

PRELIMINARY PROGRAMME

for the 15th European Wave & Tidal Energy Conference

BILBAO 
3rd -7th SEPTEMBER 2023

	Day 1 Sunday September 3	Day 2 Monday September 4	Day 3 Tuesday September 5				Day 4 Wednesday September 6				Day 5 Thursday September 7				Day 6 Friday September 8					
08:00-08:30	Bus departure to Getxo Regatta	Registration (Main Hall)	Registration (Main Hall)				Registration (Main Hall)				Registration (Main Hall)					08:00-08:30				
08:30-09:00																08:30-09:00				
09:00-09:30			Oral presentation WDD	Oral presentation TDD	Oral presentation WHM	Oral presentation THM	Oral presentation WDD	Oral presentation TDD	Oral presentation TRC	Oral presentation EIA	Oral presentation WDD	Oral presentation GPC	Oral presentation WRC	Oral presentation ESP		09:00-09:30				
09:30-10:00																09:30-10:00				
10:00-10:30	Regatta La mar en calma Sailing School in Getxo (10:00-15:00h)	Opening Ceremony (Mixelena Auditorium)	Refreshments, networking & posters exhibition (Terrace and Chillida room)											Social programme Guided tour through the river by BILBOATS	10:00-10:30					
10:30-11:00													10:30-11:00							
11:00-11:30		Keynote lectures + JRL-ORE (Mixelena Auditorium)	Oral presentation WDD	Oral presentation TDD	Oral presentation WHM	Oral presentation THM	Oral presentation WDD	Oral presentation TDD	Oral presentation TRC	Oral presentation EIA	Oral presentation WDD	Oral presentation GPC	Oral presentation WRC		Oral presentation ESP	11:00-11:30				
11:30-12:00													11:30-12:00							
12:00-12:30													12:00-12:30							
12:30-13:00													12:30-13:00							
13:00-13:30													13:00-13:30							
13:30-14:00													13:30-14:00							
14:00-14:30		Oral presentation WHM	Oral presentation ONM	Oral presentation SMM	Oral presentation GPC	Oral presentation WDD	Oral presentation TDD	Oral presentation WHM	Oral presentation THM	Oral presentation WDD	Oral presentation TDD	Oral presentation TRC	Oral presentation EIA		Oral presentation WDD	Oral presentation GPC	Oral presentation WRC	Oral presentation ESP	14:00-14:30	
14:30-15:00		Bus returning to Bilbao													14:30-15:00					
15:00-15:30		Refreshments, networking & posters exhibition (Terrace and Chillida room)											Closing Ceremony				15:00-15:30			
15:30-16:00																	15:30-16:00			
16:00-16:30		Side event 1	Side event 2	Side event 3		Side event 4	Side event 5	Side event 6		Side event 7	Side event 8	Side event 9		Technical visits: Option 1: MUTRIKU Option 2: BIMEP				16:00-16:30		
16:30-17:00																		16:30-17:00		
17:00-17:30													17:00-17:30							
17:30-18:00	2 Buses departing to Olatua Building Getxo Cruise Terminal every 30 minutes (around 6 buses)	Oral presentation WHM	Oral presentation SMF	Oral presentation SMM	Oral presentation GPC	Oral presentation WDD	Oral presentation SMM	Oral presentation WHM	Oral presentation THM									17:30-18:00		
18:00-18:30										Opening of the galleries of the Museum (exclusive for Delegates)				18:00-18:30						
18:30-19:00														18:30-19:00						
19:00-19:30	Welcome Reception (Olatua Building Getxo Cruise Terminal) Registration available			Technical Committee Meeting (Elhuyar room)								(Executive Board Meeting and Dinner)				19:00-19:30				
19:30-20:00																19:30-20:00				
20:00-20:30		Social programme Pintxos Route		(Track Directors Dinner)												20:00-20:30				
20:30-21:00																20:30-21:00				
21:00-21:30																21:00-21:30				
21:30-22:00																21:30-22:00				
22:00-22:30	All Buses returning to Bilbao												Gala Dinner (Atrium of the Guggenheim Museum)				22:00-22:30			
22:30-23:00																	22:30-23:00			
23:00-23:30																	23:00-23:30			

Colour code:	Olatua Building	Mitxelena (440 pax)	Main Hall	Barandiarán (16 pax)	Elhuyar (24 pax)	Chillida (220 m2)	Oteiza (60 pax)	Terrace (800+400 m2)	Baroja (160 pax)	Laboa (110 m2)	Arriaga (60 pax)
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Important Note: The Organizing Committee of the EWTEC'23 reserves the right to modify this program at any time according to the circumstances

		Monday September 4							
08:00-10:00		Registration (Main Hall)					08:00-10:00		
10:00-10:50		Opening Ceremony	Mixelena 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 (Mixelena Auditorium)	Mixelena Auditorium	Iñigo Losada	IH-Cantabria	11:00-11:40			
	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	Room /Track	Chairman	Paper ID	Title	Presenter			
		Baroja/ Wave hydrodynamic modelling	Deborah Greaves	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 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	CMP6 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 Salvador Sanz Sanchez	14:15-14:30		
				389	Understanding the force motion trade off of rigid and hinged floating platforms for marine renewables	Abel Arredondo-Galeano	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	Rimma Durgitskaya	15:15-15:30		
				Oteiza/ Grid integration, power take-off and control	John Ringwood	174	Experimental validation of robot-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 Skarski	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	Mixelena/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		
17:30-19:00	Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter			
		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 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		
		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 MM WEC	Samuel Draycott	18:15-18:30		
							18:30-18:45		
							18:45-19:00		
		Arriaga/ Structural mechanics - materials, fatigue, loadings	Vincenzo Nava (consultar)	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 62500-2 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	Eguzkita 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 Lafos	18:15-18:30				
375	Observer-Based Fault Estimation Applied to a Point Absorber Wave Energy Converter			Giulielmo 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		

		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	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	
		Laboa/ Tidal device development and testing	Gustavo Esteban	550	A methodology to measure the energy flux captured by a submerged U-OWC by using temperature sensors		Luana Gumari	10:15-10:30	
				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	
		Arriaga/ Tidal resource characterization	Cameron Johnstone	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	
				258	Validation of the energy resource assessment with experimental data for the site selection of a tidal turbine in the Tagus River estuary		B��d��dice 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	
		Oteiza/EIA	Juan Bald	228	Measurements of tidal flow variability in Ramsey Sound, Pembroke-shire		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 Unexploited Tidal Resource in Estuaries		Matt Lewis	10:15-10:30	
				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	
				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	
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	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	
		Laboa/ Tidal device development and testing	I��igo Bidaguren	216	Graphene oxide reinforced room-temperature-vulcanising elastomers for flexible wave energy converters		Xinyu Wang	12:15-12:30	
				418	Design, Manufacture and Testing of an Open-Source Benchmark Composite Hydrokinetic Turbine Blade		Miguel Gonz��lez-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	
		Arriaga/ Tidal resource characterization	Vincenzo Nava	567	On the design of a small scale tidal converter for long time deployment at sea		Damiano Allizzio	12:00-12:15	
								12:15-12:30	
				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 Engineer project: TIDER		Edward MacKay	11:30-11:45	
				165	Evaluating the performance of turbulence closure models for tidal stream resource characterization		Zhaoying 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		Cl��ment 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	I��igo 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		Nial 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 Tuticorn Port - Challenges		Abdus Samad	15:00-15:15	
		Arriaga/ Tidal resource characterization	Luke Blunden	576	Test rig for submerged transmissions in wave energy converters as a development tool for dynamic sealing systems		Anthon Jonsson	15:15-15:30	
				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	
		Oteiza/ Environmental impact and appraisal	Andrea Copping	478	Multi-criteria analysis to evaluate tidal energy potential in France		Florian Castillo	15:00-15:15	
				563	Improved Modelling of Vertical Velocity Profiles at a Tidal Energy Site		Lilli Enders	15:15-15:30	
				303	SafeWAVE The contribution of the SafeWAVE EU project to the future development of ocean energy		Juan Bald	14:00-14:15	
				326	ITSADROONE, 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		I��igo Muxika	14:45-15:00	
				554	Effects of the spacing between two hydrokinetic turbines on the bedforms by numerical simulations		Fatima Khaled	15:00-15:15	
				675	Underwater noise impact assessment of a wave energy converter in the northern Atlantic (Spain)		Jos�� Antonio Garc��a	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	"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 Instrumentation for Environmental Monitoring around Marine Energy Devices" (by Coastal Science Division-PNNL and WaveC)				16:00-17:30		
20:00-22:00	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			
				493	Optimisation of Air turbines for OWC Wave Energy Converters: Sensitivity of Realistic Wave Climates	Ander Zarketa-Astigarraga			
				500	Integrated hydrodynamic-electrical hardware model for wave energy conversion with MM ocean demonstrator	Judith Apsley			
				409	On data-based control-oriented modelling applications in wave energy systems	Edoardo Pasta			
				592	The Performance evaluation of 30kW class OWC wave power plant integrated with breakwater	Kilwom Kim			
				161	Investigation on the extreme peak mooring force distribution of a point absorber wave energy	Zahra Shahroozi			
		Arriaga/ Wave resource characterization	Pasquale Contestabile	140	Analysis of the North Atlantic offshore energy flux from different reanalysis and hindcasts	Matias Alday			
				175	Wave Spectral Analysis for designing Wave Energy Converters	Jesus Portilla-Yandun			
				275	Long term wave load trends against offshore monopile structures: A case study in the Bay of Biscay	Nahia Martinez-Irujoastillo			
				279	Numerical modelling of wave and tidal current interactions and their impact on wave parameters	Tian Tan			
				205	On the errors in annual energy yield estimation due to monodirectional wave spectra assumption	Giulia Cervelli			
				305	Validation of ERA5 Wave Energy Flux through Sakov diagram in Spain (2005-2014)	Jon Saez			
		Oteiza/ Economic, 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			
				157	Integration of wave energy into Energy Systems: an insight to the system dynamics and ways forward	George Lavidas			
				306	Can Risk-Based Approaches benefit future Marine Renewable Energy deployment, planning and consenting processes?	Emma Verling			
				351	Towards increased social acceptability of marine renewable energy	Niall P. Dunphy			
				362	Environmental Effects of MRE: Advancing the Industry through Broad Outreach and Engagement	Mikaela Freeman			
				397	Informing development of a socioeconomic data collection toolkit for marine energy: a literature review	Deborah Rose			
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			
				531	Spectral control co-design of wave energy converter array layout	Yeraí Peña-Sanchez			
				548	A new seawater low-head turbine for the OBREC	Pasquale Contestabile			
				549	Experimental investigation on the hydrodynamic performance of a pile-supported OWC-type breakwater	Yusuf Almalki			
				661	Weight Reduction Methodologies for Wave Energy Devices: A Structural Analysis Approach	Michael O'Shea			
		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			
				309	Wave-to-Wire Control of an Oscillating Water Column Wave Energy System Equipped with a Wells Turbine	Marco Rosati			
				510	Maximizing Wave Energy Converter Power Extraction by Utilizing a Variable Negative Stiffness Magnetic Spring	Jeff T. Grasberger			
				561	Development of control strategies for novel systems of a full scale OWC for the WEDUSEA project	James Kelly			
				346	Enhancing energy system resilience using tidal stream energy	Danny Coles			
		Arriaga/ Wave resource characterization	Jesús M. Blanco	551	Analysis of Ocean Energy Integration in Ibero-American Electric Grids	Marcos Lafoz			
				529	Impact of Resource Uncertainties on the Design of Wave Energy Converters	Markel Peñaalba			
				539	Discussions on Wave energy period in higher wave energy potential marine waters of Taiwan	Shiaw-Yih Tang			
				159	Internal waves: A potentially untapped marine energy resource	Kastubha Raghukumar			
				197	Feasibility of wave energy harvesting in the Ligurian Sea	Manuel Corrales-González			
		Oteiza/ Economic, 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	Ricardo Novo			
				558	Operating and Extreme weather conditions for testing Offshore Devices at Marine Renewable Energy Lab (MaRELab)	Pasquale Contestabile			
				398	Techno-economic analysis of marine hybrid clusters in two potential Latin American markets	Emilian Gorr-Pozzi			
				399	Techno-economic Optimization of an Offshore Hybrid Power System: Md-Atlantic Shelf Break Case Study	Sarah Palmer			
				452	Ensuring Resilience in Ocean Energy Power Plants: A Survey of Cybersecurity Measures	Thailita Nazare			
		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
357	Numerical investigation of the energy performance of a wave energy converter comprising a multi-body power take-off						Félix Elefant		
395	Hybrid wind-wave systems: The case of the VoltumUS-S semi-submersible platform						Maximilian Hengstmann		
439	Analysis of the viability of a radial Double Decker Turbine for application in Oscillating Water Column devices						p Vega-Valladares		
445	An Early Design Phase Method for Characterizing and Comparing Wave Energy Converter Archetypes						Aeron Roach		
Arriaga/ Wave energy	Jose L. Villate				564	Upsampling wave temporal resolution: Investigating wave parameters and the influence on WEC power performance	Hannah Mankle		
					619	On spatial interpolation of ocean energy source variables: A comparative analysis	Leonardo Gambarelli		
					584	Numerical Study on Overlapping Performance of Multi-stage Overlapping Wave Energy Converters	Guoliang Zhang		
		475			The application of temporal gating in the measurement of response amplitude operators	Ben Cazzolato			
		310			Analysis of the impact of floater interactions on the power extraction of a dense WEC array with adaptable nonlinear PTD	Alva Bechlenberg			
Oteiza/ Economic, social, legal and political aspects of ocean energy	James Benhin	507			Ocean Energy: Markets – Currency – Impact: Dimension of & Choices in the Technology Development Space	Jochem Weber			
		223			Using human-centered design to develop a national research landscape for marine energy in the United States	Samantha Quinn			
		385			Choosing Wave Energy Devices for Community Led Marine Energy Development	Molly Grear			
		388			A Socioeconomic, Environmental, and Regulatory Assessment for Current Energy Converter Technologies	Dominic Forbush			
		413			Floating wind and wave energy technologies: applications, synergies and role in decarbonization in Portugal	Craig White			
15:40-16:15	Closing ceremony	Mixelena 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 EWTEC25)	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 Atlas; 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