



ASIM Research Group

Advanced & Sustainable Infrastructure Materials

PhD Position for in “Thermodynamic-guided manufacturing process for production of lightweight aggregate from waste glass and waste coal combustion ash” at Drexel University

Advanced and Sustainable Infrastructure Materials Laboratory (ASIM lab) is seeking for an outstanding candidate for an open fully funded PhD position in Fall 2021. Special emphasis is placed on recruiting candidate with a background in civil engineering, chemical engineering, materials engineering or related fields. The successful candidate will work on applying advanced characterization techniques along with modeling tools to design and manufacture lightweight aggregate (a construction material) from a combination of waste glass and waste coal combustion ash. More specifically, the student will be exposed to a multidisciplinary research environment, while performing tasks such as computation driven experimental design, lab and pilot scale high temperature synthesis of novel ceramic materials and mechanical testing of its engineering properties with subsequent theoretical extrapolation to concrete applications. The computations for the experimental are aided with tools as FactSage and Matlab.

The candidate will work in the group of Professor Farnam and Professor Hsuan, in a strong collaborative environment with other professors in CAEE department and students at ASIM lab. More information can be found at:

<http://www.asim-lab.com/>

Required qualifications:

- A M.S degree from a reputable university in a topic of relevance
- An ability to work in an interdisciplinary team,
- An interest in working in a fast-paced research environment

How to apply:

If you meet the above requirements and are interested in this position, please contact Dr. Farnam by email (yf338@drexel.edu) along with you detailed resume. Recruitment will remain open until the position is filled.

Contact:

Prof Yaghoob Farnam – yf338@drexel.edu

Advanced and Sustainable Infrastructure Materials Laboratory (ASIM lab)

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