
Physical Research Laboratory

Ahmedabad 380 009

SUMMER TRAINING PROGRAMME 2001

The Physical Research Laboratory (PRL) is a leading research institution of the country engaged in basic research in several areas of experimental and theoretical physics, space and earth sciences. The Laboratory conducts summer training programme for students every year for about 2 months (during May 15 - July 15) with a view to provide them an opportunity to pursue a research project of their interest in association with the faculty of the Laboratory.

The Laboratory has a dynamic research programme in the following research areas:

Astronomy and Solar Physics

Studies on star formation processes, active galaxies, BL Lac objects and circumstellar structure. Astronomical observations are made using a 1.2 m telescope at Mt. Abu. Solar photospheric and chromospheric studies and observations for the international GONG project are made at Udaipur Solar Observatory.

Atmospheric Sciences and Aeronomy

Ground based, rocket and balloon borne studies on aerosols and minor constituents, as well as laboratory studies on atmospheric chemistry. Upper atmospheric and ionospheric research and studies on planetary and cometary atmospheres. Laboratory experiments on atomic and molecular processes relevant to upper atmospheric and ionospheric processes.

Earth Sciences and Solar System Studies

Isotope geology and geochemistry, palaeoclimate and palaeo-environmental studies employing continental as well as oceanic records. Studies on oceanography, hydrology and glaciology. Investigation on the origin of the Sun and the solar system using isotopic records in meteorites. Geochronology and the evolution of the earth's lithosphere.

Theoretical Physics

Research in gravitational physics and relativistic astrophysics, astroparticle physics, high energy particle physics and neutrino physics. Physics of dusty plasmas, nuclear physics and atomic and molecular physics.



Non-linear Dynamics, Computational Physics and Computer Science

Classical and quantum chaos and time series analysis of complex systems. Numerical studies in general relativity. Research in computer science with focus on image processing and pattern recognition.

Laser Physics and Quantum Optics

Theoretical studies and experimental research in the optical manipulation of atoms and non-linear properties of light-matter interactions.

Eligibility for the Summer Training Programme

Students who are studying in first year M.Sc. in Physics or III year B. Tech. (Engineering Physics). Limited number of students studying in II & III year B. Sc./II year B.Tech. (Engineering Physics & Computer Science) will also be considered for the programme. The total number of trainees will be about 30.

A consolidated stipend of Rs. 3500/- per month, second class return railway fare and hostel accommodation (on a nominal charge) are provided to the trainees.

The selection of trainees is done on the basis of the academic record of the applicant and nomination by the Head of the Department of a University/Institution/College. A brief bio-data of the candidate giving name, address (both home address & address for correspondence), academic record and a short write-up of the research interest of the candidate may be forwarded to:

Head, Academic Services
Physical Research Laboratory
P.O. Box. 4218
Navrangpura, Ahmedabad 380 009

Tel : + 91 – 079 – 630 2129

Fax : + 91 – 079 – 630 1502

E-mail: <psharma@prl.ernet.in>

Additional information on the academic and research programmes of the Laboratory may be obtained on request by writing to the above address.

The last date for receipt of the nomination with full details of the candidate as stated above is **March 30, 2001.**