



### **LIFE ANNIVERSARY OF Prof. Ing. JOZEF KÚDELA, CSc.**

On December 6, 2024, Prof. Ing. Jozef Kúdela, CSc., celebrated his 70<sup>th</sup> birthday at the Department of Wood Science, Faculty of Wood Sciences and Technology, Technical University of Zvolen. We are pleased that this anniversary caught him in good health and full of work activity.

Prof. Kúdela's journey in wood science began in 1979, when he joined the Department of Wood Science as a researcher at the Research and Development Institute of Wood Science which was part of the same Faculty. He remained loyal to the Department of Wood Science until the end of his active tenure, which coincided with his jubilee. His unwavering dedication to this field, which he remained loyal to until the end of his active tenure, is truly inspiring.

In 1991, after successfully defending his dissertation: *The Effect of Temperature and Humidity on the Mechanical Properties of Beech Wood*, he was awarded the scientific degree *Candidate of Technical Sciences* in the field of *Science of Non-Metallic Materials and Structural Materials*. In 1996, he was awarded a degree in a scientific field IIa (as an independent researcher) and was awarded this honour by the Slovak Academy of Science in Bratislava. He received the pedagogical title of associate professor in the scientific field *Wood Structure and Properties* in 2003 after defending his habilitation thesis entitled *Moisture and Thermal Stress of Beech Wood*. In 2009, he was appointed a professor by the President of the Slovak Republic in the scientific field of "Wood Science".

His scientific and research activities were focused on the physical and mechanical properties of wood and wood materials. He studied the reaction wood of hardwoods, the influence of multiple factors on the buckling of wooden columns, the impact of different modifications, the influence of pollution on the properties of spruce wood, and even archaeological wood. His work on the wood-water-heat system and the impact of moisture and thermal stress on wood properties was particularly groundbreaking. Moreover, his research focused on the surface properties of wood, including the modification of the wood surface to achieve targeted changes in its properties and the interaction at the phase interface of the wood-film-forming substances system in both liquid and solid states.

As a researcher, he participated in solving research tasks of the National Basic Research Plan (ŠPZV) from 1981 to 1990. Since 1990, he has been a co-investigator in several VEGA projects and the principal investigator of four VEGA projects, as well as a co-investigator in the international INCO-COPERNICUS project. Between 2012 and 2015, he collaborated as a foreign expert and guarantor of the world-package 2 (WP 2) global team in the project *InWood: The Establishment of an International Research Team for the Development of New Wood-based Materials*. Within the framework of the General Call of the APVV, he was responsible for the project *Progressive Modifications of the Wood Surface, Film-forming Substances and Their Interactions at the Phase Interface*, which was included by the grant agency in the category "Research Projects with an Excellent Level 2023" after its completion. Since 2017, he has been a member of the top team *Structure and Properties of Lignocellulosic Materials* (WOODMAT).

Since 1996, he has worked at the Faculty of Wood Sciences and Technology, the Technical University in Zvolen and the former University of Forestry and Wood Sciences and Technology in Zvolen as a university lecturer. He educated many experts and influenced the growth and direction of many colleagues. He knew how to motivate

students to engage in scientific work, with 65 students under his leadership competing in Student and Scientific Conferences. Under his leadership, 85 master theses were prepared and defended. As part of their doctoral studies, 15 students successfully defended their dissertations in the fields of *Wood Structure and Properties*, *Construction and Wood Manufacturing Processes*, and *Wood-processing Technology*. For his creative scientific and research activities related to the education of young potential scientists was awarded the J.A. Comenius plaque by the rector of the Technical University in Zvolen in 2021.

During his scientific career, he has published over 300 papers as an author or co-author in domestic and international scientific journals, as well as at international conferences, both in his home country and abroad, and authored four scientific monographs. He has over 60 papers registered in the Web of Science database. The monograph by Kúdela, J and Čunderlík, I.: *Beechwood-Structure, Properties, Use*, is a summary of the latest knowledge on the properties of beech wood and the elimination of growth defects of beech raw material in the technology of its processing to increase the efficiency of production processes. His works have been registered in the Web of Science database with approximately 700 citations (excluding self-citations), and his H-index in the WoS database is 13. He has played a significant role in the organization of seminars and international symposia, demonstrating his leadership and organizational skills. In 1983, he started organizing a seminar at the Faculty, "*Interaction of Wood with Various Forms of Energy*", which continues to this day. Since 1990, he has organized international symposia on *Wood Structure and Properties* (held every four years), and since 1996, he has been organizing international conferences on the *Interaction of Wood with Various Forms of Energy* (also held every four years).

Professor Kúdela was a member of the IAWS (International Academy of Wood Science), an external expert of SNAS (Slovak National Accreditation Service), the Accreditation Commission of the Technical University in Zvolen for the assessment of scientific qualification levels Ia and IIa, the scientific board for doctoral studies at the Faculty of Wood Sciences and Technology of the Technical University in Zvolen in the study field *Wood Structure and Properties* (chairman) and *Construction and Wood Manufacturing Processes*, the scientific board for doctoral studies at the Faculty of Forestry and Wood Technology, Mendel University in Brno in the study field *Wood Material Engineering*. He has been a member of the editorial boards of the journals – *Acta Facultatis Xylologiae Zvolen* (since 2005), *Folia For. Pol.* (since 2009), *Wood Research* (since 2011), and *Science Nature Tech.* (since 2013). Prof. Jozef Kúdela has also worked as a significant academic official at the faculty and university level for many years. He was a member of the Scientific and Artistic Board of the Faculty of Wood Sciences and Technology for several years and a member of the Academic Senate of the same Faculty. He made significant contributions to the process of comprehensive accreditation over the previous two periods.

In 2004, he was awarded a silver medal by the Academy of Agriculture in Poznań for cooperation in research and development of wood science. In 2007, the rector of the Technical University in Zvolen awarded him a jubilee medal for his contribution to the development of the Technical University in Zvolen. In 2014, the dean of the Faculty of Forestry and Wood Technology of the Mendel University in Brno awarded him the G.J. Mendel Memorial Medal for the development of the Faculty and the building of international teams.

On behalf of my colleagues and collaborators, I wish Professor Jozef Kúdela good health, optimism in life, and satisfaction in his family circle for the years to come.

Assoc. Prof. Ing. Rastislav Lagaňa, PhD. et PhD.  
Head of the Department of Wood Science