Summer Internship Programme 2022 (in Hybrid mode)

Physical Research Laboratory (PRL), an autonomous unit of the Department of Space, Government of India, conducts basic research in the areas of Astronomy and Astrophysics, Solar and Heliophysics, Space & Atmospheric Sciences, Geosciences, Planetary Sciences and Solar System Exploration, Atomic, Molecular & Optical Physics and Theoretical Physics. The Laboratory has several world-class experimental, observational, and computing facilities spread over its four campuses at Navrangpura and Thaltej in Ahmedabad; Infrared Observatory at Mt. Abu, and Solar Observatory in Udaipur. Research in PRL include niche areas, like Planetary and Space missions, Astro-chemistry, Femto-second Lasers, Quantum Communication, Exo-planets, Biogeosciences, Paleo-climatology, Laboratory analysis of Meteorites/samples, Neutrino physics. PRL website: https://www.prl.res.in/prl-eng/home For more details visit Applications are invited from academically outstanding and highly motivated graduate and post-graduate students and college teachers of Indian Nationality for the Summer Internship Programme to be held in Hybrid (offline and online) MODE by the Physical Research Laboratory from May 10 to July 8, 2022. Please note that ONLY limited number of projects will be available for the offline mode. The participants will work on a specific project in association with a faculty member of the institute. The nature of project will decide the offline/online mode.

<u>List of available projects</u>

The total duration of the SIP will be of 8 weeks. Out of 8 weeks, there will be two blocks of 4 weeks, each with one offline and one online training. This offline-online or online-offline training sequence will be decided based on project requirement/accommodation availability. The first block will be around 10-15 May to 10-15 June 2022, and the second block will be from 10-15 June to 10-15 July 2022.

Eligibility criteria and other details about the Programme for Students

Eligibility criteria

- Final year undergraduate and pre-final year post graduate students of optics, Laser Physics, Space Physics, Geology, Geophysics, Atmospheric Sciences, Environmental Sciences, Meteorology, Chemistry, Ocean Sciences, and related subjects.
- -Students who are in the first Year of M.Sc. (pre-final year), 3rd and 4th year Integrated M.Sc., 3rd year B.Sc.*, 3rd or final year B.Tech. (Physical Sciences/Engineering Physics/Engineering Physics/Optics/Photonics/Geology/Geophysics)*/ B.S.*, 4th or final **B.S.-M.S.*** eligible are *Preference will be given to candidates who are KVPY/DST INSPIRE fellows and no **FELLOWSHIP** from **PRL** will be paid to such candidates. - We expect prospective candidates to have reasonably good proficiency in basic physics and mathematics.
- A minimum of 60% marks at both Bachelor's and Master's level are required.
- The Summer Internship Programme is open for students studying in Indian Universities/Institutes.

Please note that the students studying in any discipline of engineering are not eligible to apply in this program.

Duration: Eight weeks, May 10 - July 08, 2022.

Eligibility criteria and other details about the Program for Teachers

Eligibility criteria

Teachers having academic background in Physics, Applied Physics, Astronomy & Astrophysics, Optics, Laser Physics, Space Physics, Geology, Geophysics, Atmospheric Sciences, Environmental Sciences, Meteorology, Chemistry, Ocean Sciences, and related subjects and presently teaching at postgraduate / graduate level with interest in pursuing research in any of the research areas of PRL are invited to apply for the summer internship program.

The application must be forwarded through the Head/Principal of the institution. Any application received without this recommendation will not be considered. The selected candidates will be informed through e-mail. No interim queries in this connection will be entertained.

Duration: Six-Eight weeks during May 10 - July 08, 2022.

Essential Qualifications: Essential Qualifications: Five years of teaching experience, demonstrated interest in research as evidenced by research publications/research projects and a Ph.D. degree. All the selected candidates (students/teachers) will work on projects in association with a faculty member in any of the four campuses of PRL.

How To Apply:

- 1. A list of projects is attached in an above link with contact details of respective project supervisors.
- 2. Student/Teacher applicants interested in a specific project are requested to contact the concerned supervisor.
- 3. A proposed supervisor will inform the Dean's office about the selection of students/teachers, and after this, a form will be shared with the selected students/teachers for further formalities. After receiving the said form, formal approval will be conveyed to the selected students/teachers to start working on their designated project.
- 4. Visit of students/teachers to PRL who are selected for offline project will be allowed and necessary formalities to be followed will be informed to such candidates by PRL.
- 5. At the time of filling the form, the following documents will be required:
 - . Written consent from PRL faculty member
 - i. NOC from the department/college/institute

The selected candidates will be informed through e-mail. No interim queries in this regard will be entertained.

Stipend for Offline training:

- i. For students: Rs. 10,000/- per month to students on pro-rata basis
- ii. For teachers: Rs. 15000/- per month on pro-rata basis

Stipend for online training (for students and teachers): Rs. 2000/- for entire duration of the training towards internet charges.

General Instructions:

- 1. Student/Teacher Applicants should wait for 3-4 days for a reply from the concerned faculty members before applying to other project. The final right of selection lies with the concerned faculty member subject to fulfilling of the minimum criteria as mentioned above.
- 2. Wards of PRL employee are given preference as a welfare measure to PRL fraternity.
- 3. The selected applicants report to the Head, Academic Services, with letters from the respective colleges/universities. A reporting format will be shared with the selected candidates.
- 4. Candidates who are selected for offline project may be provided accommodation (on payment basis), and canteen facilities on payment basis, as per PRL norms.
- 5. The experts will review the students' projects towards the end of the training period in online/offline mode. After the recommendation from the reviewers, a soft copy of the of the Project report duly e-certified by the Project Guide, should be submitted to the Head, Academic Services, PRL. This should be done before the end of the programme.
- 6. The results from the project work, if any, can NOT be used/published in any manner without the written permission of PRL.

Important Dates:

Date of application and completion selection: between 14 April – 26 April 2022 (including the online form to be filled.

Frequently Asked Questions for Summer Internship Programme (SIP):

- 1. How much GPA / % is required to get admission into the SIP? There is no cut-off GPA / % that is needed for the SIP. We look at the overall profile while making a decision. This includes academic performance as evinced by grades/GPA, referee reports, your write up, etc. However, a minimum of 60% (first class) is mandatory at undergraduate and postgraduate levels (until the last semester exam qualified).
- 2. Who can apply? / What are the eligibility criteria for students to apply? The common eligibility criteria for students to apply for the SIP is Students who are in the first Year of M.Sc. (pre-final year), 3rd and 4th year Integrated M.Sc., 3rd year B.Sc.*,

- 3rd or final year B.Tech. (Applied Physics/Physical Sciences/Engineering Physics) */ B.S.*, year B.S.-M.S.* eligible 4th final are only *Preference will be given to candidates who are KVPY/DST INSPIRE fellows and no FELLOWSHIP from PRL will be paid to such candidates. Students who have applied to the SIP before but NOT selected can also apply.
- 3. I am a Ph.D. student at XXXX University. Can I apply for the SIP? The SIP is primarily aimed at providing research experience to pre-doctoral (undergraduate, Masters) students. Thus, Ph.D. students are not eligible for the SIP.
- 4. I will be having my semester exams sometime in June due to which there might be a clash with the research program schedule. Could you please clarify as to whether this clash could be avoided? If you can reschedule your program, then the clash can be avoided. The SIP is an INTENSIVE training program, and we do not encourage students to take off in the middle or reschedule the timings. If you are NOT free for the ENTIRE period, please do NOT apply for the SIP.
- 5. If any program is available for XXXX Engg. related research or for pre-final year XXXX Engg. Student, is the student eligible for SIP in PRL? Please note that the students studying in any discipline of engineering are not eligible to apply in this program. There are separate programs offered by PRL for such students, which you are encouraged to apply.
- 6. I am doing my MSc physics at IIT-X. I wanted to know how many students do you take from
 IITX?
 We have no fixed number of students that we take from any institution this year.
- 7. I am from India, but I am currently pursuing my undergraduate studies at the foreign University (US/Europe etc.). I am interested in applying to SIP. This year as the SIP is in hybrid mode, students studying abroad are also eligible, provided that they are Indian nationals. These candidates are not eligible for any stipend.
- 8. Is it compulsory to have detailed knowledge about the particular research topic of interest?
 - While no specialized knowledge is necessary, we expect you to have a very thorough understanding of what is typically taught at the Pre-Final year level.
- 9. Are we to undertake a project on the research topic and finish it in the two-month time, or is it a chance to read and enhance my knowledge on a particular topic? You will be working on a focused research project and finish it in 8 weeks duration.