

breaking the surface ²⁰¹⁴

6th International Interdisciplinary Field Training of Marine Robotics and Applications

5th - 12th October 2014

ILIRIJA RESORT HOTELS, BIOGRAD NA MORU, CROATIA

Monday, 6th OCTOBER

9:00-9:45	OPENING SESSION		
9:45-10:30	MAROB 1 MORPH project Thomas Glotzbach, Ilmenau Technical University (Germany)		
10:30-10:45	COFFEE BREAK		
10:45-11:30	MAROB 2 Underwater communications: fundamentals, challenges and trends Joao Alves, Centre for Maritime Research and Experimentation (Italy)		
11:30-12:15	MAROB 3 Cognitive autonomous diving buddy - CADDY FP7 project Nikola Mišković, Faculty of Electrical Engineering and Computing (Croatia)		
12:15-13:00	T1 INTRO 3D Mapping in Marine Environments Andreas Birk, Jacobs University (Germany)		
13:00-14:30	LUNCH		
14:30-15:00	COMPANY PRESENTATION VideoRay		
15:00-16:00	GROUP 1 T1 hands-on	GROUP 2 DEMO FP7 CADDY	GROUP 3 DEMO VideoRay
16:00-17:00	GROUP 2 T1 hands-on	GROUP 3 DEMO FP7 CADDY	GROUP 1 DEMO VideoRay
17:00-18:00	GROUP 3 T1 hands-on	GROUP 1 DEMO FP7 CADDY	GROUP 2 DEMO VideoRay
19:30-20:30	DINNER		

Tuesday, 7th OCTOBER

9:00-9:45	MARBIO 2 Autonomous underwater vehicles for marine research: what are scientists looking for? Marina Carreiro Silva, University of the Azores (Portugal)		
9:45-10:30	MARCH 1 A Platypus, a Typhoon, and 10,000 years of Civilization: field-testing the first generation of autonomous vehicles built for underwater archaeology Bridget Buxton, University of Rhode Island (USA)		
10:30-10:45	COFFEE BREAK		
10:45-11:30	MARSEC 1 ICARUS Project: Sensor Suite Integration and Implementation of Autonomous Behaviors on Unmanned Surface Vehicles for Search and Rescue Operations at Sea Stefano Fioravanti, Centre for Maritime Research and Experimentation (Italy)		
11:30-12:15	MARGE 1 Climate change, sea-level rise and coastal flooding Mirko Orlić, Faculty of Science (Croatia)		
12:15-13:00	T2 INTRO Hovering AUVs for inspection and intervention Marc Carreras, University of Girona (Italy)		
13:00-14:30	LUNCH		
14:30-15:00	COMPANY PRESENTATION Evologics		
15:00-16:00	GROUP 1 T2 hands-on	GROUP 2 DEMO AUV SeaCat	GROUP 3 DEMO Evologics
16:00-17:00	GROUP 2 T2 hands-on	GROUP 3 DEMO AUV SeaCat	GROUP 1 DEMO Evologics
17:00-18:00	GROUP 3 T2 hands-on	GROUP 1 DEMO AUV SeaCat	GROUP 2 DEMO Evologics
19:30-20:30	DINNER		

Wednesday, 8th OCTOBER

9:00-9:45	MARBIO 3 Seabed habitat mapping Sergej Olenin, Klaipeda University (Lithuania)		
9:45-10:30	MARCH 2 It's not what you do it's the way that you do it: A comparison between high-resolution geophysical wreck survey techniques Martin Dean, School of History, University of St Andrews (Scotland)		
10:30-10:45	COFFEE BREAK		
10:45-11:30	MAROB 4 Coordinated Aerial, Surface and Underwater measurements using Networked Robotic Control José Pinto, University of Porto (Portugal)		
11:30-12:15	MAROB 5 Exploring the frontier of cooperative marine robotics: Motion planning, navigation, and control Antonio Pascoal, University of Lisbon (Portugal)		
12:15-13:00	MARCH 4 Recent Development of the Gnalić Shipwreck Project Irena Radić Rossi, University of Zadar (Croatia)		
13:00-14:30	LUNCH		
14:30-15:00	T3 INTRO A Laser Tracker System for Fast and Precise Relative Localisation of Marine Robots Thomas Glotzbach, Ilmenau Technical University (Germany)		
15:00-16:00	GROUP 1 T2 analysis	GROUP 2 T3 hands-on	GROUP 3 DEMO ROV ROMEO
16:00-17:00	GROUP 2 T2 analysis	GROUP 3 T3 hands-on	GROUP 1 DEMO ROV ROMEO
17:00-18:00	GROUP 3 T2 analysis	GROUP 1 T3 hands-on	GROUP 2 DEMO ROV ROMEO
19:30-20:30	DINNER		

Thursday, 9th OCTOBER

9:00-9:45	MARSEC 2 Techniques and Results for Munitions Assessments Margo Edwards, University of Hawaii (USA)		
9:45-10:30	MARCH 3 Marine Technology, Archaeology, and Dangerous Landscapes John Jensen, Woods Hole and University of Rhode Island (USA)		
10:30-10:45	COFFEE BREAK		
10:45-11:30	MAROB 6 Performance Indices for Evaluation and Comparison of Unmanned Marine Vehicles' Guidance Systems Enrica Zereik, National Research Council (Italy)		
11:30-12:15	MAROB 7 THESAURUS and ARROWS: trying to do something useful for underwater archaeologists Benedetto Allotta, University of Florence (Italy)		
12:15-13:00	T4 intro Satellite remote sensing for seafloor mapping and water quality monitoring Anders Knudby, Simon Fraser University (Canada)		
13:00-14:30	LUNCH		
14:30-15:00	T5 INTRO Remote Presence: Long Endurance Robotic Systems for Routine Inspection of Offshore Subsea Oil & Gas Installations and Marine Renewable Energy (MRE) Devices Edin Omerdić, University of Limerick (Ireland)		
15:00-16:00	GROUP 1 T5 hands-on	GROUP 2 DEMO FP7 ARROWS	GROUP 3 T4 hands-on
16:00-17:00	GROUP 2 T5 hands-on	GROUP 3 DEMO FP7 ARROWS	GROUP 1 T4 hands-on
17:00-18:00	GROUP 3 T5 hands-on	GROUP 1 DEMO FP7 ARROWS	GROUP 2 T4 hands-on
19:30-20:30	DINNER		

Friday, 10th OCTOBER

9:00-9:45	MAROB 8 Discovering the Sea: New Frontiers in Data Gathering and Analysis David Scaradozzi, Marche Polytechnic University (Italy)		
9:45-10:30	MARCH 5 The challenge of documenting and recovering artifacts from shallow underwater ancient sites situated along the Israeli Mediterranean coastline Jacob Sharvit, Underwater Archaeology Unit of the IAA (Israel)		
10:30-10:45	COFFEE BREAK		
10:45-11:30	MARBIO 4 Quantitative video analysis for benthic study Andrea Gori, The Scientific Centre of Monaco (Monaco)		
11:30-12:15	MAROB 9 Challenges and Advances in Geophysical Navigation of Underwater Robotic Vehicles Francisco Curado, University of Lisbon (Portugal)		
12:15-13:00	MAROB 10 Flow sensing: new opportunities in robotics and biology Maarja Kruusmaa, Tallin University of Technology (Estonia)		
13:00-14:30	LUNCH		
14:30-18:00	STUDENT PRESENTATIONS		
19:30-20:30	DINNER AND CLOSING CEREMONY		

Saturday, 11th OCTOBER

9:00-16:00 **FIELD TRIP**

Supported by
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HOSTING MORPH SUMMER SCHOOL

MORPH

