in the presence of $Co(\alpha\text{-cqd})_2 \cdot H_2O$. The similar reaction in *trans*-1-phenyl-1-propene, however, gave only polymethylene. Bulky diazo compounds such as Ph_2CN_2 or 9-diazofluorene are not decomposed even above 60 °C. The reaction of dicyanodiazomethane with styrene proceeded at 35 °C to give 2-phenyl-1,1-dicyanocyclopropane in 20% yield. The enantioselectivity was only 4.6% and side reactions predominated. Diazoacetophenone and styrene also give a mixture of *cis*- and *trans*-2-phenyl-1-benzoylcyclopropane (cf. Table III). The trans isomer was obtained in an optical yield of 20%, which is considerably lower than the value obtained with diazoacetates. The optical rotation and configuration of the optically pure cis isomer are unknown.

Although most of the reactions have been performed in neat olefin, it is possible to dilute the reaction mixture with usual organic solvents, such as ethyl acetate, to an extent of ~3 M for the olefin concentration. Further dilution deactivates the catalyst and retards very much the reaction rate. The results in Table V show that the enantioselectivity does not decrease appreciably in most cases. Use of more strongly coordinating solvents such as pyridine or picolines decreases the activity and selectivity. Effects of these additives will be fully described separately.

Solvent Effects on Protomeric Equilibria: Quantitative Correlation with an Electrostatic Hydrogen-Bonding Model [*J. Am. Chem. Soc.*, **100**, 3961 (1978)]. By PETER BEAK* and JOHNNY B. COVINGTON, Roger Adams Laboratory, University of Illinois, Urbana, Illinois 61801.

Page 3961, lines 20 to 23 should read: 6-chloro-2-thiolpyridine (**6a**)-6-chloro-2-thiolpyridone (**6b**), 2-thiolpyridine (**5a**)-2-thiolpyridone (**5b**), and 4-thiolpyridine (**7b**)-4-thiolpyridone (**7d**).

Table I: the heading of last column should be **7c** and **7d**; the first column, line 12, *n*-butyl; line 14, *n*-propyl; line 16, methyl.

Page 3962, column 2, line 3: read **4c–4d** for **4a–4b**.

Book Reviews*

Pesticides. An Auto-Tutorial Approach. By GEORGE W. WARE (University of Arizona). W. H. Freeman and Co., San Francisco, Calif. 1975. xv + 191 pp. $5.95.

This paperbound book is based on the author's "programmed learning" lectures and is designed to give the layman "an appreciation for the fine state of this segment of chemical art and science." It might be a good book for chemists to recommend when acquaintances without professional chemical background ask about modern agricultural chemicals. It not only treats the many different types of pesticides from the standpoint of structure and function, but places the subject in perspective, with sections on legal aspects, toxicity, and safe handling.

Resinography. By T. G. ROCHOW and E. G. ROCHOW. Plenum Press, New York, N.Y. 1976. xiv + 187 pp. $25.00.

This book is subtitled "An Introduction to the Definition, Identification, and Recognition of Resins, Polymers, Plastics and Fibers." The authors point out that resinography is a comparison discipline to metallography and petrography and often uses the same instruments and investigative techniques. A course which they gave at the School of Textiles, North Carolina State University at Raleigh, provided the basis for this book, which may be the first on the subject. Their approach is more that of materials science than chemistry, but the subject is obviously one of importance to chemists concerned with plastics and their applications.

Compendium of Organic Synthetic Methods. Volume III. By L. S. HEGEDUS and L. G. WADE. John Wiley/Interscience, New York, N.Y. 1977. xv + 495 pp. $17.00.

This immensely useful work reaches its third volume with new authors, but is otherwise essentially unchanged. It presents in equation form, with clearly written structure, transformations of functional groups, and preparations of difunctional compounds, taken from the literature of 1974, 1975, and 1976. Access to specific information is actually fairly easy by scanning, but the organization of chapters by functional group prepared, and within each chapter, by kind of starting material, makes quick access possible. As in previous volumes, only yield and reference are given beside the equation itself.

Handbook of Nonprescription Drugs. Fifth Edition. Edited by R. P. PENNA and C. KLEINFELD. American Pharmaceutical Association, Washington, D.C. 1977. xiii + 387 pp. $12.50.

This book is intended to be a reference for practical information for use by pharmacists and others in related health care fields. It is composed of 32 contributed chapters, on such subjects as Laxative Products, Dental Products, etc., in which function and recommended use are given primary attention.

The Nature of Seawater. Edited by EDWARD D. GOLDBERG. Dahlem Konferenzen, Delbrückstr. 4C, D-1000 Berlin 33, W. Germany. 1975. 719 pp. $?

This soft-bound volume is the proceedings of an international conference held in 1975. It consists of papers and group reports, largely of a review nature. They are well illustrated and documented, and include many tables. The scope of the conference was wide enough to include such important topics as biodegradation of petroleum hydrocarbons, and biogenesis of halogenated sesquiterpenes. An extensive index increases its reference value.

Chemical Process Industries. Fourth Edition. By R. N. SHREVE and J. A. BRINK, JR. McGraw-Hill Book Co., New York, N.Y. 1977. 814 pp. $23.75.

This is a book for chemical engineers and for those chemists and others who want to find out something about the major chemical manufacturing processes. The material is presented in 40 concise chapters, on such subjects as "electrothermal industries", pharmaceutical industries", etc. The book contains enormous amounts of data in tables and has many diagrams and illustrations, including one of an early type of uranium bomb. Although this edition is said to have been extensively rewritten, the chemistry presented does not show it. Along with quite correct structural formulas, there are whole sections that have been unchanged from the 1930's, showing benzene rings as cyclohexane rings. Proofreading of the chemistry appears to have been nonexistent, and such abominations as "$CH_2{\equiv}CCl{\equiv}CH{\equiv}CH_2$" for chloroprene are common. It is a pity that an otherwise good work is so marred.

Aromatic and Heteroaromatic Chemistry. Volume 5. Senior Reporters: C. W. BIRD and G. W. H. CHEESEMAN. The Chemical Society, London. 1977. xv + 566 pp. $70.00.

This volume reviews the literature published between July 1975 and June 1976. The well-known chemists in the list of 13 reporters have demonstrated by the substantial efforts they have contributed how important they consider this activity of The Chemical Society to be.

The chapter topics are imaginative and draw one's interest; in addition to the obvious topics, there are chapters on ring transformations,

* Unsigned book reviews are by the Book Review Editor.