

# HYDRODYNAMIC AND MASS TRANSPORT AT FRESHWATER AQUATIC INTERFACES

Opening of the XXXIV International School of Hydraulics

Paweł Rowiński, Monika Kalinowska Institute of Geophysics, Polish Academy of Sciences

## Organizing Institutions



Institute of Geophysics Polish Academy of Sciences



**HYTECH Project** 



Committee for Water Resources Management of the Polish Academy of Sciences



IAHR International Association of Hydraulic Engineering and Research

## **Sponsoring Institutions**



Institute of Geophysics Polish Academy of Sciences



GEOPLANET Earth and Planetary Research Centre



Committee for Water Resources Management of the Polish Academy of Sciences



**Leading National Research Centre** 

#### **Invited Lectures**

#### PETER DAVIES

Division of Civil Engineering, University of Dundee, UK "Waves on density interfaces"

#### □ HEIDI NEPF

Massachusetts Institute of Technology, Department of Civil and Environmental Engineering, USA

"Vegetation Hydrodynamics at the Blade-Scale and the Canopy-Scale"

#### **Invited Lectures**

#### □ BERNHARD STATZNER\*, NICOLAS LAMOUROUX\*\*

- \* Former Research Director at Laboratory of Ecology of Natural and Manimpacted Hydrosystems (LEHNA), France
- \*\* National Research Institute of Science and Technology for Environment and Agriculture, France

"Testing predictions of changes in the abundance and community structure of benthic invertebrates and fish after flow restoration in a large river (French Rhône)"

#### ■ ANDREA MARION

Department of Hydraulic, Department of Industrial Engineering, University of Padova, Italy

"The HYTECH Project and new opportunities for eco-hydraulics in the Marie Skłodowska-Curie Actions within Horizon 2020"

#### Scientific Committee

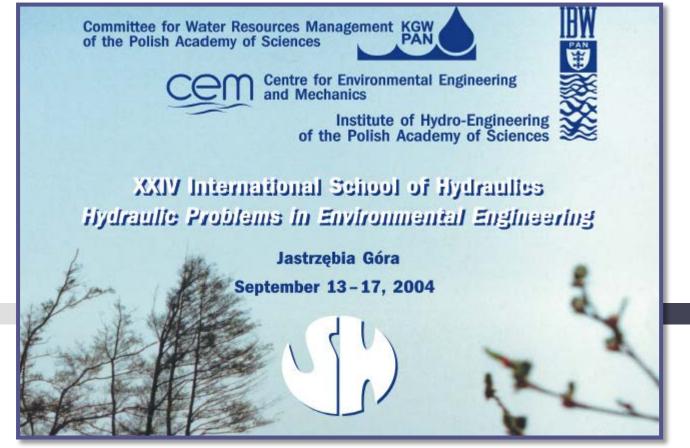
- Jochen Aberle, Norwegian University of Science and Technology, Norway
- Francesco Ballio, Polytechnic University of Milan, Italy
- **Robert Bialik**, Institute of Geophysics, Polish Academy of Sciences, Poland
- **Tjeerd Bouma**, Royal Netherlands Institute for Sea Research, Netherlands
- Christoph Gerstgraser, gIR Engineering, Germany
- Monika Kalinowska, Institute of Geophysics, Polish Academy of Sciences, Poland
- Katinka Koll, Technical University Braunschweig, Germany
- Andrea Marion, University of Padova, Italy
- Wojciech Majewski, Institute of Meteorology and Water Management, Gdynia
- Marek Mitosek, Warsaw Technical University, Poland
- Magdalena Mrokowska, Institute of Geophysics, Polish Academy of Sciences, Poland
- Jarosław Napiórkowski, Institute of Geophysics, Polish Academy of Sciences, Poland

#### Scientific Committee

- Vladimir Nikora, Engineering Department, University of Aberdeen, UK
- Matthew O'Hare, Centre for Ecology and Hydrology, United Kingdom
- Sara Puijalon, National Centre for Scientific Research, France
- Artur Radecki-Pawlik, Agricultural University of Cracow, Poland
- Carlo Someda, Giotto High Technology Photnics Srl, Italy
- Alexander Sukhodolov, Leibnitz Institute for Freshwater Ecology and Inland Fisheries, Germany
- Simon Tait, University of Sheffield, United Kingdom
- **Steve Wallis**, School of the Built Environment, Heriot-Watt University, United Kingdom
- **Geraldene Wharton**, Queen Mary University of London, United Kingdom
- Mattia Zaramella, WET Engineering, Italy

## **Organizing Committee**

- School Chairmen
  - Paweł M. Rowiński, Institute of Geophysics, Polish Academy of Sciences
  - Andrea Marion, HYTECH Project, University of Padua, Italy
- Organizing Committee
  - Magdalena Mrokowska, IGF
  - Monika Kalinowska, IGF
  - Anna Łukanowska, IGF
  - Matteo Tregnaghi, HYTECH
  - Anna Zdunek, IGF



# First school of international character

chaired by Prof. Wojciech Majewski



# XXVI International School of Hydraulics 19-22 September, 2006, Goniadz, POLAND

#### **ENVIRONMENTAL HYDRAULICS**



#### Previous lecturers, Goniądz 2006

- Vladimir Nikora, UK
- Andreas Dittrich, Germany
- □ lan Guymer, UK
- Wojciech Majewski, Poland
- Andrea Marion, Italy
- Steve Wallis, UK
- Anders Worman, Sweden



#### TRANSPORT PHENOMENA IN HYDRAULICS



#### Previous lecturers, Hucisko 2007

- Keith Beven, UK
- Włodzimierz Czernuszenko Poland
- □ Tom O'Donoghue, UK
- Dubravka Pokrajac, UK
- □ Wim S.J. Uijtewaal, The Netherlands
- Volker Weitbrecht, Germany



# HYDRAULIC METHODS FOR CATASTROPHES: Floods, Droughts, Environmental Disasters



#### Previous lecturers, Krąg 2008

- □ Gareth Pender, UK
- Jochen Aberle, Germany
- Wojciech Majewski , Poland
- Jarosław Napiórkowski , Poland



#### EXPERIMENTAL METHODS AND TECHNIQUES IN HYDRAULIC RESEARCH



#### Previous lecturers, Wiejce 2010

- Steven Coleman, New Zealand
- Cristiana di Cristo, Italy
- Subhasish Dey, India
- Rui M. L. Ferreira, Portugal
- Katinka Koll, Germany
- Wojciech Majewski, Poland
- J. Russell Manson, USA



#### XXXII

#### International School of Hydraulics

28 - 31 May · 2012 · Łochów · Poland

## OF HYDRAULIC PROBLEMS



#### Previous lecturers, Łochów 2012

- Donald W Knight, UK
- Subhasish Dey, India
- Roberto Gaudio, Italy
- Andrea Marion, Italy
- Vladimir Nikora, UK
- Artur Radecki-Pawlik, Poland
- Paweł Rowiński, Poland

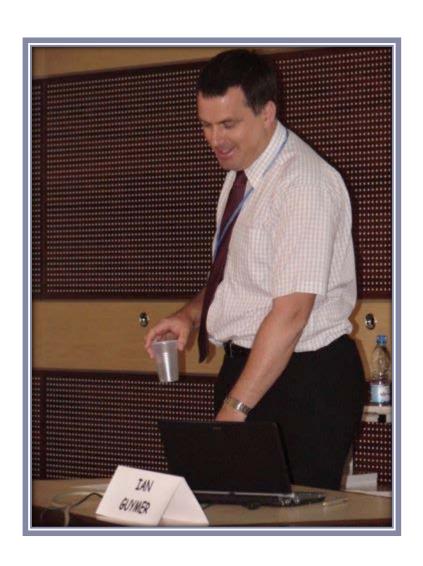
# Selected invited speakers

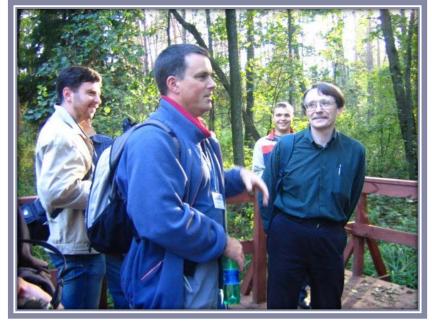
## Jochen Aberle





## lan Guymer





#### Katinka Koll & Steve Coleman





## J. Russell Manson





#### **Andrea Marion**





#### Jarosław Napiórkowski & Rui Ferreira





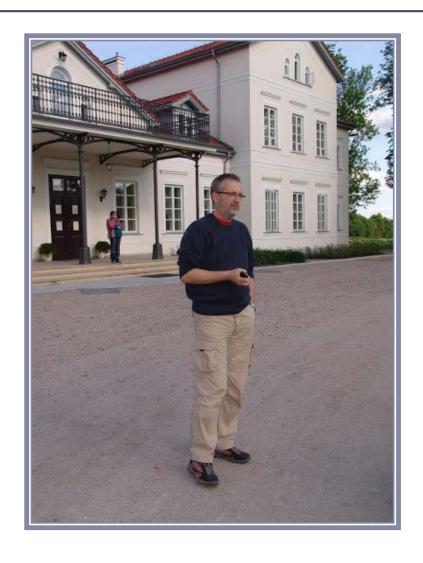
## Vladimir Nikora







#### Artur Radecki-Pawlik



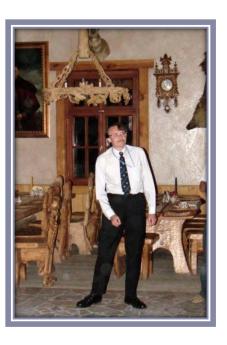


## **Steve Wallis**

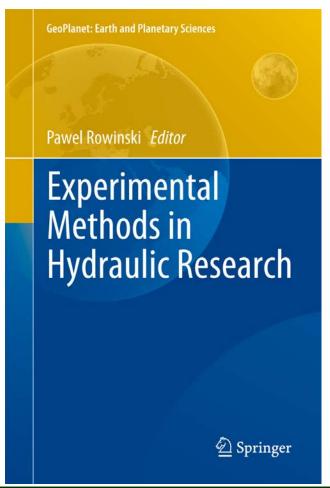


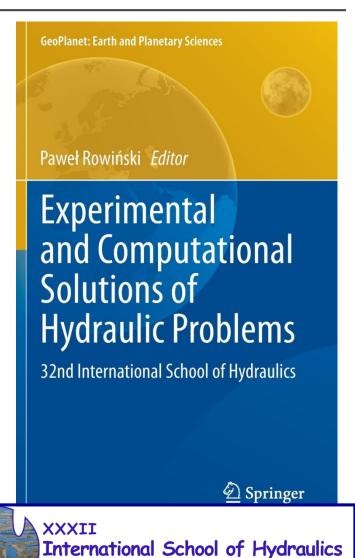






## SPRINGER monographic series





28 - 31 May · 2012 · Łochów · Poland



#### Żelechów 2015

- 69 participants
- from 11 countries:
   Chile, France, Germany, India, Italy, Mexico,
   the Netherlands, Norway, Poland, UK, USA
- □ from 4 continents







# BEST WISHES FOR A SUCCESSFUL AND ENJOYABLE MEETING!!!!!!