



Position Description

1. General information

Position reference	RMIT/Acciona-PF1: Geopolymer Optimized for Acid
	Exposure
Research topic	Exploring the use of geopolymers to tackle the challenge
	of concrete deterioration in acidic environments.
Supervisors	<u>Chamila Gunasekara</u> (RMIT)
	• <u>Jose Vera-Agullo</u> (Acciona)
Research areas	Materials science, Chemical Science/Engineering,
	Concrete and Cement Chemistry, Construction and Civil
	Engineering
Sponsoring entity	ACCIONA Construction
Employing entity	RMIT Europe
Seconding entity	RMIT University, ACCIONA AU
Position funded by	COFUND, Marie Sklodowska-Curie Actions (MSCA),
	Horizon Europe, European Union
	RMIT University (RMIT)
	Acciona
Additional information	 https://www.acciona.com/our-
	purpose/innovation/technology-innovation-
	centres/construction
Foreseen start date	September 2025
Gross annual salary	37,000 EUR, plus complements defined below

2. Expected candidate profile

The expected candidate profile for the position:

We are seeking a highly motivated and innovative professional to tackle the challenge of developing an acid-resistant concrete solution using geopolymers or alternative approaches. The ideal candidate should possess a strong background in materials science, civil engineering, or a related discipline, with specific expertise in cementitious materials and concrete durability.

Key qualifications and experience:

Candidate must possess academic studies in Civil Engineering, Materials Science,
 Chemistry or a related field.

Technical expertise:

- In-depth knowledge of concrete chemistry, hydration processes, and degradation mechanisms
- Experience with geopolymers, alkali-activated materials, or alternative cementitious binders.









- Familiarity with supplementary cementitious materials (SCMs) like fly ash, silica fume, and their role in acid resistance.
- Understanding of industrial waste valorisation and sustainability in construction materials.

Research and development:

- Strong analytical skills to assess material properties, including resistance to acid attack.
- Ability to design and conduct laboratory experiments to optimise geopolymer formulations
- Experience with durability testing methods and mechanical property evaluation of cementitious materials.

The selected candidate will play a key role in bridging scientific research and industrial application, contributing to the future of sustainable and durable construction materials.

3. Employment conditions

RMIT Europe offers a 36-month full employment contract for postdoctoral researchers to work remotely from Madrid, Spain, as part of the AuSpire researcher training program, co-funded by the European Commission under the MSCA COFUND scheme. The total working hours per week are 37 and there is a probation period of 5 months.

This position requires the Postdoctoral Fellow to frequently access Acciona's facilities in Madrid, Spain, as part of the foreseen collaboration under this role and to carry out their research using its laboratories. In addition, the Postdoctoral Fellow must be willing to travel regularly to RMIT Europe's premises in Barcelona, Spain, or upon request, to attend special company events. For this purpose, an additional travel stipend will be provided to the selected candidate.

The remuneration, in line with the European Commission rules for MSCA grant holders, will consist of a gross annual salary of 37,000 EUR. The definitive amount to be received by the Postdoctoral Fellow is subject to Spanish tax legislation.

The position will be jointly supervised by Acciona and RMIT University, where the Postdoctoral Fellow must undertake a secondment at the premises of the latter in Melbourne, Australia for up to 12 months.

Additionally, the program includes annual in-person workshops at various locations across Spain, along with online training and networking activities.









Benefits include:

- 4,000 EUR relocation for employment stipend to cover costs associated with taking up employment (flights, visa, insurance, etc.), to be distributed monthly as a top-up to the gross salary.¹
- 9,000 EUR relocation for secondment stipend to cover compulsory project-related travel and accommodation costs (flights, visa, insurance, accommodation, etc.).¹
- 3,000 EUR travel stipend to cover flights and accommodation for participating in compulsory AuSpire training and networking events in Spain over the 3 years.¹
- 314 EUR monthly family allowance offered to candidates who meet the criteria. 1 2
- Access to all the necessary facilities and laboratories at RMIT and Acciona that are directly connected to the research projects (such as the concrete technology lab).
- Travel allowance for regular visits to Barcelona, Spain.
- 22 days of paid holiday leave.
- 4 personal leave days.
- Christmas closure (between Christmas and New Year) 4 working days of leave (not discounted from holidays).
- Spanish social security coverage.
- Sick leave.
- Parental leave.
- Two weeks per year remote work from anywhere.
- Flexible salary benefits (meals, transport, healthcare, kindergarten).
- Free coffee and fruit.
- Becoming a Marie Sklodowska-Curie fellow and be invited to join the <u>Marie Curie</u> Alumni Association.

² According to MSCA-COFUND requirements, Fellows with family obligations are entitled to a family allowance (i.e. persons linked to Postdoctoral Fellow by (i) marriage, or (ii) a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or (iii) dependent children who are actually being maintained by the Postdoctoral Fellow).





¹ The definitive amount to be received by the Postdoctoral Fellow might be subject to Spanish tax legislation.