

Cameron Johnstone

Biography

Cameron Johnstone is a Senior Lecturer in Energy Systems within the Department of Mechanical and Aerospace Engineering; Director of the Energy Systems Research Unit (ESRU), University of Strathclyde; and Chief Executive Officer of Nautricity Limited. He has in excess of 20 years experience in the areas of development and experimental evaluation of new and renewable engineering systems; and the formation of procedures and standards for engineering performance appraisal, benchmarking and optimisation of thermo-fluid mechanics based energy systems. In the context of marine renewables, these have been applied to numerous conceptual tidal energy devices consisting of both oscillating hydrofoils in both vertical and horizontal planes and horizontal axis tidal rotor devices. His tidal energy research focuses on the fluid structure interactions of tidal flows with the power capture interface. This is to develop understanding of: the dynamics induced by stochastic turbulence, wakes, eddy's and wave surge propagation within the tidal flow; the resulting shock loading these induce on tidal rotors; and the development of engineering solutions to mitigate these from inducing rotor failure. His research has attracted funding from UK and Scottish Governments, Scottish Enterprise, UK Dept. of Trade and Industry, Technology Strategy Board, EPSRC and the European Commission. Specific to his tidal energy research, his portfolio includes numerous national and international collaborative research projects, two international patents in relation to next generation tidal energy systems and in excess of 50 publications.