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In Memoriam

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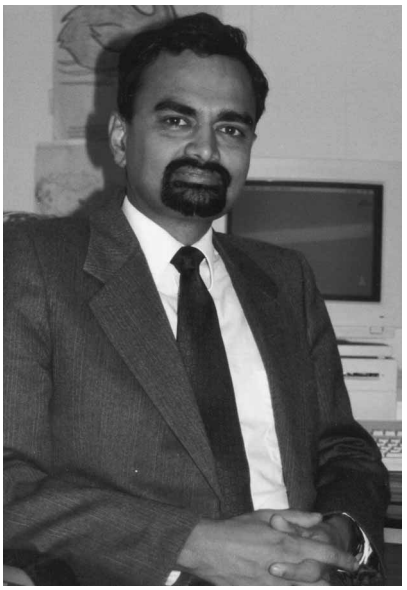

Sukant K. Tripathy
(1952–2000)

Sukant Kishore Tripathy, Professor of Chemistry at the University of Massachusetts Lowell, died on 12 December 2000 in a swimming accident off the West Coast of the island of Hawaii. While this year's symposium is 4 years later, it is apparent that Sukant's influence is still felt in current research activities in the Center for Advanced Materials. His memory remains strong in the minds of all of us who knew him.

Following the example (1) of Jayant Kumar, I will summarize my acquaintance and friendship with Sukant. I first met Sukant when he interviewed for a member of technical staff position in the Polymer Science project of the Advance Technology Laboratory of GTE Laboratories. Ironically, the position was available because of the untimely death of a young polymer chemist, Walter Deits, in an automobile accident. Sukant had done computational modeling for his Ph.D. thesis at Case Western Reserve and while he continued some of this work, his primary assignment was in the area of Langmuir-Blodgett films. This work led to the measurement of ultrafast third order nonlinear optical responses in polydiacetylene (PDA) films (2) in collaboration with Gary Carter and Y.J. Chen.

Sukant was initially shy and reserved in public discussions, especially with prominent visitors. It took him several years to overcome this pattern. Sukant made good progress in his work and the GTE Labs management recognized his abilities. After about two years, the Fundamental Research Laboratory was created and he was named manager of

the chemistry programs. At the same time, I was named a senior staff scientist, a management-level research track position. As such, Sukant supervised my coworkers, and we had to work closely together.

We also found time to make some meaningful research. With the help of John Havens, Sukant's classmate from Case Western Reserve, we used solid state NMR (3) to show that the PDA-TCDU definitively had the usual en-yne structure and was not a butatriene as had been speculated. Lynne Samuelson synthesized 1,1,4,4-tetraphenyl-butatriene as a model compound (3) for the cumulenic carbon chemical shift. We also contributed to a review article (4) summarizing the GTE Labs effort in PDA, especially as applied to 3rd order nonlinear optics for signal processing applications.

Sukant left GTE Laboratories in 1986 after a major reorganization that seriously disrupted the programs that he managed. He joined the Department of Chemistry at the University of Lowell and began setting up his program. We were in relatively frequent contact in the 1986–1992 time frame. When GTE Corporation decided to divest its lighting and materials businesses, I had the possibility of coming to the University of Massachusetts Lowell to work with Sukant and Jayant Kumar as they set up the Center for Advanced Materials. In the course of discussions to this point, I learned that Sukant had a Fourier Transform Raman spectrometer, and we collaborated on using Raman spectra to distinguish the conformational polymorphs of di-2-naphthylditelluride (5).

Sukant was of considerable help to me as I made the adjustment from a corporate research center to an academic setting. We co-supervised my first graduate student, V. Shivshankar, and we did have a lot of fun with the planning and execution of the MURI award (Multidisciplinary University Research Initiative) that we (Sukant, Jayant, myself, and Mike Rubner at MIT) received from the Office of Naval Research.

I was with Sukant on that fateful day in Hawaii in December 2000. We had breakfast, and I asked him if he was going to go to the first session of the conference on that day. He said that he was going to travel around the island, and, in retrospect, I wish that I had asked about the details of his plans for the day. Late that afternoon, the late Stan Israel contacted me and told me the bad news.

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