



Technical Sessions (Wednesday Morning, September 19)

Wednesday Morning (September 19) 10:10 - 12:10

Ocean Hydro Machinery 1 (RY306)

Chairs: Prof. Mitsumasa Iino (Ashikaga University, Japan), Prof. Bayeul-Lainé Annie-Claude (ENSAM/LMFL Kampe de Feriet, France)

[IAHR2018-160](#) **“A Study of Counter-rotating Impulse Turbine for Wave Energy Conversion - Effect of Middle Vane on the Performance -”**, Manabu Takao (National Institute of Technology, Matsue College, Japan), Kohei Yamada (Shinko Techno Engineering Co., Ltd., Japan), Rintaro Sasaki (National Institute of Technology, Matsue College, Japan), Ashraful Alam (National Institute of Technology, Matsue College, Japan), Shinya Okuhara (National Institute of Technology, Matsue College, Japan), Yoichi Kinoue (Saga University, Japan)

[IAHR2018-161](#) **“Performance Comparison of Turbines for Bi-directional Flow”**, Manabu Takao (National Institute of Technology, Matsue College, Japan), Seisuke Fukuma (National Institute of Technology, Matsue College, Japan), Shinya Okuhara (National Institute of Technology, Matsue College, Japan), Ashraful Alam (National Institute of Technology, Matsue College, Japan), Yoichi Kinoue (Saga University, Japan), Toshiaki Setoguchi (Saga University, Japan)

[IAHR2018-167](#) **“A Study on the Design and Performance Analysis on a Small Pump-turbine System for Ocean Renewable Energy Storage System”**, Ujjwal Shrestha (Mokpo National University, Korea), Patrick Mark Singh (Fiji National University, Fiji), Young Do Choi (Mokpo National University, Korea)

[IAHR2018-251](#) **“Performance of Counter-Rotating Tandem Propellers at Oblique Flow Conditions”**, Nak-Joong Lee (Kyushu Institute of Technology, Japan), Morihito Inagaki (JSE Co., LTD, Japan), Toshiaki Kanemoto (Saga University, Japan)

[IAHR2018-217](#) **“Counter-Rotating Type Tidal Stream Power Unit: Excellent Performance Verified at Offshore Test”**, Isao Samura (Kyowa Engineering Consultants Co., Ltd., Japan), Kazuo Kuwano (Kyowa Engineering Consultants Co., Ltd., Japan), Ryunosuke Kawashima (EIM Electric Co., Ltd., Japan), Taizo Oda (EIM Electric Co., Ltd., Japan), Takumi Imakyurei (EIM Electric Co., Ltd., Japan), Hideyuki Inoue (Eagle Industry Co., Ltd, Japan), Yuuichiro Tokunaga (Eagle Industry Co., Ltd, Japan), Toshiaki Kanemoto (Saga University, Kyushu Institute of Technology, Japan), Kazuyoshi Miyagawa (WASEDA University, Japan), Toshihiko Miwa (Maeda Corporation, Japan), Hiroshi Yamanokuchi (Maeda Corporation, Japan)

[IAHR2018-245](#) **“Optimization of Marine Current Turbines, Using Meta Heuristic Algorithms”**, Mojtaba Tahani (University of Tehran, Iran), Narek Babayan (University of Tehran, Iran), Roshanak Fahimi (University of Tehran, Iran), Kazuyoshi Miyagawa (WASEDA University, Japan), Mohammad Hossein Khozaei (University of Tehran, Iran), Sima Adimi (University of Tehran, Iran)