## Advertisement for Postdoctoral and Research Scientist Fellowships in the Department of Chemical Sciences, IISER Kolkata

Applications are invited from highly qualified young scientists for postdoctoral and Research Scientist positions in the following research groups of Department of Chemical Sciences (DCS), IISER Kolkata. These positions, funded by Institute fellowships, will be awarded initially for a period of one year, and may be extended for one more year based on satisfactory research progress. The Fellowships (IPF) are full-time and contractual; the Fellowships do not imply any commitment regarding any other position at IISER Kolkata.

Suitable candidates must have a PhD degree in Chemistry or an allied interdisciplinary field. We especially encourage applicants whose research interests have a considerable overlap with the research areas of the faculty members. Detailed DCS faculty profiles are available at the IISER Kolkata (http://www.iiserkol.ac.in/people/faculty) and DCS websites (http://chem.iiserkol.ac.in/).

| Name of the        | Qualification and       | Fellowship (pm, Rs) |
|--------------------|-------------------------|---------------------|
| position           | Experience              | (+ HRA)             |
|                    |                         |                     |
| 1. Postdoctoral    | Submitted PhD           | 40,000/-            |
| Fellowship         | Thesis/ PhD             |                     |
| 2. Research        | PhD + 2 years Research/ | 45,000/-            |
| Scientist          | Teaching experience     |                     |
|                    | after PhD               |                     |
| 3. Senior Research | PhD 4 years Research/   | 50,000/-            |
| Scientist          | Teaching experience     |                     |
|                    | after PhD, preferably   |                     |
|                    | demonstrating           |                     |
|                    | experience of external  |                     |
|                    | funding                 |                     |

## Eligibility Criteria and Fellowship amount

The contingency grant of Rs. 80,000/- per year for Postdoctoral Fellow, Rs. 90,000/- per year for Research Scientist and Rs.100,000/- per year for Senior Research Scientist will be provided for research purposes and attending conference/workshops.

**Deadline of applications**: Applications are invited throughout the year, and will be processed after 14 days from the date of web advertisement and *as and when sufficient suitable applications available* based on vacancy in the particular research group.

Interested candidates are requested to send their applications, directly to the concern faculty member, along with (a) Curriculum Vitae containing personal bio-data, degrees earned with dates, and list of publications, (b) Research Proposal (maximum 2000 words + schemes/figures) and (c) Synopsis of the Ph.D. work.

Candidates are required to ask at least 2 referees to submit confidential letters of recommendation in support of their application by email directly to the concern faculty member. Shortlisted candidates may be called for an interview/presentation.

| Name of faculty member                | Research Areas                 | Desirable                      |
|---------------------------------------|--------------------------------|--------------------------------|
| 1. Dr. C. Mall Reddy                  | Organic Chemistry,             | The applicant should have      |
| 1. Di. C. Maii Roudy                  | Supramolecular Chemistry,      | expertise in organic synthesis |
| Advt. Date: 30/05/2014                | Crystal Engineering            | with an interest to learn      |
| Email: cmreddy@iiserkol.ac.in         |                                | supramolecular chemistry and   |
| Email: <u>emicady e insericonae.m</u> |                                | crystal engineering. The       |
|                                       |                                | fellow will work on the design |
|                                       |                                | and synthesis of functional    |
|                                       |                                | organic materials, for example |
|                                       |                                | solid-state mechanochromic     |
|                                       |                                | luminescent materials.         |
| 2. Dr. Swadhin Mandal                 | Organometallic catalysis,      |                                |
|                                       | Nanocatalysis, N-heterocyclic  |                                |
| Advt. Date: 30/05/2014                | carbene chemistry.             |                                |
| Email:                                |                                |                                |
| swadhin.mandal@iiserkol.ac.in         |                                |                                |
| 3. Dr. Arindam Mukherjee              | Microbiology; Cancer cells;    | The applicant should have      |
|                                       | Metal complexes; Organic       | expertise in microbiology      |
| Advt. Date: 30/05/2014                | syntheses; Anticancer agents;  | relevant to the research areas |
| Email:                                | Various cancer relevant        | 'or'                           |
| a.mukherjee@iiserkol.ac.in            | assays; Western blot; Gene     | The candidate should have      |
|                                       | transfection in cancer cells;  | expertise in organic and       |
|                                       | Single crystal XRD             | inorganic syntheses, single    |
|                                       |                                | crystal XRD, electrochemistry  |
|                                       |                                | and operation of general       |
| 4. Dr. Ashwani Tiwari                 | Theoretical Chemistry,         | laboratory equipments          |
|                                       | Reaction Dynamics              |                                |
| Advt. Date: 30/05/2014                | reaction Dynamics              |                                |
| Email: ashwani@iiserkol.ac.in         |                                |                                |
| 5. Dr. Sanjio S. Zade                 | Synthesis of $\pi$ -conjugated | The applicant should have      |
| Advt. Date: 30/05/2014                | systems/polymers, Solar cell   | expertise in                   |
| Email:                                | devices, Metalloorganic        | organic/organometallic         |
| sanjiozade@iiserkol.ac.in             | compounds, DFT calculations    | synthesis. This project mainly |
| ····                                  |                                | contains synthesis of          |
|                                       |                                | conjugated molecules and       |
|                                       |                                | polymers, study of their       |
|                                       |                                | photophysical and              |
|                                       |                                | electrochemical properties,    |
|                                       |                                | and application in solar cell  |
|                                       |                                | devices.                       |
| 6. Dr. Soumyajit Roy                  | soft-oxometalates,             |                                |
| Advt. Date: 30/05/2014                | polyoxometalates, colloids     |                                |
| Email: <u>s.roy@iiserkol.ac.in</u>    | and interfaces, heterogeneous  |                                |

## List of faculty members seeking Postdoctoral and Research Scientist Fellow

|  | catalysis  |   |
|--|--|---|
| <ul> <li>7. Dr. Prasun Mandal<br/>Advt. Date: 30/05/2014<br/>Email:<br/>prasunchem@iiserkol.ac.in</li> <li>8. Pradip Kumar Ghorai<br/>Advt. Date: 30/05/2014<br/>Email:<br/>pradip@iiserkol.ac.in</li> </ul> | Molecule Spectroscopy,<br>Microscopy and Ultrafast<br>Fluorescence Dynamics of<br>Chemical, Biological and<br>Material systems<br>Theoretical<br>Chemistry/Molecular<br>Simulation   | PhD in Physics or Chemistry<br>with experiences in writing<br>programming language.   |
| 8. Dr. Sayan Bhattacharyya<br>Advt. Date: 24/06/2014<br>Email: <u>sayanb@iiserkol.ac.in</u>  | Materials Chemistry and<br>Nanotechnology  | The applicant should have<br>experience in chemical<br>synthesis of nanomaterials and<br>the characterization<br>techniques. Experience in<br>heterogeneous catalysis is<br>desirable. The applicant need<br>to have a decent number of<br>publications in reputed<br>international journals and<br>independent research aptitude.<br>This position requires a<br>commitment of at least one<br>year. |
| 9. Dr. Raja Shunmugam<br>Advt. Date: 24/06/2014<br>Email: <u>sraja@iiserkol.ac.in</u>  | Synthetic Macromolecules,<br>Drug Carriers, Self-<br>assembling Nanomaterials,<br>and Sensors  |   |
| 10. Dr. Debasis Koley<br>Advt. Date: 07/07/2014<br>Email: <u>koley@iiserkol.ac.in</u>  | Computational Chemistry,<br>Computational Modeling of<br>Homogeneous Catalysis with<br>an aim to develop new and<br>improved catalysts, Quantum<br>mechanical computation of<br>Organometallic and Organic<br>molecules, Computational<br>biophysics: Including<br>molecular dynamics and<br>molecular docking<br>simulations. |   |