Total Synthesis of Brevetoxin-B

Brevetoxin B
isolated from the red tide organism, Gymnodinium breve
C_{38}H_{60}O_{14}, Mol. Wt. 595
11 intra-fused ether rings
23 chiral centers

1. Synthesis of the D-Ring

2. Synthesis of the CDE-Ring

3. Synthesis of the ABCDEFG-Ring

4. Synthesis of the IJK-Ring

5. Completion of the Total Synthesis

Brevetoxin-B