A unified strategy for the synthesis of the C1-C14 fragment of marinolic acids, mupirocins, pseudomonic acids and thiomarinols: total synthesis of pseudomonic acid methyl monate C

Problem:

Pseudomonic acid methyl monate C

- Give the mechanism from 1 to 2. What is the name of this reaction?
- Give the mechanism from 3 to 4. What is the name of this reaction?

Solution:

• 1 to 2: Achmatowicz reaction

• 3 to 4: Johnson-Claisen rearrangement

Comments:

The Achmatowicz reaction is working also with a peroxide instead of NBS.

References:

Y. Sridhar, P. Srihari, *Org. Biomol. Chem.* **2014**, 12, 2950 – 2959.

Keywords:

Achmatovicz reaction, Johnson-Claisen rearrangement