



THE APPLICATION OF PROTEIN MASS SPECTROMETRY IN STUDYING THE BIOCHEMISTRY OF POLYKETIDE BIOSYNTHESIS

Neil J. Oldham

School of Chemistry, University of Nottingham, UK

Polyketide synthases (PKSs) are responsible for the production of a vast array of biologically active compounds. Mass spectrometry (MS) is a powerful tool for studying the interactions and enzymology of catalytic domains within PKSs. Here I present some of my group's work on the use of MS to examine the biochemistry of domains from the *trans*-acyl transferase group of modular type I bacterial PKSs. In particular I will focus on the mechanism and significance of substrate specificity exhibited by ketosynthase domains, the role of acyl hydrolase domains, and the interaction-mapping of docking domains in split modules.



