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Electroorganic Synthesis



Manuel M. Baizer 19141988

Electroorganic Synthesis

Festschrift for Manuel M. Baizer

Edited by R. Daniel Little University of California Santa Barbara, California

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PREFACE

The <u>Manuel M. Baizer Memorial Symposium</u> was held in Montreal on May 611, 1990 as part of the 177*th* meeting of The Electrochemical Society. This <u>Festschrift for Manuel M. Baizer</u> derives from the unanimous decision in favor of such a publication by the participants of that Symposium.

Manuel Baizer was born in Philadelphia on May 20, 1914, receiving his BS, MS and PhD degrees at the University of Pennsylvania in 1934, 1937 and 1940. From 19421944 he was a Research Associate, NRDC, at the University of Pennsylvania. From 19441946, he was project leader at the General Chemical Company in New York, and from 19461948, an instructor of chemistry at Brooklyn College. From 19471958 he was employed in research at New York Quinine & Chemical Works.

In 1958 he joined Monsanto as a research chemist and eventually attained the position of Distinguished Science Fellow, the highest technical level at Monsanto, awarded for his pioneering work on electrohydrodimerization. The year 1990 marked the 25*th* year of commercialization of the process.

While at Monsanto, Manuel also held an academic position at Indiana University from 1977 to 1979, and upon his retirement from Monsanto in 1979, he joined UCLA as an Adjunct Professor in the School of Engineering. The next year he moved to the University of California, Santa Barbara, and was an Adjunct Professor in the Department of Chemistry.

Manuel Baizer was the foremost internationally recognized authority on organic electrosynthesis. The book he edited with Henning Lund, <u>Organic Electrochemistry</u> published in 1973, became our "bible." He was working on the 3*rd* edition at the time of his death. Manuel believed in "getting out the word" on the benefits and the opportunities in organic electrosynthesis, and to this end he traveled widely throughout the world lecturing and consulting.

Manuel Baizer received the 1976 <u>American Chemical Society Award for</u> <u>Creative Invention</u>, the society's highest award for industrial chemistry. In 1979, he received the <u>Armstrong Award</u> (jointly) for the "Discovery, Development and Commercialization of the ADN Process". He was a member of the Electrochemical Society from 1961 and served both as Vice-Chairman and Chairman of the Organic and Biological Division. He also served as divisional editor of the Journal and organized several of the society's symposia.

He was devoted to his wife and constant companion Mary, who passed away shortly before him. Manuel followed on July 9, 1988. Manuel and Mary are survived by their three children, Joan, Carol and Eric.

In this <u>Festschrift for Manuel M. Baizer</u>, we honor his memory, his great legacy to us, his friendship and his guidance. We recognize the significant impact that Manuel made upon the growth of this field he loved so much. In a 1986 publication he wrote*:

".... organic electrochemical synthesis has ceased to be a laboratory curiosity, a methodology to be tried when all else fails, a procedure that involves mysterious black boxes and dials and wires. This science and technology are now well developed although not mature".

"The surge of activity which followed [the Monsanto adiponitrile process] has now led to over one-hundred processes which looked promising enough in the laboratory to be carried forward to a large benchscale or pilot plant or commercial development". "Fanatical though I be about the subject, I cannot say that organic electrochemical synthesis will set the world right, not even that minuscule part called the chemical world. But it will help at least a smidgen. That is as much as most of us can do who haven't the genius of Newtons and Einsteins to find a place for Archimedes' fulcrum and move the world".

* M. M. Baizer, "Electroorganic Processes Practiced in the World", *Pure & Appl. Chem.*, 58, 889 (1986).

We express our gratitude to the many talented contributors** to this memorial. Their willingness to participate in this venture and to submit materials in a timely manner is surely a tribute to our friend, Manuel Baizer. To Mr Paul Gilbert of the UCSB Chemistry Department goes our sincere thanks for being willing and so able in putting together the index. Paul, your many talents are greatly appreciated. RDL also wishes to acknowledge his daughter, Danelle Elizabeth Little, for her assistance at various stages of the editorial process. Thanks, Nellie.

R. DANIEL LITTLE NORMAN L. WEINBERG

** When indicated on a chapter-opening page, the appearance of an asterisk after a contributor's name indicates the person to whom correspondence should be addressed.

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CONTRIBUTORS

A. M. Abeysekera . . . School of Chemistry, Queens University, Belfast BT9 5AG, Northern Ireland

P. M. Allen . . . AEA Technology, Building 429, Harwell Laboratory, Oxfordshire, England OX11 ORA

Y. Araki . . . Mistsubishi Kasei Corporation, Kamosida, Midori-ku, Yokohama, Japan 227

F. Beck . . . Fachgebeit Elektrochemie, Universität Duisburg, D-4100 Duisburg 1, Germany

J. Y. Becker . . . Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, 84120 Israel

J. M. Bobbitt . . . Department of Chemistry, University of Connecticut, Storrs, Connecticut 06269-3060

U. Bornewasser . . . Institut für Organische Chemie und Biochemie der Universität Bonn, Gerhard-Domagk-Str. 1, D-5300 Bonn 1, Germany

N. J. Bridger . . . AEA Technology, Building 429, Harwell Laboratory, Oxfordshire, England OX11 ORA

H. -C. Chang . . . Department of Molecular Chemistry and Engineering, Tohoku University, Aramaki Aoba, Sendai 980, Japan

W. V. Childs . . . Fluorochemical Technology Center, 3M Company, St. Paul, Minnesota 55144-1000

A. K. Cho . . . Department of Pharmacology, University of California, Los Angeles, California 90024

P. L. Compagnon . . . Laboratoire de Chimie Organique, Faculté de Pharmacie 21000 Dijon, France

E. Cramer . . . Organisch-Chemisches Institut der Universität, Correns-Str. 40, D-4400 Münster, Germany

A. Cyr . . . Laboratoire d'électrochime, Département de chimie, Université de

Sherbrooke, Sherbrooke, Québec, Canada J1K 2R1

K. Daasbjerg . . . Department of Organic Chemistry, University of Aarhus, DK- 8000, Aarhus C, Denmark

C. Degrand . . . Laboratoire d'Electrochimie Organique associé au CNRS (URA 434), Université Blaise Pascal de Clermont-Ferrand, 63177 Aubière Cedex, France

P. Delair . . . Laboratoire d'électrochime, Département de chimie, Université de Sherbrooke, Sherbrooke, Québec, Canada J1K 2R1

J. Delaunay . . . Laboratoire d'Electrochimie, URA CNRS No 439, Université de Rennes I, Campus de Beaulieu, 35042 Rennes Cédex, France

A.-L. Dhimane . . . Department of Applied Chemistry, Faculty of Engineering, Okayama University, Tsushima Naka, Okayama 700, Japan

H. Dhimane . . . Department of Applied Chemistry, Faculty of Engineering, Okayama University, Tsushima Naka, Okayama 700, Japan

G. Dryhurst . . . Department of Chemistry and Biochemistry, University of Oklahoma, Norman, Oklahoma 73019-3070

D. H. Evans . . . Department of Chemistry and Biochemistry, University of Delaware, Newark, Delaware 19716

M. A. Fox . . . Department of Chemistry, University of Texas, Austin, Texas 78712

A. J. Fry . . . Department of Chemistry, Wesleyan University, Middleton, Connecticut 06457

T. Fuchigami . . . Department of Electronic Chemistry, Tokyo Institute of Technology, Nagatsuta Midori-ku, Yokohama 227, Japan

J. D. Genders . . . The Electrosynthesis Company, PO Box 430, East Amherst, New York 14051

R. N. Goyal . . . Department of Chemistry and Biochemistry, University of Oklahoma, Norman, Oklahoma 73019-3070

J. Grimshaw . . . School of Chemistry, Queens University, Belfast BT9 5AG, Northern Ireland

A. Hembrock . . . Organisch-Chemisches Institut der Universität, Correns-Str. 40, D-4400 Münster, Germany

T. Hirahsima . . . Osaka Municipal Technical Research Institute 1-6-50, Morinomiya, Jyoto-ku, Osaka 536, Japan

T. Inokuchi . . . Department of Applied Chemistry, Faculty of Engineering, Okayama University, Tsushima Naka, Okayama 700, Japan

S. Isoe . . . Institute of Organic Chemistry, Faculty of Science, Osaka City University, Osaka 558, Japan

C. P. Jones . . . AEA Technology, Building 429, Harwell Laboratory, Oxfordshire, England OX11 ORA