XX TECHNICAL DAM CONTROL INTERNATIONAL CONFERENCE

SAFETY OF HYDRAULIC STRUCTURES

AGENDA

SEPTEMBER 12-15, 2023

HOTEL DIAMENT ARSENAL PALACE, CHORZÓW
POLAND
ORGANIZERS

WARSAW UNIVERSITY OF TECHNOLOGY, FACULTY OF BUILDING SERVICES, HYDRO AND ENVIRONMENTAL ENGINEERING, DIVISION OF HYDRO-ENGINEERING AND HYDRAULICS

SILESIAN WATERWORKS COMPANY

DAM MONITORING CENTRE - INSTITUTE OF METEOROLOGY AND WATER MANAGEMENT - NATIONAL RESEARCH INSTITUTE

INSTITUTE FOR APPLIED RESEARCH, WARSAW UNIVERSITY OF TECHNOLOGY LTD.

POLISH COMMITTEE ON LARGE DAMS

HYDROTECHNICAL STRUCTURES DIVISION OF COMMITTEE ON CIVIL ENGINEERING AND HYDROENGINEERING OF POLISH ACADEMY OF SCIENCES

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GENERAL INSPECTOR OF CONSTRUCTION SUPERVISION

PRESIDENT OF POLISH CHAMBER OF CIVIL ENGINEERS

MARSHAL OF SILESIAN VOIVODSHIP

CHAIRMAN OF SILESIAN WATERWORKS

DEAN OF FACULTY OF BUILDING SERVICES, HYDRO AND ENVIRONMENTAL ENGINEERING OF WARSAW UNIVERSITY OF TECHNOLOGY
SCIENTIFIC COMMITTEE
OF THE XX TECHNICAL DAM CONTROL INTERNATIONAL CONFERENCE

CHAIRMEN:

PROF. ZBIgniew KLEDyŃski, PHD DSC ENG
Warsaw University of Technology, Poland

PROF. JAN WINTER, PHD DSC ENG
Warsaw University of Technology, Poland

MEMBERS:

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Institute of Geology, Earthquake Engineering and Seismology, National Academy of Sciences, Dushanbe, Tajikistan

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Slovak University of Technology in Bratislava, Slovakia

JEAN-LOUIS BRIAUD, PHD, PE, DGE
Texas A&M University, College Station, United States of America

RODNEY BRIDLE, MSC. ENG. CENG FICE CGEOL FGS
Dam Safety Ltd, United Kingdom

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Professor Emeritus, Poland

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Warsaw University of Technology, Poland

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Polytechnic University of Timisoara, Romania

ANDREJ KASANA, PHD ENG
Vodohospodárska výstavba š.p, TBD Bratislava, Slovakia

PROF. APOLONIUSZ KODURA, PHD DSC ENG
Warsaw University of Technology, Poland

PROF. ANDREJ KRYŻANOwSKI, PHD ENG
Technical University, Ljubljana, Slovenia

FLORIAN LANDSTORFER, DIPL. ENG
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Warsaw University of Life Sciences

AGNIESZKA MACHOWSKA, PHD DSC ENG
Warsaw University of Technology, Poland

PROF. WOJCIeCH MAJEWSKI, PHD DSC ENG
Institute of Meteorology and Water Management – National Research Institute, Poland

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PROF. JAROMIR ŘIHA, PHD ENG
University of Technology, Brno, Czech Republic

RAIMONDAŠ ŠADZEVIČiUS, PHD ENG
Vytutas Magnus University, Kaunas, Lithuania

EDMUND SIEINSKI, MSC ENG
Institute of Meteorology and Water Management – National Research Institute, Poland

PAWŁ STEFANeK, PHD ENG
KGHM Polska Miedź S.A. – Hydrotechnical Department, Poland

PROF. DONATELLA STERPI, PHD ENG
Polytechnic University of Milan, Italy

PROF. WALDEMAR ŚWIDZIŃSKI, PHD DSC ENG
Institute of Hydroengineering of Polish Academy of Science, Poland

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Tashkent University of Architecture and Construction, Uzbekistan

PROF. ANDRZEJ TRUTY, PHD DSC ENG
Cracow University of Technology, Poland

MARTIN WIELAND, DR
AFRY Switzerland Ltd, Zurich, Switzerland

ANDRZEJ WITA, PHD ENG
Independent Expert, Poland

PROF. ASKAR ZHUSSUPBEKOv, PHD ENG
L.N.Gumilev Eurasian National University, Astana, Kazakhstan

ANDY ZIELIŃSKI, PHD ENG
Senior Manager Technology & Dam Safety at Ontario Power, Canada

PROF. JAN ŻELAZO, PHD DSC ENG
Warsaw University of Life Sciences, Poland
## CONFERENCE SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>12th Sept. Tuesday</th>
<th>13th Sept. Wednesday</th>
<th>14th Sept. Thursday</th>
<th>15th Sept. Friday</th>
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<td>Technical session II</td>
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<td>Technical session IV</td>
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<td>General discussion and conclusion</td>
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* Universal Time Coordinated UTC + 2
Tuesday, September 12th, 2023

since 12:00  Registration of the participants
13:00 – 14:30  Lunch
14:30 – 16:00  Opening of the Conference: Prof. Jan WINTER

Official presentations:

Dorota CABAŃSKA - General Inspector of Construction Supervision

Mariusz DOBRZENIECKI - President of Polish Chamber of Civil Engineers

Jakub CHEŁSTOWSKI - Marshal of Silesian Voivodship

Henryk DROB - Chairman of Silesian Waterworks

Paweł POPIELSKI – Dean of Faculty of Building Services, Hydro and Environmental Engineering at Warsaw University of Technology

Maciej SIEINSKI - Dam Monitoring Centre - Institute of Meteorology and Water Management - National Research Institute

Piotr ŚLIWIŃSKI - Polish Committee on Large Dams

Zbigniew KLEDYŃSKI - President of Hydrotechnical Structures Division of Committee on Civil Engineering and Hydroengineering of Polish Academy of Sciences

Apoloniusz KODURA – Head of Division of Hydro-Engineering and Hydraulics, Faculty of Building Services, Hydro and Environmental Engineering, Warsaw University of Technology

16:00 – 16:30  Coffee break
Technical session I: 140 years of Silesian Waterworks Company

Chairpersons:
Prof. Emilia BEDNAROVA,
Prof. Andrej KRYŻANOWSKI,
Prof. Paweł POPIELSKI

Arkadiusz TARASIŃSKI, Henryk DROB
140 years of waterworks in Silesia – the history of Silesian Waterworks

Andrzej SIUDY, Zbigniew FARUGA
Water management on the Goczałkowice water reservoir according to the applicable water management instructions

Henryk DROB, Andrzej SIUDY
Operation of large dam reservoirs administered by commercial law companies in terms of maintenance costs

Jean-Jacques FRY, Luc DEROO, Stéphane BONELLI
New guidance in France on managing erosion risks associated with dams and levees

Martin WIELAND
A comparison of the vulnerability of concrete face rockfill dams with earth core rockfill dams

ArcelorMittal Sheet Piling
SPONSOR PRESENTATION

Banquet
<table>
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<tr>
<th>Time</th>
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<tr>
<td>07:00 – 08:30</td>
<td>Breakfast</td>
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| 08:30 – 10:30 | Technical session II:  
Surveying, operation, and maintenance of hydraulic structures – part 1  
Chairpersons:  
Prof. Alla DEMIANIUk,  
Prof. Jean-Jacques FRY,  
Prof. Agnieszka MACHOWSKA  |
|             | Stanislav KOTAŠKA, Jaromír ŘÍHA, Tomáš JULÍNEK                         |
|             | Concept of dam reservoirs to deal with climate change impacts          |
|             | Vasył KORBUTIAK, Dmytro STEFANYSHYN, Yaroslav KHODNEVYCH              |
|             | Scenario approach to managing flood risks: challenges and perspectives |
|             | Emília BEDNÁROVÁ, Juraj ŠKVARKA, Marián MiŠČÍK, Lubomír UHORŠČÁK, Peter MACKOVJAK |
|             | The function of the Veľká Domaša reservoir in the context of observed climate changes |
|             | Eun Chul SHIN, Jeong Ku KANG                                          |
|             | Evaluation Method of Engineering Condition for Small Agriculture Dams |
|             | Mateusz NERKOWSKI, Apoloniusz KODURA                                   |
|             | Analysis of potential causes of fatigue loads in pressure pipelines   |
|             | Raimondas ŠADZEVICIUS, Dainius RAMUKEVICIUS, Egidijus KASIULIS, Linas JUREVICIUS, Vyglas NARKUS, Andrzej GLUCHOWSKI, Wojciech SAS |
|             | The Comparison of Possibilities for Demolition or Rehabilitation of Hydraulic Structures |
|             | Askar ZHUSSUPBEKOV, Aliya ALDUNGAROVA, Askar YESSENTAYEV               |
|             | Numerical modeling of the interaction between the dam model and soil base in undermined areas of Kazakhstan |
| 10:30 – 11:00 | Coffee break                                                          |
Wednesday, September 13th, 2023

11:00 – 13:00

Technical session III: Surveying, operation, and maintenance of hydraulic structures – part 2

Chairpersons:
Prof. Apoloniusz KODURA,
Prof. Jaromír ŘÍHA,
Prof. Donatella STERPI

Assel TULEBEKOVA, Askar ZHUSSUPBEKOV, Aizhan ZHANKINA, Aliya ALDUNGA ROVA, Gulnaz MAMYRBEKOVA

Features of surveys of hydrological characteristics of the construction area of roads in difficult soil conditions

Alla DEMIANIUK, Dmytro STEFAN YSHYN

Challenges in the interpretation of the automated dam monitoring data and the ways to overcome them

Henryk WOLFF, Tomasz WRÓBLEWSKI, Janusz ANGER Paweł OPALIŃSKI, Katarzyna TUCHOLSKA

Tests and measurements conducted during the design, construction and operation of the Roztoki dry flood protection reservoir

Andrej KRYŽANOWSKI, Nina HUMAR

The role of hydropower in meeting the targets for renewable energy production in Slovenia

Janina ZACZEK-PEPLINSKA, Lech SALONI

Modernizing the control network for determining displacements in hydraulic structures using reflectorless automatic measurement techniques

Krzysztof RADZICKI, Remy TOURMENT, Janusz ZALESKI

The application of certain modern methods for upgrading levees

Maksymilian POŁOMSKI, Mirosław WIA TKOWSKI

Evaluation of the functionality of seepage prevention structures of dam bodies after a long period of operation - a case study of Otmuchów and Nysa reservoirs

Q&A Session

Also concerning the papers not presented during the session

13:00 – 15:00

Lunch
Wednesday, September 13th, 2023

15:00 – 17:00  Technical session IV: Surveying, operation, and maintenance of hydraulic structures – part 3

Chairpersons:
Prof. Agnieszka DĄBSKA,  
Prof. Zbigniew LECHOWICZ,  
Prof. Askar ZHUSSUPBEKOV

Chiara ROSSIGNOLI, Marco CARUSO, Cristina JOMMI, Donatella STERPI  
Preliminary experimental investigation on the use of recycled fibers from textile wastes for embankments reparation

Bohan WANG, Yoshiyuki MOHRI, Hidekazu TAGASHIRA, Akira IZUMI, Tadatsugu TANAKA  
Centrifugal shaking experiments and FEM analytical investigation on masonry block reinforcement of small earth dams

Katarzyna SYNOWIEC, Artur GOLDA, Michał TAŁAJ, Marcin SAFERNA  
Concreting of hydraulic structures as part of modernization works on the lock on the Januszkowice barrage

Lavdim OSMANAJ, Sulejman XHELEPI  
Seepage at the base of the Koman (Albania) hydropower dam where under the display block lies the grout curtain and the base consolidation structure

Michał WIERZBICKI, Anna ANDRZEJAK, Dorota PINIAJSKA, Bartłomiej SOBCZYK, Bogumił NOWAK  
Functioning of the Regional Water Management Authority in Poznań retention reservoirs in the context of climate change and water needs – challenges and operational issues based on the example of selected facilities

Janusz SOBOLEWSKI  
Synthetic concrete mats for reinforcement of hydraulic engineering structures, with particular regard to those installed underwater at the bottom and the banks of rivers and canals

Q&A Session  
Also concerning the papers not presented during the session

17:00 – 17:30  Coffee break

17:30 – 18:30  General discussion and conclusions

18:30 – 19:00  Closing ceremony

Chairpersons:  
Prof. Zbigniew KLEDYŃSKI;  
Prof. Jan WINTER

19:30 – 20:30  Dinner
### Thursday, September 14th, 2023

- **07:00 – 08:30**: Breakfast
- **08:30 – 12:00**: Technical trip to the Goczałkowice Reservoir
- **12:00 – 13:00**: Lunch
- **13:00 – 16:30**: Trip to Brewery Tyskie
- **19:00 – 22:00**: Barbecue

### Friday, September 15th, 2023

- **07:00 – 09:00**: Breakfast
- **09:00 – 12:00**: Departure of the participants

### IMPORTANT INFORMATIONS

*CONFERENCE is going to be held in:*

**Hotel Diament Arsenal Palace**

Paderewskiego St., 35

41-500 Chorzów, Poland

Phone: +48 32 606 84 84

The Goczałkowice Reservoir was built due to the construction of an earth dam on the Mała Wisła River in 1956. The main tasks of the reservoir are to supply water to the Silesian Agglomeration, to provide anti-flood protection and to compensate flows in times of drought.

**Main parameters of the reservoir and earth dam:**
- Maximum capacity: 161.25 hm³
- Maximum surface area: 30.97 km²
- Length of the dam: 2980 m
- Height of the dam: 16 m
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ORGANIZERS
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AND DAM CONSTRUCTION

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ENERGETYKA WODNA
budownictwo inżynieryjne.pl
Project co-funded by the state budget, granted by the Polish Minister of Education and Science under the program "Excellent Science II - Support for scientific conferences"
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President of Organizing Committee: Prof. Jan Winter, PhD DSc Eng
Deputy - President of Organizing Committee: Maciej Sieinski, MSc Eng
Andrzej Siudy, MSc Eng
Piotr Śliwiński, MSc Eng
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Łukasz Kaczmarek, PhD Eng
Adam Kasprzak, MSc Eng
Agnieszka Machowska, PhD DSc Eng
Katarzyna Misiołek, MSc Eng
Andrzej Wita, PhD Eng

ORGANIZING COMMITTEE ADDRESS
Division of Hydro-Engineering and Hydraulics
Faculty of Building Services, Hydro and Environmental Engineering
Warsaw University of Technology
Nowowiejska St., 20
00-653 Warsaw, Poland
ph: +48 22 234 74 53
fax: +48 22 825 29 92
e-mail: tkz.ibs@pw.edu.pl
website: www.tkz.is.pw.edu.pl