



**VARNA SCIENTIFIC AND TECHNICAL UNIONS
INSTITUTE OF OCEANOLOGY - VARNA**



**FOURTEENTH INTERNATIONAL CONFERENCE
ON MARINE SCIENCES AND TECHNOLOGIES**

**Black
Sea
2018**

**Dedicated to the 110th Anniversary of
VARNA SCIENTIFIC AND TECHNICAL UNIONS
and 45th Anniversary of the
INSTITUTE OF OCEANOLOGY – VARNA**

PROGRAMME

**October 10th - 12th, 2018
Festival and Congress Centre - Varna, Bulgaria**

Organized by:

**VARNA SCIENTIFIC AND TECHNICAL UNIONS
INSTITUTE OF OCEANOLOGY (VARNA) - BULGARIAN
ACADEMY OF SCIENCES**

With the Co-operation of:

**TECHNICAL UNIVERSITY OF VARNA
BULGARIAN NATIONAL ASSOCIATION OF SHIPBUILDING
AND SHIPREPAIR (BULNAS)
BULGARIAN SHIP HYDRODYNAMICS CENTRE (VARNA) -
BULGARIAN ACADEMY OF SCIENCES
“N. VAPTSAROV” NAVAL ACADEMY - VARNA**

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Main Topics of the Conference:

- (1) Shipbuilding and Ship Repair**
- (2) Ship Hydrodynamics**
- (3) Machinery and Propulsion Systems**
- (4) Maritime Transportation and Port Operations**
- (5) Oceanology**
- (6) Marine Education**

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Summary Timetable

October 10, 2018 (Wednesday)	
Hall 4 – Press centre	Hall 5 & Hall 6
<p>08:00 – 09:00 Registration</p> <p>09:00 – 10:00 Opening Ceremony</p> <p>10:00- 10:20 Coffee break</p> <p>10:20 – 11:40 Plenary Session (4)</p> <p>11:40 – 12:00 <i>Group photo</i> (Participants – BLACK SEA'2018 Conference)</p> <p>12:00 – 13:00 Lunch break</p>	<p>Hall 5 13:00 – 18:30 Oceanology (20)</p> <p>Hall 6 13:00 – 13:45 Ship Hydrodynamics (3) 13:45-14:00 Maritime Transportation and Port Operations (1) 14:15-17:00 Shipbuilding and Ship Repair (10) 17:00-17:30 Marine Education (2) 17:30-17:45 Machinery and Propulsion Systems (1)</p>
19:00 – Cocktail party / Restaurant “CITY – BM”, FCC – Varna	

October 10, 2018 (Wednesday)

Hall 4 (Press Centre)

08:00 – 09:00 REGISTRATION

OPENNING CEREMONY

09:00 – 09:20 Greetings

09:20-09:40 45 Years INSTITUTE OF OCEANOLOGY – BAS, VARNA

Prof. Snejana MONCHEVA

09:40-10:00 110 Years VARNA SCIENTIFIC AND TECHNICAL UNIONS

Prof. Stefan VACHKOV, Nedelcho VICHEV

10:00-10:20 COFEE BREAK

10:20 – 11:40 PLENARY SESSION

Chairman: Prof. Rumen KISHEV

Institute of Hydrodynamics – BAS , Varna

10:20-10:40 *Special considerations in model tests of high speed vessels*

Marta Pedišić BUČA

10:40-11:00 *About design of LNG fuel vessels Gennadiy V.EGOROV*

11:00-11:20 *Mapping and assessment of the ecosystem services to fisheries in the Black Sea*

Marina PANAYOTOVA, Georgi DASKALOV, Valentina TODOROVA, Ioana GEORGIEVA, Radoslava BEKOVA, Stefania KLAYN and Valko BISERKO

11:20-11:40 *Coastal flooding hazard assessment at vulnerable locations along Varna regional coast*

Petya EFTIMOVA, Nikolay VALCHEV, Nataliya ANDREEVA, Bogdan PRODANOV, Lyubomir DIMITROV

11:40 – 12:00 *Group photo (Participants – BLACK SEA’2018 Conference)*

12:00 – 13:00 *Lunch break*

19:00 – 22:00 *Cocktail Party - Restaurant “CITY BM”, Festival and Congress Centre, Varna*

October 10, 2018 (Wednesday)

Hall 5

SECTION – OCEANOLOGY

Chairman: Prof. Atanas PALAZOV
Institute of Oceanology – BAS, Varna

Secretary: Petya EFTIMOVA
Institute of Oceanology – BAS, Varna

13:00 – 13:15 *Use of macroalgae to assess ecological status of Bulgarian coastal waters for the aims of european water framework directive*

Kristina DENCHEVA

13:15 – 13:30 *Distribution of marine biotoxins on south Bulgarian coast of the Black Sea*

Zlatina PETEVA, Stanislava GEORGIEVA, Mona STANCHEVA, Lubomir MAKEDONSKI

13:30-13:45 *Setting threshold values of the zooplankton abundance indicator*

Kremena STEFANOVA, Valentina DONCHEVA, Elitsa STEFANOVA

13:45-14:00 *Identification of black mussel (*m. galloprovincialis*, lamark, 1819) populations in two zones in northern Bulgarian Black Sea part based on esterases polymorphism*

Petya IVANOVA and Elitsa PETROVA

14:00-14:15 **COFEE BREAK**

14:15-14:30 *Taxonomic diversity of marine sediments from the Black Sea: next-generation sequencing survey* Nina DZHEMBEKOVA,

Petya IVANOVA, Snejana MONCHEVA, Satoshi NAGAI

14:30-14:45 *Age-size structure and growth rate of the Golden grey mullet and Leaping mullet (*Chelon auratus* and *Chelon saliens*) in Bulgarian Black Sea coast*

Radoslava BEKOVA, Galerida RAIKOVA-PETROVA, Marina PANAYOTOVA, Bogdan PRODANOV

14:45-15:00 *Age and growth of Flathead grey mullet (*Mugil cephalus*, Linnaeus 1758) in Bulgarian Black Sea coast*

Radoslava BEKOVA, Galerida RAIKOVA-PETROVA, Bogdan PRODANOV, Marina PANAYOTOVA

15:00-15:15 *The influence of environmental condition of Varna and Burgas bays on population-biological parameters of Mullet species (*Mugil cephalus*, *Chelon auratus* and *Chelon saliens*)*

Radoslava BEKOVA, Bogdan PRODANOV, Marina PANAYOTOVA, and Todor LAMBEV

- 15:15-15:30** *Organic enrichment in the Bulgarian Black Sea coastal sediments based on geochemical indicators*
Valentina DONCHEVA, Ogniana HRISTOVA, Boryana DJUROVA, Ekaterina TRIFONOVA, Valentina TODOROVA
- 15:30-15:45** *Geoarchaeology of submerged landscapes in the western Black Sea*
Preslav PEEV, Raina HRISTOVA
- 15:45-16:00** **COFEE BREAK**
- 16:00-16:15** *Impact of the mesoscale circulation on the dispersion of oil pollution in the western Black Sea basin*
Irina GANCHEVA, Elisaveta PENEVA
- 16:15-16:30** *Interannual variability of the mixed layer summer sea water temperature in the western Black Sea*
Nadezhda VALCHEVA
- 16:30-16:45** *Evaluation and spatial variability of theoretical wave power along the Bulgarian Black Sea coast*
Nikolay VALCHEV
- 16:45-17:00** *Assessment of flood-driven direct impacts on coastal receptors along Varna municipality seaside*
Nataliya ANDREEVA, Petya EFTIMOVA, Nikolay VALCHEV and Bogdan PRODANOV
- 17:00-17:15** *Comparative study of numerical simulation of coastal flooding in urban & estuarine areas*
J.N. PAN, V. PENCHEV, J.S. ZHANG, F. PENCHEV, M.J. XIONG, D. DRAGANCHEVA, S. SHUKRIEVA, D.T. WANG, J.H. WANG
- 17:15-17:30** *Mapping seabed habitats in emodnet - the Black Sea case*
Valentina DONCHEVA, Valentina TODOROVA, Nikolay VALCHEV, Adrian TEACA, Mihaela MURESAN, Jacques POPULUS, Mickaël VASQUEZ, Eleonora MANCA
- 17:30-17:45** *Appropriateness and availability of the *Mnemiopsis leidyi* and *Beroe ovata* data on the Black sea*
Elitsa STEFANOVA, Violeta SLABAKOVA, Kremena STEFANOVA, Volodymyr MYROSHNYCHENKO, Ahmet KIDEYS, Tamara SHIGANOVA
- 17:45-18:00** *SatWebMare products and services in support of the sustainable management of the Bulgarian coastal zone*
O. KOUNCHEV, L. PASHOVA, L.FILCHEV, D. KALAGLARSKI, V. CRACIUNESCU, V. GALABOV, E.PENEVA, M. ILIEVA, B. SREBROV, Z. BIBOV
- 18:00-18:15** *Applying semantic approach in search of oceanographic data*
Nurhan HASSANOV, Vasil DONEV, Atanas PALAZOV
- 18:15-18:30** *One-way short baseline underwater positioning system*
Konstantin CHTEREV

October 10, 2018 (Wednesday)

Hall 6

Section - Ship Hydrodynamics:

Chairmen: Prof. Anton MINCHEV, Force Technology, Denmark
Assoc. Prof. Petar GEORGIEV
Technical University of Varna, BULGARIA

13:00-13:15 *On the forebody shape effect on ship resistance in still water and seaway*

Ihor P. DAVYDOV, Andriy V. PECHENYUK

13:15-13:30 *Systematic investigation of the ship geometry characteristics influence on the average loss of speed in waves*

Silvia KIRILOVA

13:30-13:45 *Numerical investigation of the free surface effects on underwater vehicle resistance*

Aleksandrina VASILEVA, Stefan KYULEVCHELIEV

SECTION Maritime Transportation and Port Operations

13:45-14:00 *On improvement of radar observation capabilities of the Bulgarian vessel tracking management and information system*

Chavdar ALEXANDROV, Miroslav TSVETKOV, Milen TODOROV, Iliyan ILIEV and Yordan SIVKOV

14:00-14:15 COFFEE BREAK

SECTION SHIPBUILDING AND SHIP REPAIR

Chairmen: Assoc. Prof. Petar GEORGIEV
Technical University of Varna, BULGARIA
Dr. Alexander EGOROV

Marine Engineering Bureau (Odessa, Ukraine

14:15-14.30 *Backgrounds of creation of river passenger vessels for socially important routes*

Gennadiy V.EGOROV, Alexander G. EGOROV

14:30-14:45 *Analysis of applicability of river passenger and cargo-passenger concepts for linear services*

Gennadiy V.EGOROV Alexander G. EGOROV

14:45-15:00 *Forecast of river-sea vessels' fleet structure till 2025 with definition of the most demanded types of vessels*

Gennadiy V. EGOROV, Alexander G. EGOROV

- 15:00-15:15** *Design features of diving vessels for Caspian region*
Gennadiy V. EGOROV, V.O. MUSTAFAYEV, Oyrad M.ABDULLAEV
- 15:15-15:30** *Research of influence of restricted area navigation classes on metal consumption of river-sea vessel*
Olga G. EGOROVA
- 15:30-15:45** *Application of unified dimensionless factors for estimation of residual overall strength of river-sea vessel's hull*
Vladimir A. NILVA
- 15:45-16:00** **COFFEE BREAK**
- 16:00-16:15** *Oil-chemical tankers of "Volga-Don max" class with enhanced sea function*
Gennadiy V. EGOROV, Valery I. TONYUK
- 16:15-16:30** *Realization of requirements of the International Convention for the Control and Management of Ships' Ballast Water and Sediments on the design stage*
Gennadiy V. EGOROV, Alexander E. NILVA, Dmitriy V. KOLESNIK
- 16:30-16:45** *PV300 concept of river cruise passenger vessel for replacement of main part of existing fleet*
Gennadiy V.EGOROV, Igor A. ILNYTSKII, Yaroslav V. KALUGIN
- 16:45-17:00** *About approaches to design of one-day trip vessels for pleasure cruises for the Black and Caspian Seas*
Gennadiy V. EGOROV

SECTION Marine Education

- 17:00-17:15** *Establishment of a blue career centre as an important link in the blue economy in Bulgaria*
Ilze ATANASOVA, Rumen KISHEV, Petar GEORGIEV
- 17:15-17:30** *Profile of the innovation needs of sme's from maritime sector in the region from the Adriatic-Ionian seas to the Black Sea*
Petar GEORGIEV, Ilze ATANASOVA, Martina ROSSI, Carlo KRASKOVIC, Angelos KTORIS

SECTION Machinery and Propulsion Systems

- 17:30-17:45** *Improvement of models for automated design of engine room arrangement on a transport ship*
Vladimir YORDANOV, Alexey DANILOVSKIY, Htet Paing AUNG

**THE ORGANIZING COMMITTEE WISHES
ALL THE PARTICIPANTS
OF BLACK SEA '2018 CONFERENCE
SUCCESSFUL WORK!**