

## Preface

During my first month in Madison, Wisconsin, I attended an Advanced Quantum Chemistry class taught by Professor Joseph O. Hirschfelder. As a young first-year Ph.D. student, I sat in the back row hoping not to be noticed. After several minutes of lecturing, Joe stopped and looked in my direction. He paused for what seemed like 30 s and then walked through the closely spaced desks toward me. Standing in front of me, hopefully not noticing my nervous vibrations, he spoke those words that so many of us have heard, "Hi, I don't believe we've met. I'm Joe Hirschfelder." This was my first personal exposure to Joe. I was, of course, well aware of Joe's monumental contributions to *all* areas of theoretical chemistry, but until that day I had never experienced his presence.

Throughout my years as a Ph.D. student in the Hirschfelder inspired Theoretical Chemistry Institute (TCI), my contemporaries and I were fortunate to experience an important time in the history of the theoretical and computational sciences. Joe, Chuck Curtiss, the late Dick Bernstein, Bill Byers-Brown, John Harriman and Saul Epstein attracted an exceptional group of visiting faculty, postdocs, and students. Bill Lester, Ralph Levine, Al Matsen, Harry King, Howard Taylor, Bob Yaris, Peter Robinson, and Alan Dickinson were all members or visitors of TCI during this time. The seminars were held in the eighth floor conference room surrounded by pictures of Joe's friends, including Von Neumann, Wigner, and Einstein. The Ph.D. and postdoctoral students included David Dion, Laurie Hunter, Bob LeRoy, Dave Wisnant, Jim Muckerman, Mary Beth Ruski, Dan Chipman, Phil Certain, and Mike Marron. The Vietnam war was in full swing and discussions of life and death matters took place frequently among TCI members.

These were wonderful times and Joe was the focal point of theory at one of the world's top centers for research in the area. The TCI group was competing head-to-head with groups from Florida's QTP, Indiana, Harvard, Chicago, and Cal Tech. Throughout *many* generations of Ph.D. students, postdoctorals, and visiting faculty members, Joe and the other TCI group members provided an extremely stimulating and motivating atmosphere. On behalf of all TCI members, I thank Joe for his contributions to our lives.

It is, of course, impossible to remember Joe without fondly recalling experiences with Betty Hirschfelder. Whether playing golf with Joe and Betty or attending a scientific symposium during which both were highly visible and inspirational, we all experienced a considerably enriched personal and intellectual environment because of Joe and Betty.

As we, friends and colleagues of the Hirschfelders, go forth in our lives and careers, we carry remnants, effects and other byproducts of Joe and Betty. On behalf of all TCI folk and the entire theoretical chemistry community, I say, "Hi, Joe. I'm awful glad we met you." It has been a real honor and pleasure to honor Joe by editing this special issue.

God bless you, Joe.

Jack Simons  
Guest Editor