Professor Martin Bajus celebrates his 80th birthday.

It is a privilege and a pleasure to present the congratulation in the Petroleum and Coal to honour Professor Martin Bajus on his 80th birthday. Martin was born in Vojčice on January 30, 1943. After graduating with honours in Fuel Technology in 1965 at the Faculty of Chemistry at Slovak Technical University in Bratislava under the supervision of prof. Václav Veselý, obtaining a PhD. Degree in 1968. This education would become a constant driver for him in the following years, where he spent almost 50 very dense years of prolific research and teaching work.

Since his early years in the pyrolysis group, he pushed hard on the chemical reaction acceleration of the engineering side of pyrolysis processes, complementing the consolidated experimental approach of the laboratory with the theoretical kinetic and mechanism analysis, a competence that he brought to the Bratislava pyrolysis school.

During the years, his research interests covered several topics in kinetics and mechanism of pyrolysis and chemical reaction engineering. Professor Bajus first described the influence of nitrogen, oxygen, phosphorus and sulfur compounds on the kinetics and mechanism of the thermal decomposition of hydrocarbons. The reactivity of some organic and inorganic sulfur compounded under the conditions of initiated pyrolysis from the viewpoint of the radical decomposition of hydrocarbon, selectivity improvement towards the desired alkenes and decreased secondary reactions, the consequence of which coke formation.

Professor Bajus are the result obtained and their industrial applications in newly devised petrochemical technologies, not only in Slovakia (Slovnaft Company, Mol Group in Bratislava) but also abroad in the Czech Republic (Unipetrol Unicre in Litvínov). This international and industrial experience gave Professor Bajus a broad and unique perspective of his field, which served the Slovak University of Technology and its students well.

Among others, I would like to emphasize his research achievements in the green etherification process of bioglycerol and ethylene glycol by isobutylene and the development of heterogeneous and homogeneous catalysts and reactors for process intensification.

In the field of pyrolysis chemical recycling of plastic waste, he pioneered the concept of a continuous tubular reactor for the intensification of heat transfer. He provided several fundamental contributions to transport phenomena in continuous reactors, which paved the way for the reactor design in different applications. Presently he cooperates with the company Dron-Industry in Mliečany on the innovation of already existing technology.

His international leadership has been recognized in all fields by several academic and industrial collaborations, plenary talks, and keynote lecture invitations at national and international conferences and seminars.

Professor Bajus has authored or co-authored almost 350 papers (in inland and international journals, collections, posters, and lectures); he is also a coinventor of 47 patents

and patent applications. In addition, he has been an invited lecturer at several universities and industrial companies worldwide.

Professor Bajus has worked at the Faculty of Chemical and Food Technology since 1966. Together with his colleagues, he has written eight scripts and studying materials, six university textbooks and has contributed to 4 monographies. In addition, he has written the first electronic textbook, "Organická technológia a petrochémia: uhľovodíkové technológie", lectured modules including energic materials and technologies (1st-year students), Alternative Fuels (4th-year students), Petrochemistry (5th-year students), Hydrocarbon Technology I., Hydrocarbon Technology II. and Alternative materials and technologies (PhD students).

He is currently serving as a member of the International Editorial Board of Petroleum & Coal journal and a reviewer of several scientific journals related to the chemical reaction pyrolysis, the oil and gas and petrochemical industries (Industrial Engineering Chemistry, Research, ACHS, USA; Energy & Fuels, ACHS, USA; Journal Analytical and Applied Pyrolysis, Elsevier, The Netherlands; Chemical Engineering Journal, Elsevier, The Netherlands; JBCS: Journal of the Brazilian Chemical Society, Brazil; As a recognition of his authority in the field, he was the scientific chairman of very successful of the International Petroleum Conference held in Bratislava; Aprochem: International Chemico-Technological Conference, Czech Republic; International Symposium Motor Fuels, Slovakia; ICCT: International Conference on Chemical Technology, Mikulov, Czech Republic; and International Conference of Slovak Society of Chemical Engineering, High Tatras.

During his years at the Slovak University of Technology in Bratislava, where he was appointed full professor of Fuel Technology in 1995, Martin has also been a teacher and mentor for many generations of students. He has supervised almost 100 master's and bachelor's thesis students and 8 PhD. students' thesis.

Being married to Mária, who has provided him with understanding and support during the decades of their happy life together, they have given grown-up Peter and Beata the most significant recognition and happiness. As a result, they first know of Martin's interests and passions, other than pyrolysis, chemical reaction mechanism, and engineering.

I hope to be successful in illustrating Martin's nature and the international profile of Martin's pedagogical and research network, which includes academic, scientific, and industrial contacts. Finally, we would like to thank Martin for his mentoring and for providing us with inspiration and motivation in our research work. Happy birthday, Martin, from your former students, presently colleagues but most of all friends and the whole IOCCP, so highly indebted to you !

professor Viktor Milata