Search for a Spanish Partner for a Bilateral R&D Project

Organization	
Date of Request:	02/03/2026
Company name:	Amity University Dubai / University of Wollongong in Dubai
Contact person and title/ designation:	Dr. Vishal Naranje — Associate Professor & Programme Leader, Mechanical Engineering
E-mail:	vnaranje@amityuniversity.ae
Phone number:	+971 050 105 8061
Mobile number:	+971 050 105 8061
Website:	**https://amityuniversity.ae/**

SECTION 1: Entity launching the partner search *(Please give brief / to the point explanations. For more explanation on any point below, you may add a short paragraph as an annexure, with this document.)*	
Sector	Higher Education, Applied R&D — Robotics, Artificial Intelligence, Marine Technology, Environmental Engineering
Entity mission or core functions	Advancing applied research in robotics, AI, and intelligent systems to address real-world urban and environmental challenges in Dubai and the broader UAE/MENA region.
Date of establishment	Amity University Dubai: 2010 | University of Wollongong in Dubai: 1993
Ownership (if public and traded, add stock exchange and ticker symbol)	
Total number of employees	200+
Number of employees in R&D	8
Key products sold or services provided	Education
Entity core technical competences	Mechanical design & prototyping; AI/ML (hierarchical architectures); digital twin simulation; XR/mixed reality interfaces; sensor fusion (LIDAR, sonar, optical); amphibious vehicle design; environmental engineering

Key R&D programs and activities	Dubai Sea Lion (amphibious robotics); prior funded projects in robotics, renewable energy, additive manufacturing, and IoT systems
Examples of accomplishments	80+ publications, H-index 10, 8 patents (PI); 100+ publications (Co-PI); Prior funding from AICTE, BITS Pilani, Amity University Dubai; consultancy with SKF Bearings, Star Cement UAE
Company strategic orientation	Commercialise the Dubai Sea Lion platform for export to MENA, Asia and Europe; build Emirati IP in AI-robotics; establish a model for university-industry R&D in the Gulf region

SECTION 2: Spanish Company Profile *(Please provide a brief summary of the prospective partner company or organization. This summary may address some or all of the points below)*	
Profile of ideal technology partner	A Spanish SME or mid-size company with proven R&D capabilities in underwater/marine robotics, AI, digital twin technology, or XR/autonomous systems. Must have capacity and interest in international R&D collaboration with UAE entities.
Core technological competencies and expertise	One or more of: (1) Underwater ROV / AUV design and manufacturing; (2) AI-driven autonomous navigation and obstacle avoidance; (3) Digital twin simulation platforms for robotics; (4) XR / Mixed Reality control interfaces; (5) Multi-sensor fusion (sonar, LIDAR, optical, acoustic); (6) Marine-grade mechanical design and materials
Other essential qualifications (e.g.: ownership, track records etc.)	track records
If you have a list of companies with whom you are in contact or interested in contacting, please provide contact details	These are the following companies we are interested in: 1) **Nido Robotics** It Spain's leading underwater ROV startup with direct experience in search & rescue, marine inspection, and autonomous navigation **Contact Info:** a) www.nidorobotics.com b) portal.nidorobotics.com 2) **IQUA Robotics** They have experience with building AUVs such as their SPARUS II AUV. IQUA Robotics is a university spin-off with deep expertise in autonomous underwater navigation which is directly relevant to the Sea Lion's AI navigation module **Contact Info** a) Tel: +34 972 183 311 b) www.iquarobotics.com

	3) **Robotnik Automation** Robotnik is one of Spain's leading mobile robotics companies with specific expertise in multi-terrain autonomous navigation and search & rescue applications which is directly relevant to the Sea Lion's amphibious ground mobility module **Contact Info** a) www.robotnik.eu b) info@robotnik.eu c) Tel: +34 96 147 54 00 4) **PAL Robotics** PAL Robotics has state-of-the-art expertise in AI-based robot control and XR teleoperation, which maps directly to the Sea Lion's XR controller and Hierarchical AI objectives **Contact Info** a) www.pal-robotics.com b) info@pal-robotics.com c) Tel: +34 93 414 53 47 5) **GMV Innovating Solutions** GMV is one of Spain's premier technology companies with specific expertise in digital twins and autonomous systems. Relevant for the digital twin training environment component of the Sea Lion **Contact Info** a) www.gmv.com b) info@gmv.com c) Tel: +34 918 072 100
If you are interested in collaboration: please specify details and other important information you want to share with a potential company	The Dubai Sea Lion is an AI-powered amphibious robotic system designed to operate seamlessly across flooded and dry urban environments for search and rescue, infrastructure inspection, and marine ecosystem monitoring (Project Ref: 2025/DRDI0516). The system integrates omnidirectional underwater propulsion, articulated ground locomotion, multi-sensor fusion, a hierarchical AI control architecture, and an XR tele-operation interface via Oculus Quest 3. The project is funded by the Dubai RDI Programme (AED 1,466,430, 36 months) and is currently at TRL 4–6, targeting applied research and prototype validation. We are looking to connect with a researcher or R&D team in Spain who could contribute to strengthening the scientific novelty of the project and help identify potential commercial applications and exploitation pathways for the technology. Collaboration would be formalised through the CDTI 13th Unilateral Call for

	Bilateral Technological Cooperation Projects. We welcome an initial conversation to explore areas of mutual interest and would be happy to share the full technical brief and project documentation upon request.
Interested areas of collaboration	Joint R&D on amphibious robot design, AI control systems, digital twin development, and XR tele-operation interface; potential co-development of IP; joint validation trials in UAE marine environments
Specific R&D contribution you are seeking/offering	Spanish partner to lead or co-develop one or more of: underwater propulsion system design, autonomous navigation AI module, digital twin simulation framework, XR/Oculus interface integration, or marine-grade sensor integration

Signature
Name: Dr. Vishal Naranje
Date: 02-03-2026