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נשיא הטכניון לשעבר

November 22, 2015

Paul von Rague Schleyer 1930-2014

Friz's E-mail informing me of Paul's death hit me like a lightning! To me, Paul Schleyer was non-destructible. We all lost a giant scientist and a mentor, and I have lost a dear and loved personal friend.

I first met Paul in 1971 when I was a graduate student and Paul came to the Hebrew University of Jerusalem to deliver a series of lectures. He lectured on adamantane and other cage compounds, their synthesis and fascinating rearrangements and used force-field calculations to support the proposed reaction steps. I was fascinated not only by the chemistry but also by Paul's enthusiasm and immediately decided that I want to work with this great scientist. Discussing with him I discovered also his interest in history and archeology and was happy to show him and Inge several of the sites in Jerusalem, including the Hezekiah's Tunnel dug some 2500 years ago where he was excited when we walked through in the dark with water up to our chests.

When he accepted me as a postdoctoral fellow, I celebrated. In 1974 I joined him in Munich where he spent a 6-month sabbatical. There he gave a course on molecular orbitals and chemical structures. This course was revolutionary! The audience was composed mostly of experimental organic chemists (Rolf Huisgen, etc.) and for them this was the first time that they were exposed to computational chemistry which, at that time, was in its infancy. The audience admired Paul's experimental work on cage molecules, carbenium ions and reaction mechanisms, and many of them thought that Paul has "went crazy" when he was telling them to start to do quantum mechanical calculations! In 1975 we returned to Princeton where Paul was already shifting from experimental work to computations, heavily collaborating with J. A. Pople. He soon faced the "stupid wall" of Princeton bureaucracy that over-charged for computer time, essentially forcing Paul to leave Princeton in 1976. At the University of Erlangen Paul had finally the freedom and means to pursue in full force computational chemistry. With Paul's arrival in Erlangen, chemistry took a new direction at German Universities; he has reshaped the field and was extremely instrumental in educating a new generation of chemists. Erlangen has become the new Mecca for computational chemists. I used to come there almost every summer to enjoy the stimulating atmosphere and to learn new things from Paul. Paul visited me several times in Israel. His visits were always a scientific feast to the Israeli chemical community and, of course, and we always combined it with visits to new archeological sites. Over the years we developed special friendship relations, which also included Inge and my wife Zipi.

Paul Schleyer was a gigantic chemist. For more than 50 years he influenced and dominated many fields of chemistry. In the first phase of his career he synthesized adamantane, opening many new possibilities and pioneered the chemistry of cage compounds; he dominated carbocation chemistry and studies of solvolysis mechanism and was the prominent researcher advocating that the 2-norbornyl cation is non-classical, thus clashing over it with H.C. Brown. The recent X-ray structure of the 2-norbornyl cation proved that Paul was correct. In the second phase he was at the front-line, developing and promoting the use of computational methods and especially *ab initio* methods. There is no doubt that his status as a leading experimentalist played a major role in convincing many organic chemists (like myself) that computations can add a lot of insights to their research. He then went on to give us a whole new perspective on chemical bonding, aromaticity, lithium compounds and many more topics. With some 1200 scholarly papers there are very few issues in chemistry that Paul did not touch!

We all lost a giant chemist. I have lost a mentor who I admired and also a very dear friend. Paul was not an easy person, but he was very kind to his friends. As an example, one summer, when I was a young starting faculty member at the Technion, Paul and Inge left their large Erlangen house and their car for me and my family for 2 weeks! How many people do you know who will do the same?

Paul Schleyer has left us, but his chemistry will continue to be taught and influence thousands of chemists around the globe for years to come.

We will all miss Paul's guidance into new fields of chemistry and his tremendous insights. Personally, I will miss him tremendously.

Yitzhak Apeloig