

National University of Singapore (Chongqing) Research Institute

新加坡国立大学重庆研究院

Nature of Employer 单位性质	Type of Employer 单位类型	Location of Employer 单位所在区县	Number of Vacant Jobs 拟招收总人数
Public institution 事业单位	Municipal-level workstation (under application for the national-level workstation) 市级工作站（国家站申请中）	Yubei District 渝北区	21
Recruiting Brochure 招收简章			
I —	Introduction to Founders 设站单位简介	<p style="text-align: center;">National University of Singapore (Chongqing) Research Institute (NUSRI Chongqing), jointly established by the National University of Singapore (NUS) and the Chongqing Liangjiang New Area Administrative Committee (LJNAAC), is an independently operated overseas research institute of NUS located in Chongqing and hosted by the LJNAAC.</p> <p style="text-align: center;">Leveraging NUS' excellent research expertise and global resources in a broad spectrum of areas, NUSRI Chongqing, the only operation centre of NUS in the western region of China, will set up high-end research and development platforms in the key scientific research areas of advanced manufacturing and materials, intelligent sensing and AI, modern logistics, as well as finance and risk management. NUSRI Chongqing will also build a high-tech industry incubation base for technology transfer, entrepreneurship and innovation-related activities; and an education and training centre for talents' cultivation and academic exchanges. These</p>	

		<p>activities will be carried out in line with the theme and directions set for China-Singapore (Chongqing) Demonstration Initiative on Strategic Connectivity by the Singapore and China governments as well as the strategic industrial development positioning of Liangjiang New Area.</p> <p>NUSRI Chongqing, an integrated platform of research, enterprise and education, is committed to being a leading international innovative research institute in China of both significant scientific impact and great social value.</p> <p>新加坡国立大学重庆研究院（以下简称“新国大重庆研究院”）是由新加坡国立大学（以下简称“新国大”）和重庆两江新区合作开设并自主运营的研究院，性质为事业单位独立法人，举办单位是重庆市两江新区。</p> <p>新国大重庆研究院将结合中新互联互通项目及两江新区十大战略性新兴产业定位及发展方向，充分依托母校雄厚的科研实力和全球资源，围绕先进制造与材料、智能传感与人工智能、现代（智慧）物流、金融与金融风险管理等重点科研发展领域，开设高端研发平台、高新产业孵化基地和教育培训中心，致力于打造具有全国影响力的产学研一体化的国际创新型研究院。</p>
<p>II 二</p>	<p>Introduction to Postdoctoral Workstation 博士后站介绍</p>	<p>NUSRI Chongqing was approved to establish a postdoctoral scientific research workstation in 2020. Since then, the postdoctoral fellows at our workstation have been successively selected into such postdoctoral projects as the Postdoctoral Innovative Talents Support Program, the International Postdoctoral Exchange Fellowship Program, and the Special Funding for Postdoctoral Research Projects. Thus, they have been given the opportunity to conduct research and innovations on high-performance all-solid-state batteries, mechanisms of hydrogen ignition, combustion and explosion, basic research on hydrogen explosion suppression by fine water mist, preparation of emerging MXene materials and their application in energy storage, oxide spintronics, and</p>

		<p>other aspects, making some achievements and breakthroughs</p> <p>研究院于 2020 年获批设立博士后科研工作站以来,我院在站博士后先后入选博新计划、国际交流计划、研究项目特别资助等博士后项目,进而在高性能全固态电池、氢气着火燃烧和爆炸的机理研究、细水雾抑制氢气爆轰的基础研究、新颖 Mxene 的制备及其在能源存储方面的研究、氧化物自旋电子学等方面进行科研探索和创新,并取得了一定的成果和突破。</p> <p>We strive to build a high-level scientific research talent team that enjoys a global outlook and international strength. If you are a researcher with a doctoral degree, we sincerely welcome you to join us from all over the world!</p> <p>我院致力于组建一支具有国际化视野和水平的高层次科研人才团队,现诚邀海内外获得博士学位的研究人员加入!</p>		
Postdoc Recruitment Requirements 博士后选聘需求				
Name of Project/Position 项目名称/招聘岗位	Number of People Needed 需求人数	Majors Involved 所需专业方向 (First-level Disciplines) (一级学科)	Remuneration and Benefits 薪资福利 (10,000 yuan/year) (万元/年)	Requirements for Doctoral Source Units 博士生源单位 Doctors 等要求
For the Associate Researcher of the Center for Advanced Manufacturing and Materials , the research directions are as follows:	3	I. Engineering 一、工学: (1) Materials Science and Engineering (1) 材料科学与工程	260,000-520,000 yuan/year 26-52 万元/年	The applicants must come from universities included in the

<p>先进制造与材料研发中心 副研究员，方向如下：</p> <p>① Flame combustion synthesis of nanomaterials</p> <p>① 纳米材料的火焰燃烧合成</p> <p>② Nanostructured catalytic materials, energy materials, and catalysis for sustainable energy</p> <p>② 纳米催化材料、能源材料和可持续能源催化</p> <p>③ Energy storage materials</p> <p>③ 储能材料</p> <p>④ Solid-state batteries</p> <p>④ 固态电池</p> <p>⑤ Development of AI-based predictive analytics algorithms for the physical-chemical processes during material manufacturing (first-principle calculation, energy band calculation, molecular dynamics simulation, and catalytic mechanism)</p> <p>⑤ 材料制造中物理化学过程的人工智能预测算法发展（第一性原理数值计算、能带计算、分子动力学模拟以及催化机理）</p>		<p>(2) Chemical Engineering and Technology</p> <p>(2) 化学工程与技术</p> <p>II. Science</p> <p>二、理学</p> <p>(1) Chemistry</p> <p>(1) 化学</p>		<p>"Double First-Class" Initiative of China, or in the list of QS Top 100 universities</p> <p>毕业于国内“双一流”高校或 QS 排名前 100 高校</p>
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<p>For the Associate Researcher of the Center for Advanced Manufacturing and Materials, the research directions are as follows: 先进制造与材料研发中心 副研究员, 方向如下:</p> <p>① Thermal management of battery module in electric vehicles ①电动车电池模块的热管理</p> <p>② Robot-assisted laser cladding ②机器人辅助激光熔覆</p> <p>③ Digital twin for laser cladding process simulation and online monitoring ③激光熔覆过程仿真及在线监控的数字孪生</p> <p>④ 3D printing technologies for metal and non-metal implants ④金属和非金属的可植入人体 3D 打印技术</p> <p>⑤ Online monitoring technology of the forming process and feasible method ⑤成形过程在线监测技术与实现方法</p>	3	<p>Engineering 工学</p> <p>(1) Mechanical Design and Manufacturing (1) 机械设计与制造</p> <p>(2) Automation (2) 自动化</p> <p>(3) Control Science and Technology (3) 控制科学与技术</p>	<p>260,000-520,000 yuan/year 26-52 万元/年</p>	<p>The applicants must come from universities included in the "Double First-Class" Initiative of China, or in the list of QS Top 100 universities 毕业于国内“双一流”高校或 QS 排名前 100 高校</p>
<p>For the Associate Researcher of the Center for Intelligent Sensing and Artificial</p>	5	<p>Engineering and Science 工学及理学</p> <p>(1) Electronic Science</p>	<p>260,000-520,000 yuan/year 26-52 万</p>	<p>The applicants must come from universities</p>

<p>Intelligence, the research directions are as follows: 智能传感与人工智能研发中心 副研究员, 方向如下:</p> <p>① Development and application of spintronic materials and devices and advanced magnetic sensors ①自旋电子学材料与器件、先进磁传感器的开发与应用</p> <p>② Application of intelligent sensing and machine learning in the field of healthcare ②智能传感及机器学习在医疗健康领域的应用</p> <p>③ Artificial intelligence, computer vision, machine learning, medical image analysis, and multimedia computing ③人工智能、计算机视觉、机器学习、医学图像分析和多媒体计算</p> <p>④ Flexible and wearable electronics and energy materials and devices ④柔性可穿戴电子学和能源材料与器件</p> <p>⑤ Intelligent microwave sensing technology ⑤智能的微波感知技术</p> <p>⑥ Efficient wireless</p>		<p>and Engineering</p> <p>(1) 电子科学与工程 (2) Computer Science and Technology (2) 计算机科学与技术 (3) Information and Communication Engineering (3) 信息与通信工程 (4) Control Science and Technology (4) 控制科学与技术</p>	<p>元/年</p>	<p>included in the "Double First-Class" Initiative of China, or in the list of QS Top 100 universities 毕业于国内“双一流”高校或 QS 排名前 100 高校</p>
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<p>transmission ⑥高效无线输能</p>				
<p>For the Associate Researcher of the Center for Modern Logistics, the research directions are as follows: 现代物流研发中心 副研究员, 方向如下: ① New channel management ①新渠道管理 ② Analysis and management of sharing platforms ②共享平台分析与管理 ③ Construction and management of sustainable supply chains ③永续供应链建造与管理 ④ Decision prejudice in operation and management ④运营管理中的决策偏见 ⑤ Fairness and competition in supply chains ⑤供应链中的公平与竞争 ⑥ Incentives for innovation and process design ⑥创新的激励与过程设</p>	<p>5</p>	<p>I. Operations Research 一、运筹学 II. Management Science 二、管理学 III. Industrial Engineering and Management Science 三、工业工程与管理科学</p>	<p>260,000-520,000 yuan/year 26-52 万元/年</p>	<p>The applicants must come from universities included in the "Double First-Class" Initiative of China, or in the list of QS Top 100 universities 毕业于国内“双一流”高校或 QS 排名前 100 高校</p>

<p>计</p> <p>⑦ Blockchain and federated learning</p> <p>⑦区块链和联邦学习</p> <p>Optimization of supply chains and production systems</p> <p>供应链及生产系统优化</p> <p>⑧ Data-driven supply chain optimization</p> <p>⑧数据驱动的供应链优化</p> <p>⑨ Last-mile delivery during the smart city operations</p> <p>⑨智慧城市运营中的“最后一公里”交付</p>				
<p>For the Associate Researcher of the Center for Finance and Financial Risk Management, the research directions are as follows:</p> <p>金融与金融风险管理中心 副研究员, 方向如下:</p> <p>① Dynamic time series prediction methods and models</p> <p>①动态时间序列预测方法和模型</p> <p>② High-dimensional data modeling and analysis</p> <p>②高维数据建模和分析</p>	5	<p>I. Applied Economics</p> <p>一、应用经济学</p> <p>II. Science (Mathematics/Statistics)</p> <p>二、理学(数学/统计学)</p> <p>III. Management Science and Engineering</p> <p>三、管理科学与工程</p>	260,000-520,000 yuan/year	<p>The applicants must come from universities included in the "Double First-Class" Initiative of China, or in the list of QS Top 100 universities</p> <p>毕业于国内“双一流”高校或QS排名前100高校</p>

<p>③ High-frequency data analysis and prediction ③高频数据分析和预测</p> <p>④ Machine learning algorithm and neural network modeling ④机器学习算法及神经网络建模</p> <p>⑤Functional data analysis and network analysis ⑤功能数据分析和网络分析</p> <p>⑥ Risk management ⑥风险管理</p> <p>⑦ Pricing of financial derivatives ⑦金融衍生品定价</p> <p>⑧ Dynamic portfolio selection ⑧动态投资组合选择</p> <p>⑨ Cryptocurrency and blockchain ⑨加密货币和区块链</p>				
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