram no. 6 (direction: Kromera) or 7 (direction: Poświętne) from „Zaolziańska” tram stop to „Oławska” tram stop and then walk west to RYNEK



"Sustainability, risk assessment and revitalization of post-mining pits and spoil dumps"  
*RAFF and SUMAD projects' achievements*



Image courtesy of University of Petrosani

## VISIT THE CONFERENCE WEBSITE

<https://www.igo.wroc.pl/portfolio-item/2022-sustainability-risk-assessment-and-revitalization/>

For details specific to the conference, please contact:

Marta Resak  
phone: +48 71 34 88 203  
e-mail: [marta.resak@igo.wroc.pl](mailto:marta.resak@igo.wroc.pl)

For enquiries regarding the projects' activities, please contact:

Adam Bajcar (RAFF)  
phone: +48 71 34 88 208  
e-mail: [adam.bajcar@igo.wroc.pl](mailto:adam.bajcar@igo.wroc.pl)

Charles Heron (SUMAD)  
phone: +44 115 74 84850  
e-mail: [Charles.Heron@nottingham.ac.uk](mailto:Charles.Heron@nottingham.ac.uk)



## International Conference on



projects' achievements

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

6 - 7 October 2022  
Wrocław, Poland

ORGANIZED BY



University of  
Nottingham  
UK | CHINA | MALAYSIA

# International Conference

**"Sustainability, risk assessment and revitalization of post-mining pits and spoil dumps"**  
*RAFF and SUMAD projects' achievements*

## PROGRAMME

**6th October**

**9:00 - 10:00** Registration and welcome coffee

**10:00 - 12:00** Conference opening and session I

**J. Szczepiński** – Head of Poltegor - Institute, Poland  
*Welcome address*

**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*

**P. Webb** - European Research Executive Agency, Belgium  
*European Commission support for the just transition of coal regions*

**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"*

**J. Benndorf, D. A. Restrepo** - TU Bergakademie Freiberg, Germany  
*TRIM4Post-Mining: Transition Information Modelling for Attractive Post-Mining Landscapes*

**Discussion**

**12:00 - 13:00** Lunch

**13:00 - 15:00** Session II

**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*

**J. Całus Moszko, A. Klupa, M. Cempa** - Central Mining Institute, GIG, Poland  
*Dump remediation and possibilities for grass cultivation*

**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*

**I.M. Apostu, M. Lazăr, F. Faur** - University of Petrosani, Romania  
*Geotechnical risks associated with the flooding of former lignite open pits from Oltenia mining region*

**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*

**Discussion**

**15:00 - 15:20** Coffee break

**15:20 - 17:00** Session III

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

**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*

**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*

**F. Faur, I.M. Apostu, M. Lazăr** - University of Petrosani, Romania  
*Consideration regarding the aquatic ecosystems developed in the open pit lakes from Oltenia mining region*

**G. V. Quintana, D. de Paz Ruiz** - SUBTERRA Ingeniería, Spain  
*Geohydronechanical behaviour of flooded open pit and pit walls employing numerical models*

**Discussion**

**19:00** – Conference dinner

**7th October**

**10:00 - 11:40** Session IV

**J. Lašek, V. Kopecký** - DIAMO s.p., Czech Republic  
*Lake Most and Lake Milada – Historical data and bathymetry*

**A. Bajcar** – Poltegor - Institute, Poland  
*Geometric changes occurring in the final pits of lignite mines while flooding them to form pit lakes*

**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*

**Discussion**

**11:40 - 12:00** Coffee break

**12:00 - 13:40** Session V

**U. Koniuch, S. Szymanowicz, K. Piróg, B. Rogosz** – Poltegor - Institute, Poland  
*Geological and geotechnical characteristics of the overburden disposal areas in lignite open pits in central Poland*

**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*

**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*

**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*

**V. Renaud, M. Al Heib**- Institut national de l'environnement industriel et des risques, INERIS, France, **J. Burda** - Výzkumný ústav pro hnědé uhlí a.s., VUHU, Czech Republic  
*Risk assessment of open pit lake using in situ observations and advanced numerical modelling – application on Most Lake*

**Discussion and conference closing**

**13:40 - 14:40** Lunch