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| Natural Product Chemistry  ⧫ Plant chemistry  ★ GC-MS analysis  ⮚ Head space GC-MS  ⮚ GC-MS analysis of volatiles  ⮚ SPME analysis  ★ Extraction and structure elucidation of natural products  ★ Quantitative NMR  ⮚ qH-NMR of essential oils  ⮚ qH-NMR of extracts and other mixtures  ★ Absolute configuration determination for natural products  ⮚ ECD  ⮚ Mosher’s method  ★ HPLC and LC-MS analysis of plant extracts  ⧫ Synthesis and biosynthesis of plant metabolites  ⧫ Microbial natural products  ★ Endophytes  ★ Bacteria  Metabolomics  ⧫ Plant metabolomics  ⧫ Human metabolomics  ★ Plasma metabolomics  ★ Urine metabolomics  Natural product drug discovery  ⧫ In silico drug discovery  ★ Molecular docking study  ⮚ Structure modification of natural products  ★ In silico ADME-Tox (Absorption, Distribution, Metabolism, Excretion and Toxicity) studies  ⧫ In vitro assays  ★ Antioxidant assays  ★ Antimicrobial assays  ★ Cell culture assays  ⮚ Cytotoxic assays  ⮚ Neuroprotective assays  ★ Enzymatic assays  ⮚ Anti-diabetic assays  ⧫ In vivo and pharmacological assays  ★ Animal studies  ⮚ acute and sub-acute toxicities of medicinal plants and other natural products  ⮚ Pharmacological activities of medicinal plants and other natural products  ⧫ Clinical practice  ★ Clinical trials of medicinal plants and other natural products  ★ Pharmacokinetics of natural products  Natural drug formulation  ⧫ Formulations  ★ Tablet, capsule, syrup, etc.  ⧫ Physico-chemical properties  ★ Stability  ⮚ GC-MS  ⮚ HPLC  ⮚ H-NMR  ★ Standardization and quantitative analysis  ⮚ GC-MS  ⮚ HPLC  ⮚ H-NMR |