

EMBS
MARINE BIOLOGY
SYMPOSIUM



40th EMBS

European Marine Biology Symposium

vienna - austria | 21-25 august 2005

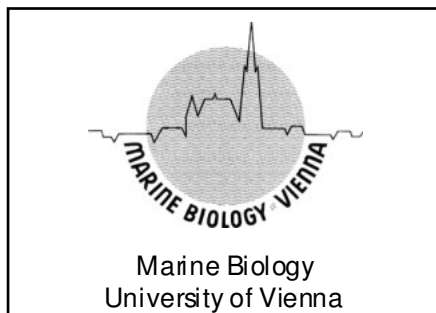
Program

Remote and inaccessible marine habitats

From sea caves, oceanic islands, wave-beaten shores and polar seas to deep-sea hot vents.

Advances in underwater observation and experimentation

From SCUBA to submersibles, ROVs and subsea observatories.



Sunday 21.08 - HS 1

08:30-09:00 Opening Session

Sea caves

Chairperson: **Wolfgang Sterrer**, Bermuda

09:00-09:50 Keynote lecture: **Tom Iliffe** (Texas A&M University at Galveston): Search for New Life: Critically endangered biodiversity hotspots in anchialine caves

09:50-10:10 **Gerhard Jarms** (University of Hamburg): From deep sea to marine caves: life cycle studies in Coronatae (Scyphozoa, Cnidaria) elucidate new phylogenetic and ecological aspects

10:10-10:30 **Tatjana Bakran-Petricioli¹, J. Vacelet², H. Zibrowius², D. Petricioli³, P. Chevaldonné² & T. Rađa⁴** (¹ University of Zagreb; ² DIMAR Centre d'Océanologie de Marseille; ³ Oikon Ltd. – Institute for applied ecology; ⁴ Speleological Society Špiljar): New data on the distribution of the "deep-sea" sponges *Asbestopluma hypogea* and *Oopsacas minuta* in the Mediterranean Sea

10:30-11:00 Coffee Break

11:00-11:20 **Maja Novosel¹, B. Jalžić², A. Novosel³, M. Pasaric¹, A. Pozar-Domac¹ & I. Radic¹** (¹ University of Zagreb; ² Croatian Natural History Museum and Croatian Biospeleological Society; ³ Nerej Diving Film Tourism Ltd): Ecology of an anchialine cave in the Adriatic Sea with special reference to thermal regime

11:20-11:40 **Pierre Chevaldonné & C. Lejeune** (DIMAR - Centre d'Océanologie de Marseille) : Evolutionary ecology of Mediterranean marine cave-dwelling Mysidacea under multiple constraints: Extreme habitat, regional warming and parasitic pressure

11:40-12:00 **Rohan Holt, F. Bunker & B. Sanderson** (Countryside Council for Wales): Survey of sea caves in Welsh Special Areas of Conservation

12:00-14:00 Lunch Break

From Scuba to remote observation

Chairperson: **Klaus Ruetzler**, USA

14:00-14:50 Keynote lecture: **Branko Velimirov** (Medical University Vienna): Utility of submersibles versus depth limits of scientific divers: A "no-compromise" case

14:50-15:10 **Donat Petricioli¹, Z. Tadić² & T. Bakran-Petricioli²** (¹ Oikon Ltd. – Institute for applied ecology; ² University of Zagreb): Is it possible to use yourself as a multi-probe?

15:10-15:30 **Martin D. J. Sayer & C. Poonian** (Scottish Association for Marine Science): The influences of census technique on the quantification of macrofaunal activity in the temperate rocky subtidal zone

15:30-15:50 **Piirepaolo Consoli¹, E. Azzurro¹, G. Sarà², M. Ferraro³ & F. Andaloro¹** (¹ ICRAM - Central Institute for the Research Applied to the Sea; ² University of Palermo; ³ Eni E&P Div.): Underwater visual census to estimating fish biodiversity associated with gas platforms: Evidence from two different methods

15:50-16:20 Coffee Break

16:20-16:40 **William L. Ellis & S. S. Bell** (University of South Florida): *In situ* video observations of fish behavior as a metric of habitat quality: An application in the mangroves of western Florida (USA)

16:40-17:00 **Verena W. Trenkel, F. Le Loch, S. Mahévas & M.-J. Rochet** (IFREMER laboratoire ressources halieutiques): Small scale relationship between Norway lobster, juvenile hake and associated macro fauna in the Bay of Biscay

- 17:00-17:20 **Leif Nottestad, O. A. Misund, W. Melle, B. K. Hoddevik Ulvestad & K. A. Orvik** (Institute of Marine Research, Bergen): Influence of zooplankton and sea temperature on the spatio-temporal distribution and migration of herring at the Arctic front in the Norwegian Sea
- 17:20-17:40: **Pozar-Domac, A., Petar Krusic, I. Radic, M. Novosel, V. Vojvodic & E. Bura-Nakic** (University of Zagreb): Inshore capture-based tuna aquaculture impact on *Posidonia* meadows in the Croatian part of the Adriatic Sea
- 17:40-18:00: **Mark Lenz, M. Molis & M. Wahl** (IFM-GEOMAR Kiel): GAME: A global tool in marine experimental ecology
- 18:00-19:00 **Poster Session I**

Monday 22.08 - HS 1

Polar Biology

Chairperson: **John Gray**, Norway

- 09:00-09:50 Keynote lecture: **David Thomas** (University of Wales-Bangor): Sea ice biology: Implications of changing sea ice conditions.
- 09:50-10:10 **Daniel Jones, B. Bett & P. Tyler** (National Oceanography Centre – Southampton): Physical controls on diversity and abundance of polar megabenthos
- 10:10-10:30 **Nadia Valérie Quéric & T. Soltwedel** (Alfred Wegener Institut für Polar-und Meeresforschung): Spatial patchiness in prokaryotic community dynamics in deep-sea sediments of Eastern Fram Strait, Arctic Ocean
- 10:30-11:00 Coffee Break
- 11:00-11:20 **Piotr Kuklinski¹, D. K. A. Barnes² & P. D. Taylor³** (¹ Natural History Museum London; ² Institute of Oceanology; ³ British Antarctic Survey): Richness patterns in intertidal and subtidal boulder-fields across the North Atlantic
- 11:20-12:00 David Thomas (University of Wales-Bangor): ISPOL: Drifting on the Antarctic Ice
- 12:00-14:00 Lunch Break

Submarines, ROVs and Microsensors

Chairperson: **Ferdinando Boero**, Italy

- 14:00-14:50 Keynote Lecture: **Charles Fisher** (Pennsylvania State University): From questions to answers: The importance of special equipment for research in the deep sea
- 14:50-15:10 **Teresa Borges, P. Morais, V. Carnal, P. Terrinha & C. Cooper** (University of Algarve): The effects of trawl fishery off the south coast of Portugal: Observations of "Delta" manned-submersible on the Submarine Canyon of Portimão
- 15:10-15:30 **Marc Eleaume, N. Ameziane & O. Brosseau** (Museum national d'Histoire naturelle): ROV observations and functional morphology of two deep sea comatulids (Echinodermata)
- 15:30-15:50 **Francesc Pagés, P. R. Flood, M. Youngbluth, C. J. Jacoby, F. Uiblein, U. Baamstedt & M. Emelianov** (Institut de Ciències del Mar - CSIC): An exploration of the gelatinous zooplankton in the basins of the Gulf of Maine and adjacent submarine canyons (northwestern Atlantic) by the submersible *Johnson-Sea-Link*
- 15:50-16:20 Coffe Break

- 16:20-16:40 **Weber, M.^{1,2,3}, Christian Lott^{1,2,3}, K. Fabricius³ & D. de Beer¹** (1 Max-Planck-Institute for Marine Microbiology; 2 HYDRA-Institute for Marine Science; 3 Australian Institute of Marine Science): A diver-operated underwater microsensor setup for in situ measurements of light, O₂, pH and H₂S on corals exposed to sedimentation
- 16:40-17:00 **Kay Vopel, A. Vopel & N. Hancock** (National Institute of Water and Atmospheric Research): Effects of a spatangoid heart urchin on early diagenesis of coastal sediments
- 17:00-17:20 **Hans Røy, P. Berg, V. Meyer, P. Färber & B. B. Jorgensen** (Max Planck Institute for Marine Microbiology): Measuring mass flux by Eddy Correlation
- 17:20-17:40 **Henrik Ståhl, H. & R. N. Glud** (Copenhagen University): 2-D optical sensors (planar optodes): a tool for *in situ* investigations of oxygen dynamics and pH in marine sediments
- 17:40-18:00 **Ute Kossak & M. Wahl** (IFM-GEOMAR Leibniz Institut für Meereswissenschaften): Simulating future salinity shifts: A multiple transplant experiment with *Mytilus edulis* in the Baltic salinity gradient,
- 18:00-18:30 Break
- 18:30-19:10 Tribute to Rupert Riedl: **Tom Fenchel**, Denmark

Tuesday 23.08 – HS 2

Hydrothermal Vents

Chairperson: **Reinhard Rieger**, Austria

- 09:00-09:20 **Olav Giere, O. & shipboard party** (University of Hamburg): The first Atlantic hydrothermal vents south of the equator: Setting, fauna and biogeographical implication
- 09:20-09:40 **Julia Zekely¹, S. Gollner¹, C. L. Van Dover², C. R. Fisher³, B. Govenar³, N. Le Bris⁴ & M. Bright¹** (1 University of Vienna; 2 College of William & Mary; 3 Penn State University; 4 Ifremer): "Meiovent": An initiative to study the hydrothermal vent meiobenthos community from the East Pacific Rise vents and adjacent off-axis sediments
- 09:40-10:00 **Marjolaine Matabos¹, N. Le Bris², S. Pendlebury³, P. Tyler³ & E. Thiébaud¹** (1 MNHN, UMR BOME; 2 Ifremer; 3 SOC): Physico-chemical environment influence upon gastropods communities and population dynamics of the vetigastropod *Lepetodrilus elevatus* at hydrothermal vents on the East Pacific Rise (EPR-13 °N)
- 10:00-10:30 **Claire Daguin, S. Plouviez, S. Hourdez & D. Jollivet** (Station Biologique de Roscoff) : Who's your mummy? A parentage analysis in the commensal hydrothermal vent polychaete *Branchipolynoe seepensis* within host mussels with microsatellite markers
- 10:30-11:00 Coffee Break
- 11:00-11:20 **Bettina Pflugfelder & M. Bright** (University of Vienna): Cell cycle kinetics in the trophosome of Siboglinid tubeworms
- 11:20-11:40 **Andrea D. Nussbaumer, C. M. Cavanaugh & M. Bright** (University of Vienna): Infection process of environmentally transmitted symbionts in hydrothermal vent tubeworms (Vestimentifera)
- 11:40-13:00 Lunch Break
- 13:00-17:00 Field Trip
- 17:00-open end **Yellow Submarine Competition**

Wednesday 24.08 – HS 1

Special Thematic Symposium Seamount Biology

Chairperson: **Malcolm Clark**, New Zealand

- 09:00-09:10 **Malcolm R. Clark¹, A. A. Rowden¹, K. Stocks² & T. Schlacher³** (¹ NIWA; ² University of California; ³ University of the Sunshine Coast): "CenSeam": A new Census of Marine Life seamounts project
- 09:30-09:50 **Matthew Gianni** (Deep Sea Conservation Coalition): A global challenge to halt the decline in biodiversity: Will UN General Assembly initiatives succeed in protecting the biodiversity of the deep sea?
- 09:50-10:10 **Craig R. McClain** (University of New Mexico): Predicting geographic variation in abundance of deep-sea benthic communities: The role of body size, temperature, carbon flux, and ocean production
- 10:10-10:30 **Christian Mohn & M. White** (National University of Ireland): Physical processes at seamounts and their influence on seamount ecosystems: General aspects and recent results from a study in the subtropical NE Atlantic
- 10:30-11:00 Coffee Break
- 11:00-11:20 **Rowden, A. A., Malcolm R. Clark & I. C Wright** (NIWA): Physical characterisation and a biologically focused classification of "seamounts" in the New Zealand region
- 11:20-11:40 **John F. Dower & V. Tunnicliffe** (University of Victoria): Explorations among the hydrothermally and volcanically active seamounts of the Marianas Arc
- 11:40-12:00 **Peter Etnoyer¹ & D. Clague²** (¹ Aquanautix Consulting; ² Monterey Bay Aquarium Research Institute): Deep cosmopolitan communities: Bamboo Corals on northeast Pacific seamount peaks
- 12:00-12:20 **Susan von Thun, L. J. Lundsten, N. J. Stout, B. Schlining & J. L. Connor** (Monterey Bay Aquarium Research Institute): A unique system for analyzing and describing seamount communities
- 12:20-14:00 Lunch Break

Seamount Biology (cont.)

Chairperson: **Thomas Schlacher**, Australia

- 14:00-14:20 **Schlacher-Hoenlinger, M.^{1,2}, Thomas Schlacher¹, A. Williams³ & J. N. Hooper³** (¹ The University of the Sunshine Coast University; ² Queensland Museum; ³ CSIRO Marine Research): Faunal assemblages on abrupt topographical features in the deep sea: Sponge diversity in canyons off Tasmania, Australia.
- 14:20-14:40 **Telmo Morato** (DOP Universidade dos Açores): Seamount effects: Are pelagic fish, marine mammals and seabirds more abundant on top and around seamounts?
- 14:40-15:00 **Odd Aksel Bergstad & T. Falkenhaus** (Flødevigen Marine Research Station): Exploring the Mid-Atlantic ridge macro- and megafaunal communities: Technological challenges and preliminary results
- 15:00-15:20 **Bettina Martin** (University of Hamburg IHF): Zooplankton biomass distribution at two seamounts in the subtropical NE Atlantic
- 15:20-15:40 Coffee Break
- 15:40-16:00 **Gunnar Gad** (Carl von Ossietzky University): First studies on meiofauna communities associated with Seamounts
- 16:00-16:20 **Kai Horst George** (Forschungsinstitut Senckenberg): "Stepping stones" or "trapping stones"? The function of seamounts for the dispersal of Harpacticoida (Crustacea, Copepoda)

16:20-16:40 **Sergio P. Avila** (University of the Azores): The origins of the shallow water mollusc fauna of the Azores

16:40-18:00 **Poster Session II**

20:00 **Conference Dinner**

Thursday 25.08 – HS 1

Deep Sea

Chairperson: **Roland Peter**, Austria

09:00-09:20 **Pascal Lorange & V. Trenkel** (IFREMER laboratoire ressources halieutiques): Natural and reaction behaviour of mid-slope fish species

09:20-09:40 **Amadine Heger¹, A. Jamieson¹, B. Wigham¹, N. King¹, I. G. Priede¹, P. M. Bagley¹ & O. Pfannkuche²** (¹Oceanlab University of Aberdeen; ²M-GEOMAR Leibniz Institut für Meereswissenschaften): Observations of bioluminescence on the deep-sea floor

09:40-10:00 **Nicola King, I. G. Priede & P. M. Bagley** (Oceanlab University of Aberdeen): Depth zonation and latitudinal changes in demersal scavenging fish fauna of the Mid-Atlantic Ridge, North Atlantic Ocean

10:00-10:20 **Ursula Witte** (Oceanlab University of Aberdeen): The fate of organic carbon settling at the deep-sea floor: The potential of experimental stable isotope approaches

10:20-10:50 Coffee Break

10:50-11:10 **Van Gaever, S., Ann Vanreusel & L. Moodley** (Gehen University): Mass aggregations of ovoviparous nematode species colonizing sulfidic sediments at Hakon Mosby Mud Volcano

11:10-11:30 **Teresa Radziejewska & A. J. Gooday** (University of Szczecin): Protozoan (foraminiferan) and metazoan meiobenthos in a deep-sea area of future commercial interest: A Pacific's Clarion-Clipperton Fracture Zone nodule field example

11:30-11:50 **Marina R. Cunha¹, J. C. Sorbe², A. Ravara & L. M. Pinheiro¹** (¹ Universidade de Aveiro; ² Laboratoire d'Océanographie Biologique): The macrobenthic community of mud volcanoes and other unusual bathyal habitats in the Gulf of Cadiz (southern Iberian margin)

11:50-14:00 Lunch Break

Mangroves, coral reefs, islands and rocky bottoms

Chairperson: **Arnfried Antonius**, Austria

14:00-14:20 **Tatjana Bakran-Petricoli¹, D. Petricoli² & O. Antonic³** (¹ University of Zagreb; ² Oikon Ltd. – Institute for Applied Ecology; ³ Ruder Boškovic Institute): Marine benthic community under the influence of temporary freshwater flow in the pit type vruljas in the Velebit Channel (Eastern Adriatic): Is it permanently in pioneer stage?

14:20-14:40 **Elif Özgür & B. Öztürk** (Istanbul University): Biodiversity of zoobenthic sublittoral communities of five rocky reefs in the southern Aegean Sea (eastern Mediterranean)

14:40-15:00 **Klaus Rützler & S. Duran** (Smithsonian Institution): Impact of environmental stress on reef and mangrove sponges

15:00-15:20 **Jürgen Herler** (University of Vienna): Inaccessible shallow-water habitats: A realm for marine gobiid dwarfs

15:20-16:00 Coffee Break

16:00-16:45 **Closing of Symposium**

Thursday 25.08 – HS 2

Biodiversity, Communities and Models

Chairperson: **Francesco Cinelli**, Italy

09:00-09:20 **Ferdinando Boero & E. Bonsdorff** (DiSTeBA University of Lecce): A conceptual framework for biodiversity and ecosystem functioning

09:20-09:40 **Mark P. Johnson¹, A. L., Allcock¹, T. P. Crowe², P. Johnston & R. McAllen³** (¹ Queens University Belfast; ² University College Dublin; ³ University College Cork): How do marine reserves preserve biodiversity: As high value refuges or interconnected networks?

09:40-10:00 **Günther Hertweck¹, A. Wehrmann¹ & G. Liebezeit²** (Forschungsinstitut Senckenberg; ²Forschungszentrum Terramare): From Ichnocoenosis to Ichnofabric: Development of Ichnofacies before the Fossil Record

10:00-10:20 **Hermann Backer, H., M. Westerborn, M. Kilpi & O. Mustonen** (University of Finland): Benthic invertebrate communities associated with blue mussel, *Mytilus edulis* (L.), in the northern Baltic Sea

10:20-11:50 Coffee Break

10:50-12:10 **Peter Funch¹, M. Obst¹ & G. Giribet²** (¹ University of Aarhus; ² Museum of Comparative Zoology): Cyclophora from the European lobster *Homarus gammarus*

11:10-11:30 **Lidia Dzierzbicka-Glowacka¹, L. Bielecka² & S. Mudrak²** (¹ Institute of Oceanology PAS; ² Institute of Oceanography UG): Dynamics of *Pseudocalanus elongatus* and *Acartia biflosa* in the Gdańsk Gulf as revealed by a coupled one-dimensional model

11:30-11:50 **Mathieu Cusson¹, J.-F. Plante², C. Genest¹ & E. Bourget³** (¹ Université Laval; ² University of British Columbia; ³ University Sherbrook): Meta-analysis, evaluation and simulation of methods used in marine macrobenthic production studies

11:50-14:00 Lunch Break

Trophic Ecology

Chairperson: **Günther Hertweck**, Germany

14:00-14:20 **Ulrich Sommer** (Leibniz-Institut für Meereswissenschaften an der Universität Kiel): The variable trophic level of marine copepods: Implications for energy transfer in food-webs and top-down control of phytoplankton

14:20-14:40 **Peter C. Dworschak¹, H. Koller² & D. Abed-Navandi²** (Naturhistorisches Museum Wien; ² University of Vienna): Feeding behaviour of *Corallianassa longiventris* and *Pestarella tyrrhena* (Crustacea: Thalassinidea: Callianassidae)

14:40-15:00 **Ariel C. Y. Yeung** (The University of Hong Kong): Foraging behaviour of *Nerita yoldii* on seasonal, tropical rocky shores

15:00-15:20 **Kourosh Haddadi Moghaddam** (Sturgeon Research Institute): Aquatic invertebrates and their significance in sturgeons biodiversity in continental shelf of the Caspian Sea

15:20-15:40 **Frank Ferraton: Mellon-Duval, C. & M. Harmelin-Vivien** (IFREMER laboratoire ressources halieutiques): Spatial variation in the diet of young European hake *Merluccius merluccius* in the Gulf of Lions (NW Mediterranean) from stomach contents and stable isotopes analysis

15:40-16:00 Coffee Break

16:00-16:45 **Closing of Symposium**