



**Composite Modelling of Urban Flooding  
in Coastal & Estuarine Areas**

A bilateral research cooperation project

funded by: The National Science Fund of Bulgaria & Ministry of Science and Technology of the People's Republic of China

**Bilateral Chinese - Bulgarian Research Seminar:  
Composite Modelling of Urban Flooding in Coastal & Estuarine Areas  
Varna, 17 - 18 October 2018, Conference hall at BSHC-BAS, Varna**

**TECHNICAL PROGRAMME**

| <b>WEDNESDAY, OCTOBER 17<sup>th</sup>, 2018</b> |  |
|---|--|
| <b>Exchange of Knowledge &amp; Expertise</b>    |  |
| 10:00 - 10:30                                   | Welcome Address, Prof. R. Kishev, Head BSHC; D. Dragancheva, Project Coordinator |
| 10:30 - 12:00                                   | Study tour: BSHC Lab Facilities  |
| 12:30 - 13:30                                   | <i>Lunch break</i>   |
| 13:30 - 14:00                                   | BSHC at the frontline of hydrodynamic research (R. Kishev)                       |
| 14:00 - 14:30                                   | NHRI: a multipurpose national hydraulic research complex (J.N. Pan)              |
| 14:30 - 15:00                                   | BDCA: Building bridges between science and industry (V. Penchev)                 |
| 15:00 - 15:30                                   | <i>Coffee break</i>  |
| 15:30 - 16:00                                   | Round table discussion   |
| 16:00 - 16:15                                   | Day 1: Conclusions & Closing   |

| <b>THURSDAY, OCTOBER 18<sup>th</sup>, 2018</b> |  |
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| 08:45 - 09:15                                  | Registration of Participants   |
| 09:15 - 09:30                                  | Welcome, Prof. R. Kishev, Head BSHC  |
| <b>Scientific Session 1</b>                    |  |
| 09:30 - 09:50                                  | Experimental study on failure mechanism of seawall by coupling effect of storm surge and waves, Prof. J. Pan (NHRI)    |
| 09:50 - 10:10                                  | Modelling of Wave Induced Hydrodynamics in Coastal Areas using MIKE21/3, S. Shukrieva (BDCA)                           |
| 10:10 - 10:30                                  | High-Resolution DEM for Numerical Simulations of Coastal Flooding - Case study Asparuhovo-Karantina, V. Penchev (BDCA) |
| 10:30 - 11:00                                  | <i>Coffee break</i>  |
| 11:00 - 11:20                                  | Compound simulation of extreme flood and waves in Beilun coast, China, Prof. J. Zhang (NHRI)                           |
| 11:20 - 12:00                                  | Discussion Scientific Session (1)  |
| 12:00 - 13:30                                  | <i>Lunch break</i>   |
| <b>Scientific Session 2</b>                    |  |
| 13:30 - 13:50                                  | Study on coupling simulation technique of storm surge and wave, Z.B. Sun (NHRI)  |
| 13:50 - 14:10                                  | Numerical tools for coastal hydrodynamic and hydro-ecological modeling: MIKE by DHI approach, F. Penchev (BDCA)        |
| 14:10 - 14:30                                  | Application of nonhydrostatic model SWASH on extreme flood and waves in Varna coast, Bulgaria, M.J. Xiong (NHRI)       |
| 14:30 - 14:50                                  | Integrated Approach - Physical & Numerical Modelling - Added value, D. Dragancheva (BSHC)                              |
| 14:50 - 15:20                                  | Discussion Scientific Session (2)  |
| 15:20 - 16:00                                  | Day 2: Conclusions & Closing   |