



Near shore marine research with low
emission medium size vessels

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1. Role of small to medium-sized plug-in hybrid vessels
2. R/V CIM UVIGO:
a successful partnership
capabilities Significance
3. R/V CIM UVIGO
Implications for a Marine Research Center

1. Role of small to medium-sized plug-in hybrid vessels

Environmental Sustainability	Reduced emissions of greenhouse gas emissions & carbon footprint More accurate & less intrusive research in near-shore ecosystems
Operational Efficiency	cost-Effectiveness energy Efficiency
Technological Integration	same advanced Sensors and Equipment same data collection and real-time análisis
Accessibility and Versatility	Near-Shore Research ⁹ Multidisciplinary Use
Support Decade of Ocean Science	

2. The R/V CIM-UVIGO

- | | |
|-------------|--|
| 2021 | CIM applies for national funding to construct a 20 m hybrid propulsion vessel coastal oceanographic research
low operational costs and high environmental respect.
acquisition of high-quality data for multidisciplinary and competitive research |
| 2022 | Public tender
won by Rodman Polyships |
| 2023 | Construction
Sea tests, special permits |
| 2024 | Fiting of hydaulic sytems
Application for equipment |



2. The R/V CIM-UVIGO

First in Spain First professional vessel built in Spain with plug-in hybrid propulsión solar panels with polycrystalline cells and two wind turbines

Budget € 1.5 million
funded by the State Research Agency
Next Generation funds

Dimensions 19.5 meters in length
5.4 meters in beam

Shipyard Rodman Polyships
Moaña

Purpose Strengthens Vigo and Galicia's position in coastal oceanographic research, address critical social challenges climate change, fishing, biodiversity, risk management

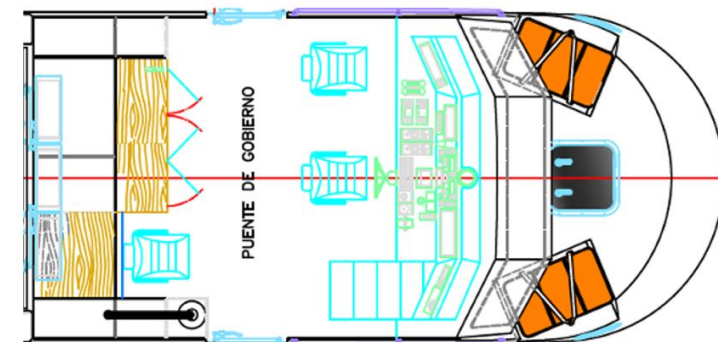
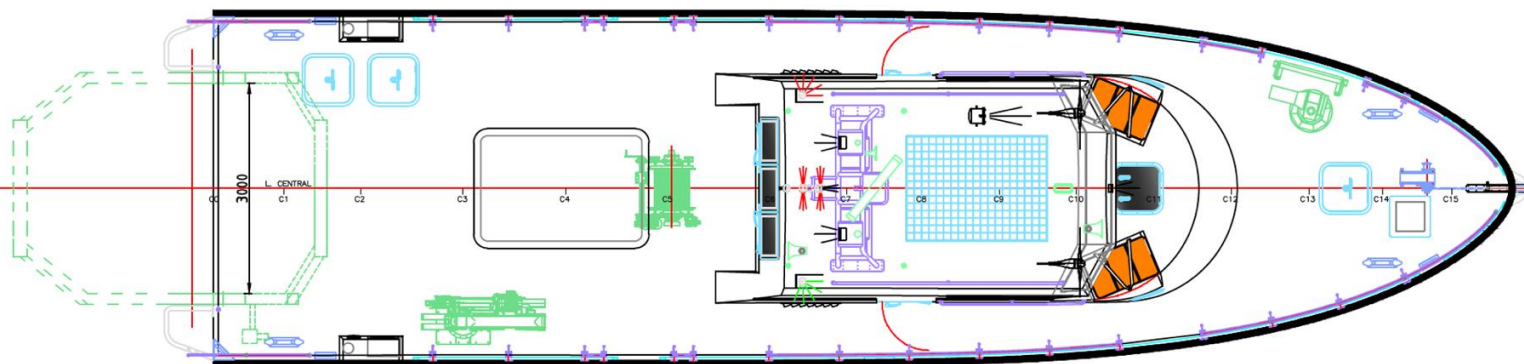
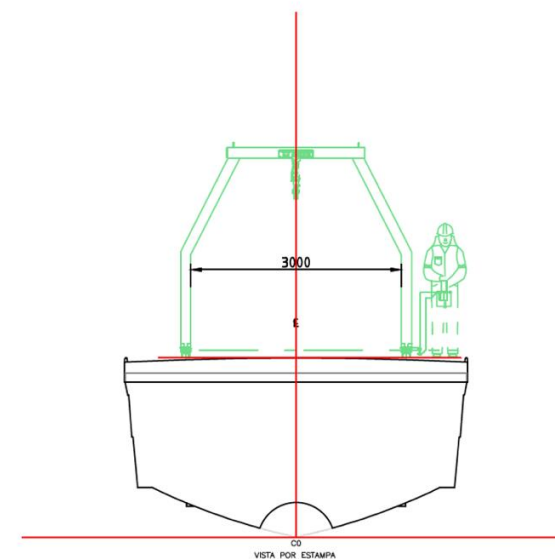
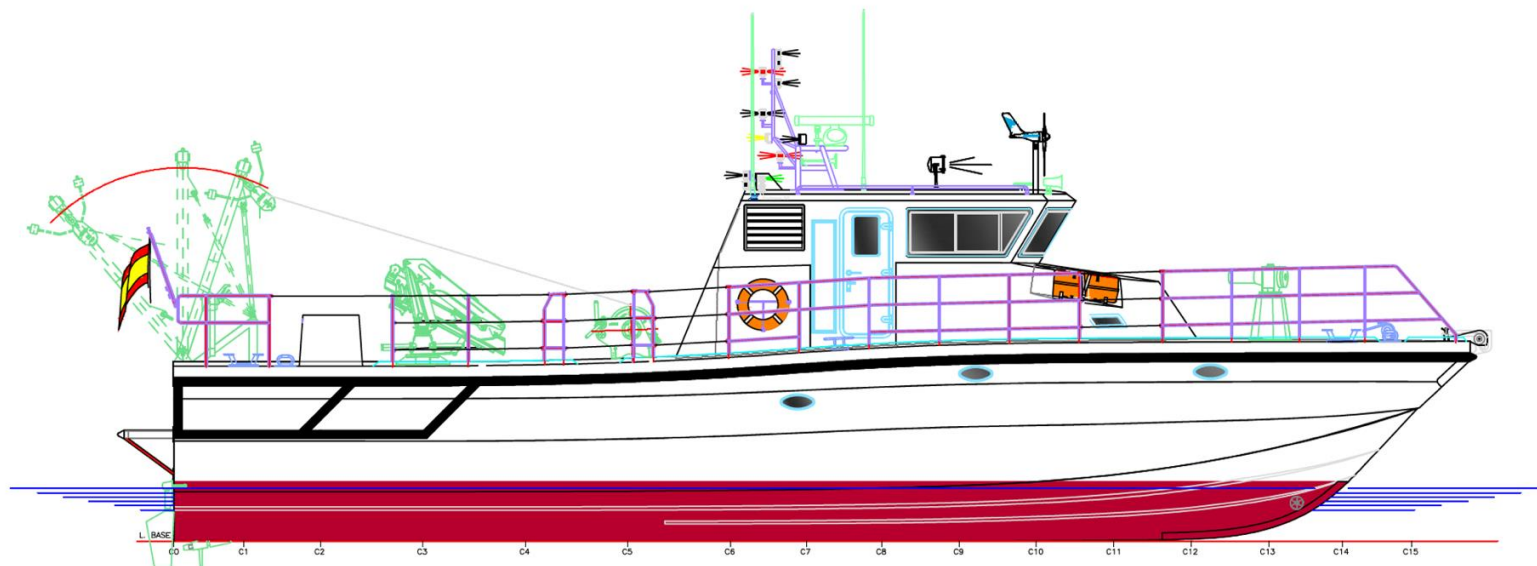


2. The R/V CIM-UVIGO

Deck	side crane, aft gantry & winch deployment of heavy equipment like rosettes, corers, nets
Materials	hull and deck of fiberglass-reinforced polyester wooden working deck
Below Deck	Accommodation area, laboratory, tanks, and engine room
Crew	12
Living Area	cabin with 4 bunk beds full bathroom Laboratory, dining area with kitchen

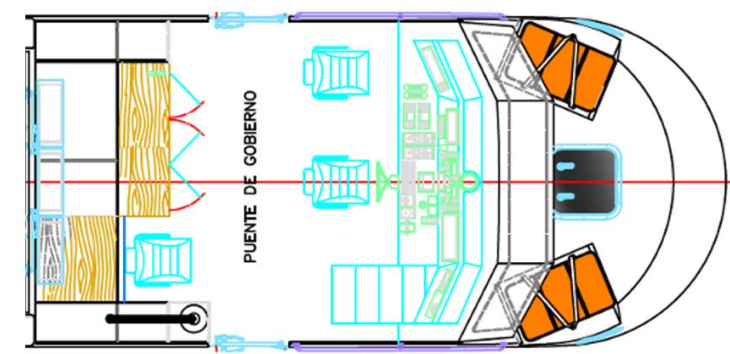
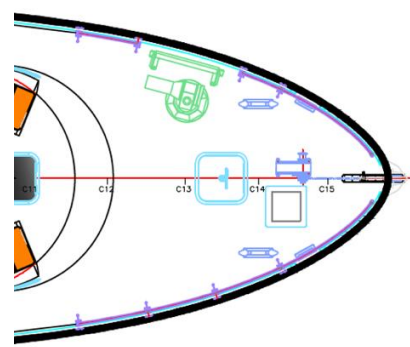
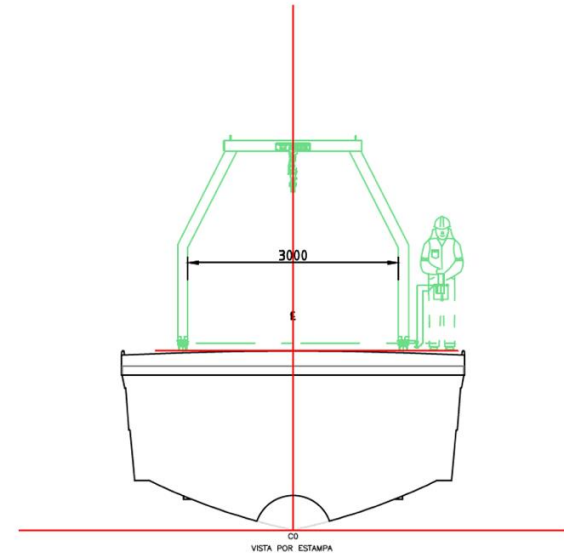
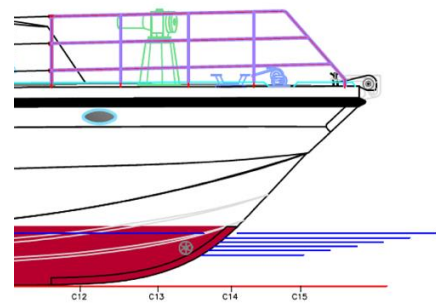


2. The R/V CIM-UVIGO



Description	Measurement
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Total Length	19.50 meters
Hull Length	18.50 meters
Total Beam	5.10 meters
Height to Main Deck (side)	2.50 meters
Maximum Loaded Draft	0.72 meters
Fuel Capacity	2 x 2,400 liters
Fresh Water Capacity	500 liters
Crew	12persons
Propulsion Power	BAUDOUIN 6M26-3 (559 kW) 810 HP @ 2100 rpm
Gearbox	TK700 (2.591:1)
Propulsion System	Shaft Line
	23 kW @ 288V - 810 rpm
Electric Power	TRANSFLUID
Generator Power	/ max power 40 kW
Max Speed @ 100% MCR	28 kW
Cruising Speed	15 knots
Range @ 15 knots	12 knots
Range @ 12 knots	615 (41 hours)
Range @ 11 knots	840 (70 hours)
	935 (85 hours)







3. Implications for the Marine Research Center (CIM-Uvigo)

Sust & Environ Stewardship Alignment with Environmental Goals:

Leadership in Green Technology:

Cutting-edge R&D

Enhanced Research Capabilities:

Interdisciplinary Research Support:.

**Operational Efficiency &
Cost Management**

Economic Viability

Energy Management

**Strategic Partnerships &
Collaborations**

Industry Collaboration

International Projects and Funding

**Educational &
Training Opportunities**

Student Engagement and Training

Public Awareness and Outreach

**Support Decade Of Ocean
Science**

Contributing to Global Goals

address critical social challenges

climate change, fishing, biodiversity,

risk management



CIM
Centro de Investigación Mariña
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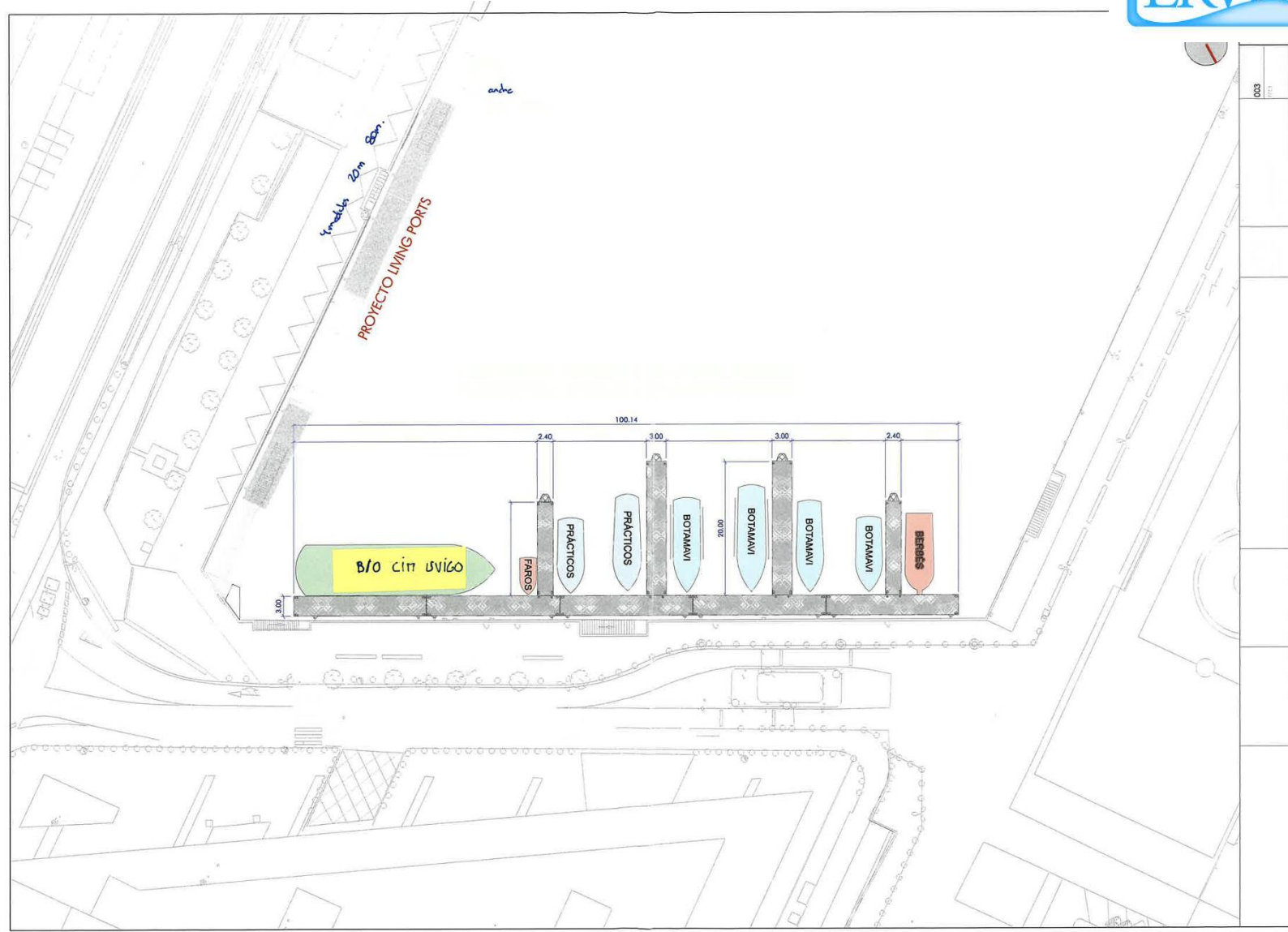
The End
thanks for your attention!

CIM
Centro de Investigación Mariña
Universidade de Vigo



O Centro de Investigación Mariña incorpora os estándares do selo HRS4R
e apoia os Obxectivos de Desenvolvemento Sostible e a Década dos Océanos





SCIENTISTS meet ARTISTS

SCIENTISTS meet ARTISTS



Promovido por
Universidade de Vigo

Puerto de Vigo
Autoridad Portuaria de Vigo

Observando el Océano

Conocer y comprender la influencia del océano en nosotros, y nuestra influencia en el océano, es crucial para vivir y actuar de forma sostenible. Para ello necesitamos información sobre su estado, qué cosas los componen y qué procesos tienen lugar en ellos. Este mural representa la variedad de técnicas, métodos y datos que utilizamos para recabar esta información sobre nuestros mares y océanos, es decir, sobre la hidrosfera. Los mares y océanos no son entidades aisladas y por lo tanto para su estudio la observación oceánica abarca también las otras esferas con las que interactúan: la litosfera, la atmósfera, la exosfera, y por supuesto, los seres vivos que habitan en ellos, es decir, la biosfera. Solo entendiendo la compleja interconexión de estos elementos, podemos avanzar significativamente en el conocimiento y cuidado de los océanos y su impacto en el medio ambiente global.

Para avanzar en nuestro conocimiento de los océanos, es esencial disponer de datos sobre su estado, así como de sus diferentes componentes, y de los procesos que en ellos ocurren. Este mural representa la variedad de técnicas, métodos y datos que utilizamos para recabar esta información sobre nuestros mares y océanos, es decir, sobre la hidrosfera. Los mares y océanos no son entidades aisladas, y por tanto la observación oceánica incluye también las otras esferas con las que interactúan: la litosfera, la atmósfera, la exosfera y, por supuesto, los seres vivos que habitan en ellos, es decir, la biosfera.

In order to advance in our knowledge of the oceans, it is essential to have data about their state, their different components, and the processes that occur in them. This mural represents the set of techniques, methods and data that we use to study the seas and oceans, the hydrosphere. Seas and oceans are not isolated elements, and therefore Ocean Observation also includes the other spheres with which they interact: the lithosphere, the atmosphere, the exosphere and, of course, the living beings that inhabit them: the biosphere.

La Observación Oceánica es el pilar fundamental sobre el que se apoya nuestro progreso en investigación marina.

¿Qué es SCIENTISTS ?

Scientists meet Artists es una iniciativa promovida y liderada por la Universidad de Vigo a través del Campus do Mar creada como lugar de encuentro y diálogo entre dos disciplinas muy diversas: la Ciencia y el Arte, con el objetivo de que el conocimiento del medio marino llegue a la sociedad de formas innovadoras, rigurosas y cargadas de emoción.

Scientists meet Artists is an initiative promoted and led by the University of Vigo through the Campus do Mar created as a meeting place and dialogue between two very different disciplines: Science and Art, with the aim of bringing knowledge of the marine environment to society in innovative, rigorous and emotionally charged ways.

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El artista: Delio Rodríguez Ces @DeliorCes

+ info



Licenciado en Bellas Artes por la Universidad de Vigo, incursiona en la intervención de espacio público nos años 90, co fundando el graffiti en Galicia. A sus obras murales en gran formato pertenece escaparates y ciudades de Galicia e de resto de España, así como en Portugal, Italia, México e Ecuador.

A graduate in Fine Arts from the University of Vigo, he began to intervene in public spaces in the 90s, with the emergence of graffiti in Galicia. His large-format mural work can be seen in cities in Galicia and the rest of Spain, as well as in Portugal, Italy, Mexico and Ecuador.



Cofinanciado por la Unión Europea



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