## **Research Opportunity – Summer 2019**

## Dr. Bala Chandran's Research Group, Mechanical Engineering, TREE Lab

I am seeking for a highly motivated graduate (doctoral or masters) student interested in doing research in the broad area of understanding radiative heat transfer in granular and suspension flows via computational modeling for applications of high-temperature energy storage and catalysis applications. Applicants are expected to have a sound knowledge of fluid/continuum mechanics and the fundamentals of heat-transfer; experience in complex fluids or multiphase flows is desirable, though not essential. Applicants should be interested in the computational aspects of this project to develop and write code.

Interested students should have the following qualifications:

- Strong analytical and computational skills, and intellectual independence (i.e., able to read books and papers and learn by oneself; able to apply theoretical knowledge to practical situations)
- Relevant course work and experience related to
  - Undergraduate level fluid mechanics, solid mechanics, heat transfer, radiation, numerical methods and programming, computational fluid/solid mechanics
  - o Graduate level courses on any/all of the above topics will be a plus point
- Excellent professional and work ethic
- Team player that is ready to interface with people developing experiments on this project

If you are interested in this opportunity, please email Prof. Bala Chandran (rbchan@umich.edu) all the following documents <u>AS SOON AS POSSIBLE</u>:

- 1. A 2-page CV with references listed
- 2. Unofficial academic transcript
- 3. 1 one-page (maximum) statement of interest that explains why you are best suited for working on the proposed research topic and indicates how you meet the required project criteria.
- 4. Slides (maximum 5) that showcase your research experience and contributions