

CALL FOR PROPOSALS
FOR
RESEARCH ON PRODUCTION AND UTILIZATION OF
METHANOL & DI-METHYL ETHER AS SUSTAINABLE FUEL
(Clean Energy Research Initiative)

DST plans to initiate a major development programme for production of Methanol from various sources including Indian coal and CO₂ from thermal plants, steel plants etc. The programme would also include direct utilization as drop-in fuel in automobiles and fuel for fuel cell based vehicles.

There are several research issues involved both in production and utilization of methanol and di-methyl ether (DME). The production routes hitherto unexplored but having future potential and requiring research in future viz. development of novel catalysts, utilization of methanol in direct methanol fuel cell, development of engines fuelled on methanol and DME etc. will be considered. These areas are only indicative and any other research area having bearing on methanol economy could also be considered under the ambit of the programme. The interdisciplinary and transformative R&D proposals will be preferred.

WHO CAN APPLY: Faculties of recognized universities and academic institutions, scientists working in National Laboratories, R&D institutions and Research organizations recognized by DSIR individually or in consortium. Genuine and meaningful participation of industry having capability in the area and potential to commercialise the developed technology is desirable. Companies registered under The Indian Company's Act, 1956 / MSMEs having DSIR recognized R&D Centres may also apply individually or jointly with universities / academic institutions / National Laboratories / Public Funded Research Institutions / R&D institutions

DURATION: 36 Months

CALL OPENING DATE: 15.01.2016

CALL CLOSING DATE: 15.02.2016

INDUSTRIAL CONTRIBUTION:

There is no mandatory contribution required from the Industry. However the proposals having industrial contribution would be encouraged. In all the proposals, participating Industry would be required to invest within its own system i.e. production/ test lines and/or develop required infrastructure to adopt research leads and is expected to bring design, engineering and development capability for the benefit of the project.

SPECTRUM OF ACTIVITIES SUPPORTED:

The spectrum of activities include translational research to convert available know how to useful product / process etc as well as applied research aimed at performance enhancement of existing processes and systems. This would also include but not limited to Research, Design, Development and Engineering (RDD&E), Prototype Development of Product/System, Process Development, etc.

ASSESSMENT CRITERIA:

The scientific out-come of the proposal should have clear connect with methanol and DME application. This should be clearly brought out in the proposal. The proposal meeting this requirement would be evaluated based on following criteria:

- ❖ Novelty, scientific uniqueness and technical merit
- ❖ Expertise, facilities and track record of Project Investigation Team
- ❖ Proposal formulation (Precision in objective, adequacy and completeness of literature review, preliminary work done, methodology and work plan, resources requested for this purpose etc.)
- ❖ Need assessment and demand for proposed work

COMPONENT OF GRANT

1. Research Manpower (Nomenclature and salary as per DST guidelines)
2. Equipment cost
3. Outsourcing / Fabrication cost
4. Domestic travel
5. Consumables
6. Contingencies
7. Other cost
8. Overheads as per DST norms.

PROPOSAL SUBMISSION:

Submit following documents in an Envelope marked "**Methanol Call: Name of Principal Investigator**":

- A. 3 copies of complete project proposal in prescribed format (Methanol) with all enclosures (1 marked original + 2 hard copies)
- B. Soft copy in CD:
 - i. Complete proposal (MS word / PDF)
 - ii. Executive Summary of the proposal as given in Project Proposal format (in MS word document only)

The complete set of documents are to be addresses to: Dr. J.B.V.Reddy, Scientist 'D', Room no 12, Hall-C, Technology Mission Cell, Department of Science &Technology (DST), Technology Bhavan, New Mehrauli Road, New Delhi- 110016 before the closing date of the call. Soft copy of Project Proposal and the Executive Summary is also to be e-mailed (*Subject Captioned: Methanol Call 2016 / Name of the Principal Investigator*) to jbvreddy.methanol2016@gmail.com.