

## ***In Memoriam***

***Karel Kudela (1946 – 2019)***



*On 20 January 2019, Karel Kudela, chairman of COSPAR National committee in Slovakia since 1993, passed away at the age 72 after a short serious illness.*

*Karel Kudela was co-founder of the Department of Space Physics at the Institute of Experimental Physics of Slovak Academy of Sciences and leading scientist in space research in Slovakia. He graduated in 1969 at the Faculty of Nuclear Engineering of Czech technical university in Prague and after finishing the post-gradual study at the same faculty and at the Physical institute in Prague, he joined Institute of experimental physics in 1971 and stayed with the institute until his death in 2019.*

*During his fertile career he was devoted mainly to exploration of the dynamics of the energetic particles in the space and low-energy cosmic rays. He was a principal investigator (PI) and co-investigator of several space exploration missions, namely Intercosmos(IK)-5, IK-13, IK-17, IK-24-Active, Prognoz8, Prognoz-10, Interball-A, Interball-T, Mars-96, Coronas-I, Coronas-F, Magion 2-5, Spektr-R, JEM-EUSO. For many decades he was PI for ground-based cosmic rays measurement by neutron monitor on Lomnický štít, high mountain observatory.*

*Karel Kudela significantly contributed to understanding of specific regions of the dynamics of the energetic particles in Earth's magnetosphere and heliosphere; to first approval of the solar neutrons response on the Earth surface during extensive solar flare; to description of low frequency cosmic rays spectra from neutron monitors; to description of correlations between space weather effects and low energy cosmic rays; to description of middle energy particles in vicinity of Earth's magnetosphere boundaries.*

*As professor at Pavol Jozef Safarik University and Technical University in Kosice he over many years regularly taught the Physics of space radiation and Plasma physics. He educated several PhD students in this field.*

*Karel Kudela is co-author of more than 250 original scientific articles and several monographies. He co-organized many scientific symposia worldwide and also organized several in his home city Kosice, e.g. European Cosmic Rays Symposium ECRS-1984, , NATO advanced research workshop - Interball observation 1998, ECRS-2008. He gave many invited talks on space research symposia worldwide.*

*Karel Kudela was a member of various scientific bodies and committees, inter alia, the International Advisory Committee IAC for ECRS symposia, science committee for International Cosmic Ray Conference ICRC and others in the field of space energetic particles. He was also a PI for many funded scientific schemes as VEGA, APVT, APVV, COST, INTAS, 6FP, 7FP and Co-I for European structural funds: "Centre for space research – influences of space weather".*

*In years 2002-2008 he was a member of International Union of Pure and Applied Physics IUPAP (C4 – commission for space radiation), since 2007 he was elected as Corresponding member of the International Academy of Astronautics in basic science. Slovakia has lost a leading scientist in space research and international scientific community has lost a renowned scientist, thoroughly committed to space research.*