Smoothed particle hydrodynamics (SPH) for hydraulic engineering: several typical applications

Date and Time: 13:00-14:30 July 20, 2023

Venue: Meeting Room 328, Engineering Building No.1, Kumamoto University

Lecturer: Prof. Shenglong GU (Qinghai University)

Brief introduction of the lecturer

Professor Gu is Deputy Dean of School of Water Resources and Electric Power, Qinghai University (Xining, China). He obtained the Bachelor Degree from University of Sciences and Technology, China in 2004, and obtained the Ph.D. from Institute of Mechanics, Chinese Academy of Sciences in 2010.

Professor Gu has been engaged in the research of Fluid mechanics and Hydraulics for a long time, especially in Smoothed



Particle Hydrodynamics (SPH). He prompted the new SPH parallel frame to solve the Shallow Water Equations and developed the Air-Water SPH code, Delta-SPH code and Delta-LES-SPH code to research dissipation of stepped spillway and hydraulic jump. Now, he works on the Ice-Water interaction in channel and SPH model for porous flow.