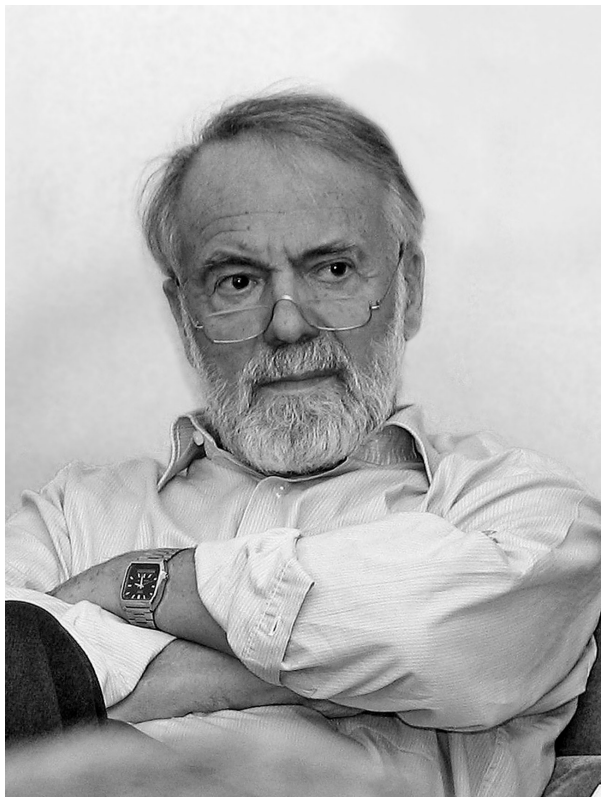
Special Issue Dedicated to Professor Dr. Alfred Schmidpeter on the Occasion of His 75th Birthday



One can not survey the chemistry of phosphorus in the last 50 years without encountering the name of Alfred Schmidpeter. His work, published in more than 250 papers, reviews, and book contributions, is related to many fundamental questions in phosphorus chemistry. Professor Schmidpeter has dedicated his scientific life to the chemistry of this fascinating element.

Five years ago William E. McEwen and Shigeru Oae at this place wrote a tribute to Alfred Schmidpeter on the occasion of his 70th birthday. Both laudatores have left us during these five years. We will not repeat what they had said in their tribute, but wish to point to it again.

To the last issue of Volume 10 of *Heteroatom Chemistry*, Alfred Schmidpeter contributed an "Essay on Phosphorus Chemistry," a sort of chemical autobiography. It displays a variety of formulas, which illustrate his favourite topics. Here is a small selection of them:

It starts with functional and tautomeric phosphazenes and with five-membered cyclic phosphazenes both resulting from cycloadditions and undergoing further cycloadditions. A main point is the interplay of ring size and phosphorus coordination number. In this early time high coordination numbers (five and six) are in the center of the scientific interest of Alfred Schmidpeter. Later on, the dicoordination of phosphorus, which is well known now, but which was quite unusual at that time, becomes the main topic.

An important class of compounds, which is connected with the name of Alfred Schmidpeter, are the heterophospholes. He may be regarded as the "father" of the heterophospholes, because out of his investigations they advanced to an own real family of aromatic heterocycles. Many of the papers and reviews Alfred Schmidpeter listed in his essay deal with heterophospholes. About twenty years ago he called them appropriately "a Post-script Chapter of Heterocyclic Chemistry." In the meantime this family of compounds has grown respectably. He had made it popular, developed many different accesses and certainly stimulated some more. Two-coordinate phosphorus in these systems proves as perfect a member as its neighbours nitrogen and sulfur.

Another wide field of his activities is filled by two-coordinate phosphorus as a member of acyclic conjugated systems such as cyanophosphides, phosphinyl-phosphides, triphosphenium ions and phosphaallylic cations. Halophosphoranides offered themselves as model compounds for P(III) substitution reactions.

The ylide group finally proved as a substituent of unsurpassed strong influence and allowed the preparation of types of phosphorus compounds not accessible otherwise, such as phosphenium chlorides, monomeric thioxophosphines and dithioxophosphoranes. This substituent effect which he used for the benefit of phosphorus compounds, will certainly also prove useful in the chemistry of other elements.

Since the start of *Heteroatom Chemistry* Alfred Schmidpeter served as its European Editor. *Heteroatom Chemistry* is much in debt to him for his essential contribution to the journal's success. In particular he graciously acted as Editor-in-Chief following the untimely passing of Bill McEwen in May 2002. At present he is still active as its European Editor. Many papers dedicated to Alfred Schmidpeter on the occasion of his 75th birthday were sent to *Heteroatom Chemistry*, to "his journal," just as was the case five years ago. They are collected in this issue. This is the way we all want to say to him: Thank you, Alfred.