EOI document:

Expression of Interest for development of commercial prototype of a signal processing system for optical accelerometers/vibration sensors.

CSIR-CGCRI has been engaged in developing several technologies which caters to key National initiatives and has sizeable market in niche applications in India and abroad.

One of the key technologies under development is *fiber optic sensors for vibration monitoring of electrical machines*. In this area, development of fiber optic sensors and signal processing system and subsequent calibration tests have been carried out with reasonable success. There is an imminent requirement of handholding with prospective industries as part of ongoing initiatives for the development of a commercial prototype of the signal processing system. The broad specification of the targeted system would be to accomplish a Single Channel Signal Processing unit capable of interrogating 12 FBG basedaccelerometers. The Scanning Frequency would be 3KHz. There would be provision for on-board data logging, 16 channel Analog Current output, 16 channel Analog Voltage output, provision for 1x4 optical switch and also a Labview based GUI. The reliability system should be suitable for 24x7x365 operation. The system should have user friendly GUI interface, which must also support remote access.

Industries interested for development of a commercial prototype of the Optical Signal Processing unit as per the design and requirement of CSIR-CGCRI may apply to Director, CSIR-CGCRI furnishing the following information and may send their intent to Head, Project Management Division, CSIR-Central Glass and Ceramic Research Institute, Kolkata – 700 032 (E-mail: sitendum@cgcri.res.in) in the format (to be typed in the company letterhead with signature and official seal):

- 1. Name of the Technology of Interest.
- 2. Name of Company:
- 3. Name and Designation of Contact Person:
- 4. Corresponding Address with Telephone Number and E-mail id:
- 5. Website Address
- 6. Products/Services handled
- Annual Turnover of last three years (enclose audited balance sheets) [Concessions as applicable to start-ups and MSME would be available in deserving cases] (As of CSIR and Govt. of India's MSMS and Start-up India Policy)
- 8. Details of Income Tax registration, sales tax registration, service tax registration etc.
- 9. PAN number
- 10. Available Technical Manpower
- 11. Briefly state why you are interested in the technology