

Department of Science and Technology

INVITATION OF PROPOSALS UNDER THE GREEN CHEMISTRY PROGRAMME

Department of Science and Technology, Government of India, under the auspices of Science and Engineering Research Council, has launched a new programme in the area of Green Chemistry. Under this programme, the following activities will be supported:

- (1) Industry – academia/national laboratories collaborative projects wherein definite financial contribution from industry is necessary.
- (2) Open-ended R&D projects from academic institutions and national laboratories. These proposals should either have significant novelty or should result in potentially exploitable processes.
- (3) Human Resource Development Programmes.

Proposals are invited throughout the year for the categories 1 and 2 mentioned above. Details about the Human Resource Development programmes will be intimated later.

For industry–academia/national laboratories collaborative projects, the following problems have been identified and collaborators are encouraged to submit proposals in these areas:

- (a) Improvements in processes based on sulphonation/alkali fusion where alternate processes are not attractive through recovery of acid and alkali via membrane separation.
- (b) Development of new Friedel-Crafts reaction and development of old Friedel-Crafts reaction in benign media.
- (c) Bromination using benign brominating agent and near complete utilization of bromine.
- (d) Use of heteropolyacid for industrially important processes in place of polluting processes.
- (e) Nitration of pyridine and pyridine derivatives to realize the desired isomer in high yield as, for example, using N_2O_5 in place of conventional methodology.
- (f) Recovery of environmentally undesirable solvents from dilute solutions (< 3%) such as DMSO, DMF, DMAc by membrane process.
- (g) Resolution of racemates with the valorisation of unwanted isomers.
- (h) Catalytic liquid phase oxidation/electrochemical processes for oxidation reactions.
- (i) Greening of chromium industries from ore to final utilization of metal.

The above areas are only illustrative in nature. The scientists, however, are encouraged to also submit proposals in other areas of Green Chemistry/Technology. The project format of 'Drugs and Pharmaceuticals programme' of DST with appropriate modifications may be used for submitting proposals under this category.

For submitting proposals under the open-ended category, the SERC project format available at our website: www.serc-dst.org may be used.

The scientists are required to submit 20 copies of the proposal to the following address:

Dr R. Brakaspathy

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Department of Science and Technology
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New Delhi 110 016
Phone: 011-2652 2815, Fax: 011-26963695, e-mail: rbpathy@alpha.nic.in

The envelope may be superscribed '**Green Chemistry – Industry collaborative projects or Open-ended projects**' (as the case may be)

There is no last date for receiving these proposals. They will be accepted throughout the year.