

2025 Nuclear Global Internship Job Description

1. Basic Information

- Expected Internship duration: *3-6 months*
- Internship Area/Topic: *Thermal-hydraulics and safety analysis of Advanced Reactors, Integrated Nuclear Energy Systems*
- Division/Department Placement: *School of Nuclear Engineering, Purdue University*
(<https://engineering.purdue.edu/NE>)
- Supervisor's contact information: *hbindra@purdue.edu*

2. Responsibilities

1) Main Purpose

The main purpose of this internship will be to provide experience to the students on unique experimental facilities- Gallium Thermalhydraulic Experiment, Helium-cooled Pebble Bed Reactor Test facility, thermal energy storage facilities including supercritical CO2 loop, as well as data-driven simulation tools for advanced reactors and integrated nuclear energy systems.

2) Tasks/ Key Results Expected

Key tasks for the student include will include: Perform experimental tests with one of more test facility identified above, obtain experimental dataset for unique test conditions, prepare report for possible publication

3) Knowledge, Skills and Abilities

Basic knowledge of thermodynamics, fluid mechanics and heat transfer is expected at any level (undergraduate or graduate). It will be great if student intern has previous hands-on experience but not required. It will also be useful if student is familiar with any computational fluid dynamics software or thermhydraulics simulations code (govt. or commercial) but not required.

3. Qualifications (Education)

- ☐ (1) Bachelor degree (3rd year ☐, 4th year ☐)
- ☐ (2) Master degree (or candidate)
- ☐ (3) Ph. D. degree (or candidate)
- ☒ (4) Does NOT matter

4. Required documents

- ☒ Resume / Curriculum Vitae
- ☒ Cover letter
- ☐ Academic transcript
- ☐ Recommendation letter written by academic supervisor
- ☒ English Test score (TOEFL, TOEIC, IELTS, etc.)
- ☐ Others ()

5. Is the host organization providing any additional financial support in addition to the funding from KONICOF?

- ☒ Yes
 - The amount of stipend: USD/EUR/CHF 1000 per month /~~week~~
 - Purpose of the stipend: *To cover lodging expenses at West Lafayette*
- ☐ No



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