



**IMPERIAL  
GLOBAL  
SINGAPORE**

<b>Job Title:</b>	Assistant Programme Director, NH3-SOFC
<b>Department/Division/Faculty:</b>	Imperial Global Singapore
<b>Campus location:</b>	Imperial Global Singapore 1 CREATE Way #11-01, CREATE Tower Singapore 138602
<b>Job Family/Level:</b>	Academic and Research \$12,000-14,000 Monthly dependent of experience
<b>Responsible to:</b>	Programme Director, NH3-SOFC
<b>Line Management for</b>	No direct reports, but responsible for supporting management of NH3-SOFC Postdoctoral Researchers with Programme Director (Expected to be up to 7 researchers)
<b>Key Working Relationships (internal):</b>	NH3-SOFC researchers, IGS management team, Collaborators within Imperial College London
<b>Key Working Relationships (external):</b>	NH3-SOFC researchers based at NTU (x7); Collaborators at Nanyang Technological University and Cambridge Centre for Advanced Research and Education in Singapore (CARES)
<b>Contract type:</b>	Full time fixed term for 2 years in the first instance (with potential for extension dependent on funding). Post will be subject to 6 months' probation period.

### **Purpose of the Post**

[Imperial Global Singapore](#), Imperial College London's formal research and innovation entity in Singapore, is seeking an experienced senior postdoctoral research assistant as an Assistant Programme Director for the NH3-SOFC research programme on development of direct ammonia solid oxide fuel cells. [This programme represents a new and timely collaboration](#) between the United Kingdom and Singapore and will be based at Imperial Global Singapore (IGS) offices, located on the campus of the National University of Singapore. This senior role will be responsible for leading the coordination of the NH3-SOFC research team, working across materials science, device engineering, electrochemistry, and in collaboration with the Programme Co-Directors based at both IGS and [Nanyang Technological University](#).

The programme aims to develop solid oxide fuel cells that can effectively and efficiently use ammonia directly as a fuel source while maintaining high performance and durability. To overcome challenges related to material compatibility, anode degradation due to nitrification, slow chemical/electrochemical processes, and performance loss, the research will explore new materials, catalysts, and cell designs. There will be two cell types of interest in this programme: i) oxygen-ion and ii) proton-conducting ceramic membrane electrolytes. The project will span the length scales, from materials discovery, including with computational approaches, through mechanical properties and microstructure optimisation to incorporation into short stacks for durability testing.

The Assistant Programme Director will be tasked with leading the coordination of the research team based at IGS, coordinating with the NTU based team in collaboration with the work package leads and contributing to management of the programmes finances and reporting requirements by working closely the IGS Associate Director. In addition, the appointee will be expected to lead an independent programme of research developed in collaboration with the Programme Director.

The collaborating Departments include senior academics from the Faculties of Engineering at Imperial, the Schools of Mechanical and Aerospace Engineering and Materials Science and Engineering at NTU, and Cambridge Centre for Advanced Research and Education in Singapore (CARES).

Candidates will be employed by Imperial Global Singapore, a research division of Imperial College London, consistently ranked within the top 10 of the QS University Rankings. Candidates will be resident and based in Singapore, but there will be opportunities for research visits to Imperial's London-based locations, and the position is a great opportunity to gain international research experience in the South-East Asian Region.

Informal enquiries are greatly welcome. You are encouraged to send an e-mail to Professor Stephen Skinner [s.skinner@imperial.ac.uk](mailto:s.skinner@imperial.ac.uk).

Questions about the recruitment process, should go to Paige Noyce, Associate Director [p.noyce@imperial.ac.uk](mailto:p.noyce@imperial.ac.uk).

### **Key Responsibilities**

The post-holder will be responsible for implementing appropriate management processes, developing the research and communication activities of the NH3-SOFC programme, professional administration, and leadership. The post-holder will be required to develop strong working relationships with a range of stakeholders and work independently in the role. They will bring technical knowledge to the programme and work with the researchers to publicise the programme. Based at IGS at CREATE Tower on the National University of Singapore's campus in Singapore, coordination with Principal Investigators based at NTU and Imperial, as well as occasional travel to Imperial College London in the United Kingdom will be required. The successful applicant will perform the following roles/activities:

#### *Management of NH3-SOFC Research Programme*

- Work closely with the NH3-SOFC programme Co-Directors and the broader research team, including principal investigators based at Imperial College London, NTU and CARES in both technical and organisational capacity.
- Work independently to lead the provision of support for the management and co-ordination of the programme in accordance with the programme plans.
- Lead and maintain clear and accurate communications to all programme team members.
- Support the recruitment of additional NH3-SOFC team members and their incorporation into the broader programme.
- Help identify, support and coordinate spin-off or translation opportunities emerging from research activities.
- Lead the development of strategic engagement/partnering objectives and support their implementation.
- Lead and organise meetings and coordinate logistical planning for collaborative discussions with support from the IGS administrative team.
- Coordinate progress and management meetings as required.

- Provide regular appropriate financial and other reporting information, with support from the IGS administrative team to the NH3-SOFC Co-Directors and partner institutions.
- Liaise with the other research staff and students working in broad areas of relevance to the research project and partner institutions.

#### *Research Activities and Laboratory Management*

- Write progress reports and prepare results for annual report publication, press / web releases, presentations.
- Liaise with relevant stakeholders to ensure lab access is secured for all researchers and that all licenses and permits are obtained (e.g. X-ray, chemicals etc)
- Implement laboratory working practices, oversee training and ensure all health and safety procedures are robust and fit for purpose.
- Undertake a personal programme of research overseen by the project leads in the area of electrode materials development and/or characterisation for direct ammonia solid oxide fuel cells
- Attend progress and management meetings as required and network with the other research groups where appropriate.
- Attend relevant national and international workshops and conferences as necessary to support the aims of the programme.

#### *Other Duties*

- Undertake any necessary training and/or development
- Undertake appropriate administration tasks
- Attend relevant meetings
- Observe and comply with all IGS policies and regulations, including the key policies and procedures
- Undertake specific safety responsibilities relevant to individual roles, as set out by IGS

Job descriptions cannot be exhaustive and the post holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

**Positions are based full time in Singapore at Imperial Global Singapore at the [National Research Foundations Campus for Research Excellence and Technological Enterprise \(CREATE\)](#) located on the campus of the National University of Singapore**

**Job descriptions cannot be exhaustive and the post holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.**

**Imperial Global Singapore is committed to equality and values diversity. IGS adheres to Imperial [Values and Behaviours framework](#).**

**Person Specification**

<b>Requirements</b>	<b>Essential (E)/ Desirable (D)</b>
Candidates/post holders will be expected to demonstrate the following	
<b>Education</b>	
a PhD (or equivalent) in any field of materials science, physics, chemistry, or a closely related discipline; Post-doctoral research experience in a field directly relevant to the goals of the NH3-SOFC programme.	E
<b>Experience</b>	
Practical experience within a research environment and publication in relevant and refereed journals.	E
Previous experience in the higher education sector in a similar or related position(s) demonstrating development through involvement in a series of progressively demanding work roles	E
Proven leadership skills, including the ability to develop operational plans and coordinate their execution; and experience of introducing new organisational methods, processes and procedures	E
Experience in developing and managing financial and other resources including preparing, managing and monitoring budgets	E
Demonstrated experience of managing laboratory equipment and safety processes including with X-ray and electron microscopy techniques	E
Proven management experience, with the ability to motivate and develop members of their team	E
Experience in communicating with multiple parties in a vibrant and multidisciplinary and multinational environment	E
Experience in working in a highly organised manner	E
Experience in presenting key issues to senior managers and academic staff	E
<b>Knowledge</b>	
Technical knowledge of development of direct ammonia solid oxide fuel cells or related/contributing research activities	E
<b>Skills &amp; Abilities</b>	
Highly confident and articulate with outstanding communication and persuasive skills both verbally and in writing	E
Demonstrated ability to work in a collaborative environment	E
Ability to transfer skills and knowledge to colleagues effectively	E
Demonstrated ability to develop and apply new concepts	E
A creative approach to problem-solving	E
Excellent organisational and time management skills, ability to prioritise and multi-task	E
Ability to produce clear, concise and accurate written materials	E
Highly motivated and enthusiastic in developing the programme	E
<b>Other</b>	
Willingness to work as part of a team and to be open-minded and cooperative	E

A flexible attitude towards work	E
Discipline and regard for confidentiality and security at all times	E
Willingness to undertake any necessary training for the role	E
Willingness to travel both within the Singapore and to the United Kingdom, and other destinations as required to conduct and disseminate research	E
Willingness to work out of normal working hours (including weekends) if the requirements of the project demand.	E

Imperial Global Singapore is committed to equality of opportunity and to eliminating discrimination. All employees are expected to:

- 1) Champion a positive approach to change and opportunity
- 2) Encourage inclusive participation and eliminate discrimination
- 3) Communicate regularly and effectively within and across teams
- 4) Consider the thoughts and expectations of others
- 5) Deliver positive outcomes
- 6) Develop and grow skills and expertise
- 7) Work in a planned and managed way

Employees are also required to comply with all IGS policies and regulations, paying special attention to:

- Confidentiality
- Conflict of Interest
- Data Protection
- Equal Opportunities
- Financial Regulations
- Health and Safety
- Information Technology
- Smoking
- Private Engagements and Register of Interests
- The regulations of CREATE Tower and of Singapore

They must also undertake specific training and assume responsibility for safety relevant to specific roles, as set out on the [College Website Health and Safety Structure and Responsibilities](#) page.

*IGS observes the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published.*

*IGS believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is shown to be necessary for developing new treatments and making medical advances. IGS is committed to ensuring that, in cases where this research is deemed essential, animals in are treated with full respect, and that any and all staff involved with this work show due consideration at every level. For further details, applicants are directed to:*

<http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research/>