

Istraživački interes

Šira i uža oblast istraživanja:

Prof. dr Mandić Sreten,

Biologija mora, ekologija, oblast zaštite marinskih ekosistema, biološki resursi morskog dna, ekotoksikologija, određivanje sadržaja teških metala u vodama Bokokotorskog zaliva i dr.

Dr Lenhardt Mirjana,

Istraživački interes

Šira i uža oblast istraživanja:

Ekologija, ihtiologija, ekotoksikologija, faktori ugrožavanja populacija, njihova zaštita

Istraživački interes

Šira i uža oblast istraživanja:

Prof. dr Savić Ivo,

Teorijska i primjenjena ekologija, ekologija životinja, biogeografija, faunistika, oblast zaštite i unapređivanja životne sredine, ekologija čovjeka.

CURRICULUM VITAE

Family name: Dr Lenhardt
First names: Mirjana
Date of birth: 07.02.1957
Nationality: Serbian
Education:

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained
Faculty of Natural Sciences, University of Belgrade, 1975 - 1980	Molecular biology and Physiology
Center for Multidisciplinary Studies of the Belgrade University, 1981 - 1984	M.Sc. thesis «Generalized computer program for calculation of optimal fish catch on Velika Morava»
Biological Faculty, University of Belgrade - 1992 - 1997	PhD thesis «Ecological-biochemical research of pike (<i>Esox lucius</i> L.) population from Danube near Belgrade»

Language skills: Indicate competence on a scale of 1 - 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
Serbian	Mother tongue		
English	1	1	1
Czech	2	2	5
Russian	1	3	3

Membership of professional bodies:

2012. member of DSTF – Danube Sturgeon Task Force;
 2012-2017. Expert Group Leader for Fishery/Fish Biology of International Association for Danube Research;
 2012. Member of AIS3 - Association of Italian and Serbian Scientists and Scholars member

Other skills:

Scholarships and Awards

2001 – Protein and amino acid content determination in fish oocytes and eggs, University of Bergen, Norway

1990 – Enzymes involved in xenobiotic metabolism of fishes, Laboratory for Aquatic Toxicology, Studsvik, Sweden

Research Interests: fishery, ichthyology, ecology, ecotoxicology, endangering factors of sturgeon species populations and their protection

Present position:

- Institute for Biological Research “Siniša Stanković”, Belgrade, Serbia (1985–present);
- Institute for Multidisciplinary Research, Belgrade, Serbia (2006–present)

Years within the firm: 35 years

Qualifications and skills:

- MSc and PhD thesis in fishery and ecotoxicology of fish in open waters finished on University of Belgrade, Serbia
- Excellent knowledge of Computer literacy. Microsoft Office, Internet applications, statistical packets (STATISTICA, SOLO)

General professional experience:

- 30+ years experience in fishery sector in Serbia, Member State (Sweden, Romania, Slovakia, Czech Republic), EEA (Norway) and international organizational level (ICPDR)
- profound knowledge of the requirements for fisheries information for policy decision makers and other stakeholders
- good experiences in delivery of expert services in fishery and sturgeon aquaculture sectors
- experience in EU financed projects, procedures
- more than 20 years experience in the design of projects relating to economically important freshwater fish species
- highly experienced in commercial fishery in Serbia
- 15 years experience leading a team of scientists working within the framework of national and international projects
- strong managerial and coordination skills

Specific professional experience:

- involvement in Negotiating Group 13 - Fisheries from the starting of this procedure in Serbia. Participation on meeting and seminars devoted to harmonization of legislation related to EU
- involvement in collection of data for Serbia's fishery sector and cooperation within regional fisheries management organizations (CITES, Action Plan for Sturgeons in the Danube River
- contribution to the preparation of legislation in fishery sector of the Republic of Serbia z

Country	Date: from- to (month/ year)
Czech Republic	Three weeks stay in 2015
Hungary	Short term missions in 2007 and 2008
Norway	Two months stay in 2001
Romania	Short missions in 2013 - 2015
Serbia	1985-now
Slovakia	Short term missions in 2012 and 2013
Sweden	Five months stay in 1990

Professional experience:

Date from – Date to	Location	Company& reference person (name &contract details)	Position	Description
03/16	Serbia	Siniša Kotur, Deputy Chair of the Negotiating Group 13 - Fisheries, Serbia	Member of Negotiation Group 13	Participation in Negotiating Group 13 - Fisheries Preparation of the Negotiating Position, March 2016, Belgrade The current state of the negotiation process, tasks and objectives. Further steps in preparation of the Negotiating position for Chapter 13. Discussion relating to Law on the protection and sustainable use of fish stocks. Protected fish species and status of aquaculture, adequate administrative and technical structures to ensure the control of fishing activities as regards in particular control of marketing and traceability of fishery and aquaculture products. The sectors of the Serbian administration involved in the control of fishing activities including import, transport, processing and marketing
2014- 2018	Serbia	Dr Arjan Paistra Wageningen University and Research Centre, Netherlands	MC for Serbia	Swimming of fish and implications for migration and aquaculture (FITFISH), COST Action (European Cooperation in Science and Technology) FA1304. MC for Serbia The main objective of the Action is to strengthen and improve knowledge on swimming of fish and its applicability in improving the status of wild and farmed fish by bringing together research and industrial partners with policy makers. More specifically: to build capacity among the high-quality scientific research community involved in studying the swimming of fish and its implications for migration and aquaculture, to support its integration; to leverage national research investments; to address an issue of global relevance and to increase the impact of science and technology on policy makers, regulatory bodies and national decision makers.
2012- 2016	Serbia	Dr Eleanor Jennings Dundalk Institute of Technology Ireland	MC for Serbia	"Network Lake Observations in Europe (NETLAKE), COST Action (European Cooperation in Science and Technology) ES 1201". MC for Serbia The over-arching objective of NETLAKE is to establish a network of scientists, technologists, managers and stakeholders focused on the development and application of cutting-edge sensor technology for the protection of European lakes and reservoirs. Using automatic high frequency monitoring allow high-resolution monitoring of lakes and reservoirs from in-situ platforms, with the data provided to local end-users by web-based technology. The information acquired by these systems is currently reviewed on a site-by-site basis, but an even greater potential lies in the integration of data from many sites into a European network.
2015- 2016	Serbia	Dr Cristina Sandu International Association for Danube Research Austria	Project Leader for Serbian part	Ex-situ survey to preserve sturgeon genetic diversity in the Middle and Lower Danube, financed by EU and the City of Vienna - Obtain an overview of existing ex-situ facilities for sturgeons in Middle and Lower Danube area; Acquire support of local stakeholders and fishery authorities for sturgeon conservation; Develop a roadmap for future actions in ex-situ conservation; Producing an inventory of existing facilities, brood stock and expertise; Field surveys in selected hatcheries and discussions with hatchery stakeholders; Preparation a workshop with national stakeholders; Discuss the conclusions of the field visits with the DSTF experts; Elaborate a roadmap of future actions and disseminate in a high-level event to raise the support of the decision makers; Dissemination activities for the wide public and local stakeholders.
2014- 2015	Serbia	Dr Radu Suciu Danube Delta National Institute for Research and Development Romania	Project Leader for Serbian part	Fish behaviour preparatory study at Iron Gate Hydropower dams and reservoirs. Financed by European Investment Bank . The main objective of this project is to restore fish migration on the Danube river, focusing on the main migration barrier - the Iron Gates hydropower dams between Romania and Serbia – as part of the legal requirements under the Water Framework Directive. The specific objectives are to test and adapt different telemetry techniques (radio – and acoustic) on sturgeon, in order to achieve the detection resolution required to precisely determine the preferred location of the fish pass entrances at the Iron Gate hydropower and navigation systems as well as to prepare and train sturgeon tagging and tracking teams from Bulgaria and Serbia, in order for them to become partner in the future larger telemetry study on sturgeon behaviour in relation to the Iron Gate hydropower and navigation systems.
2011- 2015	Serbia	Ministry of Education, Science and Technological Development of the Republic of Serbia	Project Leader	"Fish as bioindicators of the state of open waters in Serbia. Pr.No. 173045" Ministry of Education and Science of Republic of Serbia The research on this project will include all parameters stated in the EU Water Framework Directive WFD, as well as additional analyses of fish populations at different organizational levels that will be used in determination of negative anthropogenic impact. Observation of biological effects has become an integral component in environmental monitoring programmes, as an addition to established pollution monitoring. During the years, many biomarkers were developed, and it has been proved that they can represent an efficient system for early detection of negative effects on biological systems and assessment of biological effects of pollutants. Although biomarkers are potentially useful, they have certain limitations, which will be checked during the research. The threat status of different fish species will be assessed within the project activities, by analysing several parameters, the significance of which in assessment of status of water bodies in Serbia will be determined.

11/2015	Serbia	Republic of Serbia, Government, European Integration Office	Fisheries Expert	Participation on seminar Financial Aspects and Need for Analytical Support to the EU Accession Negotiation Process, November 2015, Belgrade The main aim was to strengthen members of negotiation groups in their analytical capacities for EU accession negotiations. Negotiation group 11, 12 and 13, Ministry of Agriculture and Environmental Protection, Serbian European Integration Office, Relevant members of the Negotiation Team of Serbia were involved in these activities. GIZ experts from Slovenia presented EU accession negotiations – Financial Package, EU accession negotiations – Fiscal Effects, Analytical Support Functions for EU Accession Negotiations and explained how to organise Analytical Support Function in Serbia.
09/2014	Serbia	Ministry of Agriculture and Environmental Protection of the Republic of Serbia	Fisheries Expert	Bilateral Screening Chapter 13, Law on the protection and sustainable use of fish stocks, Belgrade, Serbia Questions and answers included different topics: Discussion related to: adequate administrative and technical structures in Serbia to ensure the control of fishing activities; sectors of the Serbian administration involved in the control of fishing activities including import, transport, processing and marketing; In what way are the fisheries authorities cooperating with customs and sanitary authorities, registration of fishing vessels; Does Serbia intend to provide its flag to fishing vessels in the future; imports of fishery and aquaculture products; definition for illegal, unregulated and unreported fishing activities which may be committed by Serbian nationals or vessels.
2013- 2015	Romania	Management Authority for the Fisheries Operational Programme	Sturgeon Expert	Evaluation of survival and distribution in the Black Sea of young sturgeons stocked experimentally in the Lower Danube, Romania. The main aim of this project is to mobilize regional efforts for a transboundary approach for the management and conservation of Danube sturgeon. Specific goals related to regulator monitoring of natural sturgeon recruitment and supportive stocking of the Danube River by artificial produced and tagged beluga sturgeon, Russian sturgeon and stellate sturgeon. Monitoring of stocked juvenile sturgeon survival in the Danube River and the Black Sea coastal water was performed by experts from different countries along the Danube River and Black Sea cost.
2012- 2013	Serbia Slovakia	Slovak Academy of Science Ministry of Agriculture and Environmental Protection of the Republic of Serbia	Project Leader	Harmonization of methods for the monitoring of qualitative and quantitative composition of the fish stock of large rivers, Serbia and Slovakia. The main aim of proposed study between Serbia and Slovakia is harmonization of methods for fish sampling in the Danube River. Danube is hardly modified river impacted by dam buildings, modification of river due to navigation and flooding prevention and also by pollution (poorly treated or untreated communal and industrial waste waters). By 2015 all quality elements shall be in good status in accordance with FWD. In practical terms, this means that the species composition, the abundance and the age structure of the different fish populations shall only deviate slightly from what is regarded as natural conditions in the different water bodies. This project will develop, standardize and harmonize methods for fish sampling in large rivers which will enable better monitoring of fish populations in the Danube River.
2011	Serbia	Faculty of Agriculture University of Belgrade	Invited speaker	Participation on meeting Commercial fishery in Serbia, Faculty of Agriculture University of Belgrade, oral presentation, January 2011. Many problems with inland commercial fishery in Serbia were explained as well as different solutions how to overcome them. Two main property right regimes, public and private, were discussed with participants from Commercial fishery organization of Serbia. The other problem relates to placement of goods and valid statistics of fish catch.
2011.	Serbia	TAEIX Ministry of Agriculture, Forestry and water Management of the Republic of Serbia	Fisheries Expert	TAEIX (European Commission Technical Assistance Information Exchange Instrument, DG Enlargement) Workshop on Common Fisheries Policy, AGR44486 , organised in cooperation with Ministry of Agriculture, Forestry and Water Management in Serbia, Belgrade, May 2011. Presentations relating to support beneficiary countries in understanding, transposing, implementing and applying EU policies, legislation and rules. General principles of the common fishery policy, inspection and control, structural actions, market policy and international agreements were presented.
2011	Serbia	Faculty of Agriculture University of Belgrade, Serbia	Member of Scientific Committee	Member of Scientific Committee of the V international conference "Aquaculture and Fisheries" Institute of animal sciences, Faculty of agriculture of University of Belgrade and oral presentation Professional European aquaculture is composed of family firms, SMEs and large Enterprises, each of which will have its own governance 'model', which become more visible with the increasing size and responsibilities of the enterprise. Such models will be directed towards operating within legislative conditions – such as water use and effluent control – or be adapted to best practice and/or certification guidelines, for production that is geared towards – as examples - specific quality conditions or organic production.

2010	Serbia	SEE Transnational Programme	Expert	Participation in preparing Serbian First National Communication under the UN Framework Convention on Climate Change – part relating to biodiversity - Responsible for analysis of the present status of biodiversity in Serbia as well as interlinkages between the present status of biodiversity and current and future climate changes. Estimation of vulnerability of biological biodiversity due to climatic changes and possibility for adaptation. Plan of systematic monitoring and data collection in the sector of biological biodiversity with proposal for project activities.
2006	Serbia	UNDP GEF Directorate for Environmental Protection Serbia	Expert	Participation in National Capacity self-assessment for environmental protection management, Thematic assessment of the needs for capacity building aimed to meet the requirements of the Convention on Biological Diversity Assessment of the capacities for CBD requirements realization. In order to meet all the requirements given in the CBD, as well as the requirements given in other multilateral environmental agreements (MEA), each contracting party should develop the capacities to mobilize relevant information and knowledge, to build consensus and partnership between all stakeholders and on the basis of that they should formulate effective policy, legislation, strategies and programmes. It is also necessary to develop capacities to implement such policy, legislation, strategies and programmes, with the inclusion of human, materialistic and financial resources. Finally, it is necessary to build capacities to monitor, evaluate, report and learn on the basis of the achieved in comparison to planned activities.
1985-1990	Serbia	Serbian Ministry of Science	Team member	Project: "Protection and improvement of the environment in SR Serbia (waters), Serbian Ministry of Science" - The main aim of this project was to identify the main polluter producers, determinations of the waste water quality, screening of the present state of pollution of open waters in Serbia. These investigations also included detection of possible changes in the aquatic ecosystems that appeared under the influence of pollution. Content of toxicants in the most important components has been determinated in the aquatic ecosystems as well as their accumulation in biota, mainly in fish.
1985-1989	Serbia	European Economic Community	Team member	Project:Studies on the pollution status of the Danube River basin, measures of protection and rational exploitation of the water resources, European Economic Community - The studies on river pollution status of the Danube River Basin were realized on the Yugoslav part of the Danube during an especially significant time period (1985-1989), almost immediately before the opening of Rhine-Main-Danube network (September 1992). Investigation performed pointed out the complexity of the problems connected to contamination of such large river system as Danubian one. Fishery represented as an important field of economy in investigated part of the Danube River with the ratio of commercially important and of less appreciated fish species as 60% : 40%.
1991-1995	Serbia	Serbian Ministry of Science	Team member	Project: "Ecological interactions analysis in different types of terrestrial and aquatic ecosystems, Serbian Ministry of Science - Complex ecological investigation in Serbia with specific parts devoted to physicochemical characteristics of water, sediments and soil, microbiological investigation of water and sediments, algal flora, zooplankton, qualitative and quantitative structure of the bottom fauna with special reference to the oligochaeta community, composition and structure of the molluscan fauna, ichthyofauna and ecological characteristics of different fish species, microelements in water, sediments and aquatic communities, pesticide accumulation in the aquatic ecosystem as well as utilization of rivers for different purpose with special attention on fisheries.
1995-2000	Serbia	Serbian Ministry of Science	Team member	Project: "Ecological interactions analysis in different types of terrestrial and aquatic ecosystems", Serbian Ministry of Science - This project was continuation of project with the same title performed in the period 1991 - 1995, and included also introduction of new methods in investigation and establishing of data base with collected material in previous work.
2001-2002	Serbia, Norway	Norwegian Research Council	Project Leader for Serbian part	Project: "Endangered Species: Oocyte maturation of the beluga sturgeon (<i>Huso huso</i>) - Evolutionary significance of egg yolk proteins" - Investigation included analysis of post-vitellogenic oocytes of beluga (<i>Huso huso</i> Linnaeus, 1758), Russian sturgeon (<i>Acipenser gueldenstaedtii</i> Brandt, 1883) and sterlet (<i>Acipenser ruthenus</i> Linnaeus, 1758) sampled downstream of the "IronGate II" dam in Serbian part of the Danube River. Sturgeons spawning migrations from the Black Sea blocked on 863 river kilometer of the Danube River by dam building. Together with other negative impact (over-fishery, pollution) these induced decrease in anadromous sturgeon populations. Results of this project contribute to better understanding of final oocyte maturation in sturgeons.
2001-2005	Serbia	Serbian Ministry of Science	Team member	Project: Development of high-productive aquaculture and its application in protection and improvement of fish resources - Subject of research were endangered fish species of particular ecological and economical value, early stages or their development and their behaviour in different experimental and commercial aquaculture systems. Research concerns primarily sturgeons (Acipenseridae) in the Djerdap dam area, as well as eels and other eurihaline species from estuarine regions (Anguillidae, Mugilidae, Sparidae and Moronidae).The main research goal is to protect the Danubian beluga sturgeon and the eurihaline species from estuarine regions by way of selected strategies of aquaculture as well as to map natural habitats of the fry of estuarine species suitable for commercial aquaculture. Additional goals were to study the phisiology of the early

				development stages of these fish species in order to enable their successful rearing in captivity as well as to establish adequate techniques of commercial aquaculture, applicable to the investigated fish species as aquaculture candidates.
2002-2003	Serbia	Serbian Academy of Sciences Bulgarian Academy of Sciences	Team member	Fish-helminth system as bioindicator for anthropogenic pollution of aquatic ecosystem in the River Danube - Systematic parasitofauna investigations have been carried out on 54 freshwater fish species in waters of the Danube River Basin in Serbia, also in hill-mountainous watercourses, lakes and salmonid fishpond of Sjenicko-Pesterska plateau (south-west region of Serbia), Homolje area (east Serbia), and in Vlasina lake (south-east Serbia). This data review pointed that it is necessary to continue the investigation on fish parasites in Serbia. The data on freshwater fish parasites are important for evaluation of general influence on the community structure.
2004,	Serbia, Croatia, Norway	Norwegian Ministry of Foreign Affairs	Project Leader for Serbian part	Management of freshwater fisheries on bordering rivers – pilot study with a holistic regional approach - One of the aims of the project is to assess the status of the fish populations at different sites in the bordering rivers Sava and Danube, and propose actions where necessary. Work in this project performed in accordance with the principles and regulations for water management given in the EC Water Framework Directive (WFD) and the corresponding CIS-guidance documents (Common Implementation Strategy). The WFD also requires a co-operation between all the sectors with water management responsibility, and that those who use and impact the water also should take part in covering the cost of water management (polluter pay principle). The status of the water body should be evaluated according to the healthiness of the water biology, including fish.
2006-2010	Serbia	Serbian Ministry of Science	Project Leader	Studies on diversity, protection and sustainable use of the fish fauna as key components in developing the strategy for integral management of water resources in Serbia, Serbian Ministry of Science, Project Leader - The subject of research comprises the assessment of fish diversity in Serbia, its spatial, temporal and environmental variability, its threats and its conservation. The aim is to analyze the state of the fish fauna in Serbia and to estimate rates of sustainable use of fish populations as natural resources. The assessment of composition, structure and condition of the fish fauna could serve as a basis for a monitoring programme of aquatic ecosystems in Serbia, which represents a necessary prerequisite for successful realization of the measures predicted by the Resolution on Biodiversity Conservation Policy in Serbia. Furthermore, the estimation of the rational exploitation rate will enable the long-term sustainable use of fish resources. Considering the current multi-purpose use of aquatic ecosystems, the expected results could serve as an information basis for planning and development strategy of integral management of aquatic resources in Serbia, in keeping with the proclaimed principles of the EU Water Framework Directive.
2006-2008	Serbia	Serbian Ministry of Science	Project Leader	Standardization and harmonization of techniques for sturgeon fish population studies development and artificial reproduction, Serbian Ministry of Science, Project Leader Sustainable sturgeon species conservation requires the preservation of the complete life cycle in the natural habitat. Identify, protect and restore the life cycle of sturgeon species in the Danube River and major tributaries, including all life stages, their supporting habitats and migration routes are very important as well as to standardize the respective methodologies across the Danube River Basin. Additional investigation was devoted to development of feasibility study for fish passage construction on Iron Gates dams and to artificial spawning and sturgeon aquaculture.
2007-2008,	Serbia, Hungary	European Agency for Reconstruction	Project Leader	Sustainable use of sterlet and development of sterlet aquaculture in Serbia and Hungary - In this project joint system was developed to protect and manage common natural resources, sterlet (<i>Acipenser ruthenus</i>) populations in Serbia and Hungary. This was done by common work of two countries and collaboration between them, which has resulted in preparation of Handbook for sterlet aquaculture and Activity plan for sustainable use and protection of sterlet in the Danube River Basin. Both publications are a good basis for decision makers in Serbia and Hungary to implement sustainable use of sterlet populations. Additional work related to sterlet age structure, sublethal effects of water and sediment pollution on sterlet populations.

Other relevant information: dr Mirjana Lenhardt has published more than 100 papers in International Citation Index journals and 9 chapters in books. She was in commission of 2 MSc and 11 PhD theses. She is ad hoc reviewer for the journals: Science of the Total Environment, Chemosphere, Polar Research, Food Control, Turkish Journal of Zoology, Aquaculture International, Slovenian Veterinary Research, Saudi Journal of Biological Sciences, Folia Zoologica, Biologia. She was involved in work of Scientific and Organizing Committee for international conferences.

List of publications

In scientific journals

- Jarić, I., Bronzi, P., Cvijanović, G., **Lenhardt, M.**, Smederevac-Lalić, M., Gessner, J. (2018). Paddlefish (*Polyodon spathula*) in Europe: An aquaculture species and a potential invader. *Journal of Applied Ichthyology* in press.
- Seelen, L.M.S. Flaim, G., Keuskamp, J., Teurlinck, S., Font, R.A., Tolunay, D., Fránková, M., Šumberová, K., Temponeras, M., **Lenhardt, M.**, Jennings, E., de Senerpont Domis, L.N. 2019. An affordable and reliable assessment of aquatic decomposition: Tailoring the Tea Bag Index to surface waters. *Water Research* 151 (15), 31-43.
- Djikanović V., Skorić S., Spasić S., Naunović Z., **Lenhardt M.** 2018. Ecological risk assessment for different macrophytes and fish species in reservoirs using biota-sediment accumulation factors as a useful tool. *Environmental Pollution* 241, 1167–1174.
- Raskovic, B., Poleksic, V., Skoric, S., Jovicic, K., Spasic, S., Hegedis, A., Vasic, N., **Lenhardt, M.** 2018. Effects of mine tailing and mixed contamination on metals, trace elements accumulation and histopathology of the chub (*Squalius cephalus*) tissues: Evidence from three differently contaminated sites in Serbia. *Ecotoxicology and Environmental Safety* 153, 238-247.
- Kolarević, S., Sunjog, K., Kračun-Kolarević, M., Kostić-Vuković J., Jovanović, J., Simonović, P., Simić, V., Piria, M., Gačić, Z., **Lenhardt, M.**, Paunović, M., Vuković-Gaćić, B. (2018). The Genetic Variability (RAPD) and Genotoxicity In Vivo (Alkaline and Fpg-Modified Comet Assay) in Chub (*Squalius cephalus*): The Sava River Case Study. *Int J Environ Res* 12(5): 703-712 .
- Smederevac-Lalic, M., Kalauzi, A., Regner, S., Navodaru, I., Visnjic-Jeftic, Z., Gacic, Z., **Lenhardt, M.** (2018). Analysis and forecast of Pontic shad (*Alosa immaculata*) catch in the Danube River. *Iranian Journal of Fisheries Sciences.* 17(3), pp: 443-457.
- Lenhardt, M.**, Pekarik, L., Skoric, S., Smederevac-Lalic, M., Hegedis, A., Jacimovic, M., Djikanovic, V. 2017. Influence of the twilight period and different sampling methods on catch of gobiids (Gobiidae) at four locations in the inshore parts of the Danube River. *Acta Zoologica Bulgarica* 9, 225-229.
- Smederevac-Lalic, M., Kalauzi, A., Regner, S., **Lenhardt, M.**, Naunovic, Z., Hegedis, A., 2017. Prediction of fish catch in the Danube River based on long-term variability in environmental parameters and catch statistics. *Science of the Total Environment* 609, 664-671.
- Kostic, J., Kolarevic, S., Kracun-Kolarevic, M., Aborgiba, M., Gacic, Z., Paunovic, M., Visnjic-Jeftic, Z., Raskovic, B., Poleksic, V., **Lenhardt, M.**, Vukovic-Gacic, B. 2017. The impact of multiple stressors on the biomarkers response in gills and liver of freshwater breams during different seasons. *Science of the Total Environment* 601, 1670-1681.
- Cvijanovic, G., Adnadjevic, T., Jaric, I., **Lenhardt, M.**, Maric, S. 2017. Genetic analysis of sterlet (*Acipenser ruthenus* L.) populations in the Middle and Lower Danube sections. *North-Western Journal of Zoology*, (2017), vol. 13 br. 1, str. 34-43
- Sunjog, K., Kolarević, S., Kračun-Kolarević, M., Visnjic-Jeftic, Z., Skoric, S., Gačić, Z., **Lenhardt, M.**, Vasic, N., Vuković-Gaćić, B. 2016. Assessment of status of three water bodies in Serbia based on tissue metal and metalloid concentration (ICP-OES) and genotoxicity (comet assay). *Environmetal Pollution* 213, 600-607.
- Jovicic, K., Jankovic, S., Visnjic-Jeftic, Z., Skoric, S., Djikanovic, V., **Lenhardt, M.**, Hegedis, A., Krpo-Cetkovic, J., Jaric, I. 2016. Mapping differential elemental accumulation in fish tissues: importance of fish tissue sampling standardization. *Archives of Biological Sciences* 68 (2), 303-309.
- Aborgiba, M., Kostic, J., Kolarevic, S., Kracun-Kolarevic, M., Elbahi, S., Knezevic-Vukcevic, J., **Lenhardt, M.**, Paunovic, M., Gacic, Z., Vukovic-Gacic, B. 2016. Flooding modifies the genotoxic effects of pollution on a worm, a mussel and two fish species from the Sava River. *Science of the Total Environment* 540, 358-367.
- Morina, A., Morina, F., Djikanović, V., Spasić, S., Krpo-Ćetković, J., **Lenhardt, M.** 2016. Seasonal variation in element concentrations in surface sediments of three rivers with different pollution input in Serbia. *Journal of Soils and Sediments* 16 (1), 255-265.

Morina, A., Morina, F., Djikanović, V., Spasić, S., Krpo-Ćetković, J., Kostić, B., **Lenhardt, M.** 2016. Common barbel (*Barbus barbus*) as a bioindicator of surface river sediment pollution with Cu and Zn in three rivers of the Danube River Basin in Serbia. *Environmental Science and Pollution Research* 23 (7), 6723-6734.

Jarić I., Smederevac-Lalić M., Jovičić K., Jaćimović M., Cvijanović G., **Lenhardt M.**, Kalauzi A. (2016). Indicators of unsustainable fishery in the Middle Danube. *Ecology of freshwater fish* 25 (1), 86-98.

Banaduc, D., Rey, S., Trickova, T., **Lenhardt, M.**, Curtean-Banaduc, A. 2016. The Lower Danube River–Danube Delta–North West Black Sea: A pivotal area of major interest for the past, present and future of its fish fauna — A short review. *Science of the Total Environment* 545-546, 137-151.

Rašković, B., Poleksić , V., Višnjić -Jeftić , Ž., Skorić , S., Gačić , Z., Djikanović, V., Jarić, I., **Lenhardt, M.** 2015. Use of Histopathology and Elemental Accumulation in Different Organs of Two Benthophagous Fish Species as Indicators of River Pollution. *Environmental Toxicology* 30 (10), 1153-1161.

Jovičić K., Nikolić M.D., Višnjić – Jeftić Ž., Đikanović V., Skorić S., Stefanović M.S., **Lenhardt M.**, Hegediš A., Krpo – Ćetković J., Jarić I. (2015). Mapping differential elemental accumulation in fish tissues: assessment of metal and trace element concentrations in wels catfish (*Silurus glanis*) from the Danube River by ICP-MS. *Environmental Science and Pollution Research*, 22.5, 3820-3827.

Jarić, I., Jaćimović, M., Cvijanović, G., Knežević-Jarić, J., **Lenhardt, M.** 2015. Demographic flexibility influences colonization success: profiling invasive fish species in the Danube River by the use of population models. *Biological Invasions* 17, 219-229.

Subotić S., Višnjić-Jeftić Ž., Spasić S., Hegediš A., Krpo-Ćetković J., **Lenhardt, M.** 2015. Concentrations of 18 Elements in Muscle, Liver, Gills, and Gonads of Sichel (*Pelecus cultratus*), Ruffe (*Gymnocephalus cernua*), and European Perch (*Perca fluviatilis*) in the Danube River near Belgrade (Serbia). *Water, Air, & Soil Pollution* 226 (9), 1-11.

Jarić, I., Gessner, J., **Lenhardt, M.** 2015. A life-table metamodel to support the management of data deficient species, exemplified in sturgeons and shads. *Environmental Biology of Fishes* 98 (12), 2337-2352.

Lenhardt, M., Poleksić, V., Vuković-Gačić, B., Rašković B., Sunjog, K., Kolarević, S., Jarić, I., Gačić, Z. 2015. Integrated use of different fish related parameters to assess the status of water bodies. *Slovenian Veterinary Research* 52(1), 5-13.

Jaćimović, M., **Lenhardt, M.**, Višnjić-Jeftić, Z., Jarić, I., Gačić, Z., Hegediš, A., Krpo-Ćetković, J. 2015. Elemental concentrations in different tissues of European perch and black bullhead from Sava Lake (Serbia) *Slovenian Veterinary Research*, 52 (2), 57-65.

Djikanović V., Skorić S., **Lenhardt M.**, Smederevac-Lalić M., Visnjić-Jeftić Z., Spasić S., Mićković B. 2015. Review of sterlet (*Acipenser ruthenus* L. 1758) (Actinopterygii: Acipenseridae) feeding habits in the River Danube, 1694-852 river km. *Journal of Natural History* 49(5-8), 411-417.

Ljubobratović, U., Kucska, B., Feledi, T., Poleksić, V., Marković, Z., **Lenhardt, M.**, Peteri, A., Kumar, S., Ronyai, A. 2015. Effect of weaning strategies on growth and survival of pikeperch, *Sander lucioperca*, larvae. *Turkish Journal of Fisheries and Aquatic Sciences* 15, 327-333.

Jovičić, K., **Lenhardt, M.**, Jarić, I. 2015. Importance of Standardized Reporting of Elemental Concentrations in Fish Tissues. *Human and Ecological Risk Assessment* 21, 2170-2173.

Cvijanović, G., Adnadević, T., **Lenhardt, M.**, Marić, S. 2015. New data on sterlet (*Acipenser ruthenus* L.) genetic diversity in the Middle and Lower Danube sections, based on mitochondrial DNA analyses. *Genetika* 47 (3), 1051-1062.

Jarić, I., Knežević-Jarić, J., **Lenhardt, M.** 2014. Relative age of references as a tool to identify emerging research fields with an application to the field of ecology and environmental sciences. *Scientometrics* 100, 519-529.

Sunjog, K., Kolarević, S., Kračun-Kolarević, M., Gačić, Z., Skorić, S., Đikanović, V., **Lenhardt, M.**, Vuković-Gačić, B. 2014. Variability in DNA damage of chub (*Squalius cephalus* L.) blood, gill and liver cells during the annual cycle. *Environmental Toxicology and Pharmacology* 37(3), 967-974.

Jovicic, K., **Lenhardt M.**,Visnjic-Jeftic, Z., Djikanovic, V., Skoric, S., Smederevac-Lalic, M., Jacimovic M., Gacic Z., Jaric I., Hegedis A. 2014. Assessment of Fish Stocks and Elemental Pollution in

the Danube, Sava and Kolubara Rivers on the Territory of the City of Belgrade, Serbia, Acta Zoologica Bulgarica 66, 179-184.

Lenhardt, M., Smederevac-Lalić, M., Djikanović, V., Cvijanović, G., Vuković-Gačić, B., Gačić, Z., Jarić, I. 2014. Biomonitoring and genetic analysis of sturgeons in Serbia: A contribution to their conservation Acta Zoologica Bulgarica 66, 69-73.

Sunjog, K., Kolarević, S., Héberger, K., Gačić, Z., Knežević-Vukčević, J., Vuković-Gačić, B., & **Lenhardt, M.** 2013. Comparison of comet assay parameters for estimation of genotoxicity by sum of ranking differences. Analytical and Bioanalytical Chemistry 405 (14), 4879-4885.

Subotic S., Spasic S., Visnjic-Jeftic Z., Hegedis A., Krpo-Cetkovic J., Mickovic B., Skoric S., **Lenhardt M.** 2013. Heavy metal and trace element bioaccumulation in target tissues of four edible fish species from the Danube River (Serbia). Ecotoxicology and Environmental Safety 98, 196-202.

Skoric S., Cvijanovic G., Kohlmann K., Hegedis A., Jaric I., **Lenhardt M.** 2013. First record of a hybrid striped bass (*Morone saxatilis* x *Morone chrysops*) in the Danube River (Article). Journal of applied ichthyology 29 (3), 668-670.

Jarić, I., Cvijanović, G., Knežević-Jarić, J. and **Lenhardt, M.** 2012. Trends in fisheries science during 2000-2009: a bibliometric study. Reviews in Fisheries Science 20 (2), 70-79.

Sunjog, K., Gačić Z., Kolarević, S., Višnjić-Jeftić, Z., Jarić, I., Knežević-Vukčević, J., Vuković-Gačić, B., **Lenhardt, M.**, 2012. Heavy Metal Accumulation and the Genotoxicity in Barbel (*Barbus barbus*) as Indicators of the Danube River Pollution. The Scientific World Journal art.no. 351074, doi:10.1100/2012/351074

Skoric S., Visnjić-Jeftic Z., Jaric I., Djikanovic V., Mickovic B., Nikcevic M., **Lenhardt M.** 2012. Accumulation of 20 elements in great cormorant (*Phalacrocorax carbo*) and its main prey, carp (*Cyprinus carpio*) and Prussian carp (*Carassius gibelio*). Ecotoxicology and Environmental Safety 80, 244-251.

Lenhardt, M., Jarić, I., Višnjić-Jeftić, Ž., Skorić, S., Gačić, Z., Pucar, M. and Hegediš, A. 2012. Concentrations of 17 elements in muscle, gills, liver and gonads of five economically important fish species from the Danube River. Knowledge and Management of Aquatic Ecosystems 407, 02.

Jarić, I., Cvijanović, G., Hegediš, A. and **Lenhardt, M.** 2012. Assessing the range of newly established invasive species in rivers using probabilistic methods. Hydrobiologia 680, 171-178.

Skorić, S., Rašković B., Poleksić, V., Gačić, Z. and **Lenhardt, M.** 2012. Scoring of the extent and intensity of carp (*Cyprinus carpio*) skin changes made by cormorants (*Phalacrocorax carbo sinensis*): relationship between morphometric and histological indices. Aquaculture International 20(3), 525-535.

Lenhardt, M., Jarić, I., Cvijanović, G., Gačić Z., Kolarević, J., Smederevac-Lalić, M., Višnjić- Jeftić, Ž. 2012 Comparison of morphological characters between wild and cultured sterlet (*Acipenser ruthenus* L.). Slovenian Veterinary Research 49 (4), 177-84.

Višnjić-Jeftić, Ž., **Lenhardt, M.**, Vukov, T., Gačić, Z., Skorić, S., Smederevac-Lalić, M. and Nikčević, M. 2012. The geometric morphometrics and condition of Pontic shad (*Alosa immaculata*) migrants to the Danube River. Journal of Natural History 47(15-16), 1121-1128.

Cvijanović, G., Cvijanović, M., Jarić, I. and **Lenhardt, M.** 2012. Use of shape analysis in the investigation of disputable meristic characters for *Ameiurus melas* (Rafinesque, 1820) and *Ameiurus nebulosus* (Lesueur, 1819). Journal of Applied Ichthyology 28, 617-622.

Jarić, I., Višnjić-Jeftić, Ž., Cvijanović, G., Gačić, Z., Jovanović, Lj., Skorić, S., **Lenhardt, M.** 2011. Determination of differential heavy metal and trace element accumulation in liver, gills, intestine and muscle of starlet (*Acipenser ruthenus*) from the Danube River in Serbia by ICP-OES. Microchemical Journal 98, 77-81.

Lenhardt, M., Marković, G., Hegediš, A., Maletin, S., Ćirković, M., Marković, Z. 2011. Non-native and translocated fish species in Serbia and their impact on the native ichthyofauna. Reviews in Fish Biology and Fisheries 21 (3), 407-421.

Janković, S., Čurčić, Š., Radičević, T., Stefanović, S., **Lenhardt, M.**, Durgo, K., Antonijević, B. 2011. Non-dioxin-like PCBs in ten different fish species from the Danube river in Serbia. Environmental

Monitoring and Assessment 181, 153-163.

Jarić, I., Lenhardt, M., Pallon, J., Elfman, M., Kalauzi, A., Suciu, R., Cvijanović, G., Ebenhard, T. 2011. Insight into Danube sturgeon life history: trace element assessment in pectoral fin rays. Environmental Biology of Fishes 90, 171-181.

Smederevac-Lalić, M., Jarić, I., Višnjić-Jeftić, Ž., Skorić, S., Cvijanović, G., Gačić, Z., Lenhardt, M. 2011. Management approaches and aquaculture of sturgeons in the Lower Danube region countries. Journal of Applied Ichthyology 27 (Suppl. 3): 94-100.

Krpo-Ćetković, A., Hegediš, Lenhardt, M. 2010. Diet and growth of asp, *Aspius aspius* (Linnaeus, 1758), in the Danube River near the confluence with the Sava River (Serbia). Journal of Applied Ichthyology 26 (4), 513-521.

Jarić, I., Ebenhard, T., Lenhardt, M. 2010. Population Viability Analysis of the Danube sturgeon populations in a VORTEX simulation model. Reviews in Fish Biology and Fisheries 20 (2), 219-237.

Višnjić-Jeftić, Z., Jaric, I., Jovanovic, Lj., Skoric, S., Smederevac-Lalic, M., Nikcevic, M., Lenhardt, M. 2010. Heavy metal and trace element accumulation in muscle, liver and gills of the Pontic shad (*Alosa immaculata* Bennet 1835) from the Danube River (Serbia). Microchemical Journal 95 (2), 341-344.

Poleksic, V., Lenhardt, M., Jaric, I., Djordjevic, D., Gacic, Z., Cvijanovic, G., Raskovic, B. 2010. Liver, gills and skin histopathology and heavy metal content of the Danube sterlet (*Acipenser ruthenus* Linnaeus, 1758). Environmental Toxicology & Chemistry 29 (3), 515-521.

Lenhardt, M., Markovic, G., Gacic, Z. 2009. Decline in the Index of Biotic Integrity of the Fish Assemblage as a Response to Reservoir Aging. Water Resources Management 23, 1713-1723.

Jaric, I., Lenhardt, M., Cvijanovic, G., Ebenhardt, T. 2009. Population viability analysis and potential of its application to Danube sturgeons. Archive of Biological Sciences 61 (1), 123-128.

Višnjić-Jeftić, Ž., Lenhardt, M., Navodaru, I., Hegediš, A., Gačić, Z., Nikčević, M. 2009. Reproducibility of age determination by scale and vertebra in Pontic shad (*Alosa pontica* Eichwald, 1838), from the Danube. Archive of Biological Sciences 61 (2), 337-342.

Jaric, I., Lenhardt, M., Cvijanovic, G., Ebenhardt, T. 2009. *Acipenser sturio* and *Acipenser nudiventris* in the Danube – extant or extinct? Journal of Applied Ichthyology 25, 137-141.

Lenhardt, M., Jaric, I., Cakic, P., Cvijanovic, G., Gacic, Z., Kolarevic, J. 2009. Seasonal changes in condition, hepatosomatic index and parasitism in sterlet (*Acipenser ruthenus* L.). Turkish Journal of Veterinary and Animal Sciences 33, 209-214.

Hegediš, A., Lenhardt, M., Mićković, B., Cvijanović, G., Jarić, I., Gačić, Z. 2007. Amur sleeper (*Perccottus glenii* Dubowski, 1877) spreading in the Danube River Basin. Journal of Applied Ichthyology 23, 705-706.

Lenhardt, M., Jaric, I., Kalauzi, A., Cvijanovic, G. 2006. Assessment of extinction risk and reasons for decline in sturgeon. Biodiversity and Conservation 15, 1967-1976.

Lenhardt, M., Finn, R.N., Cakic, P., Kolarevic, J., Krpo-Cetkovic, J., Radovic, I., Fyhn, H.J. 2005. Analysis of the post-vitellogenic oocytes of the three species of the Danube Acipenseridae: beluga (*Huso huso*), Russian sturgeon (*Acipenser gueldenstaedtii*) and sterlet (*Acipenser ruthenus*). Belgian Journal of Zoology, 134 (Supplement 1), 77-80.

Paunovic, M., Cakic, P., Hegediš, A., Kolarevic, J., Lenhardt, M. 2004. A report of *Eriocheirus sinensis* (H. Milne Edwards, 1854) (Crustacea: Brachyura: Grapsidae) from the Serbian part of the Danube River. Hydrobiologia 529, 275-277.

Cakic, P., Lenhardt, M., Kolarevic, J. 2004. *Sinergasilus polycolpus*, a new copepod species in the ichthyoparasitofauna of Serbia and Montenegro. Diseases of Aquatic Organisms 58, 265-266.

Cakic, P., Lenhardt, M., Kolarevic, J., Mickovic, B., Hegediš, A. 2004. Distribution of Asiatic cyprinid *Pseudorasbora parva* in Serbia and Montenegro, Journal of Fish Biology 65, 1431-1434.

Lenhardt, M., Cakic, P. 2002. Seasonal reproductive cycle of pike, *Esox lucius* L., from the River Danube, Journal of Applied Ichthyology 18 (1), 7-13.

Cakic, P., **Lenhardt, M.**, Mickovic, D., Sekulic, N., Budakov, LJ. 2002. Biometric analysis of *Syngnathus abaster* populations, Journal of Fish Biology 60, 1588-1595.

Cakic, P., Petrovic, Z., Kataranovski, D., Jakovcev, D., **Lenhardt, M.** 2000. The first record and description of *Chaetogaster limnei* von Baer, 1827 (Naididae, Oligochaeta) on *Huso huso* fry in Serbia, Helminthologia 37, 162-164.

Cakic, D., Hegediš, A., Kataranovski, D., **Lenhardt, M.** 1998. Endohelminths of Mediterranean barbel, *Barbus peloponnesius petenyi*, in running waters of West Serbia (Yugoslavia), Folia zoologica 47 (Suppl 1), 81-85.

Lenhardt, M., Mickovic, B., Jakovcev, D. 1996. Age, growth, sexual maturity and diet of the Mediterranean barbel (*Barbus peloponnesius petenyi*) in the river Gradac (West Serbia, Yugoslavia). Folia Zoologica 45, (Suppl 1), 33-37.

Lenhardt, M. 1992. Seasonal changes in some blood chemistry parameters and in relative liver and gonad weights of pike (*Esox lucius* L.) from the River Danube. Journal of Fish Biology 40, 709-718.

Book chapters

Jarić, I., Knežević-Jarić, J., Cvijanović, G., **Lenhardt, M.** 2011. Implementing population viability analysis into fisheries management (Chapter 3). In: Fishery Management, J. S. Intilli (Ed.), pp. 43-60. Nova Science Publishers Inc., New York. ISBN: 978-1-61209-682-7 – ID=804

Jarić, I., Knežević-Jarić, J., Cvijanović, G., **Lenhardt, M.** 2011. Population viability analysis of the European sturgeon (*Acipenser sturio* L.) from the Gironde Estuary system In: Biology and conservation of the European sturgeon *Acipenser sturio* L. 1758, P. Williot, E. Rochard, N. Desse-Berset, F. Kirschbaum and J. Gessner (Eds.), pp. 603-619. Springer- Verlag, Berlin Heidelberg. ISBN: 978-3-642-20610-8 – ID=805

Lenhardt, M., Jarić, I., Cvijanović, G. and Smederevac-Lalić, M. (2008). The key threats to sturgeons and measures for their protection in the Lower Danube Region. In: V. Lagutov (ed.), *Rescue of sturgeon species in the Ural River Basin*. Springer Science, 87-96.

Jankovic, D., Krpo, J., **Lenhardt, M.**, Hegediš, A. 1994. Ecological characteristics of the Danube fish species. In: The Danube in Yugoslavia (Jankovic, D., Jovicic, M. ed.) 159-173, Inst. Biol. Res. "Siniša Stankovic" Belgrade, Inst. Dev. Wat. Res. "Jaroslav Cerni" Belgrade, Commision of the European Communities Brussels, Fed. Min. Sci. Techn. Dev. Belgrade, Min. Sci., Techn. Rep. Serb. Belgrade, Fed. Min. Env. Prot. Belgrade, Belgrade.

Jankovic, D., Pujin, V., Hegediš, A., Maletin, S., Krpo, J., **Lenhardt, M.**, Kostic, D., Andelkovic, D. & Miljanovic, B. 1994. Community structure of the fish fauna in the Danube and its Tributaries. In: The Danube in Yugoslavia (Jankovic, D., Jovicic, M. ed.) 137-148, Inst. Biol. Res. "Siniša Stankovic" Belgrade, Inst. Dev. Wat. Res. "Jaroslav Cerni" Belgrade, Commision of the European Communities Brussels, Fed. Min. Sci. Techn. Dev. Belgrade, Min. Sci., Techn. Rep. Serb. Belgrade, Fed. Min. Env. Prot. Belgrade, Belgrade.

Lenhardt, M. 1994. Biochemical fish blood parameters as indicators of the water saprobitity. In: The Danube in Yugoslavia (Jankovic, D., Jovicic, M. ed.) 185-190, Inst. Biol. Res. "Siniša Stankovic" Belgrade, Inst. Dev. Wat. Res. "Jaroslav Cerni" Belgrade, Commision of the European Communities Brussels, Fed. Min. Sci. Techn. Dev. Belgrade, Min. Sci., Techn. Rep. Serb. Belgrade, Fed. Min. Env. Prot. Belgrade, Belgrade.

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Теоријска и примењена екологија; екологија животиња; екологија човека; биогеографија; фаунистика; област заштите и унапређивања животне средине.

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ACADEMICIAN SINIŠA STANKOVIĆ (1892-1974), FOUNDER OF MODERN ECOLOGY IN SERBIA. Arch. Biol. Sci., Belgrade, 66(2), 453-459, 2014
http://serbiosoc.org.rs/arch_old/VOL66/SVESKA2/01%20-%20Academic%20Sinisa%20Stankovicr.pdf

СИНИША Ђ. СТАНКОВИЋ (1892-1974) УТЕМЕЉИВАЧ ЕКОЛОГИЈЕ У НАШОЈ ЗЕМЉИ. Защита природе, Београд, 64(1), 79-82, 2014
http://www.zzps.rs/wp/casopisi_pdf/018/casopis.pdf #page=81

МИЛУТИН РАДОВАНОВИЋ. У: 160-40-15 ГОДИНА БИОЛОГИЈЕ, МОЛЕКУЛАРНЕ БИОЛОГИЈЕ, ЕКОЛОГИЈЕ И ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ. Биолошки факултет, Универзитет у Београду, Београд, 30-31, 2013
https://www.bio.bg.ac.rs/materijali_vesti/bioloski-fakultet-2013-eng.pdf#page=31

PROFESSOR MIHÁLY MIKES (1926-2010). Arch. Biol. Sci., Belgrade, 62(3), 851-854, 2010
http://serbiosoc.org.rs/arch_old/VOL62/SVESKA_3/!ABS%2062.3%20-%2042%20in%20memoriam%20mikes.pdf

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Postdiplomske studije završio je na Centru za postdiplomski studij Sveučilišta u Zagrebu 1978 godine.

Naziv magistarskog rada: Kvalitativna i kvantitativna analiza glavonožaca (Cephalopoda) u biocenozama litoralnog područja Crnogorskog primorja".

Doktorsku disertaciju pod nazivom "Istraživanja taksonomije, bionomije i ekologije Cephalopoda u Južnom Jadranu " odbranio je na Prirodoslovno-matematičkom fakultetu Sveučilišta u Zagrebu 1983 godine.

Promovisan je za doktora prirodnih nauka iz područja biologije u Zagrebu 21.05. 1984 godine.

Odmah nakon diplomiranja (mart 1970 godine) zasniva radni odnos na određeno vrijeme, kao pripravnik-stažer u Zavodu za biologiju mora u Kotoru. Poslije dvogodišnjeg stažiranja u Zavodu i rada u više laboratorija, izabran je za asistenta za zoobentos i školjkarstvo, na osnovu potreba Zavoda, pozitivno ocijenjenog stažiranja i lične želje. Dakle, od prvog radnog dana pa sve do danas Dr Sreten Mandić radi u Zavodu na radnim mjestima: Stažera-pripravnika, asistenta, naučnog saradnika i višeg naučnog saradnika. Sada je rukovodilac Laboratorije za opštu biologiju mora i marikulturu.

Podaci o specijalizacijama

Uz rad na projektima Zavoda, domaćim i međunarodnim, kao saradnik i rukovodilac Dr Sreten Mandić je obavio veći broj specijalizacija u zemlji i inostranstvu.

U prethodnoj Jugoslaviji to su bili istraživački Centri u Splitu, Rovinju i Zagrebu, a u inostranstvu:

- SR Nemačka, Biološki institut u Hamburgu i Helgelandu, 2 x 45 dana
Institut za fiziku Univerziteta u Kiel-u, 20 dana
Institut za fiziološku hemiju Medicinskog fakulteta Univerziteta u Mainz-u, 30 dana
- Francuska, Biološki institut Univerziteta u Monpelier-u, 30 dana
- SSSR, Moskva i Lenjingrad u srodnim institucijama, 15 dana
- Japan, U institucijama i laboratorijama Univerziteta u Tokiju, 60 dana
- Italija, Biološki institut u Tarantu (studijski boravak) 10 dana
- Galicija, Španija, Institut za okeanografiju -10 dana. Tema: Marikultura

Podaci o prethodnim izborima u naučna zvanja

Dr Sreten Mandić izabran je u zvanje NAUČNOG SARADNIKA Rešenjem br. 1961 od 25.11. 1983, SIZ-a za naučne djelatnosti, u zvanje VIŠEG NAUČNOG SARADNIKA, rješenjem iste Zajednice br. 1085 od 27.04.1989 godine, i u naučnog savjetnika i redovnog profesora Riješenjem br. 01-284 Univerziteta Crne Gore od 18.04 1996.

Nastavno-pedagoška aktivnost

Tokom rada u Zavodu Dr Sreten Mandić održao je niz predavanja, terenskih i laboratorijskih vježbi za studente biologije sa Univerziteta: Sarajeva, Beograda, Novog Sada, Tuzle, Kragujevca, Prištine, Skoplja i Podgorice.

U više navrata održao je predavanja za nastavnike i profesore biologije tokom zimskih seminara iz područja svojih istraživanja savremenih bioloških saznanja.

Takođe je bio, a i sada je ,konsultant i mentor za određivanje i izradu većeg broja diplomskih radova, magistarskih teza i doktorskih disertacija.

Učestvovao je u organizaciji i izvođenju većeg broja "ljetnih škola" domaćih i međunarodnih, sa predavanjima u plenarnom i tematskom dijelu.

U pokretu "Nauka mladima", sa svojim ekipama, kao mentor, osvajao je prva mjesta na nivou SFRJ.

Od školske 1994/95 godine angažovan je na Prirodno-matematičkom fakultetu-Odsjek za biologiju za predmet "BIOLOGIJA MORA".

Biološki fakultet Univerziteta u Beogradu, izabran u zvanje vanrednog profesora za predmet Marinska ekologija od 1998 godine.

NAUČNO-ISTRAŽIVAČKI RAD

Magistarska teza:

- Mandić, S. (1978): Kvalitativna i kvantitativna analiza glavonožaca u biocenozama litoralnog područja Crnogorskog primorja. Zagreb.

Doktorska teza:

- Mandić, S. (1983): Istraživanja taksonomije, bionomije glavonožaca (Cephalopoda) u Južnom Jadranu. Zagreb.

Naučni radovi:

1. Mandić, S. i Stjepčević, J. (1972): Sezonska distribucija i sastav fitoplanktona u priobalnim vodama Bokokotorskog zaliva u jednogodišnjem ciklusu. Poljopživreda i šumarstvo, XVIII, 3-4, 57-75.
2. Mandić, S. (1973): Kvalitativno kvantitativni sastav i distribucija Cephalopoda na profilu ušća Bojane. Studia Marina, 6, 29-44.
3. Mandić, S. (1973): *Rossia macrosoma* (Delle Chiaje) novi rod i vrsta za Jadransko more. Studia Marina, 6, 45-54.
4. Mandić, S. and Stjepčević, J. (1977): First Report on Three Genera of Cephalopoda new for the Adriatic Sea. Rapp.Comm. int. Mer. Medit., 24, 5
5. Stjepčević, J; Mandić, S; Dragović, R. (1977): Mogućnost industrijskog uzgoja jestivih školjkaša u Bokokotorskem zalivu i uvođenje novih vrsta u proces uzgoja. Ichtyologia, 9, 1, 107-120.
6. Mandić, S. i Stjepčević, J. (1978): Sastav i distribucija Cephalopoda u biocenozama litoralnog područja Crnogorskog primorja. Biosistematika, 4, 1, 167-175.
7. Stjepčević, J. i Mandić, S. (1978): Nalazišta *Mitra zonata* Maryat u južnom Jadranu. Biosistematika. 4, 2, 319-326.
8. Stjepčević, J; Stjepčević, B; Mandić, S. (1978): Novi predstavnici parazitne faune dagnji (*Mytilus galloprovincialis* LAMK) i kamenice (*Ostrea edulis* L.) u eksperimentalnim gajilištima Bokokotorskog zaliva. CANU, 2, 357-368.
9. Mandić, S. Stjepčević, J. (1979): Distribucija i zastupljenost roda *Sepia* u Južnom Jadranu.
10. Mandić, S. bi Stjepčević, J. (1979): Sezonska dinamika faune Cephalopoda u litoralnom području Crnogorskog primorja. Zbornik radova II Kongresa ekologa Jugoslavije, Zadar, 1565-1575. 11.
11. Stjepčević, J; Mandić, S; Dragović, R. (1979): Rezultati uzgoja japanske kamenice (*Crassostrea gigas* TH) u uslovima Bokokotorskog zaliva. Zbornik radova II Kongresa ekologa Jugoslavije, Zadar, 1963-1976.
12. Stjepčević, J; Mandić, S; Stjepčević, B; Dragović, R. (1979): Zagađenost priobalnog područja Crnogorskog primorja kao poslijedica urbanog i industrijskog razvoja i mjere za njegovu zaštitu. Zbornik radova II Konferencije o zaštiti Jadrana, Hvar.

13. Mandić, S. et Stjepčević, J. (1981): Mouvements migratoires de quelques espèces de Céphalopodes économiquement importantes dans l'Adriatique méridionale. Rapp. Comm. int. Mer Medit., 27, 5, 213216.
14. Mandić, S. et Stjepčević, J. (1981): Rezultati eksperimentalnog uzgoja obične pljosnate kamenice (*Ostrea edulis* L.) i dagnje (*Mytilus galloprovincialis* LAMC) u Malostonskom zalivu. JAZU - Malostonski zaljev-prirodna podloga i drugtveno valoriziranje, Dubrovnik-Zagreb, 210-235
15. Stjepčević, J; Mandić, S; Stjepčević, B; Dragović, R. (1982): Prilog poznavanju stanja osnovnih abiotskih i biotskih faktora Bokokotorskog zaliva sa aspekta proizvodnje jestivih školjkaša. Acta Adriatica, 23, 1/2, 381-398.
16. Stjepčević, J; Parenzan, P; Mandić, S; Dragović, R. (1982): Survey on benthic Mallusca on Boka Kotorska Bay. Studia Marina, 11/12, 3-28.
17. Mandić, S; Stjepčević J; Dragović, R. (1982): Pojava migracije kod nekih vrsta Cephalopoda u južnom Jadranu. Studia Marina, 11/12, 95-103.
18. Mandić, S. i Stjepčević, B. (1983): Ekonomski važne vrste Cephalopoda u južnom Jadranu. Studia Marina, 13/14, 215-223.
19. Mandić, S. (1984): Cephalopoda južnog Jadrana. Studia Marina, 15/16, 3-77.
20. Stjepčević, J; Parenzan, P; Mandić, S. (1984): Polimorfizam kod vrste *Aporrhais pes-pelecani* (L.) u Bokokotorskom zalivu. Zbornik radova III. Kongresa jugoslavije, knjiga II, 97-100, Sarajevo.
21. Mandić, S. i Stjepčević, J. (1984): Ekologija Cephalopoda (Glavonožaca) južnojadranskoj kotlini. Zbornik radova III. kongresa Jugoslavije, Sarajevo, knjiga I, god.ll, serija B, 37-41.
22. Stjepčević, J; Parenzan, P; Mandić, S; Stjepčević, B. (1984): Kvalitativno-kvantitativna istraživanja Polychaeta unutrašnjeg dijela Bokokotorskog zaliva. Studia Marina, 15/16, 79-97.
23. Knežević, B; Mandić, S; Jardas, I. (1986): Immigrant fish species in Skadar and Sasto lakes and same their specificities. Rapp. Comm. int. Mer Medit., 30, 2.
24. Mandić, S; Konjević, \; Mićković, B; Honer, G; Damjanović, I; Milojević, S. (1988): Effects of different feeding schedules on survival and growth rate of thicklip grey mullet (*Shelone labrosus*) fry reared closed recycling system. Studia Marina, 19, 63-82.
25. Mandić, S. (1990): The rare species of the Cephalopods in the Adriatic. XXXII Congres C.I.E.S.M.

26. Mandić, S. (1990): Ecological specifics of the Boka Kotorska Bay. I International Symposium "Ecological Problems in the Adriatic Sea", b Split. Acta Adriatica.
27. Grgurević, S; Mandić, S; Kovačević, N. (1992): Environment and economy ecorestructuring and regional development on the example of r Montenegrin coast. Malta, zbornik referata.
28. Mandić, S. (1992): Prirodni kapaciteti Bokokotorskog zaliva i nautički turizam. Simpozijum "Prirodni kapaciteti i odnos prema kulturnom okruženju kao parametri razvoja nautičkog turizma. Kotor, zbornik referata,
29. Mandić, S. (1993): Bioekološki potencijali priobalnog mora Crne Gore. Savjetovanje, "Ekološka država Crna Gora", Podgorica, zbornik referata.
30. Grgurević, S; Mandić, S; Kovačević, N. (1993): Ekološko prestrukturiranje i regionalni razvoj na primjeru Bokokotorskog zaliva. Savjetovanje "Ekološka država Crna Gora", Podgorica, zbornik referata.
31. Kovačević, N; Mandić, S; Vukanić, D; Regner, S; Vuksanović, P. (1994): Stanje i perspektive razvoja ribarstva Crne Gore. Jug. savjetovanje "Aktuelni problemi ribarstva Jugoslavije", Zrenjanin-Ečka, Zbornik referata.
32. Mandić, S. (1994): Preliminari podaci za integralni katastar koncentrisanih zagađivača Bokokotorskog zaliva. Ljetna škola - Kotor F '94, Zbornik radova.
33. Vukanić, D; Kljajić, Z; Mandić, S; Kovačević, N; Dutina, M (1994): Osvrt na zagađujuće efekte zagađujućih materija na živi svijet u moru, s posebnim osvrtom na mineralna ulja, naftu njene deživate., Medunarodno savjetovanje Jugoma'94", Novi Sad, Zbornik referata.
34. Miloradov, M; Perzić, B; Mandić, S; Miloradov-Vojinović, M. (1995): Informacioni sistem i katastar zagadivača Boke Kotorske". V naučni skup o sistemu naučnih informacija "Informatička podrška ekološkoj prizivredi i zaštiti životne redine" Kotor, Zbornik radova.
35. Mandić, S. (1995): Prirodne karakteristike i živi svijet Bokokotorskog zaliva. Ljetna škola Kotor'95 "Biološka i hemijska istraživanja biljaka i životinja na području Crne Gore", Zbornik referata.
36. Mandić, S. (1995): Prikaz osnovnih hidrodinamičkih karakteristika Bokokotorskog zaliva s ciljem predviđanja posledica od mogućih zagađenja naftom i predlozi za zaštitu. Savjetovanje "Zaštita Južnog Jadrana od zagađenja naftom i naftnim deživatima".
37. Mandić, S. (1995): Biološki resursi morskog dna. Naučni skup "Istraživanja i zaštita južnog Jadrana" Kotor, zbornik referata.
38. Mandić, S. (1985): Bioekološke karakteristike Bokokotorskog zaliva. Naučni skup "Istraživanja i zaštita Južnog Jadrana" Kotor, zbornik referata.

39. Kovačević, N; Mandić, S. (1995): Stanje ihtiofaune na ekonomskim postajama južnog Jadrana. Naučni skup "Istraživanja i zaštita Južnog Jadrana" Kotor, zbornik referata.
40. Regner, S.; Kovačević, N; Mandić, S; Vukanić, D. (1995): Institucionalna osnova i predlozi organizacije morskog ribarstva Jugoslavije. II Jug. savjetovanje "Ribarstvo Jugoslavije", Kotor, zbornik referata.
41. Mandić, S. (1995): Mogućnost uzgoja dagnji *Mytilus galloprovincialis* LAMCK. u uslovima Kotorskog zaliva. II Jug. savjetovanje "Ribarstvo Jugoslavije", Kotor, zbornik referata.
42. Mandić, S. 1996: Bentoske biocenoze Bokokotorskog zaliva. 5 Kongres ekologa Jugoslavije, 22 - 27 septembar 1996, Beograd
43. Mandić, S., (1998) Tributaries of coastal southern Adriatic -habitats of juvenile fish important for rearing in aquaculture ENVIRONMENTAL PROTECTION TECHNOLOGIES FOR COASTAL AREAS, Black Sea International Conference
44. Regner, D., Mandić, S., and Vuksanović, N., (1998) Sea - water quality control at the southern Adriatic ENVIRONMENTAL PROTECTION TECHNOLOGIES FOR COASTAL AREAS ,Black Sea International Conference
45. Mandić, S., i Mihajlović, R., (1998) Određivanje sadržaja nekih teških metala u vodama Bokokotorskog zaliva, JUGOSLOVENSKA KONFERENCIJA O ZAŠTITI VODA KOTOR, 9-12 jun 1998 godine.9-15.
46. Regner, D., i S. Mandić, (1998) Land-induced modifications of marine ecosystem in Boka Kotorska Bay. INTERNATIONAL SYMPOSIUM ON MARINE POLLUTION, MONTE CARLO, MONACO, 5-9 OCTOBER 1998, 2 p
47. Žikić, R., R. Mihajlović, S. Mandić, A. Stajn, S. Pavlović, B. Ognjanović, (1998) Određivanje koncentracije nekih metala u tkivima dagnje (*Mytilus galloprovincialis*) iz Bokokotorskog zaliva 27. Konferencija o aktuelnim problemima zaštite voda "ZAŠTITA VODA 98", KOTOR 9-12 juni 1998: 15-20
48. B.Mićković, M. Nikčević, A. Hegediš, R.K. Anduš & S.Mandić (1999): THE BIOLOGY OF *Phoxinellus stymphalicus montenegrinus*, Karaman, 1972 Contribution to the Zoogeography and Ecology of the Eastern Mediterranean Region. Vol. I (1999) p.p 367-372
49. I. Borović, S. Mandić, A. Hegediš, B. Mićković (Kotor, Beograd) (2000): Mogućnosti korišćenja slatkih i brakičnih voda Crnogorskog primorja za potrebe akvakulture i njihova zaštita. 29. Konferencija o aktuelnim problemima zaštite voda "Zaštita voda 2000", Mataruška banja, 6-9 jun 2000.

50. B. Mićković, A. Hegediš, I. Borović, S. Mandić (Beograd, Kotor) (2000): Ekološke specifičnosti Jaške rijeke kao osnova za njenu zaštitu. 29. Konferencija o aktuelnim problemima zaštite voda "Zaštita voda 2000", Mataruška banja, 6-9 jun 2000.
51. Slobodan Regner, Aleksandar Joksimović i Sreten Mandić (2000): Stanje morskog ribarstva u periodu od 1997. do 1999. godine i mogućnosti daljeg razvoja. IV Jugoslovenski simpozijum "Ribarstvo Jugoslavije", Vršac 2000. godine.
52. Hegediš, A., Mićković B., Mandić S., Andžus K. A. (2000): Migracija staklaste jegulje u rijeci Bojani kao akvakulturalni resurs. IV Jugoslovenski simpozijum "Ribarstvo Jugoslavije", Vršac 2000. godine.
53. Mićković B., Hegediš A., Nikčević M., Mandić S., Borović I (2000): Reka Bojana kao prirodni resurs juvenilnih formi cipola za potrebe akvakulture. IV Jugoslovenski simpozijum "Ribarstvo Jugoslavije", Vršac 2000. godine.
54. Mićković, B., Hegediš, A., Nikčević, M., Mandić, S. and Andjus, R. K. (2001). A survey of fish species in estuaries along the coast of Montenegro. Prirodni potencijali kopna, kontinentalnih voda i mora Crne Gore i njihova zaštita, Žabljak, septembar 2001. Plenarni referati i izvodi saopštenja sa naučnog skupa: 100.
55. Hegediš, A., Mićković, B., Mandić, S. and Andjus, R. K. (2001). Characteristics of the pigmentation of glass eels during their migration from the Adriatic sea to river Bojana. Prirodni potencijali kopna, kontinentalnih voda i mora Crne Gore i njihova zaštita, Žabljak, septembar 2001. Plenarni referati i izvodi saopštenja sa naučnog skupa: 126.
56. Stevanović, V., I. Radović, S. Regner, S. Mandić and Z. Bulić. Characteristics and possibilities for sustainable utilization of biodiversity of the Mediterranean part of Montenegro. Prirodni potencijali kopna, kontinentalnih voda i mora Crne Gore i njihova zaštita, Žabljak, septembar 2001. Plenarni referati i izvodi saopštenja sa naučnog skupa
57. R. Mihajlović, D. Joksimović, S. Mandić i Lj. Mihajlović. (2001): Macro and micro elements in sea water of Boka Kotorska bay. Prirodni potencijali kopna, kontinentalnih voda i mora Crne Gore i njihova zaštita. Žabljak, 20-23. 09. 2001. Saopštenje
58. Hegediš, A., Mićković, B., Mandić, S. and Andjus, R. K(2001): The brine shrimp artemia from Ulcinj saltwork, a potential natural resource. Prirodni potencijali kopna, kontinentalnih voda i mora Crne Gore i njihova zaštita. Žabljak, 20-23. 09. 2001. Saopštenje
59. S.Stankovic, C.Cantaluppi, S.Mandic, S.Degetto. (2001): The environmental state of aquatic systems through sediments analysis: radiochemical approach. Prirodni potencijali kopna, kontinentalnih voda i mora Crne Gore i njihova zaštita. Žabljak, 20-23. 09. 2001. Saopštenje
60. Štajn, A. Š., R. V. Žikić, R. P. Mihajlović, S. Mandić, B. I. Ognjanović, S. Z. Pavlović, Z. S. Saičić and V. M. Petrović (2002): Mussels (*Mytilus galloprovincialis*) as bioindicators of presence

of havy metals in Boka Kotorska Bay. Prirodni potencijali kopna, kontinentalnih voda i mora Crne Gore i njihova zaštita. Žabljak, 20-23. 09. 2001. Saopštenje

61. Mihajlović, R., D. Joksimović, S. Mandić and Lj. Mihajlović (2002): Macro and micro elements in sea water of Boka Kotorska Bay. *Studia Marina* Vol. 23 No. 1: 41-49
62. Štajn, A., R. V. Žikić, R. P. Mihajlović, S. Mandić, B. I. Ognjanović, S. Z. Pavlović, Z. S. Saičić and V. M. Petrović (2002): Mussels (*Mytilus galloprovincialis*) is bioindicators of presence of havy metals in Boka Kotorska Bay. *Studia Marina* Vol. 23. No 1. 87-95.
63. Stanković, S., C. Cantaluppi, S. Mandic and S. Degetto (2002): The environmental state of aquatic systems through sediments analysis: Radiochemical approach. *Studia Marina* Vol. 23 No 1: 57-65.
64. Regner, S., A. Joksimović and S. Mandić, 2002: Present state of Yugoslav marine fisheries. V Simpozijum o ribarstvu Jugoslavije, 2.-6. oktobar 2002., Bar: 4-6.
65. S. Mandić, N. Bajković, V. Mačić i A. Ivanović (2002): Podvodni vještački greben-pilot program. *Hydrores Information*, Anno XVII, n. 22
66. Regner, S., Vukanić, D., Vuksanović, N., Jerković, L., Kljajić, Z., Mandić, S., Mačić, V., Milojević, S., Radović, I., Regner, D. (2003): Genetički resursi morskih organizama. Jugoslovenska Akademija – Bilten, 1. 45-48, Beograd.
67. Stevanović, V., Radović, I., Regner, S., Mandić, S., Bulić, Z. (2003). Biodiversity of Mediteranean part of Montenegro: Characteristics and possibilities for sustainabile exploataion. IV Workshop Releasing Development potentials at the coast: A part to stabilisation at the Eastern Adriatic. Proceedings, 78-90. Kotor, 2003.
68. Joksimović, A., Mandić, S. (2004): Strategija razvoja marikulture na crnogorskem promorjustanje i perspektiva. VI Simpozijum o ribarstvu Srbije i Crne Gore, sa međunarodnim učešćem, Zbornik Izvoda. Tara, Bajina Bašta, 1-3. XI 2004: 3-4.
69. Radović, I., Mandić, S., Kljajić, Z., Milojević, S. (2004): Diverzitet bodljokožaca (Echinodermata) akvatorije Južnog Jadran. I Simpozijum ekologa Republike Crne Gore, Tivat, 14-18. X 2004. Abstracts: p.69.
70. Stanković, S., Marković, J., Mandić, S., Degetto, S. (2004): Preliminary results on the determination of heavy metals concentrations in seawater and marine sediments of Kotor-Bay. I Simpozijum ekologa Republike Crne Gore, Tivat, 14-18. X 2004. Abstracts: p.126.
71. Stevanović, V., Radović, I., Regner, S., Mandić, S., Bulić, Z. (2004): Biodiversity and biological potentials of the Mediterranean part of Montenegro. I Simpozijum ekologa Republike Crne Gore, Tivat, 14-18. X 2004. Abstracts: p.45.

72. Mandić, S., Kljajić, Z., Joksimović, A., Mićković, B.(2004): Uslovi za razvoj marikulture u priobalnim vodama crnogorskog primorja. Zaštita Voda 2004. Borsko jezero, 8-11 jun, 2004: 419-422.
73. Mačić, V., Badin, C., Kljajic, Z. and Mandic, S. (2004): Acoustic seabed classification and mapping of seagrass *Posidonia oceanica* (L.) Del. meadow. Rapp. Comm. int. Mer. Medit., 37: 393.
74. Radović, I., Stevanović, V., Regner, S., Mandić, S., Bulić, Z. (2005): Adriatic Sea and coastal zone of Serbia and Montenegro: Characteristic of Biodiversity and Possibilities for their Sustainable Exploatation (Forth plenary: Transregional Expertise – Baltic, Mediteranean and Black Sea regions). International Conference: Integrated approaches towards sustainability: Abstracts p. 19, Riga, Jurmala (11-15 May) (Latvia). (Plenarni referat po pozivu).
75. Regner, S., S. Mandić, A. Joksimović (2005): Aktivnosti za sprovođenje mjera zaštite u svrhu optimalnog korišćenja morskih bioloških resursa Crnogorskog primorja. Zaštita voda 2005. Kopaonik, 7-10 jun, 2005: 335-339.
76. A. Joksimović, S. Mandić, B. Mićković, M. Đurović, A. Pešić, M. Mandić (2006): Nalazišta riblje mlađi u bočatnim vodama priobalja Crnogorskog primorja. Zaštita voda 2006. Zlatibor, 6-9 jun, 2006: 307-313.
77. B. Glamuzina, J. Dulčić, E. Hasković, A. Ivanc, S. Mandić, D. Mrdak, B. Skaramuca (2007): Stanje ihtiofaune na istraživanom području tijekom srpnja, kolovoza i rujna mjeseca 2007. godine, endemične vrste, ugrožene vrste, unešene vrste u svrhu uzgoja i slučajno unešene vrste. Međunarodni znanstveno-naučni skup Ugrožene i endemske vrste riba u slivovima rijeka Neretve, Trebišnjice i Morače. 14-15 prosinca, 2007. Park prirode „Hutovo blato“. Čapljina, Bosna i Hercegovina.
78. D. Mrdak, A. Joksimović i S. Mandić (2007): Salmonidne i ciprinidne vrste riba u sливу rijeke Morače. Međunarodni znanstveno-naučni skup Ugrožene i endemske vrste riba u slivovima rijeka Neretve, Trebišnjice i Morače. 14-15 prosinca, 2007. Park prirode „Hutovo blato“. Čapljina, Bosna i Hercegovina.
79. Mandić, S.: Mogućnosti razvoja marikulture u bioekološkim uslovima Bokokotorskog zaliva. 2 sajam „Vode, vodovodi, sanitарне tehnologije“. Budva, 25-27 april, 2007: 71-77. Plenarni referat
80. Kaćelan, S. and Mandić, S. (2007b): Diversity and distribution of the class Asteroidea (Echinodermata) within the Bay of Boka Kotorska (Adriatic Sea, Montenegro). Rapp.Comm.int. Mer Medit., 38, 2007
81. Joksimović, A., Kasalica, O., Mandić, S.: Monitoring demerzalnih resursa Crnogorskog primorja i uticaj hidrografskih faktora na njihovu distribuciju. Zaštita voda 2007. Tara, 26-29 jun, 2007:219-225.
82. Joksimović, A., Mandić, S.: Nova vrsta ribe u južnom Jadranu – lesepsijski migrant. Zaštita voda 2008. Mataruška banja, 3-6 jun, 2008:297-301.

83. Mandić, S., Radović, I. and Radović D. (2016). Physical and Geographical Description of the Boka Kotorska Bay. In Joksimovic et al. (eds.) The Boka Kotorska Bay Environment, Hdb Env Chem., DOI 10.1007/698_2016_27 Springer International Publishing Switzerland.

Učešće na kongresima, simpozijumima i savjetovanjima

1. Na III internacionalnom simpozijumu Jugoslovenskog društva (JID) u Kotoru 1970.
2. Na III simpozijumu Jugoslavenskih okeanografa u Splitu 1971.
3. Na I kongresu ekologa Jugoslavije u Beogradu 1973. sa referatom "*Mytilicola intestinalis* STEUER, *Polydora hoplura* CLAPAREDE *Mytil/hydra polimanti* CERRUTI paraziti dagnji kamenica u eksperimentalnim gajilistima Bokokotorskog zaliva".
4. Na XXV Congres-Assemblee Pleriere Commission internationale pour l'exploration scientifique de la Mer Mediterranee u Splitu 1976. sa referatom "First Report on Three Genera of Cephalopoda new for the Adriatic Sea".
5. Na III simpozijumu biosistematičara Jugoslavije u Novom Sadu 1977 sa referatima:
 - Sastav i distribucija Cephalopoda u biocenozama litoralnog područja Crnogorskog primorja.
 - Nalazišta i rasprostranje *Mitra zonata* MARRYAT na području Južnog Jadranu".
6. Na simpozijumu o akvakulturi u Zadru 1977. sa referatom "Mogućnost industrijskog uzgoja jestivih školjkaša u Bokokotorskem zalivu i uvodenje novih vrsta u procesu uzgoja".
7. Na II Kongresu ekologa Jugoslavije u Zadru -1979 sa referatima:
 - Sezonska dinamika faune Cephalopoda u litoralnom području Crnogorskog primorja;
 - Distribucija i zastupljenost roda *Sepia* u jučnom Jadranu;
 - Rezultati uzgoja japanske kamenice (*Crassostrea gigas* TH) u uslovima Bokokotorskog zaliva.
8. Na II Konferenciji o zaštiti Jadranu na Hvaru 1979 sa referatom "Zagadenost priobalnog područja Crnogorskog primorja kao poslijedica urbanog i industrijskog razvoja i mjere za njegovu zaštitu.
9. Na IV simpozilumu jugoslovenskih oceanografa u Splitu 1980. sa referatom "Prilog poznavanju stanja osnovnih abiotskih i biotskih faktora Bokokotorskog zaliva sa aspekta proizvodnje jestivih školjkaša".
10. Na simpozijumu "Aktuelni problemi ihtiologije i ribarstva" 1980. sa referatom: Procjena kvaliteta ekonomski vajnih vrsta Cephalopoda u južnom Jadranu.

11. Na IV simpozijumu biosistematičara Jugoslavije 1980. sa referatima:

- Sistematski pregled Mollusca Kotorskog i Risanskog zaliva; ·
- Pojava migracije kod nekih vrsta Cephalopoda u južnom Jadranu.

12. Na savjetovanju JAZU-Zagreb 1981. u Dubrovniku Malostonski zaljev prirodna podloga i drustveno valoriziranje, sa referatom "Rezultati eksperimentalnog uzgoja obicne pljosnate kamenice (*Ostrea edulis* L.) i dagnje (*Mytilus galloprovincialis* LAMC) u Malostonskom zalivu.

13. Na Congres-Assemblee Plurielle Commission internationale pour l'exploration scientifique de la Mer Méditerranée 1981. sa referatom: Mouvements migratoires de quelques espèces de Céphalopodes économiquement importantes dans l'Adriatique méridionale.

14. Na VI kongresu biologa Jugoslavije u Novom Sadu 1982. sa referatima:

- · Kvalitativno-kvantitativna proučavanja polichaeta unutrašnjeg dijela Bokokotorskog zaliva" ·
- Kondicioni indeks jestive školjke *Crassostrea gigas* TH u eksperimentalnim gajilištima Bokokotorskog raliva.

15. Na naučnom skupu "Crnogorsko primorje, mogućnost eksploatacije i zaštita" 1982. povodom 20 godina rada Zavoda za biologiju mora Kotor sa referatima:

- · Ispitivanje biološke aktivnosti ekstrakata morskih organizama južnog jadrana
- Ekonomski važne vrste Cephalopoda u Južnom Jadranu.

16. Na VIII savjetovanju o dijagnostici, profilaksi i terapiji u savremenoj stočarskoj proizvodnji u Primoštenu 1983. sa referatima:

- Infestacija Myxobolusom (Myxosporidia) *Leuciscus* sp. s naročitim osrvtom na posljedične patijske promjene u organima.
- Odstupanje krvnih parametara od normalnih vrijednosti mikromorfološke patijske promjene na organima *Leuciscus cephalus*

17. Na redovnoj konferenciji Savjeta za zaštitu Čovjekove okoline u SRCG, Risan 1984. sa referatom: Putevi, stanje i posljedice zagadenja Bokokotorskog zaliva, uz prikaz aktivnosti na istoj problematici.

18. Na III Konferenciji o zaštiti Jadrana u Budvi 1984. sa referatima: ·

- Mogućnost korišćenja prirodnih prostora Ulcinjskog regiona za intenzivnu i polointenzivnu marikulturu.
- Predlozi za zaštitu i korišćenje Bokokotorskog zaliva.

19. Na III Kongresu ekologa Jugoslavije u Sarajevu 1984 sa referatima:

- Polimorfizam kod vrste *Aporrhais pespele'ani*(L.) u Bokokotorskem zalivu.
- Ekologija Cephalopoda (Glavonozača) u južnojadranskoj kotlini

20. Na II konferenciji o zaštiti Jadrana u Budvi 1984. sa referatom: Otpadne vode kao poslijedica urbanizacije, s posebnim osvrtom na deterdžente i efekti tog zagadenja na području Bokokotorskog zaliva.

21. Na I kongresu biosistematičara Jugoslavije 1985. na Popovoj Šapci sa referatima:

- · Prilog proučavanja populacije Anthozoa unutrašnjeg dijela Bokokotorskog zaliva.
- · Rijetke vrste glavonožaca u Jadranu.
- Taksonomski status rodova u familiji cipola (Pisces, Mugilidae) u svetu novih morfoanatomskih, fizioloških i parazitolaških istraživanja.

22. Na VII Kongresu biologa Jugoslavije u Budvi 1986. sa referatima:

- Nalazišta mlađi cipola (Mugilidae) u priobalnom području Crnogorskog primorja.
- Uticaj abiotских faktora na prirast cipola (Mugilidae) u uslovima kaptiviteta.

23. Na III Kongresu biologa Hrvatske na Malom Lošinju 1987. sa referatima:

- Efekti hloriranih ugljovodonika na bioelektričnu aktivnost nervnih ćelija.
- Echinoidea (Echinodermata) u Bokokotorskem zalivu.

24. Na Naučnom skupu CANU "Ekološke aktuelnosti Crne Gore" u Titogradu 1989. sa referatom: Zaštita lokaliteta za razvoj marikulture u Crnogorskem primorju.

25. Na IV Konferenciji o zaštiti Jadrana u Neumu 1989. sa referatom: Ulcinjska regija - područje za poluintenzivnu akvakulturu.

26. Na Medunarodnom simpozijumu u Splitu 1990. "Ekološki problemi Jadranskog mora" sa referatom: Ekoločke specifičnosti priobalne zone Bokokotorskog zaliva.

27. Na Naučnom skupu u Sarajevu 1990. "Populacija vrsta i biocenoza" sa referatom: Bioekološke karakteristike Bivalvia, pogodnih za uzgoj.

28. Na Congres-Assemblee Pleriere Commission internationale pour l'exploration scientifique de la Mer Mediterranee 1990. u Izmiru sa referatom: Immigrant fish species in Skadar and Sasko lakes and some their specificities.

29. Na XXXII Congres-Assemblee PleiJlere Commission internationale pour l'exploration scientifique de la Mer Mediterranee 1990. sa referatom: The rare species of the Cephalopods in the Adriatic.

30. Na Malti 1992 sa referatom "Environment and economy ecorestructuring and regional development on the example of the Montenegrin coast".

31. Na simpozijumu Prirodni kapaciteti i odnos prema kulturnom okruženju kao parametri razvoja nautičkog turizma" u Kotoru 1992. sa referatom: Prirodni kapaciteti Bokokotorskog zaliva i nautički turizam.
32. Na savjetovanju "Ekološka drzava Crna Gora" u Podgorici 1993 sa referatima:
 - Ekološko prestrukturiranje i regionalni razvoj na primjeru Bokokotorskog zaliva".
 - Bioekološki potencijali pribalnog mora Crne Gore..
33. Na I Jug. savjetovanju "Aktuelni problemi ribarstva Jugoslavije" 1994 u Zrenjaninu-Ečka sa referatom: Stanje i perspektive razvoja ribarstva Crne Gore..
34. Na Ljetnoj školi "Kotor'94" 1994. sa referatom: Preliminarni podaci za integralni katastar koncentrisanih zagadivača Bokokotorskog zaliva.
35. Na Medunarodnom savjetovanju "Jugoma'94" 1994. u Novom Sadu sa referatom: Osvrt na zagađujuće efekte zagadujućih materija na živi svijet u moru, s posebnim osvrtom na mineralna ulja, naftu i njene deživate.
36. Na V naučnom skupu o sistemu naučnih informacija "Informatička podrška ekološkoj pživredi i zaštiti životne redine" 1995. u Kotoru sa referatom: informacioni sistem i katastar zagadivača Boke Kotorske".
37. Na Ljetnoj školi "Biološka i hemijska istraživanja biljaka i životinja na području Crne Gore" u Kotoru 1995. sa referatom: Prirodne karakteristike i živi svijet Bokokotorskog zaliva.
38. Na savjetovanju "Zaštita južnog Jadrana od zagadenja naftom i naftnim derivatima" 1995. u Kotoru sa referatom: Prikaz osnovnih hidrodinamičkih karakteristika Bokokotorskog zaliva sa ciljem predviđanja posledica od mogućih zagađenja naftom i predlozi za zaštitu.
39. Na naučnom skupu "Istraživanja i zaštita južnog Jadrana" u Kotoru 1995. sa referatima:
 - Biološki resursi morskog dna.
 - Bioekološke karakteristike Bokokotorskog zaliva.
 - Stanje ihtiofaune na ekonomskim postajama južnog Jadrana.
40. Na II Jug. savjetovanju "Ribarstvo Jugoslavije" 1995. u Kotoru sa referatima:
 - Institucionalna osnova i predlozi organizacije morskog ribarstva Jugoslavije.
 - Mogućnost uzgoja dagnji *Mytilus galloprovincialis* LAMCK. u uslovima Kotorskog zaliva.
41. I, II i III Internacionalni Simpozijum ekologa Crne Gore.

Rukovodjenje projektima:

1. Istraživanje taksonomije, ekologije (Cephalopoda) u južnom Jadranu. 1984.
2. Mogućnosti eksploracije marikulture ribljih vrsta iz porodice Mugilidae (cipoli) 1987.
3. Bokokotorski zaliv i njegov živi svijet. 1991.
4. Istraživanje, iskoriščavanje i zaštita Jadranskog mora do 2000.- god. (Savezni projekat - Koordinator za Crnu Goru).
5. Biomedicinski efekti aplikacije peloida i njihova fizičko-hemijska standardizacija (Savezni projekat) koordinator za biološka i hemijska istraživanja.
6. Proizvodnja mladi (nasada) školjaka, osnov razvoja marikulture (Savezni projekat KPR-231-193).
7. Istraživanje, korištenje i zaštita litoralnog područja južnog Jadrana. Savezni projekat HDI-058/94.
8. Bioekološki potencijali priobalnog mora Crne Gore, a ciljem razvoja marikulture, završen 1995.
9. Integralni katastar koncentrisanih zagadivača Jadranskog mora.
10. Bentoske biocenoze (naselja dna) priobalnog mora crne Gore
11. Bioekološki potencijali priobalnog mora Crne Gore (zoobentos, fitobentos i nalazišta riblje mlađi važnih vrsta)

Učešće u projektima

1. Neke komponente iz lanca ishrane na karakterističnim područjima u južnom Jadranu u odnosu na produktivne kapacitete i mogućnost eksploracije nekih ekonomski interesantnih vrsta.
2. Ekološka i biocenološka istraživanja cenobionatalitorala južnog Jadrana s posebnim obzirom na ekonomski važne vrste.
3. Karakteristike i kapaciteti priobalnog pojasa Crnogorskog primorja sa aspekta zaštite i valorizacije.
4. Vještačka fertilizacija morskih organizama (medunarodni projekat, saradnja Zavoda sa BAH Hamburg).
5. Izolovanje i karakterizacija bioaktivnih jedinjenja iz morskih organizama.
6. Kvalitativno kvantitativna proučavanja, zaštita i valorizacija ihtioloških resursa južnog Jadranu.

Studije- koordinator, koautor, autor:

1. Bazna studija "Nulto stanje" Fizičko-hemijske i biološke karakteristike voda u akvatorijumu brodogradilišta "Veljko Vlahović", Bijela
2. Dinamičke, hidrometeoroloske i batimetrijske karakteristike priobalnog mora Crnogorskog primorja.
3. Zaštita čovjekove životne sredine na području opštine Bar. Studija za potrebe revizije GUP-a.
4. Zaštita čovjekove životne sredine na području opštine Ulcinj. Studija za potrebe revizije GUP-a.
5. Mineralne vode na području Igala.
6. Mogućnosti izgradnje marina u Kotorskom zalivu.
7. Preliminarna studija izvodljivosti u vezi sa realizacijom italijansko-jugoslavenskih joint-ventures na planu izgradnje i upravljanja objektima morskog ribnjačarstva kao i plasmana njihove proizvodnje.
8. Tehničko tehnološki proces za uzgoj školjkaša u Hercegnovskom zalivu.

9. Zaštita mora na širem području Orahovca
10. Mogućnosti i opravdanost proizvodnje dagnje (*M. galloprovincialis*) u uslovima Kotorskog zaliva.
11. Strategija razvoja morskog ribarstva Crne Gore.
12. Bioekološki potencijali, zagadenost, namjena i konflikti priobalnog mora RCG.
13. Komercijalni uzgoj dagnje (*Mytilus galloprovincialis*) u uslovima Bokokotorskog zaliva.

Monografija:

Mandić, S. 1984. Cephalopoda Južnog Jadrana. Kotor.

Mandić, S & Mandić M. (2011): 50 years of the Institute of marine biology, Kotor. Institute of marine biology, Kotor. University of Montenegro. 84 p. ISBN 978-86-7664-101-7

Mandić, S., Radović, I. and Radović D. (2016). Physical and Geographical Description of the Boka Kotorska Bay. In Joksimovic et al. (eds.) The Boka Kotorska Bay Environment, Hdb Env Chem,. DOI 10.1007/698_2016_27 Springer International Publishing Switzerland.

Ostale aktivnosti:

- Od 1985. godine član je Komiteta za Vertebrata i Cephalopoda Komisije za naučno istraživanje Mediterana(C.I.E.S.M.)
- Član je društava: ekologa, biosistematičara, ihtiologa, Unije naučnih društava Jugoslavije.
- Dugogodišnji član redakcije naučnog časopisa "Studia Marina", izdavač Zavod za biologiju mora Kotor.
- Dugogodišnji član Jugoslovenske komisije za zaštitu Jadrana, koordinator za Crnu Goru.
- Dugogodišnji član Izvršnog odbora SIZ-a za naučne djelatnosti SRCG, a u jednom mandatu i predsjednik Skupštine SIZ-a
- Član i predsjednik Komisije za PMN SIZa i fonda za naučni rad. U jednom periodu predsjednik Komisije za ocjenu naučnih projekata kod fonda za naučne djelatnosti RCG.
- Član Komisije za nostrifikaciju diploma iz područja biologije.

- Koautor Elaborata o osnivanju studija biologije na PMF Univerziteta Crne Gore.
- Od 1980-1994 direktor Zavoda za biologiju mora Kotor, a u jednom periodu VD direktora Instituta za biološka i medicinska istraživanja u SRCG, od 1994-2007 direktor Instituta za biologiju mora u Kotoru.
- Član Savjeta projekta "Razvoj morskog dobra".
- Predsjednik Ekološkog društva Boke Kotorske .
- Recenzent većeg broja studija, projekata i elaborata it oblasti svoje specijalnosti, kao i recenzent za izbor u stručna i naučna zvanja uz koordinaciju i mentorstvo za izradu diplomskih radova, magistarskih teza i doktorskih disertacija.
- Za studije zaštite životne sredine primorskih opština (rađene poslije zemljotresa 1979 g.) koautor i stručni konsultant.
- Stručni konsultant za investicione projekte "Energoprojekta", za oblast hidrodinamike u priobalnoj zoni Crnogorskog primorja za potrebe vodosnadbijevanja i kanalizacionog sistema.
- Saradnik ekspertnog tima "UNIDO-a" za izradu projekta: Zaštita Bokokotorskog zaliva od industrijskog zagadenja.
- Član i predsjednik komisija primorskih SO za urbanizam i zaštitu životne sredine.
- Bez zvaničnih nagrada i društvenih priznanja.
- Veći broj novinskih članaka, intervjuja i saopštenja iz oblasti svoga rada.