





6th European Conference on Scientific Diving TU Bergakademie Freiberg

21 & 22 April 2021

Freiberg, Germany

Programme

Wednesday, April 21, 2021			
8:45- 9:00	Broder Merkel/ Tobias Fieback		Opening 6th ECSD 2021
1	Session	Biology	Chairperson Franz Brümmer
09:00 - 09:15	Franz Brümmer	University of Stuttgart / IBBS / Research Unit Biodiversity & Scientific Diving, Germany	Monitoring the invasive quagga mussel by recreational divers in a citizen science project
09:20 - 09:35	Thanos Dailianis	Hellenic Centre for Marine Research	Contrasting sponge assemblages between distinct coastal locations in Crete Island, Aegean Sea
09:40 - 09:55	Pieter van der Linden	University of Porto	3D printed Artificial Reef deployment in the Portuguese Atlantic coast: preliminary results post-deployment bio- assessment demonstrated by several scientific diving methods
10:00 - 10:15	Eva Turicchia	University of Bologna, Italy	Computed-tomography to assess long term bioconstruction and bioerosion processes in biogenic reefs
10:20 - 10:35	Markos Digenis	Hellenic Centre for Marine Research, Greece	Baseline biodiversity survey in marine caves of a Protected Area in the South-Eastern Aegean Sea
10:40 - 10:55	David José Rodrigues Mateus	MARE - Marine and environmental sciences centre (MARE-Uévora)	Abundance, population size structure and stock assessment of sea urchin Paracentrotus lividus on the west coast of Portugal
11:00 - 11:15	Domenico Sgambati	Marine Protected Area of Punta Campanella	Assessment of biodiversity in a protected bay: the importance of integrated methods for a better result
11:20 - 11:35	Markos Digenis	Hellenic Centre for Marine Research, Greece	Alien fish in marine caves of the Aegean Sea, Greece
11:40 - 11:55	Jouni Leinikki	Alleco Oy, Finland	NiSO4 spill inflicts varying mortality between four freshwater mussel species (including protected Unio crassus Philipsson, 1788) in a western Finnish river







2 Session		Biology & survey methods	Chairperson Martin Sayer
13:00 - 13:15	Francesco Maresca	MARE – Marine and Environmental Sciences Centre, Laboratório de Ciências do Mar, Universidade de Évora, Sines, Portugal	Habitat mapping as a tool for sustainable use of the sea urchin Paracentrotus lividus in the central coast of Portugal: combining underwater survey with lidar remote sensing
13:20 - 13:35	Paulo Gonçalves Miranda Agria Torres	CIBIO, Research Centre in Biodiversity and Genetic Resources - InBIO Associate Laboratory, Azores Pole, University of the Azores	Seascape value assessment of coastal and underwater diving spots
13:40 - 13:55	Dimitris Poursanidis	terraSolutions marine environment research	Coastal habitat mapping in support of conservation activities in an urban Natura 2000 seascape
14:00 - 14:15	Franz Brümmer	University of Stuttgart / IBBS / Research Unit Biodiversity & Scientific Diving, Germany	Introduction of the technical diving method for scientific diving to investigate biocoenosis in the twilight zone of freshwater lakes
14:20 - 14:35	Bernabé Moreno	Científica del Sur University	Occupational background and benthic surveys by Peruvian scientific divers: an outlook of the operations executed by 'Universidad Científica del Sur'
14:40 - 14:55	Eleni Kytinou	University of the Aegean, Greece	Development of two visual survey protocols for the study of coastal rocky reef marine food webs in the NE Mediterranean
15:00 - 15:15	Martin Sayer	Tritonia Scientific Ltd, UK	DORIS – Diver carried Oceanographic Recording InstrumentS
15:20 - 15:35	Pauliina A. Ahti	University of Jyväskylä	Rapture of the deep? The effect of nitrogen narcosis on decision-making in SCUBA divers breathing compressed air
15:40 - 15:55	Eric Mulder	Mid Sweden University	Scientific diving methods in breath-hold field research
16:15 - 17:30	Poster session		Breakout Rooms







Session 3		Geoscience & miscellaneous	Chairperson Broder Merkel
09:00 - 09:15	Broder Merkel	SDC of TUBAF, Germany	Radon as natural tracer for submarine groundwater discharge
09:20 - 09:35	Richard Stanulla	GeWiD GmbH, Freiberg, Germany	The development of lineament structures in the hydrothermal system of Panarea, Italy
09:40 - 09:55	Judy Adamek	GeWiD GmbH, Freiberg, Germany	Large and small scale neotectonics structures in the submarine hydrothermal system of Panarea Island, Italy
10:00 - 10:15	Sebastian Pose	SDC of TUBAF, Germany	RoBiMo- Robot-assisted inland water monitoring
10:20 - 10:35	Rita Auriemma	University of Salento	Underwater archaeological surveys in Salento waters: results and methods
10:40 - 10:55	Giorgio Caramanna	Geo Aqua Consulting	Risk management of cold-water impact on divers
11:00 - 11:15	Piotr Bałazy	Institute of Oceanology, Polish Academy of Sciences (IO PAN)	Polar night diving – lessons learned from the past four seasons
11:20 - 11:35	Celia Marlowe	University of East Anglia	Divers as citizen scientists: Response time, accuracy and precision of water temperature measurement using dive computers
11:40 - 11:55	Gaetano Costantino	ARPA Puglia - Centro Regionale Mare	ESD Operators: Roles and Duties for the Environmental Monitoring Activities of ARPA PUGLIA

12:00 -	Lunch Break
13:00	Lunch Break







Session 4		Technique / Training / Harmonizing	Chairperson Massimo Ponti
13:00 - 13:15	Kathryn Schoenrock	NUI Galway, Irland	Diving in Ireland: HSA regulations drive compliance and further training in Irish Scientific Diving
13:20 - 13:35	Massimo Ponti	University of Bologna, Italy	Training and schools of scientific diving in Italy
13:40 - 13:55	Alain Norro	RBINS	The establishment in Europe of the Common Practices for recognition of European competency levels for scientific diving at work (ESD&AESD)
14:00 - 14:15	Michael Jung	Universität des Saarlandes, Saarbrücken	Scientific diving from early modern period up to the 20th century
14:20 - 14:35	Keiron Fraser	University of Plymouth, UK	Training the next generation: the scientific diver- training programme at the University of Plymouth
14:40 - 14:55	Georgia Kalantzi	Laboratory of Topography, School of Rural and Surveying Engineering/Faculty of Engineering, Aristotle University of Thessaloniki	Assessment of the training, legal and professional state-of-the-art in scientific diving in combination with stakeholder perspectives in Greece
15:00 - 15:15	Kimon Papadimitriou	Aristotle University of Thessaloniki	ScienceDIVER: advancing Blue Economy through Diving
15:20 - 15:35	Themistoklis Ioannidis	Atlantis Consulting	ScienceDIVER: Capacity Building and Harmonization of Scientific Diving in Europe. Professional acknowledgment of Scientific Divers
15:40 - 15:55	llze Atanasova	Marine Cluster Bulgaria	ScienceDIVER: Capacity Building and Harmonization of Scientific Diving in Europe.
16:00 - 16:15	Rainer_Stoodt	VDST Diving for Conservation	Suddenly digital! – A webinar series goes viral and attracts Hundreds to Charophytes
16:30 - 17:30	Poster session		Breakout Rooms

17:30 - 18:15	Q&A-Session ScienceDiver	Chairperson Ralph Schill, CMAS	
------------------	--------------------------	--------------------------------	--







	List of posters			
1	Manuel Ballesteros Vázquez	Barcelona University	Biodiversity in anthropized marinas. The study case of scientific diving in the bathing area of the Forum of Barcelona (NE Spain)	
2	Giulio Franzitta	Stazione Zoologica Anton Dohrn	Underwater survey techniques for the exploration of marine biodiversity with a focus on Marine Protected Areas in Campania Region (Italy; Tyrrhenian sea)	
3	Stephan Hacquet	INRAE	Diving monitoring and divers are precious to follow the invasive shrimp Hemimysis anomala in lakes	
4	Bianca Reis	Faculty of Sciences from University of Porto	Artificial Reefs: Underwater monitoring and sampling techniques for a proper bio-assessment	
5	Thanos Dailianis	Hellenic Centre for Marine Research	An extended baseline survey of cave habitats within a marine protected area in the Aegean Sea	
6	Maria Salomidi	Hellenic Centre for Marine Research	Applying an ecosystem-based approach in assessing the status and recovery potential of a newly established MPA (Gyaros isl., Aegean Sea, Greece)	
7	Thanos Dailianis	Hellenic Centre for Marine Research	Comparison of benthic assemblages colonizing artificial reefs over a 4-year time span	
8	Broder Merkel	SDC of TUBAF, Germany	Investigation of a karst sinkhole in the endorheic Sawa Lake in southern Iraq	
9	Ralph Schill	CMAS	Underwater Cultural Heritage Signals	
10	Alexandros Tourtas	Aristotle University of Thessaloniki	The ScienceDIVER project. Training framework online workshop	
11	Irfan Sehic	OXYGEN Scientific GmbH	A Miniature Wireless Device for Long-term Underwater Environmental Data Acquisition	
12	Torcuato Pulido Mantas	Univertà Politecnica delle Marche	A photogrammetric approach for a 3D in situ growth estimation of two Porifera species of biotechnological interest (Chondrosia reniformis and Axinella polypoides)	
13	Monica Previati	Ubica srl	Neptune Project: New Sea Sites to Promote Diving Outside the Ligurian Marine Protected Areas	
14	Eva Turicchia	University of Bologna	Survey on worldwide Scientific Diver population	
15	Ralph Schill	CMAS	Citizen Science Under Water	
16	Michele de Gioia	ARPA Puglia - CENTRO REGIONALE MARE	ARPA PUGLIA Underwater Scientific Activities. ESDs Contribution in the ADRIREEF project (Interreg Italy- Croatia 2014-2020)	