

IN MEMORIAM

Dr. Zoran Kljajić

(1954 - 2015)

On 31st of May 2015, suddenly and unexpectedly, our collective has lost Dr. Zoran Kljajić. A scientist, colleague, teacher, friend. A life imbued with love for science, sea and nature in general. A tireless worker whose scientific opus went beyond the space and capacities that have often been limited by circumstances and working conditions.

Dr. Zoran Kljajić was born on 10th of January 1954 in Bogatic, Serbia. He finished primary and secondary school in Zemun. In 1977 he graduated from the Faculty of Science and Mathematics, University of Belgrade – Department of Chemistry. At the same faculty, in 1984, he acquired the title of Master of chemical sciences and with doctoral dissertation titled "Finding, isolation and characterization of lectins in marine invertebrates", in 1986, he was awarded the PhD degree in Chemical Sciences, University of Belgrade.

Dr. Kljajić began the rich and successful professional career at the Institute of Organic Chemistry, Biochemistry and Instrumental Analysis, Faculty of Science and Mathematics, in Belgrade in 1978. He remained in this Institute until 1981, working as a research associate. This period of his career was marked with strong interest in the field of chemistry of marine natural products that he remained devoted to until the end of his life. This is confirmed by numerous scientific articles in the prestigious international scientific journals on marine natural products stemming from his collaboration with renowned scientists in this field: Academician Prof. Dr. Miroslav Gasic (Faculty of Science and Mathematics, University of Belgrade, member of Serbian Academy of Sciences and Arts, Serbia), Prof. Werner E.G. Muller, (Johannes Gutenberg University Mainz, Germany), Academician prof. Rudolf Zahn, (Akademie der Wissenschaften und der Literatur – Mainz, Germany), Prof. dr. H.C. Schroder (Johannes Gutenberg University Mainz, Germany), Prof. dr. Simeon Popov (Institute of Organic Chemistry with Center of Phytochemistry, Bulgarian Academy of Sciences Sofia, Bulgaria) and others.

The challenges of the sea depths led him to Kotor in 1981, to the Institute of Marine Biology, where he worked initially as an assistant. Remarkable in work, soon, in 1982, he was

appointed the Head of the Laboratory of Chemistry, Biochemistry and Molecular biology and remained on this position for the next 33 years, until the end of his life. At the University of Montenegro, Dr. Kljajić passed all degrees of advancement, which resulted in his election as a scientific advisor in 1996. At the Faculty of Metallurgy and Technology, University of Montenegro, Dr. Kljajić was elected to the teaching position for the subject Organic Chemical Technology. He was mentor or co-mentor in the realisation of numerous bachelor, master and doctoral theses of the Montenegrin and foreign students.

As an experienced and trusted adviser, Dr. Kljajić unselfishly and with great enthusiasm conveyed the knowledge to the younger generations. Aware of the need to be informed and linked, he cooperated with a lot of institutes and scientific organizations established at national and international level. This was recognized through a large number of visits of eminent researchers worldwide to the Institute of Marine Biology in Kotor. The collaborative attitude was often a way to compensate the lack of adequate conditions and facilities in his laboratory for the demanding research work. In the same way, he has provided numerous scholarships to younger associates, encouraging them to look always ahead despite to the difficulties and obstacles.

The research interest of Dr. Kljajić was broad: marine natural products (isolation, structure, biological activity), biochemistry, molecular biology, marine ecology, oceanography. His rich scientific work was recognized in the high circles of the scientific community, which is reflected in numerous citations of more than 50 scientific papers and 105 scientific communications in the field of natural science, management and implementation of more than 40 scientific projects, 30 of which were international. His early research work has resulted in a patent of interest for pharmaceutical science: Müller W.E.G., Gasic M.J., Kljajic Z. *Verfahren zur herstellung und die Verwendung des Lectins von Chondrilla nucula zur Zytoprotektin von nicht-infizierten und Virus-infizierten limphozyten als auch zur zytologischen diagnose*. DE4012319 A1 (1990)¹. All this provided an immense scientific contribution not only to the Institute of Marine Biology in Kotor and University of Montenegro, but also to the Institute of Chemistry, Faculty of Science and Mathematics, University of Belgrade.

In appreciation to his scientific work at the Institute of Marine Biology in Kotor and Scientific Board of the University of Montenegro, Prof. dr. Vladimir Pešić, the prominent Montenegrin scientist and professor of the University of Montenegro, has named a new species of the genus *Atractides* after the late Dr. Kljajić, as *Atractides kljajici*².

A Special issue entitled "Situational sea awareness technologies for maritime safety and marine environment protection"³, has been published up in 2016, as a part of the journal

¹ http://www.google.com/patents/DE4012319A1?cl=de

² Pesic, V., Saboori, A., & Asadi, M. (2016) New species of the genus Atractides Koch, 1837 (Acari: Hydrachnidia: Hygrobatidae) from Iran, Systematic & Applied Acarology 21(9): 1250–1266

³ http://www.nat-hazards-earth-syst-sci.net/special_issue654.html

Natural Hazards and Earth System Sciences (NHESS) and dedicated to the memory of Dr. Kljajić. The editor of this special issue, the eminent European oceanographer, Dr. Nadia Pinardi, Associate Professor of Physical Oceanography at the University of Bologna, has invited colleagues to contribute with the research articles in this issue, to the memory of the late Dr. Kljajić for his contribution to the marine science.

Dr. Kljajić was a member of many professional organisations (former Serbia and Montenegro representative in IOC UNESCO, MedGOOS and MonGOOSE Montenegrin representative) and societies (American Chemical Society, Serbian Chemical Society and Chemical Society of Montenegro), a member of the former Yugoslav, now Serbian Water Pollution Control Society, an expert for CITES Convention in the field of marine sciences. He was the Editor-in-Chief of the national scientific journal "Studia Marina".

Dr. Kljajić was a member of the Senate and a member of the Scientific Board of the University of Montenegro. In the period from 1999 to 2000 he served as Deputy Minister of Science of the former Federal Republic of Yugoslavia.

Dr. Kljajić was deeply committed to making the Institute of Marine Biology in Kotor recognizable in the field of marine science and he made a great contribution to the progress of our Institute. The Institute of Marine Biology has lost a great researcher, one great career and a driving force of ideas.

Usually it is the others who wwill speak well of us, and therefore, among a lot of condolences sent to the Institute, with a deep respect to everyone who sent them, we will emphasise here the words of condolences from two of his colleagues from abroad. Expressing the words of condolences, Dr. Vlado Malačič from the National Institute of Biology, Marine Biology Station in Piran, Slovenia, briefly said:

"Zoran was

- an expert who drove EU projects at the Marine Biology Institute in Kotor
- a man with a large heart who did not hate anyone
- a honest person and a democrat
- our friend.

Sincerely,

Vlado from Piran."

Dr. Nadica Ivošević DeNardis from the Ruđer Bošković Institute, Croatia, said:

"There are not enough words to describe Zoran's enthusiasm, dedication to research and work with full heart. He was a driving force linking us together, encouraging us with new ideas. He was a very warm person and a good, honest friend.

The Institute of Marine Biology lost that important power motor. I do believe that his Young Team will continue their work and will continue with all collaborations that he started. We are here.

Memory of Zoran remains forever!!! My warm regards,

Nadica."

We, his assistants, used to call him Professor. Because of the respect during during the work with him, obliged by his knowledge, his open scientific attitude, power in decisions, by his honest and great soul. Because of pride we feel now, after his passing, that we were a part of his team.

It is hard to loose a good mentor in work, it is harder to loose a good colleague, but the hardest is to loose a good friend in life. We, the undersigned, have lost it all at the same time with the Professor's death.

Eternal glory and thanks to our colleague, Dr. Zoran Kljajić.

Profesore, nek vam je vječna slava i hvala.

Ana Castelli, Milena Mitrić Institute of marine biology