IWA 15th International Conference

Wetland Systems for Water Pollution Control

1st Announcement

4-9 SEPTEMBER 2016,
GDANSK, POLAND

www.icws2016.org

BIALYSTOK UNIVERSITY OF TECHNOLOGY

GIWK

HALMSTAD UNIVERSITY

WARSAW UNIVERSITY OF LIFE SCIENCES SGGW

UNIVERSITY of LIFE SCIENCES in Lublin

GDAŃSK UNIVERSITY OF TECHNOLOGY

IWA the international water association

WELCOME AND INVITATION

Treatment wetlands, in the past more frequently called constructed wetlands, have been introduced in Poland in the late eighties of the twentieth century. During the first 10 years treatment wetland technology became popular in Poland due to low costs and a low demand in technology for a variety of different wastewater treatments. Unfortunately basic principles of design and operation were not been frequently obeyed because of insufficient knowledge. Therefore, most of these plants did not provide an adequate level of treatment. This resulted in a lack of confidence and trust to TWs technology as an effective method of treatment.

However, thanks to the efforts and continuous work of the Polish research groups who set themselves the goal of promoting TW technology as a means of fulfilling the principles of sustainable water management and environmental protection, this method is becoming popular again. Since the beginning, Prof. Hanna Obarska-Pempkowiak was actively working locally and internationally in this field. In 2016 she will celebrate the 40th anniversary of work which was mostly devoted to the research and promotion of TW technology. Many doctoral and several habilitation thesis were written under her supervision. Also, four books in Polish related to TW technology were composed and an outstanding amount of papers were published. Thanks to her activity, courses for natural wastewater treatment systems were introduced at master degree levels in Environmental Engineering at Gdańsk University of Technology. This involvement has caused many other research centres in Poland to realize this method as being an interesting technological solution. During recent years several projects were implemented which resulted in constructing well designed facilities that operate with efficiency of over 90% of organic matter removal. Nowadays increased interest in treatment wetland application for water pollution control is observed again.

On behalf of the Organizing Committee of IWA 15th International Conference on Wetland Systems for Water Pollution Control I am pleased to invite you to Poland. Gdańsk is located at the Baltic Sea, has over thousand years of history and nearly 150 years of tradition of sewer system which from the very beginning was equipped with wastewater treatment plant (irrigated fields). For the Baltic Sea the main problems are eutrophication, hazardous and emerging pollutants as well as paucity of biodiversity. Most of these issues could be addressed by application of treatment wetlands. The conference provides an excellent opportunity to bring the most updated state of the art of treatment wetland technology to Poland. Based on this input, treatment wetland technology will be mirrored in across Eastern Europe and countries of the Baltic Sea Region. I hope it will also provide an interacting platform for exchange of ideas between scientists, engineers, environmentalists, managers, consultants and authorities. The leading motto of the conference is “Changing the Future Together” to emphasize both the needs of common activates and future of treatment wetlands for water pollution control.

Magdalena Gajewska, PhD DSc | Chair of conference

Gdańsk University of Technology

Preliminary Program

Sunday, September 4, 2016	Registration & Welcome reception
Monday, September 5, 2016	Opening, Plenary & Parallel Sessions
Tuesday, September 6, 2016	Parallel Sessions, Gala dinner
Wednesday, September 7, 2016	Technical trips
Thursday, September 8, 2016	Plenary Sessions, Parallel Sessions
Friday, September 9, 2016	Wetland Forum, Closing ceremony
Post conference tours	3-4 day in three options

Conference themes:

Process Dynamics	Design Criteria and Operation Strategies	Economics and Policy
Hydrology, Biochemistry, Kinetics, Vegetation, Substrate, Microbiology, Biotechnology, Biodiversity benefits, Factors determining the processes, Oxygen transfer	Hydraulics, Dimensioning – Sizing criteria and roles, Plant selection, Vegetation management, Modelling and optimisation, Operation and maintenance, Monitoring, Environmental factors, Thermal aspect	Investment costs, Operation and maintenance costs, Ancillary benefits, Ecological services versus Conventional technologies, Enforcement of the law and potential law changing – challenge for TWs technology

Environmental Issues	Landscaping and Environmental Service	Treatment Performances of Wetlands in Water Pollution Control
Greenhouse gases, Life Cycle Assessment, Energy Assessment, Biodiversity, Biomass production, Energetic aspects, Clean Development Mechanism, Emission Trading Scheme, Joint Implementation	Green Roofs, Vertical farming, Sustainable Urban and Agricultural Drainage, Recreational concepts for wetlands, Natural swimming pools, Environmental service, Increase water resources	Organic matter, Suspended solids, Nutrients, Heavy metals, Micro and macro-organisms, POPs, emerging pollutants, Invertebrates, Sludge Dewatering and stabilization, wetland-WSP hybridisation,

Application of TWs for Water Reuse, Eco sanitation, Sustainable Water Management	TWs Components
Rainwater harvesting, Source separation of wastewater-grey, yellow, black, Re-use in industry and agriculture	New materials and plants, Hydraulic devices, Innovative design concepts, Patents, Maintenance tools,

Case studies
Projects, Lesson Land, Municipal and industrial wastewater treatment, Agricultural and animal industry effluents treatment, Landfill leachates and reject waters treatment, Acid mine drainage treatment, Sludge dewatering and stabilization, Storm water treatment, Highway runoff, Combined Sewer Overflows treatment, Groundwater clean-up, On-site bioremediation, Non-point source control, Riparian buffer zones, Wetland restoration, Stagnant water bodies and slow flowing river and other

Committees

Scientific Committee	Programme Committee	Organizing Committee
▪ Obarska-Pempkowiak Hanna, GUT, *Poland - Chair* ▪ Arias Carlos, *Denmark* ▪ Brisson Jacques, *Canada* ▪ Brix Hans, *Denmark* ▪ Esser Dirk, *France* ▪ Greenway Margaret, *Australia* ▪ Griessler Bulc Tjasa, *Slovenia* ▪ Rousseau Diederik, *Netherlands* ▪ Inamori Yuhei, *Japan* ▪ Jenssen Peter, *Norway* ▪ Junge Ranka, *Switzerland* ▪ Kowalik Piotr, *Poland* ▪ Maelhum Trond, *Norway* ▪ Mander Ulo, *Estonia* ▪ Molle Pascal, *France* ▪ Nielsen Steen, *Denmark* ▪ Puigagut Jaume, *Spain* ▪ Shutes Brian, *UK* ▪ Tanner Chris, *New Zealand* ▪ Tonderski Karin, *Sweden* ▪ Toscano Attilio, *Italy* ▪ Verlicchi Paola, *Italy* ▪ Von Sperling Marcus, *Brasil* ▪ Wallace Scott, *USA* ▪ Zhou Qi, *China*	▪ Gajewska Magdalena, GUT, *Poland - Chair* ▪ Babatunde Akintunde, *UK* ▪ Bavor John, *Australia* ▪ Chazarenc Florent, *France* ▪ Cutolo Silvana, *Brazil* ▪ Dotro Gabriela, *UK* ▪ Headley Tom, *New Zealand* ▪ Joshi Himanshu, *India* ▪ Katima Jamidu, *Tanzania* ▪ Langergraber Guenter, *Austria* ▪ Masi Fabio, *Italy* ▪ Nivala Jamie, *Germany/USA* ▪ Rustige Heribert, *Germany* ▪ Stein Otto, *USA* ▪ Vymazal Jan, *Czech Republic* ▪ Zhai Jun, *China*	▪ Gajewska Magdalena, *GUT-Chair* ▪ Kołecka Katarzyna, *GUT-Secretary* ▪ Jeznach Jerzy, *WULS* ▪ Józwiakowski Krzysztof, *LULS* ▪ Ostojski Arkadiusz, *GUT* ▪ Skarbek Jacek, *GIWK* ▪ Warra Sylvia, *WC HU* ▪ Wiater Józefa, *BUT* ▪ Weisner Stefan, *WC HU* ▪ Wojciechowska Ewa, *GUT*

Key dates

Conference Website start-up	July 1st, 2015
2nd announcement and call for abstract	September 1st, 2015
Deadline for Abstracts submission	January 30th, 2016
Registration starts	February 1st, 2016
Notification of acceptance for authors	March 15th, 2016
Deadline for early bird registration	June 15th, 2016
Deadline for full manuscript submission	July 15th, 2016

Conference Venue

There is no other city like Gdańsk

Gdańsk is a city of nearly half million people, undoubtedly one of the most popular tourist and cultural centres in Poland, with resiliently developing universities. It is a maritime capital of Poland. It is a big economic and dynamically growing scientific centre. Located at the Bay of Gdańsk, at southern shores of the Baltic Sea. It's the unique tourist assets and its historical and cultural heritage make Gdańsk one of the most attractive city in Poland. Its old town has been renovated and the lined antique tenement halls have been enriched with new hotels, restaurants and shops. The wealth of the old Gdańsk is proven by outstanding pieces of architecture such as the City Hall, St. Mary's Church, the Arthus Court and the Golden Gate. The Long Street and the Long Market are the most important communication ducts of the area, which has been the most representative of Gdańsk over the centuries. The tallest of all buildings of the Royal Route is the City Hall, built in the renaissance style with its 80 meters tall tower.
Gdańsk is recognized all over the word, however it is the Tri-City consisting of the cities of Gdańsk, Sopot and Gdynia.

www.gdansk.pl

Gdańsk University of Technology (GUT)

GUT is the oldest and the largest scientific and technological academic institution in northern Poland. In 2014, we are celebrating the 110th anniversary of the first inauguration of the academic year at the university. At nine faculties, there are approximately 27,000 students and 1200 academic teachers. The university offers over 60 undergraduate and graduate programs, including 12 programs taught fully in English. GUT is one of the top Polish universities in terms of the number of candidates, salaries of graduates and number of graduates holding CEO positions. GUT combines the science and practice as well as traditions and modernity to become SMART University.

www.pg.edu.pl

European Solidarity Centre in Gdańsk (ECS)

ECS is not only the museum with the mission to commemorate, maintain and popularize the heritage and message of the Solidarity movement and the anti-communist democratic opposition in Poland and throughout the world but also research and academic centre, delivers space for conferences, lectures, workshops.

www.ecs.gda.pl

WETLAND SYSTEMS
FOR WATER
POLLUTION CONTROL

the international water association

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Changing the future together

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