

## Additions and Corrections

**Calixarenes. 4. The Synthesis, Characterization, and Properties of Calixarenes from *p*-*tert*-Butylphenol** [*J. Am. Chem. Soc.* **1981**, *103*, 3782]. C. DAVID GUTSCHE,\* BALRAM DHAWAN, KWANG HYUN NO, and RAMAMURTHI MUTHUKRISHNAN

Page 3784: The  $^{13}\text{C}$  NMR spectra shown in Figure 1 were obtained on different spectrometers and are incorrectly normalized to a common base line. This figure should be replaced by the one shown below which contains spectra obtained on a single spectrometer and reproduced without artistic intervention.

Page 3788: The  $^{13}\text{C}$  NMR values for 5,11,17,23,29,35,41,47-octa-*tert*-butyl-49,50,51,52,53,54,55,56-octahydroxycalix[8]arene (**2**) (Experimental Section) should be changed to read as follows:  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ )  $\delta$  146.6 (28%, Ar), 144.7 (20%, Ar), 128.7 (49%, Ar), 125.5 (59%, Ar), 34.0 (19%,  $\text{ArCH}_2\text{Ar}$ ), 32.4 (25%,  $\text{C}(\text{CH}_3)_3$ ), 31.5 (100%,  $\text{C}(\text{CH}_3)_3$ ).

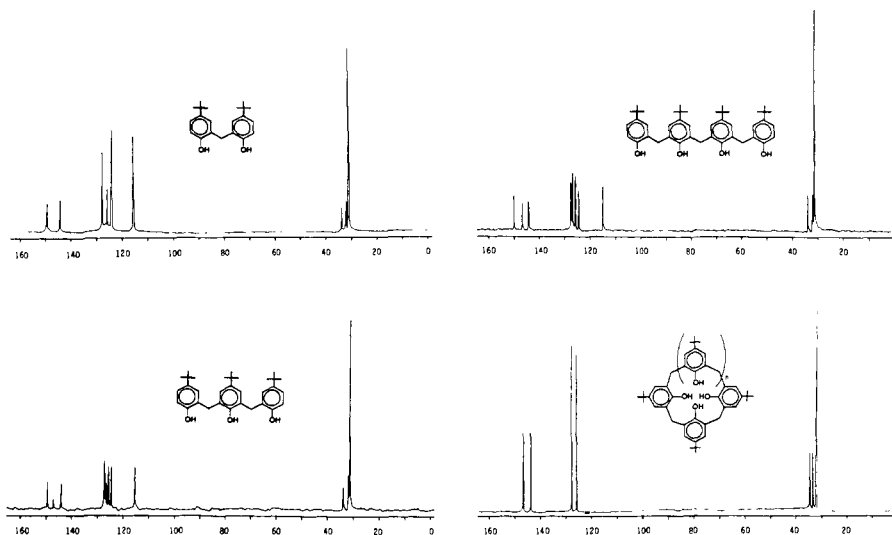


Figure 1.  $^{13}\text{C}$  NMR spectra of linear oligomers and a cyclic oligomer from the condensation of *p*-*tert*-butylphenol and formaldehyde.

## Book Reviews \*

**ETO Multicenter Molecular Integrals.** Edited by C. A. Weatherford (Florida A&M) and H. W. Jones (Florida A&M). D. Reidel Publishing Company, Boston, MA. 1982. xvii + 186 pp. \$37.00.

This volume contains the Proceedings of the First International Conference held at Florida A&M, August 3–6, 1981. The subject was usage of the ETO (exponential-type-orbital) for the multicenter integral problem, and this was addressed in broadest terms. As far as the multicenter problem is itself concerned, five articles (Steinborn, Silverstone et al., Michels, Harris, and Guseinov) represent efforts by groups who have devoted a large part of their efforts for many years toward different approaches to solving this problem. Most remaining articles address preliminary topics, such as translation formulae and expansion functions, while that of Pitzer recounts his considerable experience with spherical harmonic expansions. Two of the articles address topics that may be related to the multicenter problem.

The volume is most useful as a summary of ongoing effort, which is as it should be for this Proceedings. It is clear that the main problem remains unsolved and efforts toward solution have been greatly reduced because of the successful alternative, Gaussian orbitals, which some feel may always be most efficient. Clearly, workers in the field face an extremely difficult research problem plus an attitude among many colleagues that the problem is largely uninteresting. Support is therefore

scant (only several of the 15 articles received other than institutional support, and the latter were largely funded by foreign countries), and this is in fact eloquently addressed in the article by Randic. However, the appearance of this volume and the sponsorship of the Conference by various US agencies offers the hope for some general recognition that this extremely difficult problem is nevertheless interesting and worthwhile. For this, the editors are to be commended.

Walter England, *University of Wisconsin—Milwaukee*

**Comprehensive Treatise of Electrochemistry, Thermodynamic and Transport Properties of Aqueous and Molten Electrolytes. Volume 5.** Edited by B. E. Conway, J. O'M. Bockris, and E. Yeager. Plenum Press, New York. 1983. xvii + 472 pp. \$49.50.

This is Volume 5 of the title treatise, but it stands alone as a reference work on the physical chemistry of ionic solvation, activity, conductance, protic media, and molten salts. The preface states that the book "covers several main topics in the field of physical chemistry of electrolytes that are of interest in the various broader areas of electrochemistry treated in other volumes of this treatise". Each of the five chapters attempts to provide a blend of the fundamental theory pertinent to the topic with a substantial body of experimental results that can now be understood in the context of that theory.

Desnoyers and Jolicoeur introduce ionic solvation with special emphasis on aqueous solutions. In addition to a discussion of the classic

\*Unsigned book reviews are by the Book Review Editor.