In memoriam

dr. sc. Mirko Husnjak, a tenured professor in retirement

(1 October 1944 – 15 April 2021)



Professor Mirko Husnjak graduated in 1970 with the thesis entitled *The method of oblique illumination in photoelasticimetry* under the mentorship of Prof. Davorin Bazjanac, PhD, at the Department of Technical Mechanics and Strength of Materials at the Faculty of Mechanical Engineering and Naval Architecture. In the same year, he was employed at that department as an assistant. He retired in 2010, after forty years of service at the Faculty.

At the same institution, he defended his master's thesis dealing with the topic of measurement of residual stresses by

electrostatic and photoelastic procedures and his doctoral thesis on the contribution to the experimental determination of crack characteristics in fracture mechanics under the mentorship of Academician Stjepan Jecić.

During his long career, as an assistant, he held exercises in almost all of the existing courses at the then Department of Technical Mechanics and Strength of Materials, and today's Department of Technical Mechanics. After having been elected to the position of an assistant professor, he held lectures in the courses Mechanics 2, Theory of Mechanisms, Experimental Stress Analysis, Fatigue Strength and Fracture Mechanics. He also held lectures at some institutions of higher education in Zagreb, i.e. the Faculty of Agriculture, the "Rade Končar" Technical College and the University of Applied Sciences, and at the Faculty of Mechanical Engineering in Slavonski Brod. During his successful and varied career, he was a distinguished teacher with a deep sense of pedagogical work. Appreciated and praised for his clear and vivid interpretations, he was a role model to his fellow teachers and a sought-after interlocutor in conversations about teaching methods and the interpretation of teaching materials.

As a collaborator or a team leader, he participated in a dozen research projects in the field of applied and experimental fracture mechanics and applied dynamics of mechanical systems. His scientific activity was not just academic in nature. Professor Mirko Husnjak dealt with real-life engineering problems by finding solutions in the science of mechanics, thus contributing to the broadening of scientific knowledge. Professor Husnjak excelled himself as a scientist/engineer, theorist and a practitioner.

Professor Mirko Husnjak was an outstanding expert who worked on highly professional engineering jobs, projects, tests, and certifications, solved problems in the field of strength of materials, vibration, fracture mechanics and mechanism theory, and applied experimental and numerical methods in solving those problems in energy and oil industry plants. Through a series of scientific examinations, measurements, and systematic analyses of stress and vibration, Professor Husnjak proved to be a highly professional engineer who was known for his proposals and solutions not only in our homeland, but also in other countries where he worked collaboratively.

For twenty-six years, Professor Husnjak was the head of the Strength of Materials Laboratory, which was later renamed the Laboratory of Experimental Mechanics. He was

also the head of the Department of Experimental Mechanics and the head of the Department of Technical Mechanics; at the University of Applied Sciences, he was the deputy head of the Mechanical Engineering Department.

So much more can be said about Professor Husnjak's outstanding work. He was a mentor, teacher and colleague who aroused enthusiasm and who devoted himself entirely to his work. He had inspired generations of students by giving them his knowledge and experience, both in lectures and in the laboratory.

Professor Husnjak will be remembered by many colleagues, associates and generations of students who had the honour of meeting him. His expertise, vast knowledge and experience, and his pedagogical work will go down in the history of the Department of Technical Mechanics and the Faculty of Mechanical Engineering and Naval Architecture. With his exceptional personality, he had left an indelible mark in our memories. May he rest in peace!