PREFACE TO VOLUME 81

Volume 81 represents the confluence of two rare and important phenomena for chapters in the *Organic Reactions* series, namely, it is a single-chapter volume, and it contains a name reaction coauthored by the inventor. Of the 261 chapters published thus far, only seven have been of sufficient impact to appear as single-chapter volumes. Moreover, only one has been on a subject so closely identified with a single individual as to be published as a name reaction, that of "The Stille Reaction" that comprised Volume 50. That chapter, however, was authored by Vittorio Farina, Venkat Krishnamurthy, and William J. Scott as Professor John K. Stille was sadly killed in an airplane crash in 1989. On the other hand, Volume 55 was also a single-chapter volume entitled "Nucleoside Synthesis," coauthored by Helmut Vorbrüggen and could well have borne the title "The Vorbrüggen Reaction." Of course, the series has benefitted enormously from chapters based on name reactions that were coauthored by their inventors, as was the case for the two chapters recently published in Volume 77 on the "Kulinkovich Reaction" and the "Barton-McCombie Reaction."

It is thus of special significance that the single chapter in this volume entitled "The Krapcho Dealkoxycarbonylation Reaction of Esters with α-Electron-Withdrawing Substituents" has been coauthored by A. Paul Krapcho together with *Organic Reactions'* long-time contributor Engelbert Ciganek. The "Krapcho Decarboxylation," as it is known in common parlance, is an extraordinarily useful alternative to the classical hydrolysis-decarboxylation of esters bearing α-electron-withdrawing substituents. This process replaces the strongly basic or acidic conditions normally required for ester saponification with the neutral cleavage of the ester group by a $B_{AC}2$ mechanism through the combination of water and a dipolar aprotic solvent at high temperature. However, another popular variant involves the use of inorganic salts such as lithium chloride, sodium iodide, or sodium cyanide in a dipolar aprotic solvent which can open a second mechanistic pathway (dependent upon the ester) through $B_{AL}2$ cleavage. Drs. Krapcho and Ciganek expertly outline the broad substrate scope of this reaction and identify the preferred conditions for various substrate classes. The 419 pages of tables containing all known examples of this simple but important transformation, together with the 1,908 references cited in this Chapter, are testimony to the synthetic usefulness of the Krapcho reaction.

It is appropriate here to acknowledge the expert assistance of the entire editorial board, in particular Steven Weinreb who shepherded this chapter to completion. The contributions of the authors, editors, and the publisher were expertly coordinated by the responsible secretary, Robert Bittman. In addition, the *Organic Reactions* enterprise could not maintain the quality of production without the dedicated efforts of its editorial staff, Dr. Linda S. Press, Dr. Danielle Soenen, and Dr. Dena Lindsay. Insofar as the essence of *Organic Reactions* chapters

resides in the massive tables of examples, the authors' and editorial coordinators' painstaking efforts are highly prized.

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