



Position	1.4	osition no:	15710		
College / Directorate / Institute	Civil and Environmental Engineering / Engi	neering, Desig	gn and Physical Sciences		
Bursary	£39,907 per annum.				
Contract type	Fixed-Term 12 months				
Full time/Part time	Full time				
Accountable to	Xiangming Zhou, Head of Department of Civil & Environmental Engineering				
Reports					
Internal stakeholders	Department of Civil & Environmental Er	ngineering, B	Brunel University London		
External stakeholders	Early Career Fellowships Scheme under the International Science Partnerships Fund (ISPF), UK Department for Science, Innovation, and Technology, the British Council				
Date reviewed	31 May 2024				

Main accountabilities:

Key duties and responsibilities:

- 1. The Department of Civil & Environmental Engineering has been awarded a grant by the British Council through the International Science Partnerships Fund (ISPF) to appoint three early career fellows from Egypt to collaborate internationally and gain access to new research environments, facilities, knowledge, and expertise, to enhance the quality of their research environments and enable them to translate research and innovation into economic and societal benefit. The International Science Partnerships Fund puts research and innovation at the heart of the Department for Science, Innovation and Technology's international relationships, supporting UK researchers and innovators to work with peers around the world on the major themes of our time: planet, health, tech and talent.
- 2. The post holders will be full-time based at Brunel University London to conduct state-of-the-art research both independently and collaboratively within the specialised areas. The specialised areas focus on construction materials/structures, low-carbon and carbon-negative cement & concrete; use of cement and concrete as a carbon sink; valorisation of construction & demolition waste; molecular dynamics or thermodynamics modelling of hydration of cement or alternative cement or carbon absorption by cement or alternative cement, fibre reinforced polymers (FRP), numerical modelling of FRP concrete structures, construction and demolition waste utilisation, etc.
- 3. The post holders will grow their academic career in the designated research themes whilst promoting the international profile of Brunel University London.
- 4. The post holder should fulfil the duties as described in the Person Specification, including planning and conducting the original research at Brunel University London, obtaining original research outputs, and disseminating research in various channels such as journals, conference

proceedings, research seminars, and local communities. More specifically, the post-holder is expected to:

- carry out the research project as approved by the ISPF grant
- Demonstrate a plan and a passion to engage other early career researchers from their home country; and
- undertake/lead research and development for the designated themes/areas
- support/lead the preparation of the project's technical developments, reports, and deliverables
- report on Fellowship progress internally and externally
- maintain contact with the British Council for purposes of monitoring and evaluation during and after the fellowship
- disseminate the research activities and their outcomes through refereed journal publications, conferences and appropriate social media
- undertake training and other activities designed to develop their skills
- prepare and submit financial reports on the project
- support the University's commitment to equal opportunities and widening access and participation
- meet regularly with their academic supervisors to discuss progress and emerging issues and agree on short-term plans. Every three months, the Fellow is to submit a written report reviewing progress against the schedule for the research
- prepare the final project report for submission to the project sponsor

Post Profile

Post-holders will be expected to provide updates of research work to staff and students, **direct** the work of small research teams and have **direct** client/sponsor contact

- Production of independent original research
- Take initiative in the planning of research

Management of Staff and Students (Responsibilities and Accountability)

 Provide guidance to staff and students and to direct work of small research team including Research Assistants and Technicians

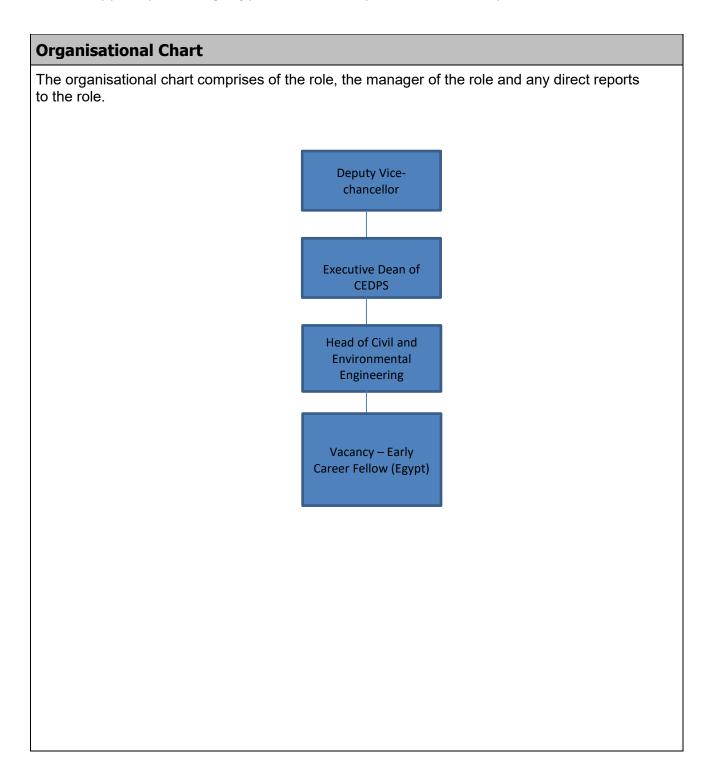
Effective Behaviours

- Timeliness
- Meeting Deadlines
- Communication and Networking
- Networking group across colleges
- Ability to negotiate and influence
- Ability to plan and organise own workload
- Ability to adapt to a flexible approach to the demands of a busy college/department in order to accommodate changes in priorities when required

University Employment Policy:

- 1. Undertake any other reasonable duties as required and commensurate with the grade of post.
- 2. Adhere to and comply with the provisions of the Data Protection Act and the Health and Safety at Work Act in accordance with University policies.

- 3. Undertake all duties and responsibilities in compliance with the rules and regulations encompassing equal opportunities to help foster a diverse workforce.
- 4. Adhere, comply and work in accordance with University and Departmental policies, procedures and codes of conduct.
- 5. Promote the University's Environmental Policy and demonstrate commitment to it through actions and decision making.
- 6. Actively participate in on-going professional development activities as requested





Disabled applicants meeting the Essential criterion will be guaranteed an interview as part of the University's commitment to the Disability Confident Scheme.

Person Specification

Attributes	Criteria	Essential /Desirable	How measured
Eligibility	Be a permanent resident in Egypt;	E	
	 Be an Early Career Researcher (e.g., a candidate near PhD completion or working as a post-doctoral researcher in Egypt); 		
	 Not currently in receipt of financial support or funding towards any other programme in the UK from any other sources; 		
	 Meet the English language requirement of the UK HEI if applicable; 		
	Have a background or a proven interest in the research area of construction materials/structures, low-carbon and carbon-negative cement & concrete; use cement and concrete as a carbon sink; valorisation of construction & demolition waste; molecular dynamics or thermodynamics modelling of hydration of cement or alternative cement or carbon absorption by cement or alternative cement, etc. Be willing to demonstrate future contributions to capacity-building and socio-economic advancement through the benefits achieved after completing the fellowship programme;		
	 Agree to maintain contact with the British Council for purposes of monitoring and evaluation during and after the fellowship; 		
	 Demonstrate a plan and a passion to engage other early career researchers from their home country; and 		
	 Employees of the British Council, the UK government or Scottish, Welsh, or Northern Irish governments are not eligible to apply for this programme; and 		
	 Candidates must be from public universities and research centres. 		
Education, qualifications & training	PhD in appropriate Discipline in Civil Engineering materials, Structural Engineering, Materials Engineering, OR	E	Application form

	Attained equivalent research, industrial or commercial experience. (Minimum 4 years). Evidence of research attainments including examples of written contributions in academic publications/journals and PhD thesis in the designated research themes.	E	
Experience	Evidence of IT literacy including Excel and databases. Provide evidence of independent, original research.	E E	Application form, Interview Application form, Interview
	Experience of organising and supervising a project team Proven experience of planning research, preparing research proposals and negotiating contracts with little supervision.	E	Application form, Interview Application form, Interview
Knowledge Skills & Abilities	Good communication skills both verbal and written – particularly when demonstrating the results of own research to both specialists and non-specialists in English. Ability to draft research papers for Publication in appropriate Academic Journals. Ability to work largely on own initiative with minimum supervision. Ability to give presentations at academic/non-academic conferences and meetings	E E E	Application form, Interview Application form, Interview Application form, Interview Application form, Interview
Additional Requirements	Working in a multi-cultural and diverse environment	D	
	Demonstrated capability in working both independently and collaboratively	D	

Job Hazard AssessmentAny identified hazards have undergone appropriate Risk Assessments.

Please tick all relevant wor	kplace haz	zards identified with	n this post.					
Currently the University, as a minimum runs Health Surveillance programmes for staff working with skin and respiratory sensitisers, Biological Agents Class 2 and above and GMOs.								
Display screen ☐ equipment	Manual h	nandling 🗆	Prolonged standing e.g. 1 hour plus □		Prol	Prolonged sitting e.g. 1 hour plus □		
Biological agents: Class 2 and above and GMO Class 1 □	Human fluids □	blood, tissue or	Respiratory sensitisers or laboratory allergens e.g. animals □		Skin Irritants/Chemicals □			
Work in confined Places □	Ionising	radiation 🗆	Noise (more than 80 dba-8 hrs. taw) □		Lone working			
Use of dangerous machinery □	Electrica	l hazards □	Shift work	/night w	⁄ork □	Wor	k outdoors □	
Neck & arm vibrating equipment □	Fork lift t	ruck driving	Work at h	eights [ghts □		Lasers	
Any other hazards (e.g. food handling) please specify and ensure that appropriate guidance has been received from the Health & Safety office:								
Physical demands Lifting Carr		Carrying	□ Bending □		Pushing □			
If lifting/carrying duties expected, please give details of heights/weight load(s) the individual is expected to lift/carry and frequency:								
Travel/Off-site working:	% of time	e	UK 🗆			Ove	rseas □	
Driving for work: Non	e 🗆	Occasiona	allv 🗆	Weekl	lv 🗆		Daily □	
Management responsibility			<u> </u>		pervisory \square			
Hours of work: Full time □		Part tim		e □ hours				
Non-standard contractual hours? (evenings/weekends) Night work Frequency, number of hours, type of work outside standard hours:								
Other – including occasional or possible work hazards (please specify nature and frequency):								