



International Association
for Hydro-Environment
Engineering and Research

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Spain Water and IWHR, China



29th IAHR Symposium on Hydraulic Machinery and Systems

September 16-21, 2018, Kyoto, Japan

Technical Sessions (Tuesday Evening, September 18)

Tuesday Evening (September 18) 15:50 - 17:50

Pumps Working As Turbines 2 (RY203)

Chairs: Mr. Alessandro Morabito (Université libre de Bruxelles, Belgium), Prof. Young-Do Choi (Mokpo National University, Korea)

[IAHR2018-324](#) “Numerical Investigation of Tongue Effects on Pump Performance in Direct and Reverse Modes”, Hamed Alemi Arani (University of Tehran, Iran), Mohammad Fathi (University of Tehran, Iran), Mehrdad Raisee (University of Tehran, Iran), Seyed Ahmad Nourbakhsh (University of Tehran, Iran)

[IAHR2018-325](#) “A Novel Volute Design for Reducing Radial Force in Pump and PAT”, Hamed Alemi Arani (University of Tehran, Iran), Mohammad Fathi (University of Tehran, Iran), Mehrdad Raisee (University of Tehran, Iran), Seyed Ahmad Nourbakhsh (University of Tehran, Iran)

[IAHR2018-224](#) “Radial Hydraulic Machinery Four-Quadrant Performance Curves Dependent on Specific Speed and Applied in Transient Calculations”, Zdravko P. Giljen (Montenegro Electric Company, Montenegro), Milos S. Nedeljkovic (University of Belgrade, Serbia)

[IAHR2018-165](#) “Optimum Design of Low Head Francis Runner to Enhance Performance against Sediment Erosion”, Ujjwal Shrestha (Mokpo National University, Korea), Zhenmu Chen (Mokpo National University, Korea), Young-Do Choi (Mokpo National University, Korea)