



25TH SALT WATER
INTRUSION MEETING
17-22 JUNE 2018
GDAŃSK  POLAND

www.swim2018.syskonf.pl | swim2018poland@gmail.com

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SALTWATER
INTRUSION
MEETING

SWIM

JUNE 17 - 22
2018

GDAŃSK
POLAND

STRATEGIC SPONSOR:



ORGANIZERS:



POLISH GEOLOGICAL INSTITUTE
NATIONAL RESEARCH INSTITUTE



NICOLAUS COPERNICUS
UNIVERSITY
IN TORUŃ



INSTITUTE OF HYDRO-ENGINEERING
POLISH ACADEMY OF SCIENCES



INSTITUTE OF OCEANOLOGY
POLISH ACADEMY OF SCIENCES

IN 2018 WE ARE GOING TO CELEBRATE THE 50TH ANNIVERSARY OF THE SWIM CONFERENCE IN **GDAŃSK** - A CITY ON THE POLISH BALTIC COAST



SWIM conferences originated in 1968, as a result of collaboration between researchers from Germany, Holland and Denmark, working on problems of freshwater-saltwater interaction in coastal aquifers.

Since that time SWIM meetings have been organized - mostly on a biennial basis - in different countries, with an increasing number of participants.

Contributions include both oral and poster presentations. The scope encompasses (but is not limited to) the following topics:

01. Case studies of saltwater intrusion, **02.** Hydrogeology of islands and atolls, **03.** Submarine groundwater discharge, **04.** Geogenic groundwater salinization, **05.** Geophysical and geochemical characterization of coastal aquifers, **06.** Monitoring and remote sensing, **07.** Variable density flow and transport: theory, experiments, analytical and numerical modeling, **08.** Coastal zone groundwater management, **09.** Impacts of climate change, sea-level rise and socio-economic changes

CALL FOR PAPERS:

Participants are encouraged to submit either short papers (up to 4 pages) or one page abstracts. The deadline for submission is 1 Feb. 2018. Submissions will be peer-reviewed and the decision on acceptance or rejection will be communicated to the authors before 28 Feb. 2018.

Papers and abstracts will be included in the conference proceedings, distributed to the participants in printed form and as a pdf file. Only contributions of which at least one author registered for the conference will be included in the proceedings.

Additionally, full-length research papers related to the work reported on the conference can be submitted to Geological Quarterly, which is a peer-reviewed journal indexed in the Journal Citation Reports. Depending on the number of contributions, they will be published as a special post-conference issue or in regular, forthcoming issues of the journal.

ADVISORY COMMITTEE:

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Bohdan KOZERSKI, Poland

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LOCAL ORGANIZING COMMITTEE:

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Andrzej SADURSKI – **vice-chairman**

Beata JAWORSKA-SZULC – **secretary**

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Beata SZYMCZYCHA

Anna GUMUŁA-KAWĘCKA

Dawid POTRYKUS

Maria PRZEWŁÓCKA

Witold TISLER

IMPORTANT DATES:

Opening Registration and Call for Papers
Deadline for Abstract/Paper Submission
Notification of Abstract/Paper Acceptance
Deadline for early bird registration
Deadline for regular registration

SWIM 2018

15 November 2017

01 February 2018

28 February 2018

31 March 2018

31 May 2018

17 – 22 June 2018

REGISTRATION INFORMATION:

The registration fee provides full participation in the conference, including conference materials, lunches, coffee breaks and evening social events (Sunday icebreaker, Tuesday soccer match and Thursday dinner). The price of the field trip includes transport, copy of the field trip handout, tickets and lunch.

The guest registration fee includes the lunches and the evening receptions.

End of online registration will be May 31st, 2018. After the stipulated date only registration on-site will be possible.

The cancellation fee amounts to 200 PLN. A cancellation after May 31st, 2018 is not possible and will not result in any refund. Cancellations must be made in written form.

For changes after issuing an invoice, a service fee of 40 PLN will be raised. The valid VAT is underlying. Changes beyond our exertion of influence are hereby explicitly reserved.

	Early Registrant Fee Received until 31 March 2018	Regular Registrant Fee Received between 1 April and 31 May 2018	On-site 17-18 June 2018
MEETING ATTENDEES	1900 PLN (~ 441 €*)	2200 PLN (~ 511 €*)	2300 PLN (~ 534 €*)
STUDENT ATTENDEES	1000 PLN (~ 232 €*)	1200 PLN (~ 279 €*)	1300 PLN (~ 302 €*)
ACCOMPANY- ING ATTENDEES	1000 PLN (~ 232 €*)	1000 PLN (~ 232 €*)	1000 PLN (~ 232 €*)
FIELD TRIP	300 PLN (~ 70 €*)	300 PLN (~ 70 €*)	300 PLN (~ 70 €*)

*please notice that applicable prices are specified in PLN; equivalents in EUR are given only for information purposes, assuming currency rate 1 EUR = 4.3 PLN

CONTACT:

swim2018poland@gmail.com

MORE INFORMATION:

www.swim2018.syskonf.pl

VENUE:

The venue of the conference is **Mercure Gdańsk Stare Miasto** hotel. This 4-star hotel is located just a few steps away from the main highlights of Gdańsk: the magnificent Old Town with the Town Hall, St. Mary's cathedral and medieval Crane at Motława river, European Solidarity Center, witnessing the transformation from communism to democracy in Eastern Europe, and the recently opened World War II museum.

The hotel has 281 comfortable rooms of various types. As one of the highest buildings in Gdansk downtown, it offers picturesque views over the Old Town and the famous Gdansk Shipyard. It is also located close to the main railway and bus station and provides its guests with an airport shuttle service.

ACCOMMODATION:

The conference fee does not include accommodation. Participants are kindly requested to book their rooms on individual bases.

The **Mercure Gdańsk Stare Miasto** hotel (4-star), which is the venue of the conference, guarantees that the room rate for SWIM participants will not exceed 350 PLN (~82 EUR) for a single room and 390 PLN (~92 EUR) for a double room, if the reservation is made by 15 April 2018. When booking early you can benefit from even lower prices.

The **Ibis Gdańsk Stare Miasto** hotel (2-star), neighboring the **Mercure** hotel, is a cheaper alternative. Early booking should give you the advantage of significantly lower prices than **Mercure**. Note also that June is high tourist season and the availability of rooms may be limited when booking late. More details about the hotel reservation can be found on the conference webpage.

Mercure ★★★★★ Gdańsk Stare Miasto
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TENTATIVE AGENDA / PRELIMINARY PROGRAM

SUNDAY, JUNE 17	15:00 - 19:00 16:00 - 18:00 19:00 - 21:00	Registration open Old Town tour Ice breaking party
MONDAY, JUNE 18	8:00 9:00 - 10:30 10:30 - 11:00 11:00 - 12:30 12:30 - 14:00 14:00 - 15:30 15:30 - 16:00 16:00 - 17:30 17:30 - 19:30	Registration open Opening Ceremony - Anniversary session Coffee break Session 1 Lunch Session 2 Coffee break Session 3 Poster session
TUESDAY, JUNE 19	8:00 9:00 - 10:30 10:30 - 11:00 11:00 - 12:30 12:30 - 14:00 14:00 - 15:30 15:30 - 16:00 16:00 - 17:30 18:30	Registration open Session 4 Coffee break Session 5 Lunch Session 6 Coffee break Session 7 Soccer match
WEDNESDAY, JUNE 20	8:00 - 17:00	Optional field trip
THURSDAY, JUNE 21	9:00 - 10:30 10:30 - 11:00 11:00 - 12:30 12:30 - 14:00 14:00 - 15:30 15:30 - 16:00 16:00 - 18:00 20:00	Session 8 Coffee break Session 9 Lunch Session 10 Coffee break Session 11 Conference Dinner
FRIDAY, JUNE 22	9:00 - 10:30 10:30 - 11:00 11:00 - 12:30 12:30 - 14:00 14:00 - 15:30 15:30 - 16:00	Session 12 Coffee break Session 13 Lunch Session 14 Goodbye coffee ;)

FIELD TRIP

PARTICIPANTS CAN CHOOSE ONE OF TWO OPTIONS OF THE FIELD TRIP. THE CHOICE HAS TO BE MADE DURING REGISTRATION. IN CASE OF A SMALL NUMBER OF INTERESTED PARTICIPANTS, THE ORGANIZERS RESERVE THE RIGHT TO CANCEL ONE OR BOTH TRIPS.

„SWIM TO HEL” [1]

This trip offers a great opportunity to discover various coastal landscapes and associated hydrogeological settings in the vicinity of Gdańsk. Participants will go on board of a ship to the Hel peninsula, a long, narrow sandbar or spit, which separates the Bay of Gdańsk from the main Baltic Sea. The peninsula was formed by deposition of sand sediment transported by the sea current along the coast. In its narrowest part the spit is only about 100 m wide and may be overflowed with water during heavy storms. Fresh groundwater on Hel is present in form of a lens recharged by precipitation. The town of Hel, located at the very end of the peninsula is renowned for the efforts to protect Baltic seals and local dune ecosystems.

Starting from the Hel town the participants will go by bus along the peninsula, with its dunes covered by pine forests, numerous tourists resorts and WWII fortifications. Back on the mainland, we will see a very different type of coast - the cliffs of Jastrzębia Góra and Roze- wie, towering up to 40 meters above the sea level. Protection of the slopes from coastal erosion and landslide processes remains a constant challenge for scientists and engineers. Groundwater, present in sandy layers sandwiched between lacustrine clays and moraine tills of the cliffs, plays a significant role in the struggle between humans and the sea.

CASTLE & DELTA [2]

This trip will bring the participants to the region of Vistula Delta, which forms a unique environment at the mouths of the largest Polish river. Its flat landscape cut by a multitude of canals and ditches resembles the Netherlands, and indeed Dutch settlers influenced the development of the region, notably in 16th and 17th centuries. Hydrogeology of the Delta is quite complex, with groundwater table in fresh alluvial sediments controlled by dewatering systems - large part of the area is below the sea level. The shallow Quarternary aquifers are underlain by deeper ones, located in Tertiary and Cretaceous sediments. The origins of increased groundwater salinity in this region were a subject of scientific debate since the early 20th century, as various researchers attributed them to the ascension of saline water from deep aquifers, presence of connate marine water in deltaic sediments or recent seawater intrusions.

The cultural highlight of the trip will be a visit to the Castle of Malbork (German Marienburg), probably the largest gothic castle and the largest building complex in the world constructed of bricks, covering area of about 21 hectares, with the total cubic space inside all buildings surpassing a quarter of a million of cubic meters. The castle used to be the seat of the Grand Master of German (Teutonic) Order Knights, a military order which ruled a large part of the southern Baltic coast in late Middle Ages. Now it is one of the UNESCO World Heritage Sites.

