Research project and supervisory team

Supervisory Team	Dr. Bencan Tang
Short introduction & description of research project	Mandapamate and isomandapamate are polycyclic marine natural products with complex structure and interesting bioactivity. Their total synthesis is yet to be accomplished. It was proposed that these natural products may be derived from furanocembranoid macrocycles in nature *via* oxidation and dearomatization of the furan ring, followed by intramolecular [4+2] cycloaddition reactions. However, literature reported preliminary experimental studies suggested these transannular reactions could happen with diverse reaction pathways and unpredictable selectivity, which may be realised *via* enzyme catalysis. This project aims at the biomimetic synthesis of these polycyclic structures using enzymatically or chemically catalysed pericyclic reactions. This research may serve as the first total synthesis of these natural products. A candidate with strong experience in organic synthesis would be ideal for this project. You are welcomed to contact us (via email bencan.tang@nottingham.edu.cn) to discuss these opportunities further.
Contact points	Dr. Bencan Tang bencan.tang@nottingham.edu.cn