Foreword for Festschrift for Peter's 80th birthday

Jane S. Murray¹ · Kevin E. Riley²

Received: 14 December 2017 / Accepted: 6 March 2018 / Published online: 26 March 2018
© Springer-Verlag GmbH Germany, part of Springer Nature 2018

The idea for a topical Festschrift to celebrate the occasion of Peter's 80th birthday was born at the Faraday Discussion on Halogen Bonding and Supramolecular Chemistry, held in Ottawa, Canada from July 10–12 of 2017. Tim Clark was the initial instigator of the idea, and asked us if we would be co-editors (co-conspirators). Of course, we accepted!

Behind the scenes and unbeknownst to Peter, we launched this project with the help of Elke and other Springer staff. It has been quite a feat to keep this a surprise, but we think that we have succeeded.

Peter Politzer, our honoree, was born in Prague, Czechoslovakia on 12 December 1937. His family fled Europe in stages in 1939, and after a year and a half living and working in Brazil, the Politzer family received word by

letter that they were included in the quota for coming legally to the United States in April of 1941. The family eventually settled in Cleveland, Ohio, where Peter's father brought a shut-down rayon factory back to life during WWII, and then after the war converted the factory to the manufacture of cellulose sponges. The reason for mentioning these family details is to emphasize that Peter grew up surrounded by people with a strong work ethic, an attribute that describes Peter totally. After high school, Peter attended Western Reserve University in Cleveland and obtained a bachelor's, master's and doctorate degree in chemistry. His PhD dissertation was directed by Ralph Petrucci, and dealt with the chemisorption of CO on metals and metal oxides—an area that he found intriguing. After 2 years as a post-doc with Harrison Shull at Indiana University, Peter ventured south to the University of New Orleans (at the time called Louisiana State University in New Orleans). He remained in New Orleans full time until Hurricane Katrina, and now spends time both in New Orleans and Cleveland, Ohio.

Peter's early research was greatly influenced by the work of Richard Bader, who was computing the forces that the electronic density of a molecule exerts upon the nuclei. In 1970, Peter became greatly interested in the use of the electrostatic potential in the study of chemical reactivity after reading articles by Scrocco and Tomasi and their co-workers. To our knowledge, he was the first American researcher to use the electrostatic potential as a computational tool in studying molecular interactions. Peter's career has followed the changes in computational capabilities and has involved research in both covalent and noncovalent interactions in a variety of fields, including energetic materials. His interests are wide, and range from fundamental concepts to practical chemistry, with a focus on physical observables.

As a collaborator, Peter has always been a pleasure to work with, offering insight, diligence, encouragement and enthusiasm to any project on which he is working. In addition to the direct effect of his efforts, it is a pleasure to work with Peter because of his cheerful attitude, his wit, and his huge store of amusing stories. K.E.R. can remember sitting with Peter in

This paper belongs to Topical Collection P. Politzer 80th Birthday Festschrift

✉ Jane S. Murray
jsmurray@uno.edu

¹ Department of Chemistry, University of New Orleans, New Orleans, LA 70148, USA

² Department of Chemistry and Biochemistry, Xavier University, New Orleans, LA 70125, USA

many cafés, restaurants and pubs, discussing some aspect of a project we were working on, when Peter would be reminded of a story about growing up in Cleveland, meeting various scientists in Prague or in the French Quarter of New Orleans, or something funny that one of his grandchildren had done. Whenever you get together to work on something with Peter, you must be prepared to be challenged intellectually and to have a very good time.

In this foreword, J.S.M. would like to include an edited portion of the Acknowledgement that she and co-authors have published in their paper for this Festschrift: ‘Some years ago, Alfred Politzer (Peter’s father) said, “Peter has spent most of

his career working on things he knows nothing about.”’ This is a compliment in disguise; it shows a willingness to learn. Bob Murray, one of J.S.M.’s sons, phrases this slightly differently: “Perhaps Dr. Politzer’s greatest contribution to chemistry and mankind is his innate ability to look, write and speak as if he knows exactly what is going on.” Using this skill has allowed collaborations and contributions that would not have been possible otherwise and will forever shape the way we view and understand theoretical physical chemistry. We are all looking forward to Peter forging ahead (with his strict work ethic) for (at least) the next 10 years.