Centre for Nano and Soft Matter Sciences (CeNS) is an autonomous institute under the Department of Science and Technology (DST), Government of India. CeNS focuses on broad areas of advanced research related to both nanomaterial and soft matter sciences. It has close collaborations with other research institutes, both within the country and abroad. There is greater emphasis to Industry interaction and Technology realisation.

Applications are invited from motivated candidates for admission to the Ph.D. programme - 2016 as Junior Research Fellows (JRF) in the given areas of research.

**ESSENTIAL QUALIFICATIONS**

- M.Sc./M.Tech from a recognized University/Institute in Physics/Chemistry/Materials Science/Nano Science and allied subjects, with at least 60% aggregate marks for general category and 55% for SC/ST candidates.
- Candidates with specialization in Nano Science and allied subjects, Condensed Matter Physics/Materials Science/Organic, Inorganic, Physical, or General Chemistry at the Masters degree level are encouraged to apply.
- Students who have appeared for the final year examination and expect to obtain their results before 31 July 2016 may also apply.
- The candidate should have qualified in any one of the exams: CSIR-UGC NET (JRF only), GATE or JEST or should be an INSPIRE fellow.

**AREAS OF RESEARCH**

- Carlson Nanomaterials: Turbostratic graphene, Graphene oxide based inorganic core-shell materials
- Nanoporous organic inorganic hybrids
- Morphology controlled metal nanocrystals
- Textured nanocrystalline oxide films for light trapping, Magnetic thin films
- Soft hybrid nanomaterials and devices: Influence of metal nanocrystals on liquid crystals, Metal nanoparticles functionalized with liquid crystals, Semiconductor quantum dot – liquid crystal nanocomposites, Triboelectric responsive materials, Soft optical nanostructures, Nanomaterials for liquid crystal displays
- Synthesis and applications of metal and non-metal nanoparticles, ITO free transparent conducting electrodes, device fabrication
- Liquid crystalline materials: Synthesis and characterization, photo-induced effects, high pressure studies, electrical, magnetic and mechanical properties
- Nanolithography, Soft lithography
- Nanoscale electrical conductivity of Langmuir-Blodgett films, Fractal structures in Langmuir monolayers, Spreading and retraction dynamics of liquid drops

Students will be provided a fellowship and can avail hostel facility. They are encouraged to participate in national and international workshops, expos, symposia and conferences.

**Fellowship: Rs. 25,000/- pm with HRA for JRF**

Application form and related information may be downloaded from CeNS website: [http://www.cens.res.in/Home/Ph-D-programme](http://www.cens.res.in/Home/Ph-D-programme) or may be obtained by sending a request to email: phdadmission@cens.res.in or by post to Admissions, CeNS with the above given address. Shortlisted applicants will be called for an interview at CeNS.

**Last date for receipt of completed applications – 10 May 2016**