

## Adventures in Natural Product Synthesis

Maier, Martin E.

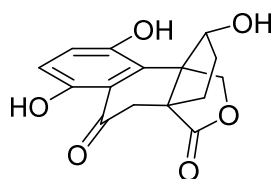
Auf der Morgenstelle 18, 72076 Tübingen

Institut für Organische Chemie

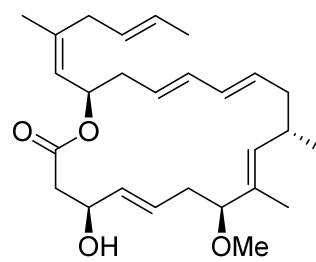
Germany

*martin.e.maier@uni-tuebingen.de*

Natural products come in various structural types, like macrocyclic polyketides or polycyclic terpenes. They often are endowed with useful biological activities that can be exploited in biological studies. Even though natural product synthesis has a long tradition and has advanced through concepts like retrosynthetic analysis and organometallic chemistry, it is still very challenging. Thus, seemingly trivial reactions might fail or unexpected transformations can occur. We will illustrate this with the total synthesis of two natural products, lingzhiol<sup>1</sup> (**1**) and biselyngbyolide B (**2**).



lingzhiol (**1**)



biselyngbyolide (**2**)

The lessons learnt from this and other projects are the following: A good plan is the key prerequisite for success. Moreover, skilled co-workers and experience are equally important. But there is still a lot of trial and error in natural product synthesis.

1. Mehl, L.-M.; Maier, M. E.: A Radical-Based Synthesis of Lingzhiol. *J. Org. Chem.* **2017**, *82*, 9844-9850.