

美国药典在线点播课程 *USP On-Demand Webinar*

美国药典定量核磁系列讲座

USP Quantitative NMR Webinar Series

课程时长 **Course Duration:**

13小时39分钟 13 hour 39 mins



免费视频课!

课程介绍 **Course Description and Objectives:**

定量核磁共振波谱技术以其计量学的可追溯性、检测快速、样品无损、复杂基质化合物无需分离纯化、无需已知纯度自身对照品方面的特性，在药物研发和药品质量控制中受到广泛的关注，尤其是在复杂化合物如生物大分子和辅料方面具有独特的优势。自2022年4月起，美国药典委员会中华区总部已成功举办了12场在线美国药典定量核磁系列讲座，内容涵盖核磁确认、标准制定、案例研究、教学实践以及应用等（详见如下）。

- 核磁共振仪器确认
- 定量核磁良好称量规范及测量不确定度
- 定量核磁药典标准制定 - USP 通则 <761> “核磁共振波谱” 修订详解
- USP 通则 <1761> 《核磁共振波谱-原理及实践》
- 案例研究：应用定量核磁确定药典各论中 HPLC 相对响应
- 定量核磁共振—概念、原理和应用
- 定量核磁共振方法验证—传统方式和生命周期方式
- 教学实践 - 定量核磁共振方法及应用
- 有机纯度标准物质的不确定度分析及溯源性讨论
- 台式核磁的定量应用
- ¹HNMR 数据自动分析数字平台：数字化标准的原型框架

Quantitative nuclear magnetic resonance spectroscopy (qNMR) has been widely used in pharmaceutical R&D and quality control because the advantage of its metrological traceability, non-destructiveness for the whole sample profile with high accuracy and repeatability. The qNMR itself is capable of simultaneous qualitative and quantitative analysis for product quality assessment without the need for corresponding physical reference standard(s) of the target analyte(s). USP-China has hosted twelve qNMR webinars since April 2022, covering topics focusing on NMR Qualification, standards, case studies, teaching practice, application, etc.

- NMR Instrument Qualification
- Good Weighing Practice - For Accurate qNMR Sample Preparation
- Setting of qNMR Standard: Revision of USP NMR General Chapter <761>
- USP NMR General Chapter <1761>: Nuclear Magnetic Resonance Spectroscopy – Theory and Practice
- Use of qNMR to determine HPLC relative response factors for botanical reference standards used in pharmacopeial monographs
- Quantitative NMR—Concepts, Principles and Applications
- Quantitative NMR Method Validation—Traditional and Lifecycle Approaches
- Teaching Practice - Quantitative NMR Methods and Applications
- Uncertainty and Traceability of Quantitative Organic Reference Materials
- Benchtop Quantitative NMR Applications
- A Digital Platform for Automated Analysis of ¹HNMR Data: Prototype Framework of Digital Reference Standard

授课语言 **Language:** 中文或英语 Chinese or English

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报名方式 Register Procedures:

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课程有效期 Access Duration:

课程在线观看有效期: 自在线报名成功日起, 14 天内有效, 逾期课程访问通道将自动关闭。

(报名成功后您会收到课程登录信息通知邮件)

Access to this course expires 14 days from the date of registration or until you mark it 'Complete' in your transcript—whichever occurs first.