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## 何华

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何华, 药物分析学教授, 博士生导师。

长期从事本科生和研究生的教学工作。1999年4月赴法国巴黎第五大学进行体内手性药物分离分析等研究。承担国家、省部级、国际合作及企业合作科研项目三十多项, 在Carbon、J. Mater. Chem.、J Chromatogr. A、Analyst、Int. J Pharm、Journal of Pharmaceutical and Biomedical Analysis、J Chromatogr. B、J Chromatogr. Sci.、J Biochem. Biophys. Methods、Toxicology letters、Talanta、Journal of Nanoscience and Nanotechnology、International Journal of Biomedical Science、J Nanoparticle Research、J Separation Science、Journal of Luminescence、Spectrochimica Acta Part A、J Food, Agri & Environ、Chromatographia、Luminescence、Spectroscopy、化学学报、化学进展、光谱学与光谱分析、分析化学、高分子学报、中国环境科学、药学学报、中国药科大学学报等国内外学术刊物上发表论文100余篇, 其中SCI收录论文60余篇, EI收录论文6篇。编写《现代色谱分析》等教科书和教学参考书8本。申请专利13项。

研究方向为药物现代仪器分析、药物质量研究与评价和药物分析新材料与新技术。主要从事微量组分、主客体相互作用的分析方法研究、手性药物分离分析和分子模拟研究。特别关注体内药物和生物药物的分离分析及药物质量标准研究和制订。

主要学术兼职: 国家食品药品监督管理局保健食品评审专家, 国家863计划评审专家, 教育部学位与研究生教育评审专家, 长江学者计划评审专家, 青年千人计划评审专家, 国家科技奖励评审专家, 江苏省食品药品监督管理局评审

专家, 农业部兽药评审专家, 《Int. J. Biomed. Sci.》杂志编委, 《J Food, Agri. Environ.》杂志助理编委。

#### 主要学术成绩:

镧系离子探针在肿瘤早期诊断及抗肿瘤筛选中的应用与国内外临床医学专家和病理专家合作, 开展了荧光光谱与临床医学的交叉研究。率先提出了以Tb-CPI为探针, 用于肿瘤快速诊断和抗肿瘤药物筛选的新方法。发表相关研究文章10篇。

拟除虫菊酯及其异构体环境行为基础研究围绕拟除虫菊酯在环境的滞留、迁移、转化和归趋研究中的不足, 开展了拟除虫菊酯及其异构体的环境行为研究。为了解菊酯类农药在环境中滞留、迁移、转化等行为, 正确评价其药效和环境安全性提供科学依据。发表相关研究文章5篇。

手性药物分离分析采用手性固定相, 反相高效液相色谱法直接拆分苯并二氮杂草类药物对映体, 可用于苯并二氮杂草类药物对映体的分离测定和体内研究。同时, 通过热力学参数的计算, 对分离机理进行了研究。在J. Chromatogr. B等英文杂志发表SCI文章8篇。

分子印迹水相分离技术及其在药学中的应用基于溶剂热法制备了粒径、形貌、饱和磁化率均可灵活调节的磁性碳纳米管, 实现了材料的可控性制备, 并对复合机理进行了探讨; 在磁性碳纳米管表面进行乙烯化和环糊精修饰, 合成了两种新型的功能单体MCNTs@C=C和MCNTs@ $\beta$ -CD, 在分子印迹反应中同时作为基质材料和功能单体, 从而提高印迹容量和印迹反应效率; 结合纳米技术和表面分子印迹技术, 在磁性碳纳米管表面制备分子印迹材料, 应用于复杂样品的前处理, 实现了基质材料和分离模式的技术创新; 将磁性碳纳米管表面分子印迹材料应用于毛细管电色谱领域, 同时作为柱塞和固定相, 克服填充型毛细管电色谱柱柱塞制备困难、手性拆分效能低的瓶颈; 探讨了磁性碳纳米管的合成机理、磁场辅助毛细管电色谱的构建原理、分子印迹孔穴与环糊精的空腔协同识别机制, 为相关工作的研究提供了理论基础。

以GTFX为模板分子, 制备了一种新型的M-MIP(两亲性M-MIP), 并用新的检测方法考察其两亲性, 结果表明得到的纳米材料在水及生物体液中均具有较好的适应性; 利用溶胶-凝胶法, 在c-MWCNTs的表面制备了Cu(II)印迹聚合物, 研究了Cu(II)在材料表面的吸附行为。并将该聚合物应用于中药材中残留重金属离子的检测; 采用计算机模拟技术选择合适的功能单体, 合成了一种对表柔比星(EPI)具有选择性的新型的水相识别M-MIP, 并应用于模板药物的吸附及体外的控释过程。发表文章10余篇。

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