PhD vacancy on "Reaction Kinetic and Microstructure of Alkali Activated Blended System"

Job description

We are looking for a candidate with a MSc degree in Civil Engineering, Materials Science and Engineering or Chemical Engineering and experience in modelling and experimental research on construction materials (preferably on alkali activated materials) to be part of an MARIE SKŁODOWSKA-CURIE ACTIONS Innovative Training Network funded by the EU HORIZON 2020 Programme "DuRSAAM - PhD Training Network on Durable, Reliable and Sustainable Structures with Alkali-Activated Materials". The main aim of this PhD is to simulate reaction kinetics and microstructures development of the alkali activated system blended with different kind of precursors. The particle natural of different precursors, the dissolution kinetics, the mineralogy of reaction products and rate of reaction and allocation of reaction products will be studied and simulated explicitly.

Job requirements

The candidate should be both an independent thinker and a team player and be motivated to find creative solutions. Fluency in English is required.

- Requirements from the EU programme are that the candidate
- be within the first four years (full-time equivalent) of their research career;
- not yet have been awarded a doctoral degree;

• not have resided in The Netherlands for more than 12 months in the 3 years immediately before the recruitment date (and not have carried out their main activity (work, studies, etc.) unless as part of a procedure for obtaining refugee status under the Geneva Convention.

Conditions

TU Delft offers a customisable compensation package, a discount for health insurance and sport memberships, and a monthly work costs contribution. Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities. As a PhD candidate you will be enrolled in the TU Delft Graduate School. TU Delft Graduate School provides an inspiring research environment; an excellent team of supervisors, academic staff and a mentor; and a Doctoral Education Programme aimed at developing your transferable, discipline-related and research skills. Please visit http://www.tudelft.nl/phd for more information.

During the first three years, the salary will be covered via the Marie Curie Project allowances. Salary: € 2266 - € 2897 per month.

Additional information

To apply, please send

- a motivation letter specifically addressing our position, and your possible start date
- full curriculum vitae including a list of all courses and marks
- copies of your degree and your transcripts (courses and grades)
- publication list incl. a one-page summary of your MSc thesis,
- two recommendation letters (or alternatively the names and email addresses of two references).

Please e-mail all your application information in one single PDF entitled Lastname_CITG18-44 pdf to <u>g.ye@tudelft.nl</u> before 21 December 2018.

PhD vacancy on "Transport Phenomenon in Alkali Activated Materials"

Job description

We are looking for a candidate with a MSc degree in Civil Engineering, Materials Science and Engineering or Chemical Engineering and experience in modelling and experimental research on construction materials (preferably on alkali activated materials) to be part of an MARIE SKŁODOWSKA-CURIE ACTIONS Innovative Training Network funded by the EU HORIZON 2020 Programme "DuRSAAM - PhD Training Network on Durable, Reliable and Sustainable Structures with Alkali-Activated Materials". The main aim of this PhD is to numerically investigate the chloride transport mechanisms inside the microstructure of AAMs at different ages, and to obtain the time-dependent permeability and chloride diffusivity parameters suitable to be used in meso-scale simulations. A lattice Boltzmann multi-ionic reactive transport model will be developed as the framework for the simulations.

Job requirements

The candidate should be both an independent thinker and a team player and be motivated to find creative solutions. Fluency in English is required.

- Requirements from the EU programme are that the candidate
- be within the first four years (full-time equivalent) of their research career;
- not yet have been awarded a doctoral degree;

• not have resided in The Netherlands for more than 12 months in the 3 years immediately before the recruitment date (and not have carried out their main activity (work, studies, etc.) unless as part of a procedure for obtaining refugee status under the Geneva Convention.

Conditions

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During the first three years, the salary will be covered via the Marie Curie Project allowances. Salary: € 2266 - € 2897 per month

Additional information

To apply, please send

- a motivation letter specifically addressing our position, and your possible start date
- full curriculum vitae including a list of all courses and marks
- copies of your degree and your transcripts (courses and grades)
- publication list incl. a one-page summary of your MSc thesis,
- two recommendation letters (or alternatively the names and email addresses of two references).

Please e-mail all your application information in one single PDF entitled Lastname_CITG18-45 pdf to <u>g.ye@tudelft.nl</u> before 21 December 2018.