15th ewtec 2023 European Wave and Tidal Energy Conference Series | BILBAO 3rd -7th SEPTEMBER 2023

Wednesday September 6

08:00-09:00 — **Registration** *(Main Hall)* — **08:00-09:00**

09:00-10:30 — Oral presentations

Room /Track	Chairman	Paper ID	Title	Presenter	
Baroja/ Wave device development and testing	Gareth Tomas	291	Simulations of extreme wave load on an oscillating water column wave energy converter	Chris Chartrand	09:00-09:15
		298	On the survivability of WECs through submergence and passive controllers	Elie Al Shami	09:15-09:30
		393	A probabilistic framework for fatigue damage of lift based wave energy converters*	Abel Arredondo-Galeana	09:30-09:45
		382	Preliminary design of an OWC wave energy converter battery charger	D.N. Ferreira	09:45-10:00
		540	Development & performance enhancement of an AUV wave-charging system	Brian Rosenberg	10:00-10:15
		550	A methodology to measure the energy flux captured by a submerged U-OWC by using temperature sensors	Luana Gumari	10:15-10:30
Laboa/ Tidal device development and testing	Gustavo Esteban	137	CFD analysis of hydrodynamic force on a horizontal axis tidal turbine	Kai Xu	09:00-09:15
		150	Dynamic Responses of a 1:5-Scale Ocean Current Energy Converter	Shun-Han Yang	09:15-09:30
		328	The Development of a passive blade-pitch mechanism to reduce the loads on a tidal turbine in high-flow conditions	Thomas Summers	09:30-09:45
		348	Effects of non-isotropic blockage on a tidal turbine modeled with the Actuator-Line method	Enzo Mascrier	09:45-10:00
		400	Intracycle Control Sensitivity of Cross-Flow Turbines	Ari Athair	10:00-10:15
		402	Development of an Unmanned Mobile Current Turbine Platform	Manhar Dhanak	10:15-10:30
Arriaga/ Tidal resource characterization	Cameron Johnstone	258	Validation of the energy resource assessment with experimental data for the site selection of a tidal turbine in the Tagus River estuary.	Bénédicte Hoofd	09:00-09:15
		302	On tidal array layout sensitivity to regional and device model representation	Connor Jordan	09:15-09:30
		457	Resource assessment using a combination of seabed mounted and semi-stationary vessel-mounted ADCP measurements	Eloi Droniou	09:30-09:45
		228	Measurements of tidal flow variability in Ramsey Sound, Pembrokeshire	Jon Miles	09:45-10:00
		171	Investigation of Low Order Parameters Affecting Tidal Stream Energy Resource Assessments	Misha Patel	10:00-10:15
		178	Mapping the Unresolved Tidal Resource in Estuaries	Matt Lewis	10:15-10:30
Oteiza/ Environemental impact and appraisal	Andrea Copping	187	Acoustic Characterization around the CalWave Wave Energy Converter	Kaustubha Raghukumar	09:00-09:15
		214	A conditional probabilistic encounter-impact model for fish-turbine interactions	Jezella Peraza	09:15-09:30
		303	SafeWAVE The contribution of the SafeWAVE EU project to the future development of ocean energy	Juan Bald	09:30-09:45
		623	Automated detection of wildlife in proximity to marine renewable energy infrastructure using machine learning of underwater imagery	David Gold	09:45-10:00
		221	Choose Your Own Marine Energy Adventure Game: Collision Risk	Lenaig Hemery	10:00-10:15
		284	Measurements of the wake from a floating tidal energy platform	Maricarmen Guerra Paris	10:15-10:30

10:30-11:00 — **Refreshments, networking & posters exhibition** *(Terrace and Chillida room)* — **10:30-11:00**

11:00-12:30 — Oral presentations

Room /Track	Chairman	Paper ID	Title	Presenter	
Baroja/ Wave device development and testing	Urko Izquierdo	270	Biofilm prevention in the generator of a direct drive wave energy converter	Nick Baker	11:00-11:15
		330	Hydro-elastic interaction of polymer materials with regular waves	Krishnendu Puzhukkil	11:15-11:30
		380	Degrees of Freedom Effects on a Laboratory Scale WEC Point Absorber	Courtney Beringer	11:30-11:45
		155	Effects of projected wave climate changes on the sizing and performance of OWCs: a focus on the Mediterranean and Atlantic European coastal waters	Irene Simonetti	11:45-12:00
		211	A multi-PTO Wave Energy Converter for Low Energetic Seas: Ensenada Bay Case.	Paulino Meneses Gonzalez	12:00-12:15
		216	Graphene oxide reinforced room-temperature-vulcanising elastomers for flexible wave energy converters	Xinyu Wang	12:15-12:30
Laboa/ Tidal device development and testing	Iñigo Bidaguren	418	Design, Manufacture and Testing of an Open-Source Benchmark Composite Hydrokinetic Turbine Blade	Miguel Gonzale-Montijo	11:00-11:15
		456	Wake characterization of tidal turbines in the Pentland Firth using vessel-mounted ADCP measurements	Marion Huchet	11:15-11:30
		553	Tidal Turbine Benchmarking Project: Stage I - Steady Flow Experiments	S.W. Tucker Harvey	11:30-11:45
		574	Tidal Turbine Benchmarking Project: Stage I - Steady Flow Blind Predictions	Xiaosheng Chen	11:45-12:00
		567	On the design of a small scale tidal converter for long time deployment at sea	Marco Torresi	12:00-12:15
					12:15-12:30
Arriaga/ Tidal resource characterization	Vincenzo Nava	323	Influence of the spatial variation of upstream velocity on a vertical-axis tidal turbine performance	Lilia Flores Mateo	11:00-11:15
		339	Tracking a large vortex at a tidal power site	Philippe Mercier	11:15-11:30
		577	Overview of Resource and Turbine Modelling in the Tidal Stream Industry Energiser project: TIGER	Tim Stallard	11:30-11:45
		165	Evaluating the performance of turbulence closure models for tidal stream resource characterization	Zhaoqing Yang	11:45-12:00
		296	Tidal turbine wake characterization by vessel-mounted ADCP data analysis	Patxi Garcia Novo	12:00-12:15
		299	Estimation and characterisation of the wave-induced turbulent kinetic energy and turbulent dissipation from ADCP data	Clément Calvino	12:15-12:30

12:30-14:00 — **Lunch & posters exhibition** *(Terrace and Chillida room)* — **12:30-14:00**

14:00-15:30 — Oral presentations

Room /Track	Chairman	Paper ID	Title	Presenter	
Baroja/ Wave device development and testing	Iñigo Albaina	263	A Dual Hardware-In-the-Loop (DHIL) platform for testing and validation of WEC subsystems	Giacomo Alessandri	14:00-14:15
		430	Hardware-in-the-loop testing framework for active accumulator wave energy converters	Chen Zeng	14:15-14:30
		354	Multi wave absorber platform design, modelling and testing : Investigating the integration of multiple wave energy absorbers into a floating offshore wind platform considering a future	Niall McLean	14:30-14:45
		481	Analysis of data from the full-scale prototype testing of the WASP – A novel wave measuring buoy.	Brendan Walsh	14:45-15:00
		484	Open Sea Trial of a Wave-Energy Converter at Tuticorin Port – Challenges	Abdus Samad	15:00-15:15
		576	Test rig for submerged transmissions in wave energy converters as a development tool for dynamic sealing systems	Anthon Jonsson	15:15-15:30
Arriaga/ Tidal resource characterization	Rodolfo Olvera-Trejo	390	Turbine fatigue load prediction from field measurements of waves and turbulence	Hannah Mullings	14:00-14:15
		428	Development of a Tool to Optimise Tidal Stream Energy Sites	Paul Evans	14:15-14:30
		467	Assessing wave-turbulence separation from ADCP measurements with artifical flow data	Michael Togneri	14:30-14:45
		478	Multi-criteria analysis to evaluate tidal energy potential in France	Jordi Serret	14:45-15:00
		563	Improved Modelling of Vertical Velocity Profiles at a Tidal Energy Site	Lilli Enders	15:00-15:15
					15:15-15:30
Oteiza/ Environemental impact and appraisal	Juan Bald	220	Siting tidal energy projects through resource characterization and environmental considerations	Andrea Copping	14:00-14:15
		326	ITSASDRONE, an autonomous marine surface drone for fish monitoring around wave energy devices	Ainhize Uriarte	14:15-14:30
		600	Empowering communities to participate in marine energy planning and development	Grace Chang	14:30-14:45
		374	Assessing the effect of onshore and offshore Wave Energy Converters on seafloor integrity combining image-based and acoustic methods	Iñigo Muxika	14:45-15:00
		554	Effects of the spacing between two hydrokinetic turbines on the bedforms by numerical simulations	Sylvain Guillou	15:00-15:15
		675	Underwater noise impact assessment of a wave energy converter in the northern Atlantic (Spain)	José Antonio García	15:15-15:30

15:30-16:00 — **Refreshments, networking & posters exhibition** *(Terrace and Chillida room)* — **15:30-16:00**

16:00-17:30 — Side events

Mitxelena/Side event 7	SafeWAVE project (by AZTI / WavEC)	16:00-17:30
Baroja/Side event 8	Wave Energy Converter Simulator (WEC-Sim) (by SANDIA LAB. -WEC-SIM TEAM-)	16:00-17:30
Arriaga/Side event 9	Environmental monitoring for marine energy – instrumentation for devices and arrays (Ocean Energy Systems – Environmental and Pacific Northwest National Laboratory)	16:00-17:30

20:00-22:00 — Social programme — Gala Dinner (Atrium of the Guggenheim Museum) — **20:00-22:00**