

## Cover Picture

**Sangdon Han, Andrew D. Bond, Raymond L. Disch, Daniel Holmes, Jerome M. Schulman, Simon J. Teat, K. Peter C. Vollhardt, and Glenn D. Whitener**

**The cover picture shows** the molecular structure of the helically extended angular [8]phenylene. An unprecedented cobalt-catalyzed triple cyclization of an appropriate nonayne was successful in assembling the largest crystallographically characterized helical phenylene (heliphen). Its properties are intriguing; the heliphen is unusually configurationally labile and has a strongly attenuated bathochromic increment in the UV spectrum, shielding of the terminal rings as a result of spatial overlap, and alternating ring-current intensities along the angular frame. The X-ray crystallographic data detail the helical and  $\sigma$ - $\pi$  distortive features. Most surprisingly, the remarkable flexibility of the heliphen provided an unusually low barrier ( $\Delta G^\ddagger(-4.5^\circ\text{C}) = 13.4 \pm 0.4 \text{ kcal mol}^{-1}$ ) for enantiomerization. The  $^1\text{H}$  NMR spectrum was consistent with the alternation of cyclohexatrienoid and aromatic character; the terminal rings are the most diatropic and the penultimate ones the least. Further details about this chiral polycyclic benzenoid hydrocarbon are described by K. P. C. Vollhardt, et al. on p 3227 ff.

