

MRES ADVANCED CHEMICAL SCIENCES

高级化学硕士 (研究型)

XJTU | MRES
ADVANCED CHEMICAL SCIENCES

CAREERS

Graduates from this programme are well prepared for careers in a variety of industries, including chemical and material science, pharmaceuticals, biotechnology, food and beverages (quality assurance and new formulation), and analytical laboratories.

Some of our graduates have been hired at Johnson & Johnson, BioBay companies, Novo Nordisk, CNCEC Construction Investment Group, Shan-dong University, pursued with PhD studies, to name a few.

START DATE
September 2024

ATTENDANCE
Full time

SCHOOL
School of Science

LOCATION
Suzhou

DURATION
24 months

Xi'an Jiaotong-Liverpool University
西交利物浦大学

MRES ADVANCED CHEMICAL SCIENCES

The School of Science is home to the MRes Advanced Chemical Sciences. It provides students with the education and training needed to understand different aspects of the field of chemical sciences. It aligns with similar MSc programmes at the University of Liverpool.

KNOWLEDGE AND SKILLS

By the time you graduate from the MRes Advanced Chemical Sciences, you will have:

- Deep understanding of the theoretical background and practical implementation of an intensive research project
- Career-enhancing personal and employability skills such as time management, report writing, team-building, networking and project management
- A wide range of critical interdisciplinary research skills

WHY SHOULD I STUDY ADVANCED CHEMICAL SCIENCES AT XJTU?

- Study at Chemistry department of XJTU, first at an independent Sino-foreign university in China to achieve professional accreditation by the Royal Society of Chemistry in the United Kingdom
- Learn from international staff, who are experts in various fields of chemistry with strong links to local and international industries
- Benefit from XJTU's strategic location near many biotechnology companies in Bio Bay, a national biotechnology hub with more than 400 companies with the opportunity for internships
- Take advantage of the offered joint research projects with JITRI (Jiangsu Industrial Technology Research Institutes), supported by the Jicui Scholarship Programme
- Enjoy prestigious scientific symposia, conferences and summer schools at the nearby Cold Spring Harbor Asia giving you the chance to interact with world-famous researchers
- Gain an excellent foundation for pursuing PhD programmes both in China or abroad
- Earn a University of Liverpool degree that is recognized by the Chinese Ministry of Education

MODULES

COMPULSORY MODULES

- ADVANCED ANALYTICAL CHEMISTRY
- NANOTECHNOLOGY AND ADVANCED MATERIALS
- RESEARCH PROJECT I
- RESEARCH PROJECT II

OPTIONAL MODULES

- PERSONAL AND EMPLOYABILITY SKILLS FOR CHEMISTS
- FUNDAMENTALS OF PROJECT MANAGEMENT
- TOPICS IN ADVANCED ORGANIC CHEMISTRY
- EXPERIMENTAL METHODS IN MATERIALS AND MECHANICS

XJTU-JITRI JOINT-SUPERVISION PATHWAY

This programme also offers XJTU-JITRI joint-supervision pathway, which provides students with opportunity to conduct industry research projects at JITRI research institutes or leading enterprises in Yangtze River Delta region. Students will benefit from:

- Cutting-edge research topics which are generated from real industry problems
- Joint supervision by both XJTU academic supervisor and recognised industry supervisor
- Opportunities to participating in various innovation and entrepreneurial activities
- Generous research allowance and/or living stipend provided by collaborative industry partner
- Job opportunities within the JITRI research institutes and enterprises



高级化学硕士 (研究型)

本研究型硕士专业为学生提供化学及材料科学
相关领域所需的教育和培训, 并与英国利物浦
大学的理学硕士专业相对应。

毕业生所获知识与技能

毕业生将获得以下几个方面的知识和能力:

- 强化职业性的个人及就业能力, 包括时间管理、报告撰写、团队建设、交流及项目管理
- 一系列重要的学科研究技能
- 对高强度研究项目的理论背景及其实际履行的深刻了解

专业优势

- 拥有由化学各学科领域专家组成的国际化师资队伍
西交利物浦大学毗邻苏州生物纳米园, 园区化学、生物技术企业林立, 超过400家公司可提供实习机会
- 毗邻冷泉港亚洲会务所在地, 冷泉港亚洲会务在苏州工业园区举办了许多具有国际影响力的科研会议、学术会议和夏令营, 为学生提供了与国际知名研究人员互动的机会
- 培养理论基础扎实、就业相关综合技能强的专业人才
- 毕业生可获得中国教育部认可的英国利物浦大学学位

就业

本专业毕业生可在诸多行业内就业, 如:

化学和材料科学、制药、生物技术、食品及饮料
(质保及新配方)、分析实验室

MRES ADVANCED CHEMICAL SCIENCES 高级化学硕士 (研究型)

The MRes Advanced Chemical Sciences programme provides you with the education and training needed to understand different aspects of the field of chemical sciences.

本研究型硕士专业为学生提供化学及材料科学相关领域所需的教育和培训。

专业设置包含了合成化学、纳米技术、化学分析、仪器分析, 及项目管理和职业技能发展的课程。项目管理及专业技能会被重点培养。在完成课程后, 学生将选择拓展研究课题, 进行为期一年的研究并提交论文。

个性化的学习计划可适用于有不同背景和职业规划的学生。



开始时间
2024年09月



教学形式
全日制



院系
理学院



学习地点
苏州



学制
24个月

课程

必修课程

- 高级分析化学
- 纳米技术和先进材料
- 研究项目I
- 研究项目II

选修课程

- 化学家个人就业技能
- 项目管理
- 高级有机化学的相关专题
- 材料和力学的实验方法

西浦-集萃产业联合培养

本专业开设产业联合培养方向, 为学生提供在长三角国家技术创新中心 (江苏省产业技术研究院) 研究院所、龙头企业开展产业课题的机会:

- 联合导师机制: 西浦校内导师与认证的校外产业导师联合指导
- 产业前沿科研课题: 参与由来自产业的真实技术需求凝练的研究生培养课题
- 创新实践机会: 训练营, 创新杯, 集萃论坛
- 科研与生活补贴: 产业科研课题提供科研与生活补贴
- 高就业竞争力: 优先进入集萃研究院所和企业就业的机会

