



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

# **XX TECHNICAL DAM CONTROL INTERNATIONAL CONFERENCE**

**SAFETY OF HYDRAULIC STRUCTURES**

# **AGENDA**

## **PATRONAGE**

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

**SEPTEMBER 12-15, 2023**

**HOTEL DIAMENT ARSENAL PALACE, CHORZÓW**

## **THIRD ANNOUNCEMENT**

# 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:

**PROF. PULOD AMINZODA, PHD ENG**  
Institute of Geology, Earthquake Engineering and  
Seismology, National Academy of Sciences,  
Dushanbe, Tajikistan

**PROF. EMÍLIA BEDNÁROVÁ, PHD ENG**  
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

**PROF. VOLODYMYR CHERNIUK, DSC TEC.**  
Lviv Polytechnic National University, Ukraine

**PROF. SZCZEPAN DĄBKOWSKI, PHD DSC ENG**  
Professor Emeritus, Poland

**AGNIESZKA DĄBSKA, PHD DSC ENG**  
Warsaw University of Technology, Poland

**PROF. JEAN-JACQUES FRY**  
EURCOLD, France

**PROF. MICHAEL ION, DR. ENG**  
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 KRYŽANOWSKI, PHD ENG**  
Technical University, Ljubljana, Slovenia

**FLORIAN LANDSTORFER, DIPL. ENG**  
Verbund Hydro Power, Vienna, Austria

**PROF. ZBIGNIEW LECHOWICZ, PHD DSC ENG**  
Warsaw University of Life Sciences, Poland

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Warsaw University of Technology, Poland

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

**PROF. PAOLO MAZZANTI, PHD ENG**  
NHAZCA S.r.l., Rome, Italy

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National Ibaraki University, Japan

**PROF. ALI NOORZAD**  
Shahid Beheshti University, Iran

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**DAVID RICHTR, ENG**  
Vodni Dila – TBD, Prague, Czech Republic

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

**RAIMONDAS ŠADZEVIČIUS, PHD ENG**  
Vytautas Magnus University, Kaunas, Lithuania

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Institute of Meteorology and Water Management –  
National Research Institute, Poland

**PAWEŁ 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

**PROF. FUMIO TATSUOKA, PHD ENG**  
University of Tokyo, Japan

**ALISHER TOSHXODJAYEV, PHD ENG**  
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

Date Time *	12 <sup>th</sup> Sept. Tuesday	13 <sup>th</sup> Sept. Wednesday	14 <sup>th</sup> Sept. Thursday	15 <sup>th</sup> Sept. Friday	
7:00 - 7:30		Breakfast	Breakfast		
7:30 - 8:00					
8:00 - 8:30		Technical session II	Technical trip		Breakfast
8:30 - 9:00					
9:00 - 10:00					
10:00 - 10:30		Coffee break			Departure
10:30 - 11:00					
11:00 - 12:00		Technical session III	Lunch		
12:00 - 13:00	Registration				
13:00 - 13:30	Lunch	Lunch	Trip to brewery TYSKIE		
13:30 - 14:00					
14:00 - 14:30					
14:30 - 15:00	Opening of the Conference	Technical session IV			
15:00 - 16:00					
16:00 - 16:30	Coffee break	Coffee break			
16:30 - 17:00	Technical session I				
17:00 - 17:30		General discussion and conclusions			
17:30 - 18:00					
18:00 - 18:30		Closing ceremony			
18:30 - 19:00					
19:00 - 19:30	Banquet	Dinner	Barbecue		
19:30 - 20:00					
20:00 - 20:30					
20:30 - 21:00					
21:00 - 22:00					
22:00 - 23:00					

\* **Universal Time Coordinated UTC + 2**

Tuesday, September 12<sup>th</sup>, 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 SIEŃSKI** - 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**

16:30 – 18:00      **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

**19:00 – 23:00 Banquet**

Wednesday, September 13<sup>th</sup>, 2023

**07:00 – 08:30 Breakfast**

**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

**Vasyl KORBUTIAK, Dmytro STEFANYSHYN, Yaroslav KHODNEVYCH**

Scenario approach to managing flood risks: challenges and perspectives

**Emília BEDNÁROVÁ, Juraj ŠKVARKA, Marián MIŠČÍK, Ľubomír 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 ŠADZEVIČIUS, Dainius RAMUKEVIČIUS, Egidijus KASIULIS, Linas JUREVIČIUS, Vygandas NARKUS, Andrzej GŁUCHOWSKI, 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

**Q&A Session – also concerning the papers not presented during the session**

**10:30 – 11:00 Coffee break**

**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 ALDUNGAROVA, Gulnaz MAMYRBEKOVA**

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

**Alla DEMIANIUK, Dmytro STEFANYSHYN**

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

**Henryk WOLFF, Tomasz WRÓBLEWSKI, Paweł OPALIŃSKI**

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 WIATKOWSKI**

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**

**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 repairation

**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 PINIARSKA,  
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 14<sup>th</sup>, 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 15<sup>th</sup>, 2023

07:30 – 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

<https://www.hotelediament.pl/hotele/hotel-diamant-arsenal-palace/>



# XX TECHNICAL DAM CONTROL INTERNATIONAL CONFERENCE

## SAFETY OF HYDRAULIC STRUCTURES

### ORGANIZERS

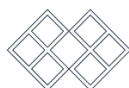


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# XX TECHNICAL DAM CONTROL INTERNATIONAL CONFERENCE

## SAFETY OF HYDRAULIC STRUCTURES

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*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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## **ORGANIZING COMMITTEE**

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Prof. Jan Winter, PhD DSc Eng

Deputy - President of Organizing Committee:

Maciej Sieinski, MSc Eng  
Andrzej Siudy, MSc Eng  
Piotr Śliwiński, MSc Eng  
Paweł Zych, MSc Eng

Secretary:

Agnieszka Dąbska, PhD DSc Eng

Members:

Bartosz Bednarz, MSc Eng  
Alicja Budzianowska, MSc Eng  
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Adam Kasprzak, MSc Eng  
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Katarzyna Misiólek, MSc Eng  
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