Requirement of Post-docs and Scientific Positions at ICT-IOC Odisha Campus, Bhubaneswar

1. Advertisement for Recruitment of Support Staff for Instrumentation (Age limit 40 years as on 10th March, 2021)

A. Name of the post: Technical Operator

Total No. of Post: 06 (On Contractual Basis for one year)

I. Instrument: HRTEM (High Resolution Transmission Electron Microscope)

Number of posts: 1

Salary: Rs. 40,000/- per month (consolidated)

II. Instruments: FESEM and SEM (Field Emission Scanning Electron Microscope)

Number of posts: 1

Salary: Rs. 40,000/- per month (consolidated)

III. Instrument: NMR (Nuclear Magnetic Resonance)

Number of posts: 1

Salary: Rs. 40,000/- per month (consolidated)

IV. Instrument: HRMS (High Resolution Mass Spectrometer)

Number of posts: 1

Salary: Rs. 40,000/- per month (consolidated)

V. Instruments: PXRD, SCXRD (Single Crystal and Powder X-ray Diffraction)

Number of posts: 1

Salary: Rs. 40,000/- per month (consolidated)

VI. Liquid Nitrogen Plant Operator

Number of posts: 1

Salary: Rs.40,000/- per month (consolidated)

Educational and other qualifications:

M. Sc. (Physics/ Chemistry/ Electronics), B.E / B.Tech (Instrumentation/Electronics Engg (Materials Science/ Materials Engineering, or related subjects) with consistent excellent academic record.

Desirable Qualification:

Work experience in relevant field, e.g. handling the scientific instruments (e.g., HRTEM, FESEM, SCXRD, PXRD, NMR, GC-QP HRMS, Liquid N₂), maintenance of Scientific equipment, knowledge of calibration, can give training, and support to research. Experienced candidates will be preferred.

Preamble: There are many high cost instruments like XRD, FESEM, SEM, HRTEM, NMR, HRMS which need skilled technical persons for its smooth operation. The Instrument Technical officer is responsible for the operations of instruments within the centralized facility. The person will operate research instruments, be responsible for training and maintaining all instrument records while also overseeing that the research labs are always maintained in a clean and functioning state. Actively and enthusiastically participate in the installation, maintenance and routine operation of these instruments. The incumbent must assist in designing and conducting experiments and support research work as and when required. Routinely monitor and ensure the performance of instruments under his/her charge. Incumbent should be conversant with the basic principles of operation of these instruments and should be willing to acquire additional knowledge. Periodically arrange technical training sessions to interested candidates.

Job Description:

- Analysis of samples received from Faculty, industries and other academic institutes and keeping record of the same.
- Lead training programs for new staff and post graduate students on research instruments, writing of research proposals jointly with Faculty.
- In collaboration with the Technical Coordinator ensure instrumentation facilities are well maintained and ensure smooth functioning, including documentation.
- Assist with undergraduate teaching laboratory preparation duties during non-busy research periods
- Other duties as allocated by the Institute.
- Implementation of other projects required by the Institute

1. Advertisement for Instrumentation Facility Incharge

Name of the post: Scientific Officer

Age limit 40 years as on 10th March, 2021

(Age relaxation upto 5 years in case of highly qualified, experienced and deserving candidate)

Number of posts: 01 *(on Regular Basis)* Salary: 65,000/- per month (consolidated)

Educational and other qualifications: Ph.D. (Physics/Chemistry/Material Science) with consistently excellent academic record.

Desirable qualifications: Work experience in relevant field, e.g. handling the scientific instruments (e.g., HRTEM, FESEM, SCXRD, PXRD, NMR, GC-QP HRMS, Liquid N2), maintenance of scientific equipment, knowledge of calibration, can give training, and support to research.

Preamble: Excellent research & Instrumental method of Analysis, knowledge of the state-of-the-art sophisticated equipment, conducting various workshops, acts as facilitator and network with the industries and other institutes. These equipment and facilities help the faculty, research scholars and students to carry out globally competitive R & D in basic and applied sciences. For overall management of all the instruments in the Institute at both the CET Campus and ICT-IOC, Bhubaneswar, a skilled scientific officer is essential. The Scientific officers are research scientists with advanced degrees and years of experience performing successful independent research. Scientific officer, generally act as liaison between an organization's executive administrators and the scientists and technicians who make up a research division, although they may also work with collaborative organizations. Research projects solicitation activity is highly desirable.

Job Description:

- Primary job duties include smooth function of the special instrumentation lab of ICT-IOC.
- To coordinate meetings, both within and amongst the teams they lead, and shoulder administrative responsibilities in personnel as well as in budget management.
- Scientific officers also supervise the implementation of programs and coordinate the work between different labs and phases of the research for maximum efficiency and progress.
- Scientific officers also work with other departments on tasks related to Research Proposals, intellectual property or management of special instrument lab
- Integral secondary job duties include hiring personnel, training them for the specific research projects and supervising their research.
- Scientific officers must also manage the budget for their division, including personnel salaries, equipment and supply costs.

 Additionally, he will develop acceptable work policies and procedures that meet government or industry regulatory standards.

2. Advertisement of Assistant Librarian

Name of the post: Assistant Librarian

Age limit 35 years as on 10th March, 2021

No of posts: 01

Salary: Level 10 7th CPC of pay matrix

Qualifications and experience:

- a) A Master's degree in library science/information science/documentation science or an equivalent professional degree, with at least 55% marks (or an equivalent grade in a point scale, wherever the grading system is followed)
- b) A consistently **good academic record**, with knowledge of computerization of a library.
- c) Besides fulfilling the above qualifications, the candidate must have cleared the National Eligibility Test (NET) conducted by the UGC, CSIR or similar test accredited by the UGC like SLET/SET or who are or have been awarded a Ph.D Degree in accordance with the University Grants Commission (Minimum Standards and procedure for Award of M. Phil/Ph.D Degree) Regulations, 2009 or 2016 and their amendments from time to time as the case may be: *Provided* that the candidates registered for the Ph.D degree prior to July 11, 2009, shall be governed by the provisions of the then existing Ordinances/Bye-laws/Regulations of the Institution awarding the degree, and such Ph.D candidates shall be exempted from the requirement of NET/SLET/SET for recruitment and appointment of Assistant Professor or equivalent positions in Universities/Colleges/Institutions subject to the fulfilment of the following conditions:
- The Ph.D. degree of the candidate has been awarded in the regular mode
- The Ph.D. thesis has been evaluated by at least two external examiners;
- Open Ph.D. viva voce of the candidate has been conducted;
- The candidate has published two research papers from his/her Ph.D. work out of which at least one is in a refereed journal;
- The candidate has presented at least two papers based on his/her Ph.D. work in conferences/seminars sponsored/funded/supported by the UGC/ICSSR/CSIR or any similar agency.

3. Advertisement for Post-doctoral fellow

Name of the post: Post-Doctoral Fellow Age limit 40 years as on 10th March, 2021

No of posts: 05

Fellowship: 50,000/- per month (consolidated)
Tenure: Upto 2 years depending upon performance

Subjects: Chemical Engineering, Chemistry and Physics

Qualification required:

• The candidate must have a doctorate degree in the relevant subject preferably with high quality published research work to their credit.

• Candidates who have submitted the thesis and awaiting award of degree may also apply.

Preamble: Leading research groups around the world usually have a good mix of post-doctoral fellows and doctoral students with the former bringing in a level of experience and maturity. Post-doctoral research is an important enabling step in grooming young researchers for launching an academic/research career. This is a transition phase from a largely supervisor directed student at doctoral level to an independent researcher for leadership position, particularly in academia. A post-doctoral stint also provides an opportunity to acquire new skills, broaden one's horizon and offers a platform for transiting into cross-disciplinary areas. Mentoring for independent research is an indispensable element of post-doctoral training.

A. Chemical Engineering / Biochemical Engineering / Petro Chemical Engineering

Name of the post: Post-Doctoral Fellow

No of posts: 02

Fellowship: 50,000/- per month (consolidated)

Essential Qualification:

- a) First class M. Tech/M.E in Chemical Engineering
- b) Ph.D. degree in Chemical Engineering
- c) Research publication in reputed journals

Desirable qualification for position:

- a) Candidate to have interest in developing sustainable technologies
- b) Bioactive compounds /Essential oil based value added products
- c) Solids Handling such as Granulation, Milling, Crystallization, Filtration and Drying

B. Industrial Chemistry / Chemical Technology (in any branch)

Name of the post: Post-Doctoral Fellow

No of posts: 02

Fellowship: 50,000/- per month (consolidated)

Essential Qualification:

- a) First class M.Sc. in Chemistry/M. Pharm in Medicinal Chemistry
- b) Ph.D. degree in Organic Chemistry/ Medicinal Chemistry
- c) Research publication in reputed journals

Desirable qualification for Position-No.01

Candidate should have experience in solid state chemistry, pharmaceutical formulation and pharmaceutics

Desirable qualification for position- No.02

- a) Total synthesis of nature inspired molecules
- b) Organic synthesis, Chemical Biology
- c) Process Development and Process Intensification

C. Applied Physics / Chemical Physics

Name of the post: Post-Doctoral Fellow

No of posts: 01

Fellowship: 50,000/- per month (consolidated)

Essential Qualification:

- a) First class M.Sc. in Physics/Material Science
- b) Ph.D. degree in Experimental Condensed Matter Physics/Material Science
- c) Research publication in reputed journals

Desirable qualification for position:

- a) Candidate should have experience in spectroscopy techniques
- b) Nonlinear Optics: Ultrafast effects in amorphous semiconductors

Important Instruction:

- 1. The candidates are required to submit their application along with Biodata and supporting documents to the following emails on or before 30.03.2021 Email: recruitment.iocb@ictmumbai.edu.in; director@iocb.ictmumbai.edu.in
- 2. Candidates already employed must submit their applications through proper channel along with No Objection certificate from present employer.
- 3. Applications without required supporting documents or those submitted after the last date of receipt of application will not be considered.
- 4. Candidates are requested to refer ICT website from time to time as all information and circulars will be notified on the website.
- 5. The age of the candidate as on 10th March, 2021
- 6. No correspondence with ineligible candidates will be made, for updates visit our website.
- 7. Scrutiny and selection committee's decision will be final and binding on all.