

Benzo[*b*]fluorenes Formed in the Thermal Cyclization of 3-Ene-1,6-diynes

Michael Schmittel^{a,*}, Marc Strittmatter^a, Wolfdieter A. Schenk^b, Michael Hagel^b

^a Institut für Organische Chemie der Universität Würzburg, Am Hubland,
D-97074 Würzburg

^b Institut für Anorganische Chemie der Universität Würzburg, Am Hubland,
D-97074 Würzburg, Germany

Z. Naturforsch. **53b**, 1015–1020 (1998); received June 9, 1998

Ene-diyne, Cyclization, Fluorene, X-Ray Data, Biradical

A three-step preparation of the benzofluorene core is presented. The last step involves thermal cyclization of 3-ene-1,6-diyne (**7**) leading to the formation of four benzofluorene derivatives, one of which has been investigated by X-ray analysis. The harsh thermal conditions indicate that the cyclization of **7** might not proceed *via* a biradical intermediate as would be anticipated by a mechanistic proposal from Ueda.

* Reprint requests to Prof. Dr. M. Schmittel. E-mail: mjls@chemie.uni-wuerzburg.de