

PRELIMINARY PROGRAMME

for the 15th European Wave & Tidal Energy Conference

BILBAO 
3rd -7th SEPTEMBER 2023

15th ewtec 2023
European Wave and Tidal
Energy Conference Series

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3rd -7th SEPTEMBER 2023

Tracks:	THM: Tidal hydrodynamic modelling	WDD: Wave device development and testing	ONM: Operations, maintenance and decommissioning	ESP: Economical, social, legal and political aspects of ocean energy
	WHM: Wave hydrodynamic modelling	GPC: Grid integration, power take-off and control	TDD: Tidal device development and testing	SMF: Station-keeping, moorings and foundations
	EIA: Environmental impact and appraisal	WRC: Wave resource characterization	TRC: Tidal resource characterization	SMM: Structural mechanics - materials, fatigue, loadings

Important Note: The Organizing Committee of the EWTEC'23 reserves the right to modify this program at any time according to the circumstances

08:00-10:00	Monday September 4					08:00-10:00		
	Registration (Main Hall)							
10:00-10:50	Opening Ceremony	Mixelena Auditorium	Jesús M. Blanco	Local Committee Chairman	10:00-10:10	10:00-10:50		
			Cameron Johnstone	EWTEC Executive Board Chair	10:10-10:20			
			Jose L. Villate	Local Committee Chairman	10:20-10:30			
			Gorka Moreno	Vicerektor campus UPV/EHU	10:30-10:40			
			Aranxa Tapia	Basque Government	10:40-10:50			
11:00-12:20	Keynote lectures (Mixelena Auditorium)	Mixelena Auditorium	Iñigo Losada	IH-Cantabria	11:00-11:40	11:00-12:20		
			Andrew Scott	Orbital Marine Power	11:40-12:20			
12:20-12:30	JRL-ORE	Mixelena Auditorium	Eider Robles	JRL-ORE	12:20-12:30			
12:30-14:00	Lunch & posters exhibition (Terrace and Chillida room)					12:30-14:00		
14:00-15:30	Oral presentations	Baroja/ Wave hydrodynamic modelling	Deborah Greaves	Paper ID	Title	Presenter		
				142	Numerical modeling 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 modeling	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	
		Laboa/ Operations, maintenance and decommissioning	Gregorio Iglesias	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	
				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 Algarrá	14:15-14:30	
				259	Lubrication of offshore mechanical components: towards sustainable & reliable power production	Juan Guillermo Zapata Tamay	14:30-14:45	
		Arriaga/ Structural mechanics - materials, fatigue, loadings	Claudio Lugni	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	
				181	Structural testing and numerical modeling 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	
		Oteiza/ Grid integration, power take-off and control	John Ringwood	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	James McVey	15:00-15:15	
				267	Material characterization of elastomeric bearing elements in Wave Energy Converters	Rimmie Duraisamy	15:15-15:30	
				174	Experimental validation of rollout-based model predictive control for wave energy converters on a two-body, fast-moored point absorber prototype	Zechuan Lin	14:00-14:15	
		15:30-16:00	Refreshments, networking & posters exhibition (Terrace and Chillida room)	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 Skjarski	14:30-14:45	
				434	Laboratory Tests Assessment of a Mechanical Sensorless 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			
		16:00-17:30	Side events	Mixelena/Side event 1	"Supergen ORE Hub Wave and Tidal Energy research and opportunities" (by SUPERGEN-ORE HUB - University of Plymouth)			
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			
17:30-19:00	Oral presentations	Baroja/ Wave hydrodynamic modelling	Siming Zheng	Paper ID	Title	Presenter		
				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	
		Laboa/ Station-keeping, moorings and foundations	Iñaki Zabala	182	Performance Enhancement of Fluidic Diode for a Wave Energy System through Genetic Algorithm	Emeel Kenikous	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	
				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	
		Arriaga/ Structural mechanics - materials, fatigue, loadings	Vincenzo Nava	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	
				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	
		Oteiza/ Grid integration, power take-off and control	Jon Lekube	490	Fatigue Life Assessment for Wave Energy Converter Mooring Lines under Realistic Wave Climates	Eguzkike Martinez	18:00-18:15	
				501	A methodology to capture the single blade loads on a cross-flow tidal turbine Rume model	Timo Bennecke	18:15-18:30	
							18:30-18:45	
							18:45-19:00	
				207	A comparison of AC and DC collection grids for marine current energy	Christoffer Fjellstedt	17:30-17:45	
		20:00-22:00	Social programme	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 Lafzo	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	Pintxos Route					20:00-22:00

Wednesday September 6						
Registration (Main Hall)						08:00-09:00
Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
	Baroja/ Wave device development and testing	Martyn Hann	291	Simulations of extreme wave load on an oscillating water column wave energy converter	Nhu Nguyen	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 Gurnari	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	Ani 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	Larissa Perez	09:30-09:45
			228	Measurements of tidal flow variability in Ramsey Sound, Penobscot Bay	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/EIA	Juan Bald	187	Acoustic Characterization around the CalWave Wave Energy Converter	Kaustubha Raghumkar	09:00-09:15
			214	A conditional probabilistic encounter-impact model for fish-turbine interactions	Jezella Peraza	09:15-09:30
			220	Siting tidal energy projects through resource characterization and environmental considerations	Andrea Copping	09:30-09:45
			623	Automated detection of wildlife in proximity to marine renewable energy infrastructure using machine learning of underwater imagery	McKenzie Love	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
Refreshments, networking & posters exhibition (Terrace and Chillida room)						10:30-11:00
Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
	Baroja/ Wave device development and testing	Jochen Weber	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 Gonzalez-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	R.H.J. Wilden	11:45-12:00
			567	On the design of a small scale tidal converter for long time deployment at sea	Damiano Alizzio	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 Modeling in the Tidal Stream Industry Energiser project: TIGER	Edward MacKay	11:30-11:45
			165	Evaluating the performance of turbulence closure models for tidal stream resource characterization	Zhaoping 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
Lunch & posters exhibition (Terrace and Chillida room)						12:30-14:00
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 m	Nial McLean	14:30-14:45
			481	Analysis of data from the full-scale prototype testing of the WASP – A novel wave measuring b	Brendan Walsh	14:45-15:00
			484	Open Sea Trial of a Wave-Energy Converter at Tutuotui Port – Challenges	Abdus Samad	15:00-15:15
			576	Test rig for submerged transmissions in wave energy converters as a development tool for dyn	Anthon Jonsson	15:15-15:30
	Arriaga/ Tidal resource characterization	Luke Blunden	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
			432	Principles of ADCP deployment methodologies	Penny Jeffcoat	14:30-14:45
			467	Assessing wave-turbulence separation from ADCP measurements with artificial flow data	Michael Togneri	14:45-15:00
			478	Multi-criteria analysis to evaluate tidal energy potential in France	Florian Castillo	15:00-15:15
			563	Improved Modeling of Vertical Velocity Profiles at a Tidal Energy Site	Lilli Enders	15:15-15:30
	Oteiza/ Environmental impact and appraisal	Andrea Copping	303	SafeWAVE: The contribution of the SafeWAVE EU project to the future development of ocean energy	Juan Bald	14:00-14:15
			326	ITSASDRONE, an autonomous marine surface drone for fish monitoring around wave energy c	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 co	Iñigo Muxika	14:45-15:00
			554	Effects of the spacing between two hydrokinetic turbines on the bedforms by numerical simulat	Fatima Khaled	15:00-15:15
			675	Underwater noise impact assessment of a wave energy converter in the northern Atlantic (Spa	José Antonio Garcia	15:15-15:30
Refreshments, networking & posters exhibition (Terrace and Chillida room)						15:30-16:00
Side events	Mixelena/Side event 7	"SUPPORTING THE FUTURE OF OCEAN ENERGY HERE AND NOW; A GLIMPSE OF BASQUE PUBLIC INITIATIVES TO FOSTER SECTOR SCALE-UP" (by EVE)				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	"Instrumentation for Environmental Monitoring around Marine Energy Devices" (by Coastal Science Division-PNNL and WavEC)				16:00-17:30
Social programme	Gala Dinner (Atrium of the Guggenheim Museum)					20:00-22:00

	Thursday September 7						
08:00-09:00	Registration (Main Hall)						08:00-09:00
09:00-10:30	Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
		Laboa/ Grid integration, power take-off and control	Joao Henriques	472	A time domain approach for the optimal control of wave energy converter arrays	Mohamed Shabara	09:00-09:15
				493	Optimization of Air turbines for OWC Wave Energy Converters: Sensitivity of Realistic Wave Climates	Ander Zarketa-Astigarraga	09:15-09:30
				500	Integrated hydrodynamic-electrical hardware model for wave energy conversion with M4 ocean demonstrator	Judith Apsley	09:30-09:45
				409	On data-based control-oriented modelling applications in wave energy systems	Edoardo Pasta	09:45-10:00
				592	The Performance evaluation of 30kW class OWC wave power plant integrated with breakwater	Kilwom Kim	10:00-10:15
				161	Investigation on the extreme peak mooring force distribution of a point absorber wave energy converter with and without a survivability control system	Zahra Shahroozi	10:15-10:30
		Arriaga/ Wave resource characterization	Pasquale Contestabile	140	Analysis of the North Atlantic offshore energy flux from different reanalysis and hindcasts	Matias Alday	09:00-09:15
				175	Wave Spectral Analysis for designing Wave Energy Converters	Jesus Portilla-Yandun	09:15-09:30
				275	Long term wave load trends against offshore monopile structures: A case study in the Bay of Biscay	Nahia Martinez-Iruricastillo	09:30-09:45
				279	Numerical modeling of wave and tidal current interactions and their impact on wave parameters	Tian Tan	09:45-10:00
				205	On the errors in annual energy yield estimation due to monodirectional wave spectra assumption	Giulia Cervelli	10:00-10:10:30
				305	Validation of ERA5 Wave Energy Flux through Sailor diagram in Spain (2005-2014)	Jon Saenz	10:15-10:30
		Oteiza/ Economical, social, legal and political aspects of ocean energy	Pablo Ruiz-Minguela	154	Do recent renewable energy policy changes in Ireland satisfy the requirements of a nascent wave energy technology development sector?	Carrie Anne Barry	09:00-09:15
				157	Integration of wave energy into Energy Systems: an insight to the system dynamics and ways forward	George Lavidas	09:15-09:30
				306	Can Risk-Based Approaches benefit future Marine Renewable Energy deployment, planning and consenting processes?	Emma Verling	09:30-09:45
				351	Towards increased social acceptability of marine renewable energy	Niall P. Dunphy	09:45-10:00
				362	Environmental Effects of MRE: Advancing the Industry through Broad Outreach and Engagement	Mikaela Freeman	10:00-10:15
		397	Informing development of a socioeconomic data collection toolkit for marine energy: a literature review	Deborah Rose	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	453	The Impact of Uncertainty on the Control of a Multi-Axis Wave Energy Converter	Carrie Hall	11:00-11:15
				531	Spectral control co-design of wave energy converter array layout	Yeral Peña-Sanchez	11:15-11:30
				548	A new seawater low-head turbine for the OBREC	Pasquale Contestabile	11:30-11:45
				549	Experimental investigation on the hydrodynamic performance of a pile-supported OWC-type breakwater	Yusuf Almalki	11:45-12:00
				661	Weight Reduction Methodologies for Wave Energy Devices: A Structural Analysis Approach	Michael O'Shea	12:00-12:15
		Laboa/ Grid integration, power take-off and control	Eider Robles	215	Wave Farms Integration in a 100% renewable isolated small power system: frequency stability and grid compliance analysis	Marcos Blanco	11:00-11:15
				309	Wave-to-Wire Control of an Oscillating Water Column Wave Energy System Equipped with a Wells Turbine	Marco Rosati	11:15-11:30
				510	Maximizing Wave Energy Converter Power Extraction by Utilizing a Variable Negative Stiffness Magnetic Spring	Jeff T. Grasberger	11:30-11:45
				561	Development of control strategies for novel systems of a full scale OWC for the WEDUSEA project	James Kelly	11:45-12:00
				346	Enhancing energy system resilience using tidal stream energy	Danny Coles	12:00-12:15
		Arriaga/ Wave resource characterization	Jesús M. Blanco	551	Analysis of Ocean Energy Integration in Ibero-American Electric Grids	Marcos Lafoz	12:15-12:30
				529	Impact of Resource Uncertainties on the Design of Wave Energy Converters	Markel Peñalba	11:00-11:15
				539	Discussions on Wave energy period in higher wave energy potential marine waters of Taiwan	Shiaw-Yih Tang	11:15-11:30
				159	Internal waves: A potentially untapped marine energy resource	Kastubha Raghukumar	11:30-11:45
				197	Feasibility of wave energy harvesting in the Ligurian Sea	Ismael Alejandro Corrales-González	11:45-12:00
		Oteiza/ Economical, social, legal and political aspects of ocean energy	Peter Frigaard	378	Identification of optimal sites for the deployment of wave energy converters: the importance of a technology-centred approach	Riccardo Novo	12:00-12:15
				558	Operating and Extreme weather conditions for testing Offshore Devices at Marine Renewable Energy Lab (MaRELab)	Pasquale Contestabile	12:15-12:30
				398	Techno-economic analysis of marine hybrid clusters in two potential Latin American markets	Emilian Gorr-Pozzi	11:00-11:15
				399	Techno-economic Optimization of an Offshore Hybrid Power System: Mid-Atlantic Shelf Break Case Study	Sarah Palmer	11:15-11:30
				452	Ensuring Resilience in Ocean Energy Power Plants: A Survey of Cybersecurity Measures	Thalita Nazare	11:30-11:45
340	On the complementarity of wave, tidal, wind and solar resources in Ireland	Hafiz Ashan Said	11:45-12:00				
281	Empowering Communities to Participate in Marine Energy Planning and Development	Grace Chang	12:00-12:15				
335	A Comparison of the European Regulatory Framework for the deployment of Wave Energy Converters	Claudio Moscoloni	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	Tony Lewis	350	Performance enhancement of pitching WECs via oscillating water columns technology	Marco Fontana	14:00-14:15
				357	Numerical investigation of the energy performance of a wave energy converter comprising a m	Félix Elefant	14:15-14:30
				395	Hybrid wind-wave systems: The case of the VoltumUS-S semi-submersible platform	Maximilian Hengstmann	14:30-14:45
				439	Analysis of the viability of a radial Double Decker Turbine for application in Oscillating Water	Ado Vega-Valladares	14:45-15:00
				445	An Early Design Phase Method for Characterizing and Comparing Wave Energy Converter An	Aeron Roach	15:00-15:15
		Arriaga/ Wave energy	Jose L. Villate	564	Upsampling wave temporal resolution: Investigating wave parameters and the ir	Hannah Mankie	14:00-14:15
				619	On spatial interpolation of ocean energy source variables: A comparative analys	Leonardo Gambarelli	14:15-14:30
				584	Numerical Study on Overtopping Performance of Multi-stage Overtopping Wave	Guoliang Zhang	14:30-14:45
				475	The application of temporal gating in the measurement of response amplitude of	Ben Cazzolato	14:45-15:00
				310	Analysis of the impact of floater interactions on the power extraction of a dense V	Alva Bechlenberg	15:00-15:15
		Oteiza/ Economical, social, legal and political aspects of ocean energy	James Benhin	507	Ocean Energy: Markets – Currency – Impact. Dimension of & Choices in the Technology Development Stage	Jochem Weber	14:00-14:15
				223	Using human-centered design to develop a national research landscape for marine energy in the United States	Samantha Quinn	14:15-14:30
				385	Choosing Wave Energy Devices for Community Led Marine Energy Development	Molly Grear	14:30-14:45
388	A Socioeconomic, Environmental, and Regulatory Assessment for Current Energy Converter Technologies			Dominic Forbush	14:45-15:00		
413	Plotting wind and wave energy technologies: applications, synergies and role in decarbonization in Portugal	Craig White	15:00-15:15				
436	Wave energy communication and social opposition: can we improve perception of ocean energy development projects?	Maria C. Uyarra	15:15-15:30				
15:40-16:15	Closing ceremony	Mitxelena Auditorium	Jesús M. Blanco	Local Committee	15:40-15:45		
			Jose L. Villate	Local Committee	15:45-15:50		
			Iñigo Ansola	Chair EVE	15:50-15:55		
			Bruce Cameron	Chair PAMEC 2024	15:55-16:00		
			C H Jo	Chair AWTEC 2024	16:00-16:05		
			Cameron Johnstone	EWTEC Executive Board	16:05-16:10		
			Luis Gato	IST Lisbon (Chair of EWTEC'25)	16:10-16:15		
16:30-20:30	Social programme	Technical visits: Option 1: MUTRIKU Option 2: BIMEP					16:30-20:30
21:00-22:30	Technical programme	(Executive Board Meeting and Dinner)					21:00-22:30

Paper ID	Title of the poster	Authors' List
342	Vortex induced vibrations of marine risers: validating turbulence models	Chang, Wang; Antonis Vakis; Arthur Veldman; Eize, Stamhuis
313	Grid value of co-located offshore renewable energy	Erik, Jonasson; Irina, Temiz
545	Preliminary performance assessment from towing tank testing of a horizontal-axis turbine	David, Lande-Sudall; Sondre, Tollefsen; Kjetil, Gravelsæter; Harald, Moen; Jan Bartl
377	Life Cycle Assessment of a wave energy device – LiftWEC	Paula, Bastos; Fiona, Devoy-McAuliffe; Abdel, Arredondo-Galeana; Julia Chozas; Paul, Lamont-Kane; <u>Pedro, Almeida Vinaagre</u>
184	Experimental passive and reactive control of a Laboratory Scale WEC Point Absorber	Bret, Bosma; Courtney, Beringer; Bryson, Robertson;
586	Combining offshore wind and wave energy to supply a big size desalination plant	Beatriz, Del Rio Gamero; Julieta, Schallenberg Rodríguez; Pedro, Suarez Arocha
422	Design, installation, capacities and expenses of an indoor multipurpose modular 2D wave flume and <u>circulating water channel</u>	Iñigo, Bidaguren; Natalia, Montalban; Urko, Izquierdo; Iñigo, Albaina; Alberto, Peña; Egoitz, Urtaran; Jesus <u>Maria, Blanco</u>
483	New design options for the improvement of the Mutriku power plant	Urko, Izquierdo; Iñigo, Bidaguren; Gustavo Adolfo, Esteban; Miguel Angel, Gomez Solaeche; Juan Luis <u>Larrabe; Jesus Maria, Blanco</u>
578	Experimental Optimization Environment for Developing an Intracycle Pitch Control in Cross Flow Turbines	Stefan, Hoemer; Roberto, Leidhold; Shokoofeh, Abbaszadeh; Karla, Ruiz-Hussmann; Timo, Bennecke; <u>Zhao, Zhao; Christian-Tora, Weber; Pierre-Luc, Delafin;</u>
441	Increase in power generation by calculating maximum amount of drainage water using a real-time water level prediction A.I.	HeeJin, Kwack; SungHun, Lee; ByunJoon, Jun; SangJun, Min; JeonA, Baek; SeoYeong, Lee
570	Assessment of tidal energy resources in the Strait of Magellan in southern Chile	Leandro, Suarez Atias; Cristian, Escarriaza; Megan Williams; Maricarmen, Guerra;
387	Quality Function Deployment methodology as a tool for sustainable design of ocean technologies	Selef Farcia Orozco
325	Marine Renewable Energies and Maritime Spatial Planning: different national proposals for their legal and <u>spatial context</u>	Iratxe Mentxaka; Ibon Galparsoro; Emma Verling; Inés Machado; Enored LebBourhis; Thomas Soulard; Juan Bald
542	A Filtering device for improving the quality of cooling water in turbine generator of Sihwa Tidal Power Plant	Taekyun Kim; Hee Jin Kwak; Jee Hun Bang; Mosol Kim; Bem sug Kim
276	A new type of wave tank: prototype and proof of concept	Joannes Berque; Iñigo Zarate; Jesus Maria Blanco; Iñigo Bidaguren; Imanol Touzon; Luisa Fernandez
488	Comparison of physics-based and machine learning methods for phase-resolved prediction of waves <u>measured in the field</u>	Jialun Chen; Thobani Hlophe; Wenhua Zhao; Ian A. Milne; David Gunawan; Adi Kumiawan; Hyg Wolgamot; <u>Paul H. Taylor; Jana Orszaghova</u>
170	Wave Excitation Tests on a Fixed Sphere: Comparison of Physical Wave Basin Setups	Jacob Andersen; Morten Bech Kramer
368	Development of the Exowave Oscillating Wave Surge Converter	Sarah Krogh Iversen; Jacob Andersen; Lars Wigant; Peter Frigaard