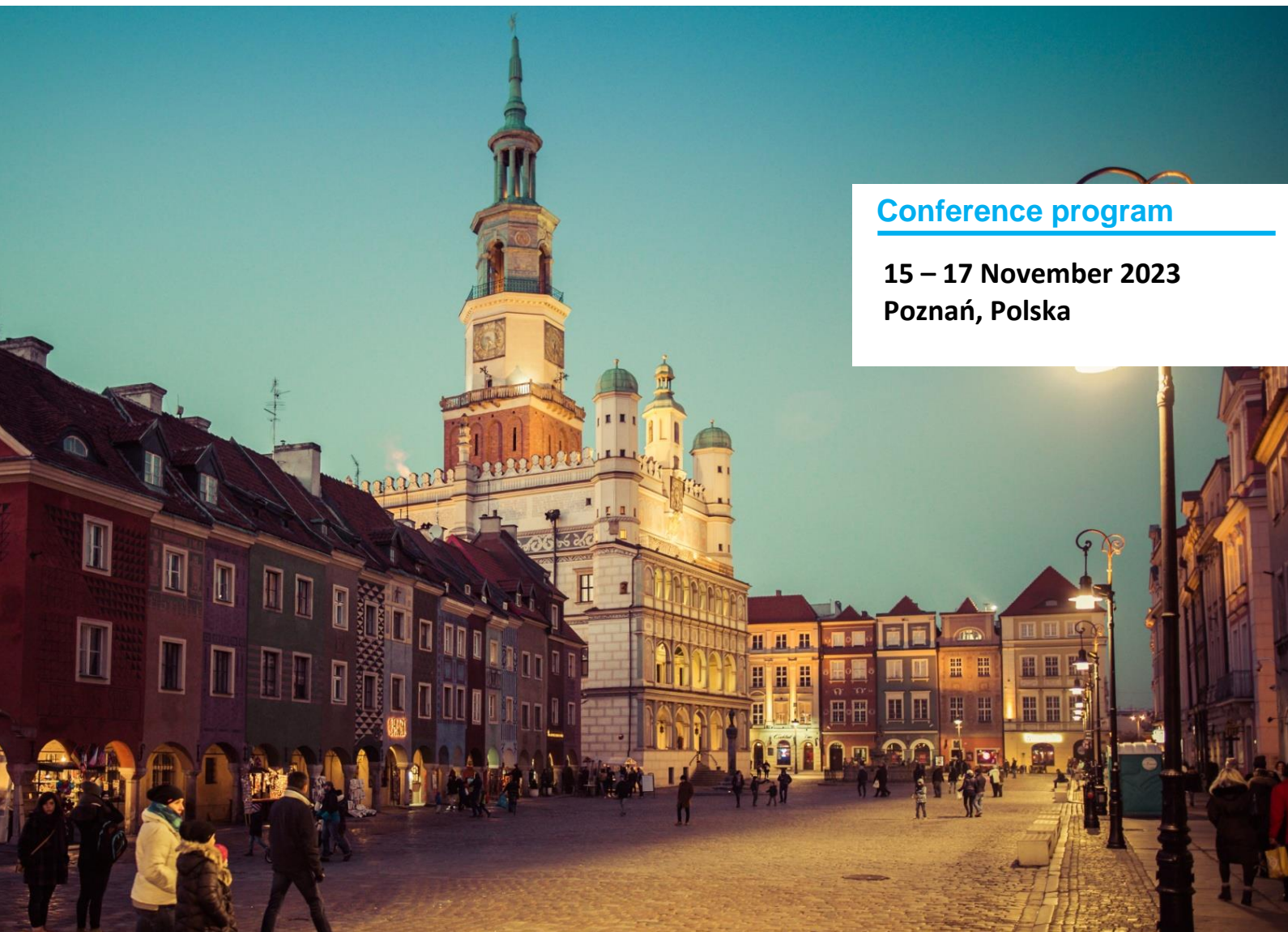


# Water - Excellent Science and Industrial Development

## 3'rd Polish YWP Conference



### Conference program

15 – 17 November 2023  
Poznań, Polska

<https://ywp.put.poznan.pl/>

ORGANIZER



**POLAND**  
YOUNG WATER PROFESSIONALS  
PROGRAMME



**POZNAŃ UNIVERSITY OF TECHNOLOGY**

## CO- ORGANIZER



Mineral and Energy  
Economy Research  
Institute  
Polish Academy of Sciences



Cracow University  
of Technology



## GOLDEN PARTNER:



## PARTNER:



## SILVER PARTNER



## PATRONAGE



# DAY 1

Wednesday, November 15

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**13:30 - 17:00**

## Workshops (with Lunch break)

- ◆ Modelling Wastewater treatment plant [305\*]
- ◆ Modeling Water Distribution Systems [UCK\*]  
(in Polish)

**17:10 - 18:40**

## Industrial development track (in Polish)

[051\*]

**Chair:** Jacek Mąkinia, Agnieszka Szuster-Janiaczyk

- ◆ **Monika Ochmańska** (Cracow University of Technology)  
*Związki PFAS w wodzie przeznaczony do spożycia dla ludzi w aspekcie zagadnień Dyrektywy (UE) 2020/2184*
- ◆ **Justyna Michalska** (Silesian University of Technology)  
*Ocena możliwości zastosowania wybranych materiałów naturalnych i odpadowych do usuwania substancji humusowych z cieczy osadowej i przywrócenia materii organicznej do gleby*
- ◆ **Dominika Poproch** (Cracow University of Technology)  
*Oczyszczalnia ścieków Kraków-Płaszów w kontekście zrównoważonej gospodarki obiegu zamkniętego*
- ◆ **Mateusz Muszyński Huhajło, Stanisław Miodoński** (Wroclaw University of Science and Technology)  
*Produkcja wolnego kwasu azotowego (III) ze strumienia odcieków z odwadniania osadu przefermentowanego w komunalnej oczyszczalni ścieków*
- ◆ **Stanisław Miodoński, Mateusz Muszyński Huhajło** (Wroclaw University of Science and Technology)  
*Analiza możliwości eliminacji bakterii nityfikacyjnych II fazy z osadu czynnego z wykorzystaniem selektora opartego o FNA.*

DISCUSSION

**18:45 WELCOME RECEPTION AND  
INFORMAL ACTIVITIES**





## DAY 2

Thursday, November 16

**8:00 - 9:00**

Conference Registration  
[UCK\*]

**9:00 - 10:30**

OPENING SESSION  
[UCK\*]

**Chair:** Zbysław Dymaczewski, Jacek Małkinia, Jakub Drewnowski, Jędrzej Bylka

### Welcome speech

- ◆ Mahesh Ganesapillai (Vellore Institute of Technology)  
*Establishing a Bioeconomy based on Human Excrete: Nutrient Recovery from Human Urine and Feces*
- ◆ Francisco Jesus Fernandez Morales (University Castilla-La Mancha)  
*An effective HCT doping strategy of carbon felt anode for metal recovery in microbial fuel cells*
- ◆ Marta Saracyn (BGK - Bank Gospodarstwa Krajowego)  
*Co hydrolog robi w banku? O wodzie w instytucji finansowej i nie tylko*

**10:30 - 10:45 COFFE BREAK**

**10:45 - 12:15**

Water and Wastewater  
[UCK\*]

**Chair:** Joanna Jeż-Walkowiak, Małgorzata Komorowska-Kaufman

- ◆ Edyta Kiedrzyńska (European Regional Centre for Ecohydrology of the Polish Academy of Sciences)  
*Ecohydrological analysis of emerging pollutants in water and wastewater: from the Pilica River to the Baltic Sea basin*
- ◆ Katarzyna Jaszczyszyn (European Regional Centre for Ecohydrology of the Polish Academy of Sciences)  
*Analysis of microplastics using FTIR imaging microscopy: preliminary results for Pilica River catchment*
- ◆ Dominika Piwowarska (University of Lodz)  
*Analysis of PAHs and heavy metals in industrial and municipal wastewater*
- ◆ Paulina Otto (Poznan University of Technology)  
*Implementation of the IWA Water-Wise Cities principles in Polish urban planning*
- ◆ Natalia Kolwicz (Poznan University of Technology)  
*Comparison of struvite recovery from sludge liquids using two different sources of magnesium*



## 12:15 - 13:15 LUNCH & POSTER

13:15 - 14:45

### Wastewater and Resources Recovery 1

[UCK\*]

**Chair:** Małgorzata Cimochoicz-Rybicka, Katarzyna Jaszczyszyn

- ◆ Sajid Hussain (University of Trento)  
*Start-up of granulation in aerobic granular sludge sequencing batch reactor for treating industrial wastewater using cationic polymer*
- ◆ Aleksander Czapla (Gdansk University of Technology)  
*The strategy of using composite as a material for Water and Wastewater Systems*
- ◆ Bogna Śniatała (Gdansk University of Technology)  
*Membrane distillation for N recovery from wastewater – operational parameters optimization*
- ◆ Wiktor Gielniak (Poznan University of Technology)  
*Food industry wastewater as an external carbon source for the denitrification process in a municipal wastewater treatment plant*
- ◆ Maciej Floczyk (University of Warmia and Mazury)  
*Characterization of extracellular polymers extracted from activated sludge*

DISCUSSION

## 14:45 - 15:00 COFFE BREAK

15:00 - 16:00

### Wastewater and Resources Recovery 2

[UCK\*]

**Chair:** Jakub Drewnowski, Mahesh Ganesapillai

- ◆ Hubert Byliński (Gdansk University of Technology)  
*Effects of low-thermal pretreatment combined with enzymatic hydrolysis on solubilisation of food waste*
- ◆ Kishore Kumar Kadimpati (Silesian University of Technology)  
*In situ bio-methanation of sewage sludge biogas using a mesophilic CSTR system*
- ◆ Emilia Bączkowska (Gdansk University of Technology)  
*The influence of UV disinfection method on the concentration of micropollutants in treated wastewater – Case study o Jastrzębia Góra (Baltic Sea Region)*
- ◆ Aisha Khan Khanzad (Gdansk University of Technology)  
*Comparative Analysis of Lactic Acid Fermentation Using Rice and Potato Substrates, and Profiling of Volatile Fatty Acids*

DISCUSSION

16:00 - 16:30

CLOSING SESSION

Zbysław Dymaczewski, Jacek Mąkinia, Jędrzej Bylka

18:30 DINNER

## DAY 3

Friday, November 17

**10:00 - 13:00**

Technical trip

Aquanet S.A. Centralna Oczyszczalnia Ścieków  
Meeting at Gdyńska 1, 62-028 Koziegłowy:



Access by public transport

From: Rondo Śródka

To: Koziegłowy/Piaskowa COŚ

BUS numbers: 312 or 341

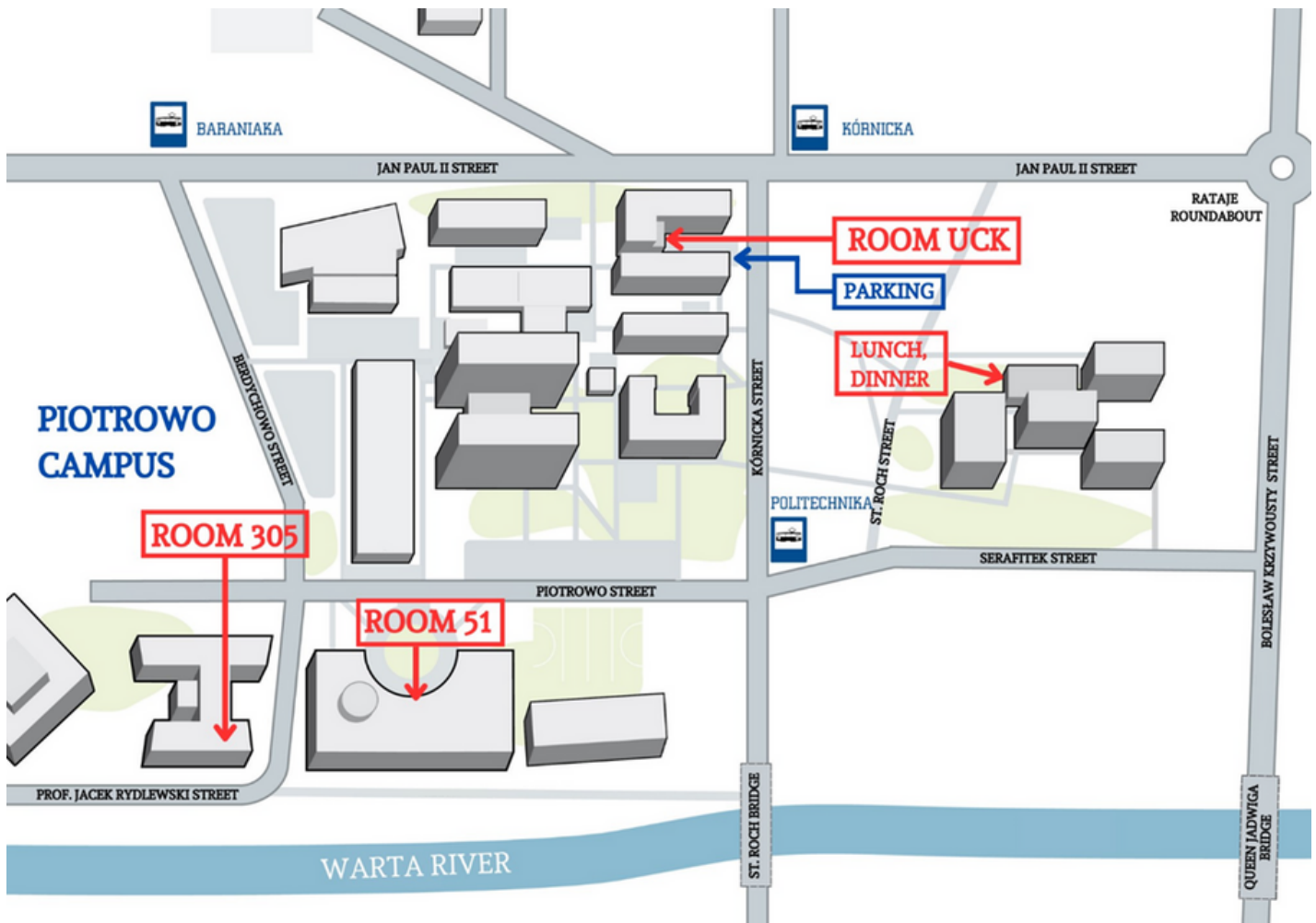
## \*Location of meeting rooms



**305** - Wydział Technologii Chemicznej PP  
ul. Berdychowo 4  
3 rd. floor

**UCK** - Uczelniane Centrum Kultury PP  
ul. Jana Pawła II 28

**051** - Centrum Wykładowe PP  
ul. Piotrowo 2





# POSTERS

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- ◆ **Anna Wilińska-Lisowska**  
Gdansk University of Technology  
*Biodegradation of the dissolved fraction of organic nitrogen in leachate from biogas plants located at wastewater treatment plants*
- ◆ **Zahra Askarniya**  
Gdansk University of Technology  
*The application of advanced reduction processes for the removal of halogenated compounds*
- ◆ **Hameed UI Haq1**  
Gdansk University of Technology  
*Novel method for methyl violet dye determination in contaminated river water – a natural deep eutectic solvent based ultrasound assisted liquid-liquid micro-extraction approach*
- ◆ **Łukasz Cichocki**  
Gdansk University of Technology  
*Advanced reduction processes (ARPs) in degradation of pesticides in wastewater by CO<sub>2</sub> reducing radicals generated in the HCOOH/UV system*
- ◆ **Mohanad Awad**  
Gdansk University of Technology  
*Model-Based Evaluation of Strategies for Mitigating N<sub>2</sub>O emissions in Activated Sludge Systems: Insights from Poznan's Wastewater Treatment Plant*
- ◆ **Francisco Jesus Fernandez Morales**  
University Castilla-La Mancha  
*Energy and material valorisation of corn-syrup by uncontrolled pH fermentation*
- ◆ **Małgorzata Iwanek**  
Lublin University of Technology  
*Efficiency Analysis of Selected Methods for Sustainable Management of Rainwater*
- ◆ **Dominika Łomińska-Płatek**  
Cracow University of Technology  
*Humic acids and their influence on the environment and climate changes*



# POSTERS

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- ◆ **Paulina Ormaniec**  
Cracow University of Technology  
*Characteristics of microplastics in municipal wastewater treatment plants*
  
- ◆ **Krzysztof Kwiatkowski**  
Cracow University of Technology  
*Ocena skuteczności usuwania wybranych zanieczyszczeń ze ścieków przy wykorzystaniu osadów z klarowania wody.*
  
- ◆ **Weronika Borowska**  
Warsaw University of Technology  
*Effect of short-term oxygen concentration variations on nitrification process and microbial community structure*
  
- ◆ **Alicja Jeżewska**  
Gdansk University of Technology  
*Application of low-thermal pretreatment of waste activated sludge with/without addition of cow dung in technological scale*
  
- ◆ **Paweł Suchorab**  
Lublin University of Technology  
*Classification of the nodal demands in 3 case study water supply networks*
  
- ◆ **Rafał Ciepluch**  
West Pomeranian University of Technology  
*Analiza błędu oszacowania retencji powierzchniowej wód płytkich w oparciu o dane pochodzące z lotniczego skaningu laserowego*
  
- ◆ **Joanna Majtacz**  
Gdansk University of Technology  
*The role of the combined nitrogen-sulfur-carbon cycles for efficient performance of anammox-based systems*
  
- ◆ **Marianna Piosik**  
Poznan University of Technology  
*Universal method for the determination of estrogens in water, wastewater and soil*
  
- ◆ **Agnieszka Rybarczyk**  
Poznan University of Technology  
*Konwersja zanieczyszczeń farmaceutycznych z wykorzystaniem immobilizowanej lakazy*

# POSTERS

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◆ **Joanna Antos**

Poznan University of Technology

*Effect of artificial infiltration process on non-steroidal anti-inflammatory drugs and antibiotics concentrations*

◆ **Michał Narojczyk**

Poznan University of Technology

*Technologia wody basenowej w Polsce i USA – doświadczenia z badań*

◆ **Urszula Derkacz**

Poznan University of Technology

*Budownictwo zrównoważone – woda jako ważny element certyfikacji BREEM i LEED*

◆ **Anna Januchta-Szostak**

Poznan University of Technology

*Concept of development of the Wierzbak valley in Poznań using surface runoff modeling tools*

◆ **Justyna Michalska**

Silesian University of Technology

*Validity of recovering humic substances from reject water using opoka and concrete*

◆ **Farooque Janjhi<sup>9</sup>**

Gdansk University of Technology

*MXene as emerging sustainable materials for wastewater treatment – a review*



**Aleksander Czapla**

Gdansk University of Technology

*Strategizing for Sustainability: A Deep Dive into Optimizing Energy Efficiency in Wastewater Treatment Plants*

◆ **Jakub Żywiec**

Rzeszow University of Technology

*The concept of estimating the risk of water losses in the water supply network*

◆ **Karolina Klobukowska**

University of Warmia and Mazury

*Wpływ gęstości prądu stałego na efektywność oczyszczania ścieków szklarniowych*

# POSTERS

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◆ **Paulina Szulc-Kłosińska**

Poznan University of Technology

*Introduction to the algorithm of carbon footprint calculation for municipal wastewater treatment plants according to EU legislation*

◆ **Sechout Arouna N.M**

Poznan University of Technology

*Wastewater management in Cameroon*

◆ **Ewelina Nowak**

Poznan University of Technology

*The use of Raman spectroscopy in the identification of plastic particles in water intended for human consumption*