

# **Conference Program** Friday 10th September 2021

### 9.00 – 9.15AM

## **OPENNING SESSION**

Introduction & Welcome address: *Dr Ranjan Sarukkalige*, Curtin University, Australia Opening address: *Prof So Kazama*, Tohoku University, Japan

### 9.15 – 11.00AM

### **SESSION 1: WATER RESOURCES ASSESSMENT: TOOLS & APPROACHES** Session Chair: Dr Ranjan Sarukkalige

Application of flexible model structures to interpret dominant process controls on flow duration curves, *Chris Leong, Yoshiyuki Yokoo,* Fukushima University, Japan

Long-duration Maximum Precipitation Estimation for large basins dominated by Atmospheric Rivers using the WRF model, *Yusuke Hiraga, Yoshihiko Iseri, Michael D. Warner, Chris D. Frans, Angela M. Duren, John F. England, M. Levent Kavvas,* University of California, Davis, USA

Towards water security in the cities of La Paz and El Alto, Bolivia, Pablo Fuchs, Javier Mendoza and Gustavo Ayala, Universidad Mayor de San Andrés, Bolivia

Performance of Machine learning algorithms for potential recharge areas mapping in high-altitude, Andean mountains, *Evelyn Aliaga and Freddy Soria*, Universidad Católica Boliviana, Bolivia

Evaluation of factors affecting the concentration of an emerging pharmaceutical pollutant (Sulfamethoxazole) in cities with absence of wastewater treatment systems by sensitivity analysis of a global fate transport model, *Andrea Agramont, Freddy Soria, Carolina Garvizu,* Universidad Católica Boliviana, Bolivia

Streamflow maps for small-sized basins of Japan, Ryosuke Arai, Yasushi Toyoda, So Kazama, Central Research Institute of Electric Power Industry, Japan

Integrated assessment of the flood and heat mitigation effect of vegetation in an urban residential area, *Qing Chang, So Kazama, Yoshiya Touge, Shunsuke Aita*, Wuhan University of Science & Tech, China

#### 12.00 – 2.30PM

## **SESSION 2: GROUNDWATER RESOURCES & CATCHMENT STUDIES** Session Chair: A/Prof Chaiwat Ekkawatpanit

Boundary effect on pumping test estimations and ways of lowering groundwater level in Muscat Airport premises, *Luminda Gunawardhana, Ahmed Sana*, University of Moratuwa, Sri Lanka

Comparison drought index and observed agricultural drought in Indonesia, Nurul Fajar Januriyadi, Bambang Heri, Idham Riyando Moe, Pertamina University, Indonesia

Identifying the Spatiotemporal Variation in Qualitative and Quantitative Characteristics of Groundwater in Attanagalu Oya Basin, Sri Lanka, *Vinu I*, *Danushka U*, *Chaminda S.P*, *Dassanayake A.B.N*, University of Moratuwa, Sri Lanka

Spatiotemporal Variation of Groundwater Quality in Malwathu Oya Basin, Sri Lanka, *Madhushankha JML, Madhuwan ARB, Menan P, Chaminda SP,* University of Moratuwa, Sri Lanka

Identifying Flash Flood Potential Areas Using Morphometric Characterization of watershed, *Thapthai Chaithong*, Kasetsart University, Thailand

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Employing satellite image derived water surface areas to estimate the small tank capacities in data-scarce regions, S. M. A. D. R. M. Sammandapperuma, *N. K. Gunasekara and C. Herath, General Sir John Kotelawala Defence* University, Sri Lanka

A comparison of the quality of spatial rainfall data products available over Attanagalu Oya catchment, Sri Lanka, *N. K. Gunasekara1 and T. D. S. Rashmika*, General Sir John Kotelawala Defence University, Sri Lanka

Flood Scenarios to facilitate emergency services resource planning, *Bandara Nawarathna*, Bureau of Meteorology, Australia

A comparison of the design peak-flow estimated using simulated and storm-hydrographs, *Faisal Al-Hinai, Luminda Gunawardhana*, Sultan Qaboos University, Oman.

Evaluation of the surface water-groundwater interaction in estimating water yield from an ephemeral river catchment in Western Australia, *Amila Basnayaka, Ranjan Sarukkalige,* Curtin University, Australia

## 3.00-5.00PM

## **SESSION 3: IMPACTS OF CLIMATE CHANGE ON WATER RESOURCES** Session Chair: Prof Seiki Kawagoe

Assessing the risk of river bank erosion under the context of climate change for Hochiminh City, Vietnam, *Ngoc Pham, Hoa Thi Pham, Angeli Doliente Cabaltica*, International University, Vietnam National University Ho Chi Minh City, Vietnam

Spatial changes of Urban Heat Island formation and its effect on the Ecology: A case study of Colombo City, Sri Lanka, *Kurugama KAKM, Dissanayake DMDOK, Chaminda SP*, University of Moratuwa, Sri Lanka

Local action on climate change: Opportunities and constraints in the Lower Yom and Nan River basin, Thailand, *Weerayuth Pratoomchai, and Naphol Yoobanpot*, King Mongkut's University of Technology North Bangkok, Thailand

Evaluation of altered flow regimes by dams and climate change in the Omaru river network using a distributed hydrological model, *Mineda H, Nukazawa K, Tanimura Y, Suzuki Y,* Miyazaki University, Japan.

Effects of Climate Change on Surface Water and Groundwater Recharge in the Yom and Nan River basin, Thailand, *Chanchai Petpongpan, Chaiwat Ekkawatpanit, Duangrudee Kositgittiwong*, King Mongkut's University of Technology Thonburi, Thailand

Estimation of current and future flooding using HEC RAS case study of Sedon catchment, LAO PDR, *Sengphrachanh Phrakonkham, Sisouvanh Kittavong*, National University of Laos, Laos.

Bias correction of WRF-ROMS for rainfall forecasting in the Upper Ping River Basin, Thailand, *Prem Rangsiwanichpong, Phakawat Lamchuan, Thienchart Suwawong,* Kasetsart University, Thailand

Assessment of Landslide Risk using Hydrological Model in the Upper Yom River basin, Thailand, *Chaiwat Ekkawatpanit, Chanchai Petpongpan,* King Mongkut's University of Technology Thonburi, Thailand

# 5.00 – 5.15PM

# **CLOSING SESSION / VOTE OF THANKS**

# 5.15PM Onwards

SOCIAL EVENT / NETWORKING, CATCHING-UP AND WRAPPING EVENT