

Job Opening: Researcher 25-2

Under the Grants-in-Aid for Scientific Research (KAKENHI), Scientific Research (A)

"Development of an intense Ultra-Cold Neutron Source for a neutron Electric Dipole Moment Search"

(Principal Investigator: Shinsuke Kawasaki)

1	Job title, Number of Job Opening	Researcher Position, One person
2	Inst/Group	Institute of Particle and Nuclear Studies
3	Job Description	<p>To explain the matter–antimatter asymmetry in the universe, a new source of CP violation is required. A non-zero permanent electric dipole moment (EDM) of a fundamental particle, such as the neutron, would indicate CP violation under the assumption of CPT conservation.</p> <p>Neutron EDM measurements use ultra-cold neutrons (UCNs) with kinetic energies below 300 neV. UCNs are confined in a material vessel under electromagnetic fields, and the EDM is probed by observing spin precession. The TRIUMF Ultra-Cold Advanced Neutron (TUCAN) collaboration aims to construct a high-intensity UCN source to perform an nEDM measurement with a sensitivity of 10^{-27} e·cm. Since the current sensitivity is limited by statistics, increasing the UCN density is essential.</p> <p>The successful applicant will join the Muon and Neutron Group at IPNS and contribute to the TUCAN project by participating in the development of the ultracold neutron (UCN) source and the R&D of components for the neutron electric dipole moment (nEDM) search experiment.</p>
4	Qualification	Applicant must have a Ph.D. obtained at the time of application or is sure to get Ph.D. prior to starting the Job at KEK.
5	Salary	<p>Expected salary is around 300,000 JPY per month. Salary and various allowances are determined according to the KEK rules (Annual salary system).</p> <p>Salary payment method: The base annual salary is divided into twelve and paid monthly. Various allowances will be determined according to the KEK rules in addition.</p>
6	Appl. Deadline	by 12:00 JST August 15, 2025
7	Start of the term	Negotiable, but prefer as early as possible after acceptance.
8	Term	Until March 31, 2026
9	Renewal Criteria	<p>Until March 31, 2029 with the contract renewed every fiscal year.</p> <p>The contract update is determined by the following: (1)Work performance, Work attitude (2)Ability of workers (3)Amount of work at the expiration contract period (4)The need for business (5)Situation of budget</p>

10	Place of employment	High Energy Accelerator Research Organization, Tsukuba campus, 1-1 Oho, Tsukuba, Ibaraki 305-0801 Japan
11	Method of Selection	After reviewing the submitted application documents (see below), applicants may be called for an interview. (Details will be separately communicated to the applicants who will be interviewed.)
12	Application Documents	<p>(Use A4 size papers (295mm x 210mm or similar size))</p> <p>1. Curriculum vitae (Use the designated form of KEK: https://www.kek.jp/en/resume) * CV should include the job number Researcher 25-2, e-mail address, your date of birth, and the possible date you can start working at IPNS in addition to standard information of CV. * If you apply for more than one job openings in KEK, please indicate all the job numbers you apply for and your priorities in your CV.</p> <p>2. Research experience</p> <p>3. Publications list (Indicate up to 5 important papers in the publication list. Provide Web pointers (URL, DOI etc.) for the important papers. Attach reprints when Web pointers are not available.)</p> <p>4. Research plan at IPNS in KEK</p> <p>5. Recommendation or reference letter(s) (The letter(s) must be addressed to Dr. SAITO Naohito, Director, IPNS)</p>
13	How to submit application documents	<p>1. Application documents other than recommendation/reference letter(s) Send by email in pdf format to Shinsuke Kawasaki, at the email shinsuke.kawasaki_at_post.kek.jp (Please replace _at_ with @). Subject of the mail should be "Researcher 25-2 Application".</p> <p>2. Recommendation/reference letter(s) Please request your referee to send by email in PDF format directly to Shinsuke Kawasaki, at the email shinsuke.kawasaki_at_post.kek.jp (Please replace _at_ with @).</p>
14	For more information: please contact	<p>Prof. Shinsuke Kawasaki</p> <p>E-mail: shinsuke.kawasaki_at_post.kek.jp (Please replace _at_ with @)</p>
15	Passive Smoking Prevention Measures	Indoor Smoking Prohibited Throughout the Premises

16	Private information	Private information obtained from application documents will not be used or provided to any third party for purposes other than the necessary procedures related to personnel affairs, salary, and welfare. Please note that documents submitted for the recruitment process will not be returned to the applicant.
17	Others	<p>1.KEK is promoting gender equality. In accordance with the intent of “Basic Act for Gender Equal Society”, when the finalists for a position comprise both males and females whose qualifications and merit, including experiences, education, research achievements and social contributions, have been deemed equal, preference will be given to the female candidate.</p> <p>2.An option for working at home is available to improve work-life balance or to cope with exceptional working environment.</p>