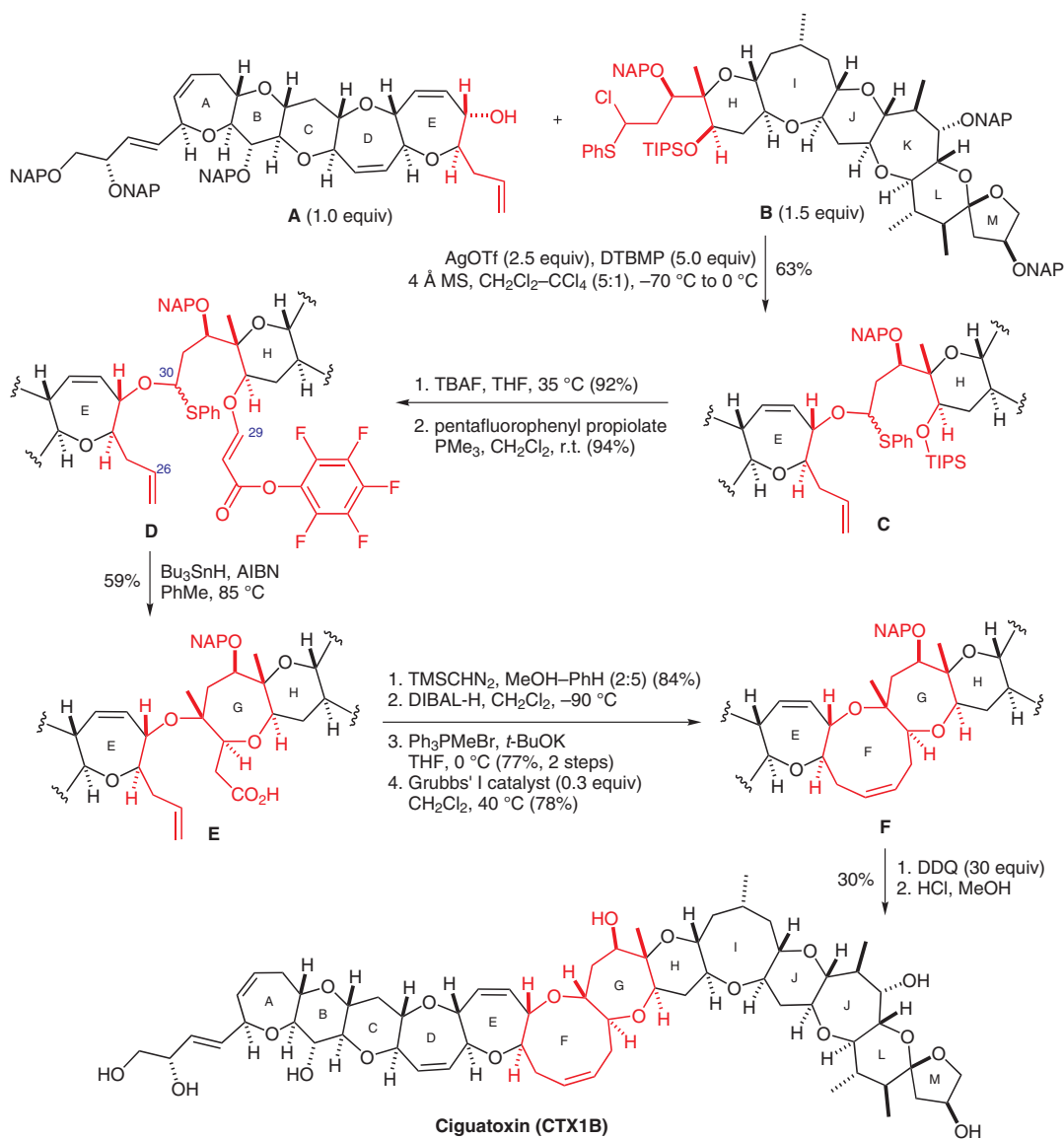


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Total Synthesis of Ciguatoxin and 51-HydroxyCTX3C

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## Synthesis of Ciguatoxin (CTX1B)



**Significance:** This awesome synthesis of ciguatoxin features the use of a thioether group to (a) promote linkage of fragments **A** and **B** via the formation of an *O,S*-acetal **C** and (b) serve as a radical precursor in the cyclization of **D** to **E**.

**Comment:** The 7-*exo-trig* cyclization (**D** to **E**) of the C30 radical onto the acrylate moiety at C29 was favored over the 6-*exo-trig* cyclization onto C26 by using the pentafluorophenyl ester.

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