Department of Biotechnology
Ministry of Science & Technology
Government of India

Call for proposals on 'River Cleaning'

Background: Rivers are our lifeline, not only in terms of sustaining primary producers and recycling the nutrients to ensure a healthy food chain in ecosystems, but also in terms of their contribution to evolution of human societies and cultures in ancient history and their impact on environment and human health. Indiscriminate pollution of rivers poses one of the biggest challenges and deserves immediate attention. Pollution in rivers is mainly on two accounts municipal waste and/or industrial effluent and river surface pollutions such as pious refuse, solid waste, disposal of dead bodies' etc.

Purpose: Application of biotechnology may play a catalytic role in development, demonstration and adaptation of effective bioremediation tools and techniques for waste water management. Aiming to take up biotechnological scientific research/ demonstration projects on river cleaning for providing various possible river clean up options, Department of Biotechnology (DBT) invites project proposals built upon innovative ideas on bioremediation/ biodegradation to address various issues in river cleaning like:

- In- situ detection, mapping and quantification of pollutants with innovative approaches like using GPS-based quantitative mapping, sensor chips etc.
- Replacement of conventional treatment systems with more sustainable options that provide more local benefits.
- Demonstration projects on bioremediation technologies having proof of concept for industrial wastewater.
- R&D projects on development and demonstration of wastewater specific (like dairy waste, textile effluent, tanneries effluent, pulp & paper industry effluent, sugar & distillery effluent, sewage etc.) effective bioremediation options like natural attenuation to bio-stimulation, bio-augmentation or a combination of filtration, phyto-remediation and microbial degradation.

- Development of bioremediation technologies for agricultural run-off for removal of chemical fertilizers and pesticide pollution.
- Development of new and innovative bioremediation technologies at the source point of industrial pollution.
- Mapping of river basin & tributaries for ecological niche and study of its role in pollution as well as in cleaning of the rivers.

Eligibility: Researchers/ Scientists working in the Universities/Academic Institutions/National Laboratories / SIRO recognized Non-Profit Organizations, with sound scientific & technical backgrounds and relevant publications in proposed area can submit applications.

Proposals, which are interdisciplinary and integrative in nature, and focus on a specific area of wastewater treatment, will be given priority. Development of a collaborative proposal with user industry / agencies will be encouraged. Routine open ended pproposals will not be encouraged.

Mode of Submission: Interested researchers must online submit the project proposal through ePromis (http://dbtepromis.nic.in/Login.aspx) under the Environmental Biotechnology programme clearly stating that it is submitted under DBT call for proposal on 'River Cleaning'. Five hard copies of the proposal (alongwith PDF file of soft copy in CD) should also be submitted to Dr. Onkar N. Tiwari, Principal Scienctific Officer/ Scientist 'D', Room No. 621, 6th Floor, Block-2, CGO Complex, Lodhi Road, New Delhi- 110003.

Evaluation Criteria: Proposals will be judged based on scientific and technical merit, with emphasis placed on the delivery of a novel bioremediation option at the end of the project period addressing a particular wastewater problem. However, Department also reserve the right to select or reject the proposal based on the priority and availability of funds.

Contact for furher information: Dr. Onkar N. Tiwari: email ID: onkar.dbt@nic.in; Tel.: +91-11-24361290

Last Date of Project Submission: 15th April, 2016.

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