Professor Hrvoje Kozmar - recipient of the Croatian Academy of Sciences and Arts Award

The Croatian Academy of Sciences and Arts Award for the highest scientific and artistic achievements in the Republic of Croatia in 2020 in the field of engineering was conferred on Professor Hrvoje Kozmar.

Hrvoje Kozmar was born in Split on 16 November 1968. He concurrently attended High School of Arts and Culture and High School of Mathematics and Computer Science in Split, which he completed in 1986 and 1987, respectively. He graduated from the Faculty of Mechanical Engineering and Naval Architecture of the University of Zagreb (UNIZAG-FSB) in 1994 on a scholarship from the Brodosplit Shipyard. From 1994 to 2000, he attended postgraduate studies at UNIZAG-FSB and obtained his MSc degree in collaboration with the Technical University of Munich (TUM). In 2005, he completed his PhD at UNIZAG-FSB in collaboration with TUM.

From 1994 to 1996, he worked at the Soltech company in Zagreb. In 1996, he joined UNIZAG-FSB, where he still works. In 2008, he became Assistant Professor, in 2013 Associate Professor, and in 2018 Professor. He studied abroad for thirty months at TUM, two months at the German Aerospace Center in Göttingen, four months at the University of Florence, Italy, three months at the Technical University of Berlin, Germany, and thirteen months at the University of Notre Dame, USA.

In 2017, he founded the Chair of Environmental and Structural Aerodynamics at UNIZAG-FSB and has been its head ever since. He has participated in twenty research projects, gaining particular merit by leading projects of the Croatian Science Foundation, FP-7, the Fulbright Foundation, the German Academic Exchange Service (DAAD), the Croatian Academy of Sciences and Arts, and the Ministry of Science and Education of the Republic of Croatia (MZORH).

He has published sixty research papers in international journals, four book chapters and forty-nine conference contributions. He has given twenty-five invited lectures at leading universities and research institutes, including Duke University, University of Notre Dame, University of California-Berkeley, TUM, TU-Berlin, and KTH-Stockholm. He has reviewed submissions to twenty-five international journals and is on the editorial board of four international journals. In 2017, he was a guest editor of a special thematic issue of the Wind and Structures journal. He is editor of two books.

In 2012, the Ambassador of Germany to the Republic of Croatia presented him with special recognition for his exceptional personal contribution to the development and deepening of German-Croatian relations. In 2018, the Croatian DAAD Club recognized his exceptional personal contribution to the development of that club. He received the Annual Research Award of the Republic of Croatia for 2019 in the field of engineering.

He is Chair of the Supervisory Board of the Croatian DAAD Club (2013-) and the Croatian Society of Mechanics (2012-), International Scientific Committee Member of the Institute of Theoretical and Applied Mechanics in Prague (2019-), and member of the Croatian Academy of Engineering (2021-). He has been a member of the Fulbright Foundation Committee for Croatia since 2009, a Croatian representative in the NATO Science and Technology Organization since 2015, co-chair of the 7ICCSM International Conference in 2012, and a reviewer for MZORH, DAAD, and the US-Israeli Science Foundation.

Professor Kozmar has been given this award for his research work entitled *Geophysical and Industrial Fluid Flows and Their Impact on Engineering Structures and Vehicles*. This work consists of thirty research articles published during the last five years, namely twenty-eight research papers in relevant international journals and two book chapters.

Of the thirty articles, twenty-five are listed in the Web of Science database with sixteen of them being of top quality (Q1 or Q2). Professor Kozmar is the lead author, i.e. the first or corresponding author, of fourteen of these articles. Significant evidence of Professor Kozmar's work with young colleagues is seen in nineteen papers co-authored by his students.

The presented results of his theoretical and experimental research include the characteristics of the Bora wind, the aerodynamic stability of cable-stayed bridges, and wind turbines on a complex terrain. This highly multidisciplinary research was conducted in collaboration with leading universities and institutes, including TUM, the University of Florence, and the Institute of Theoretical and Applied Mechanics in Prague. The achieved results represent a significant contribution to science and are of great importance for the development of the economy.

Hrvoje Kozmar in the test section of a boundary layer wind tunnel at the University of Florence, Italy -- model experiments on wind characteristics in wind farms situated on a hilly terrain

Ivo Senjanović
Full Member of the Croatian Academy of Sciences and Arts