



Editorial

2008 ACS Award Issue “For Creative Work in Fluorine Chemistry”, Dennis P. Curran



Each year, the *Journal of Fluorine Chemistry* publishes a special issue to honor the annual recipient of the American Chemical Society Award for Creative Work in Fluorine Chemistry. In this issue, we are honoring and recognizing the creative spirit of the 2008 award winner, Professor Dennis P. Curran, and in particular the broad and significant contributions he has made to the field of Fluorous Phase chemistry.

Several of the papers included in this special issue were submitted by colleagues, who participated in the Award Symposium held at the 235th ACS National Meeting, April 5–10, 2008, in New Orleans, LA, as invited speakers. As an overwhelming response to Professor Curran's recognition, a record-setting number of his friends, colleagues and admirers in the field have chosen to contribute to the Curran's Issue of the *Journal of Fluorine Chemistry*. The issue is comprised of 26 papers in all, and they encompass the broad field of synthetic fluorine chemistry. The main piece of the issue, though brief, is by the honoree, titled “Fluorous Chemistry in Pittsburgh: 1996–2008”.

Dennis P. Curran hails from a family of chemists. His brother, Kevin, and his father, Bill are organic chemists. Although, Curran's father never pushed him to chemistry, his mother, Jane bought him a chemistry set early on. Dennis, now 54, began his career in chemistry in 1971 at Boston College, where his inspiration to chemistry came from T. Ross Kelly, his “Introductory Organic Chemistry” professor. He completed his Ph.D. at the University of Rochester and a postdoctoral fellowship at the University of

Wisconsin, Madison, and is now a Distinguished Service Professor and Bayer Professor of Chemistry at the University of Pittsburgh.

Dennis' interest in fluorine chemistry arose after reading a “spectacular” Science article (1994, 266, 72) by István T. Horváth and József Rábai, on catalytic chemical transformations using a fluorous biphasic system. Dennis' research group worked on projects in organic radical chemistry and had problems separating organotin reagents from their products. Horváth and Rábai's article inspired him to learn about organofluorine chemistry, which he found could help his group's research. Once his group started doing offbeat, but simple experiments and began getting exciting results, Dennis was hooked to fluorous chemistry and there was no turning back.

Although Dennis initially considered himself an “outsider” in the field, his excitement about fluorine chemistry has had a great deal of impact on the field. His contributions to fluorous chemistry include the creation of a fluorous solid-phase extraction technique and the introduction of many new fluorous protecting groups, scavengers, reagents, and catalysts. Dennis has shown the creativity to consistently take the fluorous field in new directions. Other groups have made many innovative and potentially very important contributions, such as oligosaccharide synthesis with fluorous microarrays, which follow directly from concepts and techniques that Dennis introduced and pioneered. The original uses of fluorous chemistry in small-molecule synthesis and separation have expanded dramatically in recent years to biomolecule synthesis, natural products isolation, proteomics microarrays, and others. Dennis has been able to commercialize his discoveries in fluorous chemistry: In 2000, he started a company called Fluorous Technologies, which provides tags, scavengers, reagents, and custom compounds and services.

Dennis is an ISI Highly Cited Researcher, among the top 100 in chemistry, and has received many awards and accolades, including the 2000 ACS Award for Creative Work in Synthetic Organic Chemistry and the 1998 Janssen Prize for Creativity in Organic Synthesis. He has published close to 360 articles and holds 29 patents with dozens more pending. He co-wrote the book “Stereochemistry of Radical Reactions: Concepts, Guidelines, and Synthetic Applications,” and has edited or co-edited four other books, including the “Handbook of Fluorous Chemistry”.

We wish Dennis the very best and look forward to seeing his creative contributions continue to flourish in the field for many years to come.

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