

# Department of Science and Technology

## New Initiative in Bioinorganic Chemistry

Department of Science and Technology, Government of India is launching three types of programmes in the area of bioinorganic chemistry for strengthening research in this area. They are:

### 1. Generation of major programmes in the areas listed below:

- a. Oxido reductases: As functional models for understanding phenomena and structure-activity relation
- b. Bio mineralization
- c. Metal based drugs including leads from traditional medicine

Under this category, inter- or intra-institutional collaboration among different research groups is welcomed.

### 2. Invitation of individual/collaborative projects in the following areas:

- a. Diagnostic and imaging through bioinorganic systems
- b. Fully functional models for metallo enzymes including biomimetic systems
- c. Ion binding and directed transport including drugs
- d. Metal ions as selective structure breakers for proteins, nucleic acids and their conjugates
- e. Metal induced neuro degenerative disorders
- f. Development of new advanced techniques for bioinorganic molecules including computation methods
- g. Any other research areas in bioinorganic chemistry

Proposals are invited in the above two categories and interested researchers may submit twenty copies of the proposal in SERC format (The format can be downloaded from our website: [www.serc-dst.org](http://www.serc-dst.org)).

### 3. Institution of twenty Bio-inorganic Research Fellowships (15 pre-doctoral and 5 post-doctoral)

The conditions of the fellowship are given below:

#### **For pre-doctoral fellowship:**

1. Registration leading to Ph.D. degree is essential.
2. Mentor should forward the students application to DST through the institution where research would be carried out.
3. The institute should certify that the candidate possessed entry requirements for doctoral research and would be permitted to register for Ph.D. if the fellowship was granted.
4. Fellowship amount equivalent to DST/CSIR will be given for a period of three years (2 years JRF and 1 year SRF) and a contingency grant of Rs 50,000/- per year will also be provided. The candidate is expected to earn SRF from CSIR and other sources after the end of 3 years and the fellowship will not be extended beyond three years. It is expected that the candidate will be able to join the main stream of research fellowship schemes within the 3 years of research experience.
5. The application should include, among other things, marks obtained from class XII onwards, details of national level test passed (GATE/NET), research experience, if any, etc. There is no separate format for applying for this fellowship.

#### **For post-doctoral fellowship:**

1. Maximum duration is two years with an initial period of one year extendable by one more year.
2. Emoluments equivalent to DST/CSIR will be provided. In addition annual contingency and consumables grant of Rs 1.00 lakhs (including Rs 15,000/- for travel) will be provided.
3. Applications for post-doctoral fellowship need not be forwarded through the host institution initially and there will be no personal interview.
4. The fellowship is not available for continuing post-doctoral research with the Ph.D. supervisor.
5. The application should include, among other things, research work done during doctoral work, list of publications, proposed research work, etc. There is no format for applying for this fellowship.

Last date for receiving proposals/applications for all the three categories is **31 March 2006**. The proposals/applications may be sent to the following address with the envelope superscribing 'New initiative in Bioinorganic Chemistry'.

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