

## **Research Engineer position in Iodine Radiochemistry**

**Project Title:** advancing radioiodination techniques using metal-free C-H activation

**Project Overview:** We are seeking a highly motivated and dedicated researcher to join our research team. This project aims to develop a novel radioiodination technique utilizing metal-free C-H activation. Led by Dr. Thomas Cailly, our synthetic methodology and radiochemistry group specializes in iodine radiochemistry and is dedicated to pioneering new methodologies in the field. The project will involve collaboration with leading experts in metal-free C-H activation chemistry and medical imaging.

### **Research Objectives:**

- Develop a novel radioiodination technique based on the activation of inert carbon-hydrogen bonds.
- Apply the developed methodology to label radio-iodinated imaging agents for central nervous system imaging or theranostic tools.

### **Responsibilities:**

- Design and conduct experiments to optimize (radio)iodination techniques using carbon-hydrogen bonds activation.
- Characterize synthesized compounds using analytical techniques such as HPLC, NMR, and mass spectrometry.
- Collaborate with team members and international partners to achieve project milestones.
- Take responsibility for managing the group's radiochemistry equipment.
- Manage a technician working on the same project.
- Prepare scientific publications and present research findings at conferences.

### **Qualifications:**

- A PhD in organic chemistry or a related field.
- Strong background in synthetic organic chemistry.
- An experience in radiochemistry is a plus but not mandatory
- Experience with organometallic chemistry is desirable.
- Experience with HPLC is desirable.
- Excellent communication and teamwork skills.
- Ability to work independently and efficiently manage research projects.

### **Benefits:**

- Full-time position starting in January 2025.
- Access to state-of-the-art research facilities and resources.
- Radiation safety training.
- Opportunities for professional development and international collaboration.
- Supportive research environment with mentorship from experienced faculty members.



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**Application Process:** Interested candidates should submit a cover letter, CV, academic transcripts, and contact information for two references to Dr. Thomas Cailly at [thomas.cailly@unicaen.fr](mailto:thomas.cailly@unicaen.fr) or Pr. Valérie Collot at [valerie.collot@unicaen.fr](mailto:valerie.collot@unicaen.fr). Review of applications will begin immediately and continue until the position is filled.

**About the Research Group:** [The synthetic methodology and radiochemistry](#) group led by Dr. Thomas Cailly is dedicated to advancing the field of iodine radiochemistry and developing innovative radiolabeling techniques for medical imaging applications. Our collaborative and interdisciplinary approach fosters groundbreaking discoveries and contributes to the advancement of molecular imaging technologies.