

## A letter from George S. Hammond to RSH Liu

Dear Bob,

So, you are retiring! It is a grave move in one's life; but let me assure you it does not mean that life is over. After a few years of practice I think that I have learned how to handle the situation. I still miss going to the lab and talking with my coworkers. I also confess that I miss the great secretaries who help me through many emergencies and took care of me in various ways. As I type this I realize once again that at my best I can type in an hour what one of my secretaries could have done in ten minutes.

I recall clearly the day you first came into my office at Caltech. I was in my role of counseling half of the incoming graduate students. We divided the group alphabetically and did not classify the students by the fields of their expressed interest. That meant that I talked with you even though you had indicated that you were a physical or inorganic chemist. We talked about doing chemistry at CIT; a few days later you came back to talk about my research. I was happy to see you back. I blithered on about some of our photochemistry and you expressed an interest in joining the group. I don't really know why since I have read your comments to the effect that you really don't know what the devil I was talking about. The group was too large at the time so I didn't know where I could find space for you. However, one of my people, Harold Waits, had to take medical leave so there was a bench for you. You settled into the group very smoothly and flourished under the tutelage of people like Nick Turro and Jack Saltiel. It was a great group! It was my great good fortune to have some truly outstanding coworkers and you were one of them. You studied the photosensitized dimerization of conjugated dienes and turned out some truly exciting results. We discovered marvelous examples demonstrating stereoisomerization of the excited states of conjugated dienes. Related suggestions had been made by Havinga in the study of trienes in the pro- and pre-D vitamins. I confess that when we published your results I was unaware of the Havinga work. However, your work was more definitive and because the examples were simpler they had a huge impact on the field.

Despite your avowed humility, you were no shrinking violet at CIT. You were a real asset in many ways. You cooperated with others in the group and in the department. I will cite one example; once when I came back from a vacation Turro informed me that the Chemistry softball team had a game scheduled against one of service groups. That was important. Nick installed me at first base so that my deficiencies as a runner would be minimized. He also had you on the team, although I forget what position you played. What impressed me most was the authoritative way that you swung the bat.

Your career since you left Cal Tech has been outstanding. At Du Pont you did some splendid work. The most important from a purely scientific point of view was showing that the second triplet state of anthracene could function as a photosensitizer. I

enjoyed talking with you when I came to the Station consulting and Howard Simmons told me that you were doing great stuff. I recall chatting with you about your life in Wilmington. You said that Du Pont was a good place to work but that Wilmington was not a great place for a bachelor, especially a Chinese bachelor. I was not surprised that when the opportunity at Hawaii came along you jumped at it. I sympathized with your fear that you were going off to Never-Never Land but you have done a splendid job there. And, in fact, have done much to put the University on the world's scientific map. You wisely chose an area of photochemistry that was not being overworked by the so-called big shots in the field. Your choice of visual pigments as a subject was inspired, and your approach, which emphasized demanding synthesis of related polyenes and studying them by themselves and in conjunction with opsin showed great judgment. Your suggestion that the Hula Twist can play a role in the isomerization of rhodopsin was insightful.

I deeply appreciate the fact that in recent years you have generously given me a piece of the action in trying to understand unexpected aspects of the work. If it had not been for you I probably never would have gotten into thinking about femtochemistry. I look forward to your e-mails which always stimulate new thoughts. At this time in my life, with no laboratory and no immediate coworkers, thinking is the way I stay alive as a chemist.

Aloha,

*George*  
George S. Hammond

*P. S. Happy Birthday!*