

IN MEMORIAM

This volume is dedicated to our colleague Dr. ANTE BARIĆ who was devoted to marine chemistry, analytical and electrochemistry.



ANTE BARIĆ 1943 - 2020

In Zagreb, on March 23, at the age of 77, Dr. Ante Barić, a research scientist at the Institute of Oceanography and fisheries, passed away. The departure of our colleague who was the founder of modern marine chemistry - electrochemistry in Croatia, represents a major loss for the Croatian academic and scientific community.

We are sincerely deprived of a man who knew a great deal about marine chemistry of the Adriatic Sea and who shared his knowledge selflessly and with ease to his students and colleagues.

Dr. Ante Barić was born on August 31, 1943 in Zadar, Croatia. He was educated at the University of Split, Faculty of Chemistry and Engineering (B. Sc. in Chemistry, 1965), at the University of Zagreb, Faculty of Natural Sciences (M. Sc. in Physical chemistry - ana-

lytical and radiochemistry), and at University of Zagreb, Faculty of Natural Sciences (Ph. D. in Chemistry).

From 1965 to 1971 he worked as scientific assistant at the Institute Ruđer Bošković in Zagreb, Croatia. From 1971 to 1973 he was associated expert in Aluminum Industry Business Association JUGAL, Split. From 1973 to 1974 he was in National Data Center in USA. From 1974 to 1975 he worked at the Institute Ruđer Bošković in Rovinj, Croatia as a coordinator of the UNDP project "Protection of the environment in the Adriatic Region, Croatia. From 1975 to 1981 dr. Barić worked in Municipality of Split in Department for Social Planning, Development and Statistics. From 1982 to 1989 he was a lecturer and director of the Faculty of Natural Sciences in Split. From 1989 to 2005

he worked at the Institute of Oceanography and Fisheries, Split Croatia. In parallel, since 2003 to 2004 dr. Barić was director in United Nations Environment Programme/Mediterranean Action Plan (UNEP/MAP) Coordinating Unit in Athens, Greece. After his retirement, he continued as consultant in UNEP/MAP in Athens, Greece.

In variety of interests, his scientific investigations cover problems mainly in marine chemistry, particularly electrochemistry and later in the protection of the marine environment from the pollution derived from land-based activities and sources.

Scientific work through his master thesis "Polarographic determination of the ionic state of zinc, cadmium and indium in seawater" was crowned in doctoral thesis "Electrochemical testing of the system: copper (II) ion water ethylene-diamine-tetra-acetic acid" which he was defended on the Faculty of Sciences, University of Zagreb in 1972.

He spent a certain time at the Institute of Oceanography and Fisheries, studying trace metal distribution in coastal sediment from Adriatic Sea, trace metal accumulation in different grain size fractions of the sediments from a semi-enclosed bay heavily contaminated by urban and industrial wastewaters. His scientific interests regarding the trace elements were enlarged through biomonitoring of mercury, copper, cadmium, lead, zinc and chromium using Mediterranean blue mussels *Mytilus galloprovincialis*.

He has been involved into the investigations of polychlorinated biphenyls (PCBs) in surface sediments from the middle and south Adriatic coastal waters as well as temporal and spatial distribution of chlorinated hydrocarbons in mussels.

Dr. Barić has also been researching the eutrophication phenomena in the Adriatic, naturally or anthropogenically induced, with special reference to the Kaštela Bay. He was involved

into the investigations of the benthic fluxes of nutrients in the Adriatic as well as fish farming influence on physical and chemical properties of sediment and water column of the middle and southern Adriatic Sea.

During time at the Institute Dr. Barić coordinated the scientific project financed by Ministry of the Science and Technology of the Republic of Croatia named „Exchange of the matter in the coastal and semi enclosed basins “.

From the period of 2003 to his retirement dr. Barić was director in UNEP/MAP Coordinating Unit in Athens, Greece where he was coordinating the preparation of the documents "Survey of pollutants from land-based sources in the Mediterranean" and "Guidelines for the application of Best Available Techniques (BATs), Best Environmental Practices (BEPs) and Cleaner Technologies (CTs) in industries of the Mediterranean countries" which were widely applied across the Mediterranean countries that signed a Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention).

At the graduate study of Chemistry and Biology at the Faculty of Science in Split and Zagreb he has been teaching courses General and Inorganic Chemistry. He was also one of the founders of the graduate study Biology and Ecology of the Sea, University of Split and Marine Fishery studies, University of Split.

During his relatively short time spent at the Institute he was sharing his knowledge and scientific experience among younger colleagues that was reflected in master and doctoral thesis and finally in sequence of scientific papers. Furthermore, his foundations inside the United Nations organization were very important for the promotion of our Institute at the international level regarding the protection of the marine environment policy.

He has published more than 120 original scientific and expert papers, studies and reports.

Prof. Slavica Matijević, Ph.D.

Institute of Oceanography and Fisheries, Split

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BYBLOGRAPHY OF SELECTED PAPERS

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