REPORT ON

The activities of The Working Group of IAG on "Advancing theory and modelling of river systems" in 2019

The working group was approved by IAG during the 9th International Conference on Geomorphology held in New Deli, India during November 6-11, 2017. 2019 is the second year of the working group and the activities carried out by the working group in 2019 mainly include:

- Profs. He-Qing Huang and Ian Rutherfurd, co-conveners of our working group, held the 2nd meeting of our working group at the University of Melbourne, Australia during Feb. 1-2, 2019, reviewing the progress of our working group made in 2018 and laying out a detailed plan for activities to be carried out in 2019 and 2020.
- 2. Prof. Ian Rutherfurd organized the 18th Biennial Conference of the Australia and New Zealand Geomorphology Group held at Inverloch in southeastern Australia during Feb. 4-9, 2019. During the conference, several sessions were focused on river systems and Profs. Gerald Nanson, Ian Rutherfurd, Gary Brierley, Kirstie Fryirs and He-Qing Huang, together with many young fluvial geomorphologists, presented latest research results, introduced the activities of our working group, and exchanged views on the approaches for advancing the theory and modelling of river systems.
- 3. Under the financial support of the National Natural Science Foundation of China, Prof. He-Qing Huang organized a field investigation of the variation of the channel morphology of the Mekong River from March 26 to April 4. During the investigations, scientists from China, Laos and Cambodia communicated research results, introduced the activities of our working group, and discussed the approaches for enhancing collaborations for deepening the understanding of the behavior of the Mekong River in Vientiane and Phnom Penh, respectively.
- 4. Profs. Gary Brierley and Xilai Li organized the International Symposium on Integrative Management of the Grassland, Wetlands, and Rivers of the Source Zone of the Yellow River at Qinghai University, Xining, China, during July 5-6

- of 2019, with more than 50 participants from New Zealand, Australia, France, Italy, UK, USA and China. Before the symposium, a pre-conference field trip to the source of the Yellow River was made. During the symposium, a special session focusing on the behavior and management of river systems was held, with Profs. Gary Brierley, Kirstie Fryirs, He-Qing Huang and Xilai Li presented latest research results, introduced the activities of our working group, and reviewed the approaches for advancing the theory and modelling of river systems.
- 5. During May and September, 2019, Profs. Paul Carling and He-Qing Huang visited several Chinese universities and research organizations, including Tongji University in Shanghai, Sichuan University in Chengdu, Henan University in Kaifeng, Institute of Geographic Sciences and Natural Resources Research of Chinese Academy of Sciences in Beijing and introduced the objectives and activities of our working group.
- 6. During May to July, Profs. He-Qing Huang, Paul Carling and Ian Rutherfurd, co-conveners of the special session of "Advancing theory and modelling of river systems" proposed for our working group for the 2019 Regional Conference on Geomorphology, provided detailed evaluations of all abstracts submitted to the session.
- 7. During August 6-21, Prof. He-Qing Huang was invited to offer lectures about the behavior of management of river systems in China and an introduction of the activities of our working group for more than 30 students from developing countries across the world during the 2019 Training Programme on Climate Risk and Sustainable Water Management funded by Chinese Academy of Sciences and held in Beijing.
- 8. During Sept. 19-21, 2019, Profs. Ian Rutherfurd and He-Qing Huang attended the Regional Conference on Geomorphology held at the National and Kapodistrian University of Athens in Athens, Greece and co-chaired the session "Advancing theory and modelling of river systems" during the conference. During the session, Profs. Ian Rutherfurd and He-Qing Huang also presented latest research progress on river systems and the activities of our working group.

- 9. During Sept. 19, 2019, Profs. Ian Rutherfurd and He-Qing Huang attended the council meeting of IAG as national representatives.
- 10. During Nov. 1-3, the Geographical Society of China organized many activities to celebrate its 110th anniversary, including a China Conference on Geography. Prof. He-Qing Huang was invited to give an introduction of the activities of our working group and a review of the study progress about the behavior of the Yellow River and the practical experience gained from managing the river system.

Conveners of the working group of IAG on "Advancing theory and modelling of river systems":

Prof. He-Qing Huang, Institute of Geographic Sciences and Natural Resources Research,
Chinese Academy of Sciences, Beijing, China; Email: huanghq@igsnrr.ac.cn
Prof. Paul Carling, Southampton University, UK; Email: P.A.Carling@soton.ac.uk
Prof. Ian Rutherfurd, University of Melbourne, Australia; Email: idruth@unimelb.edu.au