



Valentina RUSEVA TODOROVA

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Gender: Female **Date of birth:** 14/10/1966 **Nationality:** Bulgarian

WORK EXPERIENCE

[03/04/2023 – Current]

Professor

Institute of Oceanology - Bulgarian Academy of Sciences

City: Varna

Country: Bulgaria

Develops and coordinates the implementation of scientific projects and leads research teams; Collects, analyzes and synthesizes scientific information and data; Scientific publishing; Develops systems for classification of the ecological state (marine macrozoobenthos), assessment and reporting of the state of the marine environment in fulfillment of the obligations of IO-BAS to carry out marine monitoring according to the national and European regulations; Develops methods for collecting and processing marine biological samples for macrozoobenthos, incl. quality assurance and quality control procedures; Organization and conduct of marine research expeditions; Performs expert and consulting activities and participates in advisory bodies and working groups to ministries and other national and international bodies (Ministry of Environment and Waters, Black Sea Basin Directorate, Black Sea Commission, European Commission, etc.). Educates and supervises the research projects of PhD students.

[27/09/2011 – 03/04/2023]

Assoc. Professor

Institute of Oceanology - Bulgarian Academy of Sciences

City: Varna

Country: Bulgaria

Develops and coordinates the implementation of scientific projects and leads research teams; Collects, analyzes and synthesizes scientific information and data; Scientific publishing; Develops systems for classification of the ecological state (marine macrozoobenthos), assessment and reporting of the state of the marine environment in fulfillment of the obligations of IO-BAS to carry out marine monitoring according to the national and European regulations; Develops methods for collecting and processing marine biological samples for macrozoobenthos, incl. quality assurance and quality control procedures; Organization and conduct of marine research expeditions; Performs expert and consulting activities and participates in advisory bodies and working groups to ministries and other national and international bodies (Ministry of Environment and Waters, Black Sea Basin Directorate, Black Sea Commission, European Commission, etc.). Educates and supervises the research projects of PhD students.

[27/01/2017 – 22/02/2021]

Scientific Deputy Director

Institute of Oceanology - Bulgarian Academy of Sciences www.io-bas.bg

Address: ул. "Първи май" 40, 9000, Varna, Bulgaria

Business or sector: Professional, scientific and technical activities

Assists the director in carrying out the planning, organization and reporting of the scientific research and development activities, sets tasks and participates in their implementation himself, provides methodical and organizational assistance to the scientists and technical staff of the Institute of Oceanology in the implementation of the scientific research tasks. Leads and participates in the development and implementation

of scientific research projects, contracts and tasks related to the national and international priorities of the activity of IO - BAS.

[01/12/1998 – 27/09/2011]

Research Associate III-I grade

Institute of Oceanology - Bulgarian Academy of Sciences

City: Varna

Country: Bulgaria

Participates in maritime research cruises and sampling; Performs analysis of hydrobiological samples; Collects, analyzes and summarizes scientific information and data; Scientific publishing; Participates in development, implementation and reporting of scientific research projects; Educates MSc students; Performs expert and consulting activities.

[2006]

Ръководител на експертна група по биоразнообразие на Черно море

Офис за проектно обслужва на ООН (UNOPS)

Ръководи регионална група по биоразнообразие за разработване на доклад „Трансгранични диагностичен анализ на Черно море 2007”.

[01/09/1992 – 01/12/1998]

Biologist

Institute of Oceanology - Bulgarian Academy of Sciences

City: Varna

Country: Bulgaria

Maritime research cruises and sampling; Analysis of hydrobiological samples - macrozoobenthos; Collects, analyzes and summarizes scientific information and data; Scientific publishing.

EDUCATION AND TRAINING

[1999 – 2005]

PhD in Hydrobiology

Institute of Oceanology - Bulgarian Academy of Sciences

City: Varna

Country: Bulgaria

Thesis: Ecological status of the zoobenthic communities from the sublittoral sediments of the shelf in the northwestern part of the Black Sea and in front of the Bulgarian coast
Hydrobiology, Biological Oceanography;
Diversity, biology and ecology of benthic invertebrate fauna in the Black Sea;
Benthic habitats in the Black Sea;
Taxonomy of Polychaeta;
Non-native and invasive species in the Black Sea;
Biological indicators and classification systems for assessing the state of the marine environment;
Biostatistical methods;
Methodology of sampling and processing of macrozoobenthic samples and procedures for quality assurance and quality control;
Aquatic methods for the study of macrozoobenthos and benthic habitats.

[1985 – 1992]

MSc in biology with specialization in hydrobiology and water protection

Sofia University "St. Kliment Ohridski", Biology Faculty

City: Sofia

Country: Bulgaria

Mathematical Analysis, Mathematical Methods in Biology, Physics, General and Inorganic Chemistry, Analytical Chemistry, Biochemistry, Plant Anatomy and Morphology, Plant Systematics, Invertebrate Zoology, Vertebrate Zoology, Human Anatomy, Embryology and

Histology, Cytology, Microbiology and Virology, Animal and Human Physiology, Plant Physiology, Genetics, Biophysics and Radiobiology, Environmental Microbiology, Ecology and Environmental Protection, General Hydrobiology, Limnology, Hydrology and Hydrochemistry, Biological Control, Bioproductivity and Water Treatment, Sanitation and technical hydrobiology and aquatic toxicology, Oceanology, Applied hydrobiology, Legal norms, Organization and management of water protection.

LANGUAGE SKILLS

Mother tongue(s): Bulgarian

Other language(s):

English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Russian

LISTENING C1 READING C1 WRITING B1

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

PUBLICATIONS

Selected publicationh in the last 5 years (2019-2023)

Pellowe, K.E.; De Cervo, A.; Laznya, A.; Berov, D.; Daskalov, G.; Karamfilov, V.; Klain, S.; Bobchev, N.; **Todorova, V.**; Georgieva, Y. et al. (2023). Ecosystem Service Bundles Highlight Multiple Trade-Offs for Marine Spatial Planning in the Western Black Sea. SSRN, 2023. DOI: 10.2139/ssrn.4655201

Prodanov, B.; **Todorova, V.**; Dimitrov, L.; Bekova, R. (2023). LOSS OF NATURAL SEABED AND BENTHIC HABITATS ALONG THE BULGARIAN BLACK SEA COAST AS A CONSEQUENCE OF INFRASTRUCTURE DEVELOPMENT. International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM 2023. DOI: 10.5593/sgem2023/3.1/s15.46

Băncilă, R.I.; Skolka, M.; Ivanova, P.; Surugiu, V.; Stefanova, K.; **Todorova, V.**; Zenetos, A. (2022). Alien species of the Romanian and Bulgarian Black Sea coast: state of knowledge, uncertainties, and needs for future research. Aquatic Invasions 2022. DOI: 10.3391/ai.2022.17.3.02

Todorova V. R., Panayotova M.D., Bekova R.Iv., Prodanov B.K. (2022). The recovery of Flexopecten glaber (Linnaeus, 1758) in the Bulgarian Black Sea – recent distribution, population characteristics and future perspectives for protection and commercial utilization of a valuable species. Acta Zoologica Bulgarica, 74 (3), pp. 437-444.

Todorova V., Doncheva V. (2021). Benthic habitats biodiversity status in the Bulgarian Black Sea in 2019 - classification and spatial assessment under the marine strategy framework directive. 21st International Multidisciplinary Scientific GeoConference SGEM 2021, Volume 21, Book number 3.1, 2021, ISBN:978-619-7603-24-8, ISSN:1314-2704, DOI: 10.5593/sgem2021/3.1/s15.86, 693-700.

Todorova V., Panayotova M., Doncheva V., Zlateva I. (2021). Assessing the physical disturbance on the seabed from fisheries in the Bulgarian Black Sea area with reference to benthic habitats status. 21st International Multidisciplinary Scientific GeoConference SGEM 2021, Volume 21, Book number 3.1, 2021, ISBN:978-619-7603-24-8, ISSN: 1314-2704, DOI:10.5593/sgem2021/3.1/s15.83, 667-674.

Todorova V., Doncheva V., Trifonova E. (2020). First Implementation of Marine Strategy Framework Directive for Benthic Habitats Assessment in the Bulgarian Black Sea. Ecologia Balkanica, Volume 12, Special Edition 3, 247-256, University of Plovdiv Publishing House, 2020, ISSN:1314-0213.

Other selected publications

Berov D., **Todorova V.**, Dimitrov L., Rinde E., Karamfilov V. (2018). Distribution and abundance of phytobenthic communities: Implications for connectivity and ecosystem functioning in a Black Sea Marine Protected Area. *Estuarine, Coastal and Shelf Science*, 200: 234-247

Fraschetti S., Pipitone C., Mazaris A. D., Rilov G., Badalamenti F., Bevilacqua S., Claudet J., Caric' H., Dahl K., D'Anna G., Daunys D., Frost M., Gissi E., Göke C., Goriup P., Guarnieri G., Holcer D., Lazar B., Mackelworth P., Manzo S., Martin G., Palialexis A., Panayotova M., Petza D., Rumes B., **Todorova V.**, Katsanevakis S. (2018). Light and Shade in Marine Conservation Across European and Contiguous Seas. *Frontiers in Marine Science*, 5:420, Frontiers Media S.A., 2018, ISSN:22967745, DOI:10.3389/fmars.2018.00420

Todorova V., Dimitrov L., Doncheva V., Trifonova E., Prodanov B. (2015). Benthic habitat mapping in the Bulgarian Black Sea 12th International Conference on the Mediterranean Coastal Environment, MEDCOAST 2015, 1, pp. 251-262.

Todorova V., Micu D., Klisurov L. (2009). Unique oyster reefs discovered in the Bulgarian Black Sea *Comptes Rendus de L'Academie Bulgare des Sciences*, 62 (7), pp. 871-874.

Buhl-Mortensen L., Galparsoro I., Vega Fernández T., Johnson K., D'Anna G., Badalamenti F., Garofalo G., Carlström J., Piwowarczyk J., Rabaut M., Vanaverbeke J., Schipper C., van Dalsen J., Vassilopoulou V., Issaris Y., van Hoof L., Pecceu E., Hostens K., Pace M.L., Knittweis, L., Stelzenmüller V., **Todorova V.**, Doncheva V. (2017). Maritime ecosystem-based management in practice: Lessons learned from the application of a generic spatial planning framework in Europe. *Marine Policy*, 75, pp. 174-186.

Janssen R., Knudsen S., **Todorova V.**, Hoşgör A.G. (2014). Managing Rapana in the Black Sea: Stakeholder workshops on both sides. *Ocean and Coastal Management*, 87, pp. 75-87.

Langmead O., McQuatters-Gollop A., Mee L.D., Friedrich J., Gilbert A.J., Gomoiu M.-T., Jackson E.L., Knudsen S., Minicheva G., **Todorova, V.**. Recovery or decline of the northwestern Black Sea: A societal choice revealed by socio-ecological modelling (2009). *Ecological Modelling*, 220 (21), pp. 2927-2939.

Salomidi, M., Katsanevakis, S., Borja, Á., Braeckman, U., Damalas, D., Galparsoro, I., Mifsud, R., Mirto, S., Pascual, M., Pipitone, C., Rabaut, M., **Todorova, V.**, Vassilopoulou, V., Fernández, T.V. Assessment of goods and services, vulnerability, and conservation status of European seabed biotopes: A stepping stone towards ecosystem-based marine spatial management (2012) *Mediterranean Marine Science*, 13 (1), pp. 49-88.

NETWORKS AND MEMBERSHIPS

Advisory councils and expert groups

- Working group at the MoEW for determining Bulgaria's national commitments to the "EU Strategy for Biological Diversity until 2030."
- MSFD Benthic Habitats and Seabed Integrity Technical Group (TG SEABED) to the EC
- Advisory Group on the Convention on Biological Diversity to the Commission for the Protection of the Black Sea from Pollution
- Geographic Intercalibration Group (GIG) "Black Sea" under the EC Water Framework Directive
- National Biodiversity Council to the Minister of Environment and Water
- Consultative and coordination council for environmental protection in the marine waters of the Black Sea
- Advisory Council on Maritime Spatial Planning to the Ministry of Land Development

PROJECTS

Project leadership

National projects

2011-2012 "Expansion of the ecological network NATURA 2000 in the Bulgarian Black Sea to overcome the medium insufficiency in terms of the marine habitats 1110 "Sandbanks which are slightly covered by sea water all the time" and 1170 "Reefs" and the species 4125 *Alosa immaculata*, 1349 *Tursiops truncatus* and 1351 *Phocoena phocoena* and partial overcome of scientific reserves for habitat 1180 "Submarine structures made by

leaking gases" and species 1349 Tursiops truncatus in accordance with the conclusions of the European Topic Center on Biodiversity from the Black Sea Biogeographic Seminar, 15 June 2010, Brindisi". EMEPA, Contract 7976/04.04.2011.

2015-2017 Investigations on the State of the Marine Environment and Improving Monitoring Programs developed under MSFD - ISMEIMP, Contract № Д-34-13/02.04.2015 г. Progamme BG02 "Integrated Management of Marine and Inland Waters", Financial Mechanism of EEA.

International projects

2022-2026 OBSERVING AND MAPPING MARINE ECOSYSTEMS – NEXT GENERATION TOOLS - OBAMA-NEXT, Contract № 101081642, HORIZON EC. **Coordinator for IO-BAS**

2018-2020. Assessing the vulnerability of the Black Sea marine ecosystem to human pressures - ANEMONE, Contract № 83530/20.07.2018, ENI CBC – Joint operational Programme Black Sea Basin 2014-2020. **Work package leader**

2016-2020. COST Ation № CA15121 Advancing marine conservation in the European and contiguous seas – MarCons. **Member of the Steering committee**

2012-2016 Towards COast to COast NETworks of marine protected areas (from the shore to the high and deep sea), coupled with sea-based wind energy potential – CoCoNet, Contract №: 287844 7FP EC. **Coordinator for IO-BAS**

2009-2013 Monitoring and Evaluation of Spatially Managed Areas – MESMA Contract №: 226661" 7FP EC. **Coordinator for IO-BAS**

2009-2012 Knowledge-based Sustainable Management for Europe's Seas - Knowseas, Contract № 226675, 7FP EC. **Coordinator for IO-BAS**

Project membership

2023 – 2027 Assessing spillover from marine protected areas to adjacent fisheries: Mediterranean and Black Seas - SPILOVER-MED, CINEA/EMFAF/2021/3.1.2/05/ SI2.882080-SC06

2023 – 2027 Enhancing social well-being and economic prosperity by reinforcing the EFFECTIVEness of protection and restoration management in Mediterranean MPAs – EFFECTIVE, Contract 101112752 — EFFECTIVE — HORIZON-MISS-2022-OCEAN-01, CINEA

2022 – 2024 Mapping of marine protected areas and their associated fishing activities: Mediterranean and Black Seas - MAPAFISH-MED, CINEA/EMFF/2021/3.1.2/SI2.868140-SC02, CINEA

2021-2025 A BRIDGE-BS - Advancing Black Sea Research and Innovation to Co-Develop Blue Growth within Resilient Ecosystems. H2020-BG-2018-2020 , BG-11-2020, RIAN № SEP-210673568

2021-2023 EuSeaMap - A physical habitat map for European Seas. Lot Seabed Habitats. Договор № EASME/EMFF/2020/3.1

2019-2022 Black Sea CONNECT - Coordination of Marine and Maritime Research and Innovation in the Black Sea. H2020-EU.3.2.5.2. Contract № 860055

2020-2021 EuSeaMap - A physical habitat map for European Seas. Lot 3 Seabed Habitats. EASME/EMFF. Contract № SI2.843624

2019-2021 EuSeaMap - A physical habitat map for European Seas. Lot Seabed Habitats. Contract № EASME/EMFF/2018/1.3

2017-2019 EuSeaMap - A physical habitat map for European Seas. Lot 2 Seabed Habitats. Contract № EASME/EMFF/2016/1

2015-2019 eLTER - Integrated European Long-Term Ecosystem & Socio-Ecological Research Infrastructure. H2020. Contract № 654359

2013-2016 EUSeaMap - A physical habitat map for European Seas European. Lot Seabed Habitats. Commission Directorate-General for Maritime Affairs and Fisheries. Contract № SI2.657872

HONOURS AND AWARDS

Awards

Collective award "Varna" of Varna Municipality for scientific achievements under the project "Investigations on the State of the Marine Environment and Improving Monitoring Programs developed under MSFD" (ISMEIMP), Contract No. D-34-13/02.04.2015 under Program BG02 "Integrated management of marine and inland waters" under the Financial Mechanism of the European Economic Area. **Scientific team leader**

ORGANISATIONAL SKILLS

Managing and leadership skills

Excellent managing skills acquired as Scientific Deputy Director and Head of "Marine Biology and Ecology" Department.

Excellent team leadership skills acquired as coordinator and principal investigator of national and international projects and research teams.

PROFESSIONAL SKILLS

Job skills

- Extensive knowledge on biodiversity of marine macrozoobenthos at species and above species (communities, biotopes, habitats) level;
- Development of national indicator systems for classification and assessment of the ecological status of marine macrozoobenthos under WFD and MSFD;
- Determining of shellfish population parameters
- Indicator development and impact assessment of non-native invasive species
- Assessment of anthropogenic pressure benthic habitats - physical disturbance, habitat loss;
- Classification and mapping of marine benthic habitats;
- Biostatistical analyses;
- Sampling and laboratory analysis of marine zoobenthos;
- Quality assurance and quality control of sampling and laboratory analysis of marine zoobenthos;
- Development of marine monitoring programs under MSFD;
- Excellent knowledge of the application of European environmental legislation - Habitats Directive, Water Framework Directive; Marine Strategy Framework Directive;
- Education and supervision of doctoral students.

OTHER SKILLS

Other skills

TDI Decompression Procedures Diver

WORLD PLATFORMS FOR PUBLICATIONS AND CITATIONS DATA

Personal ID

<https://orcid.org/0000-0002-2679-5062>

[Scopus Author ID: 36777574600](#)

[ResearcherID: A-3230-2016](#)

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