Analytical workflows for studying reactive metabolites

Abstract: We are continuously exposed to a myriad of environmental contaminants, which can pose serious health risks. Reactive metabolite formation contributes to the toxicity of several compounds found in our environment. Our group has developed analytical workflows using mass spectrometry for the elucidation of these metabolic pathways. Environmental contaminants such as plasticizers, sunscreens and synthetic antioxidants will be discussed. This talk will also cover the protein binding of acetaminophen via its biotransformation to NAPQI. This reactive metabolite is responsible for the leading cause of acute liver failure in the Western world.