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

Monday September 4

08:00-10:00	**Registration** *(Main Hall)*					08:00-10:00
10:00-10:50	**Opening Ceremony**	**Mitxelena Auditorium**	Jesús M. Blanco	Local Committee Chairman	10:00-10:10	
			Cameron Johnstone	EWTEC Executive Board Chair	10:10-10:20	
			Jose L. Villate	Local Committee Chairman	10:20-10:30	
			Gorka Moreno	Vicerector campus UPV/EHU	10:30-10:40	
			Arantxa Tapia	Basque Government	10:40-10:50	
11:00-12:20	**Keynote lectures** *(Mitxelena Auditorium)*	**Mitxelena Auditorium**	Iñigo Losada	IH-Cantabria	11:00-11:40	
			Andrew Scott	Orbital Marine Power	11:40-12:20	
12:20-12:30	**JRL-ORE**	**Mitxelena Auditorium**	Eider Robles	JRL-ORE	12:20-12:30	
12:30-14:00	**Lunch & posters exhibition** *(Terrace and Chillida room)*					12:30-14:00

		Room /Track	Chairman	Paper ID	Title	Presenter	
14:00-15:30	Oral presentations	**Baroja/ Wave hydrodynamic modelling**	Deborah Greaves	142	Numerical modelling of a box-type and bottom-detached oscillating water column wave energy conversion device: a comparison with experimental data and between BEM and CFD numerical modelling	Vaibhav Raghavan	14:00-14:15
				192	Numerical and experimental studies of the effects of WEC motion on a combined wind-wave energy platform	WeonCheol Koo	14:15-14:30
				265	Fast time-domain model for an array of interactive point-absorbers	Charitini Stavropoulou	14:30-14:45
				547	Farm Layout Optimization of an innovative type of Hybrid Floating Breakwater	Sara Russo	14:45-15:00
				163	A CFD-FEM analysis for Anaconda WEC with mooring lines	Yang Huang	15:00-15:15
				153	CMIP6 wave climate simulation in the European North East Atlantic Basin using WaveWatch III	Ponni Maya	15:15-15:30
		Laboa/ Operations, maintenance and decommissioning	Gregorio Iglesias	173	A method for the growth inhibition of biofouling in Sihwa Tidal Power Plant	SeoYeong Lee	14:00-14:15
				262	Informing Early Design Decisions Through Functional Analysis of Maintenance Drivers: Applications in Marine Renewables	Nathan Algarra	14:15-14:30
				259	Lubrication of offshore mechanical components: towards sustainable & reliable power production	Juan Guillermo Zapita Tamayo	14:30-14:45
				535	SEASNAKE: Impact - Marine operations modelling for evidence-based results detailing the impact of using a new fully dynamic cable design for ocean energy devices.	Ben Kennedy	14:45-15:00
							15:00-15:15
							15:15-15:30
		Arriaga/ Structural mechanics - materials, fatigue, loadings	Claudio Lugni	181	Structural testing and numerical modelling of a glass fibre-reinforced composite demonstrator for turbine blades	Yadong Jiang	14:00-14:15
				469	Antifouling and anticorrosive prevention with ceramic coatings on offshore structures for renewable energy	David Sanchez	14:15-14:30
				389	Understanding the force motion trade off of rigid and hinged floating platforms for marine renewables	Abel Arredondo-Galeana	14:30-14:45
				147	Reducing the uncertainty of ULS load estimates in offshore structural design	Joao Cruz	14:45-15:00
				222	Critical Feature and Seawater Testing of Cross-Flow Rotor Components Fabricated with Additive Manufacturing	Rob Cavagnaro	15:00-15:15
				267	Material characterization of elastomeric bearing elements in Wave Energy Converters	Rimmie Duraisamy	15:15-15:30
		Oteiza/ Grid integration, power take-off and control	John Ringwood	174	Experimental validation of rollout-based model predictive control for wave energy converters on a two-body, taut-moored point absorber prototype	Zechuan Lin	14:00-14:15
				288	Control co-design and uncertainty analysis of the LUPA's PTO using WecOptTool	Carlos Michelen Strofer	14:15-14:30
				396	Tidal barrage operation optimization using moment-based control	Agustina Skiarski	14:30-14:45
				434	Laboratory Tests Assessment of a Mechanical Sensor-less MPPT Control Strategy for Tidal Turbines	Mohammad Rafiei	14:45-15:00
				590	Design considerations for a hybrid wind-wave platform under energy-maximising control	Maria Luisa Celesti	15:00-15:15
				468	Wave Excitation Force Estimation for a Multi-DoF WEC via a Cubature Kalman Filter: Improved Design and Results	Jiamin Zhu	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 1**	**"Supergen ORE Hub Wave and Tidal Energy research and opportunities" (by SUPERGEN-ORE HUB - University of Plymouth)**	16:00-17:30
		Baroja/Side event 2	**"Distributed Embedded Energy Conversion Technology (DEEC-Tec)" (by Wave Energy Scotland / NREL)**	16:00-17:30
		Arriaga/Side event 3	**"Morphing Blades: New-Concept Tidal and Wind Turbine Blades for Unsteady Load Mitigation" (by University of Edinburgh)**	16:00-17:30

		Room /Track	Chairman	Paper ID	Title	Presenter	
17:30-19:00	Oral presentations	**Baroja/ Wave hydrodynamic modelling**	Siming Zheng	152	An Experimental Study for Wave Energy Converter of Wavestar Type using Real-Time Hybrid Model Testing Technique	Yoon-Jin Ha	17:30-17:45
				643	Demonstrating real-time hydrodynamic motion response in force control for regular waves in a robotized dry test rig with a point-absorber WEC	Dana Salar	17:45-18:00
				534	Data-base Hydrodynamic Coefficients Interpolator for Control Co-Design of Wave Energy Converters	Demian Garcia-Violini	18:00-18:15
				261	Review of TEAMER Awards for WEC-Sim Support	Beatrice Battisti	18:15-18:30
				182	Performance Enhancement of Fluidic Diode for a Wave Energy System through Genetic Algorithm	Emeel Kerikous	18:30-18:45
				272	Parametric resonance: a risk to be avoided or an opportunity to be exploited? A case for a 2:1 wave energy converter	Giuseppe Giorgi	18:45-19:00
		Laboa/ Station-keeping, moorings and foundations	Iñaki Zabala	344	Control synthesis via Impedance-Matching in panchromatic conditions: a generalised framework for moored systems	Bruno Paduano	17:30-17:45
				582	Hydrodynamic Response of Mocean Wave Energy Converter in Extreme Waves	John Ashlin Samuel	17:45-18:00
				427	The Dynamic response of floating offshore renewable energy devices: Sensitivity to mooring rope stiffness	Katie Smith	18:00-18:15
				485	Experimental measurements of two elastic taut-slack mooring configurations for the multi-float M4 WEC	Samuel Draycott	18:15-18:30
							18:30-18:45
							18:45-19:00
		Arriaga/ Structural mechanics - materials, fatigue, loadings	Vincenzo Nava	410	Fatigue-life prediction methods of a dynamic power cable for a floating testing platform – a numerical approach	Daniela Benites-Munoz	17:30-17:45
				419	Beta-version Testing and Demonstration of the Design Load Case Generator: A Web-based Tool to Support IEC 62600-2 Standard Design Load Case Analyses	Vincent Neary	17:45-18:00
				490	Fatigue Life Assessment for Wave Energy Converter Mooring Lines under Realistic Wave Climates	Eguzkiñe Martinez	18:00-18:15
				501	A methodology to capture the single blade loads on a cross-flow tidal turbine flume model	Timo Bennecke	18:15-18:30
							18:30-18:45
							18:45-19:00
		Oteiza/ Grid integration, power take-off and control	Jon Lekube	207	A comparison of AC and DC collection grids for marine current energy	Christoffer Fjellstedt	17:30-17:45
				315	Power quality assessment of a wave energy converter using energy storage	Md Imran Ullah	17:45-18:00
				552	Dimensioning and optimization of multi-source offshore renewable energy parks	Anton Schaap	18:00-18:15
				308	A novel proposal of PTO direct-drive linear generator, an Azimuthal Multi-translator Switched Reluctance Machine (AMSRM): mechanical, characterization and performance tests.	Marcos Lafoz	18:15-18:30
				375	Observer-Based Fault Estimation Applied to a Point Absorber Wave Energy Converter	Guglielmo Papini	18:30-18:45
				394	Control of multiple PTOs in single OWC's air chambers	Juan Portillo	18:45-19:00

20:00-22:00	**Social programme**	**Pintxos Route**	20:00-22:00