

CURRENT TRENDS IN ORGANOMETALLIC CHEMISTRY

A Symposium held at the University of Cincinnati,

June 12-15, 1963

In June 1963, approximately 120 people representing many major centers of organometallic chemistry in the world met in Cincinnati for a Symposium on Current Trends in Organometallic Chemistry. The program was co-sponsored by the U.S. Army Research Office (Durham), the Petroleum Research Fund of the American Chemical Society, and the University of Cincinnati.

Fifty-five percent of the attendees were from academic institutions and forty-five percent from industry and government. Nine countries were represented: Belgium, Canada, England, France, Germany, Holland, Italy, Japan, and the United States. Twenty-one people were from outside the continental United States. The next international Symposium of Organometallic Chemistry in this series will be held in September 1965 at the University of Wisconsin.

For the information of the readers of the *Journal of Organometallic Chemistry*, the titles, authors, and affiliations of the work presented at the Cincinnati Symposium are listed below. Although complete abstracts of the papers are no longer available, information concerning any particular paper may be obtained from the appropriate author.

RAYMOND E. DESSY

HENRY GILMAN

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- RAYMOND E. DESSY, *University of Cincinnati*, Introduction
- HENRY GILMAN, *Iowa State University*, The growth of Organometallic Chemistry
- ROLAND KOSTER, *Max Planck Institute, Mulheim, Ruhr (Germany)*, New results in the field of organoboron compounds
- FREDERICK HAWTHORNE*, RICHARD L. PILLING, RUSSEL N. GRIMES AND PETER STOKELY, *The University of California, Riverside, California*, Recent mechanism studies with $B_{10}H_{14}$ derivatives
- M. F. LAPPERT* AND B. PROKAI, *The Manchester College of Science and Technology, University of Manchester (England)*, Chloroboration and allied reactions of acetylenes
- DONALD S. MATTESON, *Washington State University, Pullman, Washington*, Electrophilic additions to α,β -unsaturated boronic esters
- KURT NIEDENZU, *U.S. Army Research Office, Durham, North Carolina*, Reaction of some amino-silanes with boron derivatives
- THOMAS P. ONAK, *Los Angeles State College, Los Angeles, California*, AND ROBERT E. WILLIAMS, *Space General Corporation, El Monte, California*, Synthesis of carboranes from dihydro-carboranes
- H. H. FREEDMAN* AND T. A. GOSINK, *Dow Chemical Company, Framingham, Massachusetts*, Addition evidence for $d\pi-p\pi$ bonding of the Group IVB metals with an aromatic ring
- ROBERT WEST* AND JOYCE Y. COREY, *University of Wisconsin, Madison, Wisconsin*, The siliconium ion problem
- DONALD R. WEYENBERG, *Dow Corning, Midland, Michigan*, The disilylation reaction. The trapping via reaction with a chlorosilane of short-lived intermediates from unsaturated organic and alkali metals
- DIETMAR SEYFERTH, *Massachusetts Institute of Technology, Cambridge, Massachusetts*, Reactions of organolithium with phosphonium halides and with phosphine oxides and sulfides
- SAMUEL O. GRIM* AND REGINA SCHAAFF, *University of Maryland, College Park, Maryland*, Phosphonium salts and phosphinemethylenes
- MAKOTO KUMADA, *Department of Synthetic Chemistry, Kyoto University, Kyoto (Japan)*, Intramolecular rearrangement, with sulfuric acid, of isopropenyl derivatives of disilane and trisilane
- B. KANNER*, D. I. BAILEY AND E. J. PEPE, *Silicones Division, Union Carbide Corporation, Tonawanda, New York*, Redistribution of halosilanes
- J. G. A. LUIJTEN, *Institute for Organic Chemistry T.N.O., Utrecht (The Netherlands)*, The preparation of organotin-substituted acetylenes by the decarboxylation of organotin acetylene-carboxylates
- H. C. CLARK*, SHARON FURNIVAL AND J. T. KWON, *University of British Columbia, Vancouver (Canada)*, The addition of fluoro-olefins to an organotin dihydride
- J. E. DUBOIS, *Laboratoire de Chimie Organique Physique, University of Paris (France)*, Physical and chemical properties of the chloromagnesium complex of *tert*-butyl acetate in hydrocarbon media
- H. M. WALBORSKY* AND A. E. YOUNG, *Florida State University, Tallahassee, Florida*, An optically active Grignard reagent and its mode of formation
- RAYMOND HAMELIN*, *Embassy of France, Washington, D.C.* AND SIMONE HAYES, *École Normale Supérieure, Paris, France*, On the phenomena of association in organomagnesium solutions
- L. VASKA, *Mellon Institute, Pittsburgh, Pennsylvania*, Activation of molecular hydrogen and oxygen by metal complexes
- L. M. VENANZI*, D. V. CLARIDGE AND R. G. DENNING, *Inorganic Chemistry Laboratory, University of Oxford (England)*, Complexes of amino-olefins
- M. D. RAUSCH, *Monsanto Chemical Company, Saint Louis, Missouri*, Exchange reactions of some organomercury compounds
- GEORGE F. WRIGHT, *University of Toronto, Ontario (Canada)*, Catalysis in the symmetrization toward bis-organomercurials
- R. F. HECK, *Hercules Research Center, Hercules Powder Company, Wilmington, Delaware*, Reactions of conjugated dienes with acyclobalt carbonyls
- P. M. MATLIS, *McMaster University, Hamilton, Ontario (Canada)*, General syntheses of tetraphenylcyclobutadiene transition-metal complexes by ligand-exchange and ligand-transfer
- R. E. DESSY* AND W. L. BUDDE, *University of Cincinnati, Ohio*, The homogeneously catalyzed hydration of acetylenes by mercuric perchlorate-perchloric acid
- J. R. DOYLE*, N. C. BAENZIGER, H. HAIGHT AND G. F. RICHARDS, *University of Iowa, Iowa City, Iowa*, The crystal structures of some copper(I) cycloolefin compounds
- KATSUMIKO ICHIKAWA*, G. ITOH, T. UENO AND M. FUJIWARA, *Institute for Chemical Research, Kyoto University, Kyoto (Japan)*, The reaction of olefin-mercuric acetate adducts with active methylene compounds and an unusual type of demercuration of the resulting mercurials
- JAY K. KOCHL* AND DENNIS D. DAVIS, *Case Institute of Technology, Cleveland, Ohio*, Benzyl chromium complex ions
- LESTER FRIEDMAN* AND JOSEPH WILCZYNSKI, *Case Institute of Technology, Cleveland, Ohio*, The aryl Grignard-cupric ion coupling reaction

- THEODORE L. BROWN*, R. L. GERTEIS AND R. E. DICKERSON, *University of Illinois, Urbana, Illinois*, The crystal structure of $\text{LiAl}(\text{C}_2\text{H}_5)_2$
- LAWRENCE F. DAHL, *University of Wisconsin, Madison, Wisconsin*, Structures and bonding of several chalcogen iron carbonyl complexes
- E. C. FISCHER, *University of Munich (Germany)*, Recent developments in the chemistry of transition metal π -complexes
- MINORU TSUTSUI*, J. ARIYOSHI, M. LEVY, K. MORI AND A. NAKAMURA, *New York University, University Heights, New York 53*, π -Complex effects
- L. MALATESTA* AND M. ANGOLETTA, *Istituto Chimica Generale, Milano (Italy)*, Iridiumtriphenylphosphinenitrosyl compounds
- ULRICH SCHOELLKOPF, *University of Heidelberg (Germany)*, Mechanism of rearrangement and cleavage reactions of lithium-substituted ethers
- ROKURO OKAWARA, *Department of Applied Chemistry, Osaka University, Osaka (Japan)*, The coordinated structure of some alkyltin compounds
- R. E. BENSON*, D. R. EATON, A. D. JOSEY AND W. D. PHILLIPS, *Central Research Department, E. I. du Pont de Nemours and Co., Wilmington, Delaware*, Proton spin-spin coupling constants from the spectra of paramagnetic Ni(II) aminotroponimineates
- F. E. BRINCKMAN* AND H. S. HAISS, *U.S. Naval Propellant Plant, Indian Head, Maryland*, Covalently bonded polyazeno-metal derivatives
- M. L. H. GREEN*, J. K. P. ARIYARATNE AND P. L. I. NAGY, *University Chemical Laboratory, Cambridge (England)*, Studies on some organo- σ -iron complexes
- J. H. RICHARDS*, K. PLESSKE AND H. WERNER, *California Institute of Technology, Pasadena, California*, Participation by the metal atom of metallocenes in various organic reactions
- L. N. MULAY*, SISTER M. E. FOX AND ATA HASSAN, *University of Cincinnati, Ohio*, π -Electron density from diamagnetic anisotropy data and the puzzling nature of certain molecular orbital treatments
- M. ROSENBLUM* AND R. W. FISH, *Brandeis University, Waltham, Massachusetts*, Magnetic shielding effects in arylferrocenes
- G. N. SCHRAUZER, *Department of Inorganic Chemistry, The University, Munich (Germany)*, Some recent advances in the organometallic chemistry of nickel
- W. HUBEL, *Union Carbide European Research Associates, Brussels (Belgium)*, Reactions of metal carbonyls with acetylenes
- JOHN M. BIRMINGHAM, *Arapahoe Chemicals, Inc., Boulder, Colorado*, Potassium cyclopentadienide
- JOHN F. BROWN, JR., *General Electric Research Laboratory, Schenectady 1, New York*, Configurational restrictions imposed by $d\pi$ - $p\pi$ -bonding in compounds of silicon and phosphorus
- NEIL R. FETTER, *U.S. Naval Ordnance Laboratory, Corona, California*, Reactions of Me_3Al and H_3Al with several tertiary amines
- A. H. FRYE, F. J. BUESCHER, G. J. GOEPFERT AND V. G. SOUKUP, *Central Research Laboratories, Cincinnati Milling Machine Co., Cincinnati, Ohio*, Some factors which affect the preparation of Grignard reagents in hydrocarbon media
- R. B. KING, *Mellon Institute, Pittsburgh, Pennsylvania*, π -Cyclopentadienyl- π -indenyliron (Benzoferrrocene)
- W. E. McEWEN*, J. KLEINBERG, A. SMALLEY, G. BRILES AND R. PARKS, *University of Massachusetts, Amherst, Massachusetts and University of Kansas, Lawrence, Kansas*, Unusual reactions of ferrocene with Lewis acids
- H. A. SCHROEDER, T. L. HEYING AND J. R. REINER, *Olin Mathieson Chemical Corporation, New Haven, Connecticut*, The chlorination 11,12-dicarbadodecaborane (carborane)
- G. P. SOLLOTT, H. E. MERTWY, S. PORTNOY AND J. L. SNEAD, *Pitman-Dunn Institute for Research, Frankford Arsenal, Philadelphia, Pa.*, Phosphorus-containing ferrocene derivatives
- WALTER STAMM, *Chauncey (N.Y.) Research Laboratory, Stauffer Chemical Company*, Organosilicon and tin alkylthiols
- HIROSHI YAMAZAKI AND NOBUE HAGIHARA (presented by AKIRA NAKAMURA), *Institute of Scientific and Industrial Research, Osaka University, Osaka (Japan)*, Oxygenated bis-benzene chromium(o)
- Problems associated with substitution at silicon centers:
- LEO SOMMER, *Pennsylvania State University, University Park, Pennsylvania*
- CECIL FRYE, *Dow Corning Corporation, Midland, Michigan*
- Problems associated with the structure and mechanistic aspects of the Grignard reagents:
- E. C. ASHBY, *Ethyl Corporation, Baton Rouge, Louisiana*
- E. I. BECKER, *Polytechnic Institute of Brooklyn, Brooklyn, New York*
- A. H. FRYE, *Cincinnati Milling Machine Co., Cincinnati, Ohio*
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