# **CALL FOR PROPOSALS**

#### For

# **DEVICE DEVELOPMENT PROGRAMME**

#### under

# (TECHNOLOGY DEVELOPMENT PROGRAMME)

Last Date of Submission: 31st January, 2018

The Department of Science & Technology (DST) under its Device Development Programme has been promoting and supporting activities related to indigenous development of selected devices in the country. During recent past, DST has supported the development of instruments/devices etc. at various R&D institutions/universities. This has resulted in development of these instruments and subsequent transfer of know-how to various production agencies for their commercial production.

#### **IDENTIFIED AREAS:**

Following areas have been identified and project proposals may be submitted for development of device in the following areas: -

#### • Measuring/ Monitoring devices/instruments: -

- Low cost IR spectrophotometers (NIR & MIR)
- Low cost Raman spectrophotometers.
- ✤ Low cost GC, HPLC instruments.
- ✤ Micro-fluidic platforms for various applications.
- Vibration Measuring/Monitoring Instruments
- Straightness Measuring Instruments
- Teaching Aid Instruments
- Quality Measuring Instruments
- Sensor based devices
- Food adulteration detection devices: -
  - Affordable devices to check for adulteration in food, including grains, spices and raw & processed food.
  - Devices for detection of hazardous elements in food like lead, mercury, arsenic etc.

#### • Plants diseases detection devices.

- Low cost, fast and compact device for the detection of disease in plants.
- Spectroscopic systems for quantification of disease level in plants.

#### • Environmental monitoring devices/ Early warning Systems: -

- ✤ Low cost kit for automobile exhaust emission measurement.
- Instrument for pollution measuring and monitoring systems

#### • IoT enabled industrial systems:-

✤ IOT enabled industrial systems for various applications

#### • Disaster management in sewages and Man-holes:

 Novel systems for detection and monitoring of hazardous gases like Methane and Hydrogen Sulphide in sewage and man-holes.

## • Textile Instrumentation

- Instruments for texture evaluation and inspection of textile surface profile.
- Multi-axial testing systems for woven, knitted, nonwoven textile and composite laminated structures.
- Axial impact testing of linear textile elements like fibers, yarns and ropes.

# WHO CAN SUBMIT PROJECT PROPOSALS

The Project Proposal could be submitted for financial support though <u>ONLINE MODE</u> <u>ONLY</u> by Scientists/ Engineers/ Technologists working in Universities and other Academic institutions; R&D institutions/ laboratories having adequate infrastructure and facilities to carry out R&D work.

Financial support is provided only for temporary staff salaries, equipment, consumables, domestic travel and other miscellaneous items. No support is provided towards basic infrastructure, buildings and International travel. The investigators/ R&D Group should have adequate experience and expertise in the relevant area of proposal.

# PROCEDURE FOR SUBMISSION OF PROJECT PROPOSALS

The Project Proposal could be submitted though <u>ONLINE MODE ONLY</u> (<u>www.online dst.gov.in</u>). In addition, two (2) hard copies of the project proposal should be submitted in the enclosed format to DST.

The project proposal may be sent to:-

Dr. Neeraj Sharma Adviser & Head Technology Development & Transfer Division Department of Science & Technology Technology Bhavan, New Mehrauli Road NEW DELHI – 110016

#### POINTS TO BE KEPT IN MIND WHILE SUBMITTING PROJECT PROPOSALS

# 1. Involvements of industries

It is envisaged that the end product of development shall be transferred to industries for commercial production. Hence it is desirable that industry (s) may be associated with project right from the beginning with defined participation in technical terms. As far as possible the proposed device should have sufficient users in the country and there should be adequate demand for the product.

# 2. <u>Project Duration</u>

The projects should be time-bound normally for duration of 2-3 years depending upon the device to be developed.

# 3. <u>Monitoring of the Project</u>

Implementation of the projects is monitored regularly through Progress Reports, Financial Statements and Committee of Experts in Group review meetings and onsite as well.

# GENERAL TERMS AND CONDITIONS FOR THE GRANT

- **1.** The Institution where project will be implemented, will assume financial and other administrative responsibilities of the project.
- **2.** In case of multi-institutional project, the Principal Investigator has to obtain formal agreement from the collaborating Institutions/Scientists.
- 3. International travel is normally not permissible under the project.
- 4. The manpower recruited for the project should be paid as per the rules of the institute and guidelines of the Government of India. The posts which are not covered under the guidelines but permissible under projects at host institute are also permitted.

The temporary staff employed for the project by the organization is not treated as employees of Government of India and the deployment of such staff at the time of termination of the project will not be the concern / responsibility of the Government of India.

- 5. It is the policy of DST to maximize the use of equipment. In this light, investigator shall permit the use of spare or idle capacities of equipment procured under the project by bona fide users (research workers in other DST funded projects or other projects of the institute).
- **6.** All the assets including equipment acquired and prototypes fabricated from the grant will be the property of Government of India and should not be disposed of, or utilized

for purposes other than those for which the grant has been sanctioned, without the prior sanction of the Department of Science & Technology.

- 7. The Principal Investigator/ Organization will be required to furnish progress reports every six months on the progress made on all aspect of the project including expenditure incurred on various approved items during the period.
- **8.** The Comptroller and Auditor General will have the right to access to the books and accounts of the organization for Grants received from the Government.
- **9.** The organization would maintain separate account for the project. The grant should be kept in an interest earning bank account and the interest earned should be reported to the Department of Science & Technology. The interest thus earned will be treated as a credit to the organization and will be adjusted towards further installments of the Grant.
- **10.** Grant can be terminated by DST at any stage if it is convinced that the Grant has not been properly utilized or appropriate progress is not being made.
- **11.** If the Principal Investigator wishes to leave the organization where the project is based, the organization/investigator will inform the same to DST and with its consultation evolve steps to ensure successful completion of the project, before relieving the Principal Investigator. The Investigator should submit three copies of complete and detailed report of the work done by them on the project before leaving the organization.
- 12. Sale proceeds, if any, of the components, prototypes, pilot plants etc. fabricated as a result of the development of the project arising directly from funds granted by the Department of Science & Technology shall be remitted to the Government of India. The Government of India, may, at its discretion allow a portion of such receipt to be retained by the organization.
- **13.** The know-how generated from the project would be the property of the Government of India and any receipts by way of sale of know-how, utilization of know-how for production, royalties etc. shall belong to the Government of India. The Government of India, may, at its discretion, allow a portion of such receipts to be retained by the organization.
- 14. The Principal Investigator / organization will prepare all the documents that would be required for the transfer of know-how to the production agency/agencies and submit them of DST as and when required. The organization will be responsible to transfer the know-how developed to the production agency/ agencies and supply all the needed information to the production agency/ agencies as and when required.