

Preface

The present issue of the *Proceedings of the Estonian Academy of Sciences. Chemistry* is dedicated to Professor Ilmar Koppel, a distinguished Estonian chemist, on the occasion of his 65th birthday.

Professor Koppel has been active in very many areas of chemistry and even physics, ranging from the determining of the mass of neutrino to the problems of synthetic organic chemistry. However, his main scientific interests have undoubtedly been in physical organic chemistry: the mechanism of S_{N1} and S_{N2} reactions, influence of solvation on a wide range of the properties of substances (e.g. the famous Koppel–Palm equation), substituent effects, photoelectron spectroscopy, gas-phase equilibriums involving both Brønsted and Lewis acids and bases, acid–base equilibriums in different media starting from the most common – water – and ranging to such an exotic one (for charge-transfer reactions) as heptane, where until recently the accurate determination of pK_a values was not possible. Professor Koppel has always been deeply interested in new developments in chemistry and, which is more important, has applied new methodologies in his research as soon as possible. A good example of such approach is the application of quantum chemical (and later density functional theory) calculations in tackling real chemical problems, e.g. the design of new superstrong acids and bases. He has never complained much about the inadequate research infrastructure – his motto has been “if you have a good enough idea you can always find people and equipment to carry out your research”, and he has proved it with many fruitful scientific cooperation projects with different laboratories in the USA, Canada, France, Spain, Germany, Sweden, Russia, Ukraine, and Japan to name just a few.

Ilmar Koppel has also been a very inspiring and generous mentor to his many students, who have by now developed into independent scientists, and hopefully carry on the curiosity and persistence of their mentor.

The present issue reports some recent results of the friends and former students of Professor Ilmar Koppel, who also take this opportunity to record in the literature their heartiest wishes for a happy birthday to you, Ilmar.

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