

Prof. dr. Ladislav Kosec
(1938 – 2023)



In memoriam

Prof. dr. Ladislav Kosec

(1938 – 2023)

V četrtek 28. septembra 2023 nas je razžalostila vest, da nas je za vedno zapustil velik človek in priznani strokovnjak na področju metalurgije prof. dr. Ladislav Kosec. Rojen je bil 23. septembra 1938 v Zgornjih Gameljnah. V uničevalni vihri 2. svetovne vojne je že leta 1941 leta izgubil očeta, komandirja Rašiške čete, ki so ga okupatorji odpeljali v Begunje, kjer je zaradi nečloveških razmer v zaporu umrl že oktobra istega leta. Oče Stane Kosec je bil po vojni posthumno imenovan za narodnega heroja. Ni manjkalo veliko, pa bi tudi majhnega fantiča Ladislava Kosca med vojno ustrelili.

Ker je bil Ladislav Kosec zelo vedoželjen in bister fant, se je po maturi na gimnaziji Šentvid leta 1957 vpisal na Univerzo v Ljubljani, Fakulteto za rudarstvo, metalurgijo in kemijsko tehnologijo, na odsek za metalurgijo in diplomiral leta 1962. Podiplomski magistrski študij je ravno tako nadaljeval na Univerzi v Ljubljani na Fakulteti za naravoslovje in tehnologijo (FNT), odseku za metalurgijo in ga končal z delom Vpliv antimona, arzena, bakra in kositra na izoblikovanje obogatene plasti pri selektivni oksidaciji mehkega jekla. Doktoriral je leta 1971 na Univerzi v Ljubljani z doktorsko disertacijo Notranja oksidacija večkomponentnih zlitin. Leta 1974 je bil habilitiran za docenta fizikalne metalurgije, leta 1983 za izrednega profesorja na Fakulteti za strojništvo Univerze v Ljubljani in leta 1987 za rednega profesorja na FNT Univerze v Ljubljani.

Kot raziskovalec je bil od leta 1962 krajše obdobje zaposlen na Metalurškem inštitutu v Ljubljani, leta 1971 je postal asistent na Fakulteti za strojništvo, kjer je bil v obdobju od 1974 do 1978 nato predavatelj za materiale. Od leta 1983 je bil na odseku za metalurgijo FNT Univerze v Ljubljani (ki se je pozneje preimenovala v Naravoslovnotehniško fakulteto, Oddelek za materiale in metalurgijo, Univerze v Ljubljani) najprej predavatelj fizikalne metalurgije, nato pa tudi številnih drugih predmetov, kot so metalurške tehnologije, preiskava materiala, specialna jekla, korozija, izbirne vsebine na smeri za materiale, idr. Kot redni profesor je bil do svoje upokojitve zaposlen na Univerzi v Ljubljani, Naravoslovnotehniški fakulteti, Oddelku za materiale in metalurgijo.

Že leta 1963 je mladi Ladislav Kosec dobil Prešernovo nagrado za študente, leta 1979 pa nagrado Sklada Borisa Kidriča (SBK). Med drugim je bil je član Mednarodnega združenja za materiale ASM (International Association for Materials) in združenj za metalurgijo prahov EPMA (European Powder Metallurgy Association) in APMI (American Powder Metallurgy Institute). Njegovo širše raziskovalno področje je

bilo povezano z metalografijo, fizikalno metalurgijo, ter sintezo in karakterizacijo materialov.

Znanstveno in strokovno se je ukvarjal z jekli, aluminijevimi, bakrovimi in srebrovimi zlitinami in naprednimi materiali, kot so npr. kompoziti s kovinsko osnovo. Imel je širok spekter znanj pomembnih metalurških tehnologij. Bil je izjemen strokovnjak na področju toplotnih obdelav, (selektivne) notranje oksidacije kovinskih zlitin, metalurgije prahov, korozije, spajanja in varjenja, karbidov v jeklih, preiskave materialov, pa tudi na področju karakterizacije materialov z uporabo modernih tehnik, kot je elektronska mikroskopija, s katero se je na področju metalografije in fraktografije začel ukvarjati med prvimi v Sloveniji. Bogato, skoraj enciklopedično znanje je prek predavanj in mentorstva prenašal na svoje študente, pomemben prispevek stroki pa je dal tudi s številnimi recenzijami publikacij. Bil je eden tistih, ki so v zadnjih desetletjih bistveno prispevali k uspešnemu razvoju inženirskih materialov v Sloveniji. Poleg tega je bil izreden pedagog in mentor, saj je bil mentor pri 26 doktoratih, pri 25 magisterijih in kar pri 143 diplomah. Številna so tudi njegova somentorstva. Prof. dr. Ladislav Kosec je v svojem življenju vzorno skrbel za razvoj metalurške stroke ter predano vodil Katedro za inženirske materiale in Oddelek za materiale in metalurgijo.

Prof. dr. Ladislav Kosec je bil kolegalen, inovativen ter izredno delaven. Vsi smo občudovali njegove pristne odnose z mladimi ter prijateljske povezave s kolegi, predvsem pa njegovo skromnost in predano, vedno aktivno delo na fakulteti, ki mu je bilo v zelo veliko veselje. V naših srcih ostaja izjemen človek, strokovnjak, znanstvenik, pedagog in praktik v pristnem pomenu te besede, saj je nudil pomoč in podporo mnogim, tako sodelavcem in kolegom na Univerzi, študentom, kot tudi kolegom metalurgom iz industrije ter številnim drugim strokovnjakom iz najrazličnejših panog.

In kar je mogoče še najpomembnejše – njegov značilen temperament, smisel za humor in živ duh, s katerim je odkrival nova obzorja in nas razveseljeval v človeškem in strokovnem smislu, sta ga zapisala v naša srca.

V sredo, 4. oktobra 2023 smo ga v Šmartnem pod Šmarno goro pospremili na njegovi poslednji poti. Spominjali se ga bomo z velikim spoštovanjem.

Direktor Inštituta za kovinske materiale in tehnologije
A/Prof. dr. Matjaž Godec

In memoriam

Prof. dr. Ladislav Kosec

(1938 – 2023)

On Thursday, September 28, 2023, we were saddened by the news that we had lost a great man and a renowned expert in the field of metallurgy, Professor Dr. Ladislav Kosec. He was born on September 23, 1938, in Zgornje Gameljne. In the midst of the destructive turmoil of World War II, he lost his father in 1941, the commander of the Rašica Unit, who was taken by the occupiers to Begunje, where he died as a result of the inhumane conditions in the prison in October of the same year. After the war, his father Stane Kosec was posthumously made a national hero. In fact, it was a close call that young Ladislav Kosec himself wasn't shot during the war.

His curiosity and sharp intellect meant that after attending Šentvid Grammar School in 1957, Ladislav Kosec enrolled at the University of Ljubljana, Faculty of Mining, Metallurgy and Chemical Engineering, in the Department of Metallurgy, where he graduated in 1962. He continued his postgraduate master's studies at the University of Ljubljana, Faculty of Natural Sciences and Technology (FNT), in the Department of Metallurgy, completing it with a thesis on the Influence of Antimony, Arsenic, Copper and Tin on the Formation of an Enriched Layer in the Selective Oxidation of Soft Steel. In 1971 he obtained his doctorate at the University of Ljubljana with a dissertation on the Internal Oxidation of Multicomponent Alloys. In 1974 he was habilitated as an assistant professor of physical metallurgy, in 1983 as an associate professor at the Faculty of Mechanical Engineering of the University of Ljubljana, and in 1987 as a full professor at FNT of the University of Ljubljana.

As a researcher, he worked at the Metallurgical Institute in Ljubljana for a brief period starting in 1962, and in 1971 he became an assistant at the Faculty of Mechanical Engineering, where he served as a lecturer for materials from 1974 to 1978. From 1983 onwards, he worked at the Department of Metallurgy at FNT of the University of Ljubljana (which was later renamed the Faculty of Natural Sciences and Engineering, Department of Materials and Metallurgy), initially as a lecturer in physical metallurgy and later teaching numerous other subjects such as metallurgical technologies, material investigation, special steels, corrosion, elective courses in materials, and more. He remained employed as a full professor at the University of Ljubljana, Faculty of Natural Sciences and Engineering, Department of Materials and Metallurgy, until his retirement.

In 1963, young Ladislav Kosec received the Prešeren Award for students, and in 1979 he was awarded the Boris Kidrič Fund Prize. Among other achievements, he was a member of the International Association for Materials, as well as the European Powder Metallurgy Association and the American Powder Metallurgy Institute in

the field of powder metallurgy. His broader research areas were connected to metallography, physical metallurgy, synthesis and material characterisation.

He dedicated himself to scientific and professional work related to steels, aluminium, copper, silver alloys, and advanced materials, such as composites with a metallic base. He possessed a wide spectrum of knowledge in essential metallurgical technologies. He was an outstanding expert in heat treatments, the selective internal oxidation of metallic alloys, powder metallurgy, corrosion, joining, and welding, as well as carbides in steels, material investigations, and the characterisation of materials using modern techniques such as electronic microscopy, which he was among the first to explore in Slovenia in the fields of metallography and fractography. Through lectures and mentorship, he shared his rich, almost encyclopaedic knowledge with his students. He made contributions to the field through numerous reviews. He was one of those who contributed to the successful development of engineering materials in Slovenia over the past few decades. Furthermore, he was an exceptional educator and mentor, serving as a mentor for 26 doctoral theses, 25 master's theses, and 143 undergraduate theses. He also had numerous co-mentorships. Throughout his life, Prof. Dr. Ladislav Kosec took exemplary care of the development of the metallurgical field and led the Department of Materials and Metallurgy.

Prof. Dr. Ladislav Kosec was collegial, innovative, and extremely hardworking. We all admired his genuine relationships with young people and friendly connections with colleagues. Above all, we appreciated his modesty and his unwavering dedication to his work at the university, which he found great joy in. In our hearts, he will remain an exceptional individual, expert, scientist, educator, and practitioner in the truest sense of the word, as he provided assistance and support to many, including university colleagues, students, fellow metallurgists from industry, and numerous other experts from various fields.

And perhaps most importantly, his characteristic temperament, sense of humour, and lively spirit, with which he discovered new horizons and brought us joy in both a human and professional sense, have left a lasting mark on our hearts.

On Wednesday, October 4, 2023, we accompanied him to his final resting place in Šmartno pod Šmarno goro. We will remember him with great respect.

Director of the Institute of
Metals and Technology
A/Prof. Dr Matjaž Godec