Peter Varga
(1946 – 2018)

With great sadness we announce that our colleague Peter Varga has passed on October 27, 2018. Peter Varga was deeply invested in TU Wien and the Institute of Applied Physics (IAP), and he was a major force in shaping our institute into one of the world's leading centers of surface physics. Most of all he was a wonderful human being. With his elegance, his energy, his wit, and his generosity he was a close friend and a role model to us and to many others.

Peter Varga was born on June 30, 1946 in Vienna, Austria. He studied engineering physics at TU Wien and started his lifelong career at the IAP as a work study student in 1973. He completed his masters thesis in 1974 supervised by Franz Viehböck and received his PhD in 1978 under the guidance of Hannspeter Winter. Already his early scientific work was recognized with several awards, including the Theodor-Körner-Prize (1980) and the Max-Auwärter-Prize (1981). An Alexander-von-Humboldt Fellowship supported post-doctoral research at the Max-Planck-Institute in Garching, Germany (1981-1982). Except for extended research stays abroad (1984 in Grenoble, France and 1985 in Osnabrück, Germany), he continued his career as a faculty at our institute; first as Assistant Professor and, since 1997, as Associate Professor.

Peter had a knack for identifying important scientific questions and figuring out how to best tackle them. In the early 1980s he started investigating single crystal surfaces. He completed his habilitation thesis on ion-surface interactions in 1990, and used his expertise in low-energy ion scattering to investigate segregation phenomena in metal alloys. His work on the influence of the charge state on ion-surface interactions laid the foundation for the research direction on highly charged ions that continues at our institute today.

Under Peter's leadership, scanning tunneling microscopy was established at IAP at an early stage. Together with Michael Schmid he has used this method for groundbreaking surface investigations. Their atomically resolved scanning tunneling microscopy images of densely-packed platinum-nickel alloys are a legendary first. They established ultra-thin sodium chloride films on aluminum as an ideal (and heavily-used) system to support and electronically decouple organic molecules.

The outstanding performance of the instrument at IAP has led to many fruitful collaborations with groups from all over the world. Early on Peter Varga recognized the importance of combining theory and experiment in surface science, and used it successfully for the interpretation of experimental results. This lead to outstanding results, particularly in the area

of ultrathin oxide films; today oxide surfaces are the main research focus of the Surface Physics group at IAP.

His scientific work, creative yet meticulously executed, often resolved heated scientific controversies: particularly important was the structure determination of ultra-thin iron films on copper. This system fascinated Peter up to the end: in his last FWF project, completed this past July, his ultra-thin paramagnetic iron-nickel film are used for fabricating magnonic nanostructures together with colleagues at CEITEC Brno.

Peter was deeply committed to his students and an effective research advisor to numerous Bachelor, Masters and PhD students. It is here that his high social intelligence, his deep understanding of, and concern for people came to bear most clearly. He was respected and loved, and many graduates of his group have gone on to become influential leaders in industry and academia.

Peter also distinguished himself through his service to the international scientific community. Through the organization of workshops, symposia and congresses (including one of the most prominent conferences in surface physics, the European Conference on Surface Science in Vienna 1999), his many years of service in the Austrian Vacuum Society (ÖGV President 1997-2001), and IUVSTA, the International Union of Vacuum Science and Technology, he helped our institute gaining its international reputation.

In 2011 Peter retired from our university, but not from science. He continued providing valuable input as ‚post-prof' in the surface physics group, and he helped to propel the newly-founded research center CEITEC in Brno to a high scientific level.

For his scientific achievements Peter Varga received numerous recognitions. Amongst others he was awarded an honorary doctorate of the University of Lund in 2010. Just a few months ago, the Japanese Society for the Promotion of Science (JSPS) awarded him a prize for "…. his distinguished contribution on the clarification of surface phenomena by atomic level investigation and the development of novel functional materials".

Peter was a brilliant physicist. But most of all he was a great man and a real friend to many. He lived his life to the fullest. He was known for saying it like it is. With his sharp and incisive humor he got right to the point. Perhaps his personality is best reflected in the 3S symposium series (the abbreviation 3S stands for Symposium on Surface Science), which he founded and chaired: For more than 30 years, the who's who of surface science has gathered every winter for a week of brilliant science, energetic skiing and exuberant sociability.

Peter Varga showed us how to combine the quest for scientific knowledge with joie de vivre and a genuine interest in people. He embodied the lightness of being. We miss him very much.

Ulrike Diebold & Friedrich Aumayr