

PAT18 is the Spanish Association of Naval Architects and Marine Engineers' working group on Marine Renewables (ENERMAR).

PAT18 organizes the 9<sup>th</sup> Edition of its Technical Sessions which, under the motto "The sea and renewable energies. The contribution of the Naval Architecture and Marine Engineering", will be hold in Seville, Spain, by June, 28<sup>th</sup> and 29<sup>th</sup>.

These Technical Sessions, already in their 9<sup>th</sup> Edition, focus on the introduction of the new markets that are being opened to the local industry; opportunities arisen from the ambitious programs of introduction of this kind of clean energies all around the world.

It will provide practical answers from utilities, manufacturers, EPCs, technological centers, shipyards, ship owners, certification bodies, etc... , both Spanish and international, attending the event.

Besides, it will create the right environment for the networking naval sector needs on the Marine Renewables (ENERMAR) sector.

A key aspect underlying the creation of these Sessions and the very PAT18 is its call for GENERATING EXCITEMENT in young generations of engineers and any sort of professionals, showing ENERMAR as an innovative, interesting and promising professional exit.



Ingenieros Navales y  
Oceánicos de España

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TECHNICAL SESSIONS  
ON  
NAVAL ENGINEERING  
PAT18



## 9<sup>th</sup> Technical Sessions

**"The sea and renewable energies"**

The contribution of the Naval Architecture and  
Marine Engineering.

Venue: Pabellón de México, Paseo de las Delicias, Sevilla, Spain.

Date: June, 28<sup>th</sup> and 29<sup>th</sup>.

Time: 08:00 AM

ASOCIACIÓN DE INGENIEROS NAVALES Y OCEÁNICOS DE ESPAÑA  
COLEGIO OFICIAL DE INGENIEROS NAVALES Y OCEÁNICOS

JUNE, 28<sup>TH</sup>

8 AM	<b>REGISTRATION</b>	11:30 AM	<b>ROUND TABLE</b> <b>Installation and exploitation of offshore wind farms : Prospects in Andalucía.</b> D. Jose Juan Alonso . Universidad de Cádiz. Representative of MAGTEL. D. Antonio Jara Vera. Technical Advisor in Ministry of Industry, Tourism and Trade. Representative of The Junta de Andalucía. Representative of an environmental NGO.	9:35 AM	<b>BREAK</b>
8:30 AM	<b>WELCOME AND OPENING CEREMONY</b> D. Luis Vilches. AINE's President Andalucia government representative TBC) D. José Guadix Martín. CEO of Knowledge Transfer at the University of Sevilla. D. Jesús Alonso. President of AINE in Andalucía. D. Juan Moya. PAT 18 Chairman			9:45 AM	<b>PANEL 4 : The “before”, the “throughout” and the “after” of an offshore wind farm</b> <b>The task of certification of an offshore wind project and the classification of their auxiliary vessels.</b> Jaime Pancorbo & Javier González. Bureau Veritas. <b>Swirl project. Modular oceanic platform and advanced multifunctional systems for offshore operations.</b> Igor Blanco. Ghenova. <b>Sustainable decommissioning of an offshore wind farm.</b> Eva Topham. DNV-GL.
9 AM	<b>PANEL 1 : New offshore hybrid technologies</b> <b>Hybrid Plataforms - A new breed.</b> Antonio Luis García . Independent Consultant <b>First step on the study of a renewable energy hybrid platform.</b> María José Legaz, Universidad de Cádiz & Javier Fernández, Enerocean. <b>Blackbird: Hybrid CAES Storage Mono-TLP VAWT WEC.</b> Christopher Golightly. Geotechnical and Engineering Geology Consultant.	1 PM	<b>DEPARTURE TOWARDS CÁDIZ BY BUS</b>	10:45 AM	<b>COFFEE BREAK</b>
9:55 AM	<b>BREAK</b>	2:30 PM	<b>LUNCH.</b> Navantia shipyard.Puerto Real, Cádiz.	11:15 AM	<b>PANEL 5 : Wave and tidal technology</b> <b>SEA-TITAN Power Take-Off.</b> F. G. Lorenzo, A. S. Nieto. Wedge Global. <b>Sea currents energy converter platform.</b> Alberto Sisí. Sea Master. <b>Harnessing tidal stream power – Ride the tide.</b> Marlène Moutel. Sabella
10:05 AM	<b>PANEL 2 : Marine structures</b> <b>Engineering, procurement and construction of offshore converter platforms.</b> Rafael García. DragadosOffshore. <b>Optimization of metallic structures for wind power sector.</b> Rodrigo Gallardo. GRI. <b>Application of concrete caisson-based solutions for the offshore wind market.</b> José Landete, Javier Abanades & Carlos García. TYPSA.	3:30 PM	<b>GUIDED VISIT TO PUERTO REAL SHIPYARD</b> Visit to the Navantia Puerto Real Museum. Presentation of the Iberdrola's <i>East Anglia One</i> (UK) offshore wind farm's SE. by Antonio Fernández Pardo & Cándido Alonso. Navantia. Panoramic visit to the dock where the EA One's SE and jacket are being built.		
11 AM	<b>COFFEE BREAK</b>	6:30 PM	<b>RETURN TO SEVILLA</b>	12:10 PM	<b>BREAK</b>
		9:30 PM	<b>Networking cocktail on the roof top patio of the Cámara de Comercio de Sevilla.</b>	12:15 PM	<b>PANEL 6 : Future of floating offshore wind.</b> <b>Hydraulic pump for windpower converters.</b> Andrea Novás. Rotary Wave. <b>Short draft SPAR platform for floating offshore windturbines.</b> Santiago de Guzmán. Seaplace. <b>FLOW project: Development of a floating windturbine for its full scale demonstration.</b> Raúl Rodríguez. Nautilus (Tecnalia).
			<b>JUNE, 29<sup>TH</sup></b>	1:15 PM	<b>CONCLUSIONS AND CLOSING CEREMONY</b> Institutional Representative (TBC)
		8:30 AM	<b>PROJECT PRESENTATION.</b> 4 <sup>th</sup> ENERMAR Contest winner project	1:40 PM	<b>FAREWELL LUNCH</b>
		8:40 AM	<b>PANEL 3 : O&amp;M activities</b> <b>Risk-based maintenance of offshore wind sub-structures.</b> Pablo G. Morato. University of Liège, Belgium. <b>Active Maintenance Scheduling Support Based on Mesoscale Day-ahead Power Forecasts for Large Offshore Wind Farms.</b> Lloyd's Register. <b>Marine Energies' Floating Devices' Access Systems (SAFE).</b> Álvaro Rodríguez. CTC.		