



DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science & Technology
Government of India

Call for Proposals for Challenge Program on Algal biomass production for cost effective biofuel

Department of Biotechnology (DBT) with its success in the Algal Network project on collection, selection and characterization of Microalgae and Cyanobacteria would like to present opportunity for academia in collaboration with entrepreneurs / industry and put up collaborative efforts to explore this algal collection for biomass cultivation with maximum productivity.

In a program, recently carried out by Department of Biotechnology, nearly 2000 cyanobacteria and Microalgae strains have been collected from diverse ecological niches from regions located all over India by a team of scientists from 12 reputed National R&D Institutes and Universities. The goal is to generate algal biomass to produce liquid hydrocarbon or biodiesel on an industrial scale.

The major challenge is to generate algal biomass at a mass scale on a continuous basis as a feed stock for Bioenergy application. This call is for inviting Innovative R&D proposals (maximum 18 months duration) in collaboration with industry.

Also, the CO₂ utilization from flue gases can be integrated with wastewater treatment and reclamation, providing an early application of this technology. The developed technology will be helpful to preserve our planetary atmosphere and biosphere.

The major challenges would be

1. To increase the algal productivity >0.5 kg/day/1000L or with use of cheaper sources of NPK or with > 90% NPK recycling
2. Lipid content of algae should be > 30 % of dry biomass
3. To reduce production cost by recycling of resources, cheaper bioreactor design, lower power consumption with a target of Rs. 5-10/kg dry algae

Proposals are invited from R&D centers (National Laboratories, Public Institutes, and Universities etc.) preferably with Indian Industrial Partners who are interested in exploring promising algal resources for developing cost effective biofuel and value added product(s) of industrial importance. Proposals in DBT format may be submitted online through eProMIS. A PDF copy of same proposal should reach to sangita.kasture@nic.in before **28th February 2015**.

A single hard copy of proposal (duly forwarded by Head of the Institution) may please be sent to Dr. Sangita Kasture, Joint Director, Department of Biotechnology, Ministry of Science & Technology, Government of India, 8th Floor, Block 2 CGO Complex, Lodi Road New Delhi, 110 003

Proposals will be screened based on merit, demonstrated proof of concept/leads, expertise and existing facility. Only shortlisted proposals will be considered for detailed evaluation by Task Force–Energy Biosciences.

Last date of online submission of proposal: 28th February 2015