

Wojciech Majewski Institute of Meteorology and Water Management



30 YEARS OF SCHOOL OF HYDRAULICS

Institute of Hydro-engineering, Polish Academy of Sciences, Gdańsk (I – XXV)



Institute of Geophysics, Polish Academy of Sciences, Warsaw

(XXVI – XXVIII and XXX)

- 30 years passed since the first School of Hydraulics was organized.
- This 30 year anniversary of School of Hydraulics generates both retrospections and outlooks to the future. In such situation two questions may be asked:
- Where we are going? Which means what will be the future of School of Hydraulics?
- Where we come from? What was the beginning of the School and how it developed till the present day?
- Answer to the first question belongs now mainly to the organizers of the next schools.
- I would like to concentrate my presentation mainly on the past of the School of Hydraulics.
- What was the idea of the School?
- How it was organized ?
- What topics were discussed ?
- What can be regarded as achievements and what as failures?

- In 1981 School of Hydraulics (SH) was established under the auspices of the Committee of Water Resources Management of the Polish Academy of Sciences – Prof. B. Kordas.
- Organizer of the SH was the Institute of Hydro-engineering (IH) of the Polish Academy of Sciences in Gdańsk.
- The general heading of SH was *Contemporary Problems of Inland Water Hydraulics.*
- The main aim of the SH was to create a forum for discussion and education in the field of inland water hydraulics including also hydraulic structures.
- SH were organized every year in September and each school was devoted to a selected topic of inland hydraulics.
- Each time school was organized in a different place and connected with the visit to interesting hydraulic structure during construction or operation.

LOCATION OF SCHOOL OF HYDRAULICS



• First SH was organized in Osieczany in September 1981. Prof. B. Kordas, who was the initiator of the SH died tragically several days before the first school started.



FIRST YEARS OF SH

- First years were very difficult because of political unrest in Poland, what resulted in the shortage of funds for science and difficulties with food supply.
- The situation worsened in 1982 when Marshal Law was introduced. All this produced additional organizational difficulties.
- Fortunately due to involvement of many people all these problems were overcome and SH was regularly organized each year.

PARTICIPANTS

- Participants represented numerous universities of technology, agricultural universities, research institutes, design and consulting offices, engineering enterprises and water administration boards.
- Number of participants varied from 36 (1981) and (1989) to 76 (1995) and 85 (1996). Number of participants depended not only on the topic of the school but also on financial situation of institutions sending their participants.
- There were participants who regularly attended SH, some, however, attended one or two SH. Over the first 25 SH there were about 150 names of participants who attended the school.

- SH I XXIII were organized as national in Polish with some presentations given by foreign lecturers
- SH XXIV and XXV were organized as international (in English) and included into the activity of the Centre of Excellence (Centre for Environmental Engineering and Mechanics)



SCHOOL PROCEEDINGS

 Since 1991 (XI SH) proceedings including lectures and papers were published regularly as monographs of the Institute of Hydroengineering. In general these proceedings were published before each school. All papers were reviewed before acceptance for presentation.



VISITED HYDRAULIC STRUCTURES



SCHOOL TOPICS

- School topics were gradually changing from studies on various types of hydraulic structures and their hydraulic model investigations, including measuring techniques and scale effects, to open channel flows and environmental problems
- Topics included also basic studies which aimed to better understand various
 physical processes existing in open channel flow
- Flow in open channels was considered not only as water flow but also thermal regime, sediment transport or influence of ice cover were taken into account. These problems were investigated on hydraulic models and in natural conditions in form of in situ measurements. Numerical techniques were presented
- When in 2004 Poland entered EU numerous new problems connected with hydraulics appeared. In 2000 Water Framework Directive was established and Poland accepted its rules. Recently Flood Directive came into force with new approach to flood protection
- In general it is now possible in retrospection to state that SH always tried to follow problems which were important to the hydraulics and hydraulic engineering.

CONCLUSIONS

- Looking back to 30 years of SH, which passed, it is possible to state that this yearly meeting of scientists and specialists in the realm of hydraulics fulfilled the aims, which were assumed when school was established
- SH were not only scientific meetings. There were many social events, informal discussions and future friendships
- In retrospection of 25 years when I had the duty and honor to chair SH, I would like to say that school could not be regularly organized without involvement of many participants, who prepared papers, lectures and also served as reviewers, organizers of study tours or preparing publications
- It would be difficult to mention all these names, because the list would be very long. Some of them retired or passed away
- One of the drawbacks is unfortunately small amount of young Polish scientists
 who take part in international schools
- I am very glad that school of hydraulics assumed the international form. I would like to wish prof. Rowiński and the organizing team from Institute of Geophysics further success.



THANK YOU FOR YOUR ATTENTION