

T U E S D A Y , 13TH S E P T E M B E R 2022

8.00 - 9.00 a.m. Welcome and registration
 9.00 a.m. Welcome speech

HYDRODYNAMICS AND RESISTANCE

9.30 – 11.30 Session 1

KEYNOTE: Prof. Tsutomu TAKAGI, Hokkaido University, Faculty of Fisheries Science, Japan

K. B. BURGAARD, S. CARSTENSEN, D. R. FUHRMAN and F. G. O'NEILL: *Using hydrodynamics to optimize the design of sea star trawls*

E. N. KOSTAK, E. GRIMALDO, J. BRINKHOF, B. HERRMANN, R. B. LARSEN: *Hydrodynamic drag and catch efficiency of low porosity Calanus sp. Nets*

H. CHENG, M. C. ONG: *Wake effects on the drag force estimation of downstream fish cages*

11.30 -13.00 Lunch

EXPERIMENTAL ANALYSIS OF NET-LIKE STRUCTURES AND RELATED MARINE SYSTEMS

13.00 – 15.00 Session 2

KEYNOTE: Antonello SALA, National Research Council, Institute of Marine Biological Resources and Biotechnologies, Italy

M. EIGHANI, T. VEIGA-MALTA, F. G O'NEILL: *Engineering performance of self-adjusting otterboards in comparison with a conventional trawl otterboard*

U.LICHTENSTEIN, K. BREDDERMANN, S. KOSLECK: *Experiments on thin-twine net panels*

I. L. HERNANDO: *Experimental considerations for flexible OFFSHORE structures*

15.00 – 15.30 Coffee break

METHODS AND RESULTS IN FISHING RESEARCH

15.30 – 18.00 Session 3

KEYNOTE: Prof. Nils GOSEBERG, Technical University Braunschweig, Leichtweiß-Institute for Hydraulic Engineering and Water Resources, Germany

M. PASCHEN, D. GLÜCK, R. HELBIG: *A new technological approach for sustainable eelgrass reforestation using textile plastic-free growing media*

Z. BAK-JENSEN, B. HERRMANN, J. SANTOS, V. MELLI, J. P. FEEKINGS, D. STEPPUTTIS: *Re-thinking the design of fishing gears: fixed mesh constructions are required to reduce variability in codend size selection*

O. SOYKAN and A. TOKAÇ: *A biological approach to bottom impact; The case of demersal trawling in the Aegean Sea*

A. TOKAÇ and M. H. KAYKAÇ: *A data-based study on the comparison of fishing gear selectivity and fisher's selectivity in the bottom trawl fisheries*

D. STEPPUTTIS, I. KRATZER, H. SCHRATMANN, T. NOACK: *Passive acoustic reflectors to reduce odontocete bycatch in gillnets*

19.30 Get-together

W E D N E S D A Y , 14TH S E P T E M B E R 2022**SURVEY, OBSERVATION AND DATA PLATFORMS**

8.30 - 9.00 Coffee break

9.00 – 11.30 Session 4

KEYNOTE: Hans POLET, Science Director, ILVO - Flanders Research Institute for Agriculture, Fisheries and Food, Belgium

A. HERMANN, M. NAUMANN, M. BJÖRNER, F. FURKERT, D. STEPPUTTIS: *Hydrography on Fishing Vessels – A feasibility study leads to an open source development*

C. PORSCHÉ: *Development of a blue bioeconomy for sustainable production of marine carbohydrates from Baltic Sea macro algae*

C. STREHSE, H. LANGOSCH, H. BETZ, S. KOSLECK: *OpenAquaSense – An open-source Sensor Network for tailor made marine Sensing*

A. TOKAÇ, M. T. TOLON, O. SOYKAN: *A Preliminary Study on Morphometric Measurements of Aquatic Species Using 3D Scanner Images*

11.30 -13.00 Lunch

13.00 – 18.00 Excursion

18.00 Conference Dinner

T H U R S D A Y , 15TH S E P T E M B E R 2022**MATHEMATICAL MODELS USED FOR NUMERICAL ANALYSIS OF NET-LIKE STRUCTURES AND RELATED MARINE SYSTEMS**

8.30 - 9.00 Coffee break

9.00 - 11.00 Session 5

KEYNOTE: Prof. Ana IVANOVIC, University of Aberdeen, School of Engineering, United Kingdom

S.-K. KARUMATHIL, F. G. O'NEILL, M. J. GONZÁLEZ CASTRO: *Modelling Fishing Nets as Porous Surfaces for Understanding Demersal Trawling Seabed Impact*

F. BOTTERO, M. J. GONZÁLEZ CASTRO.: *Modelling the structural behaviour of netting with beam finite elements*

K. BREDDERMANN, U. LICHTENSTEIN, D. PRIOUR: *FEMNET – OpenFOAM coupling. A FSI approach to simulate fishing gear*

11.00 – 11.30 Final discussion, preparation of next DEMaT

11.30 – 13.00 Lunch

13.00 Farewell