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## Invitation For EOI

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### 1. About IHFC

#### I-Hub Foundation for Robotics (IHFC)

IHFC is the Technology Innovation Hub (TIH) of IIT Delhi incorporated as a Section 8 company, registered under The Companies Act, 2013 having registered office at MZ-122 IIT Room No. Hauz Khas, Delhi, India-110016, established under the mandate of the Govt. of India through the Department of Science and Technology (Ministry of Science and Technology), under its NM-ICPS (National Mission on Interdisciplinary Cyber-Physical Systems) mission for promoting research and development, incubating/promoting individuals/start-ups, entrepreneurs, organizations and corporations individually or in collaboration with faculty and other parties for harnessing the new wave of technological innovation in India.

### 2. About Eoi

IHFC is issuing this online EOI (Expression of Interest) for inviting commercial rate submission for an integrated 2-Dimensional magnetic maneuverer device with micron scale precision with high-resolution optical microscope attached for microscopic observation of magnetic field influence on magnetic compounds or organisms for setup at IIT Delhi. The device should primarily compose of four components or more:

- a high-resolution and digital optical microscope used for observation of a studied sample
- a source of magnetic field which allows for precise control of intensity and direction of the magnetic field to which the sample is subjected
- a non-magnetic motorized stage which allows for smooth control of the sample's location
- a control electronics and an advanced computer software which controls the entire system and allows for microscope image recording and vision processing.

The system should allow for flexible control of a magnetic field direction and intensity in the plane of the specimen. The field properties can be set as constant values or may vary over time. Examples of field control options:

- constant field in North, South, East or West
- circular rotation of the field
- constant switching between North-South or East-West
- manual control of the field direction and intensity through a joystick
- user defined field direction and intensity as function of time loaded from a \*.csv file

The device should also be controlled with software which should be provided with the instrument and allows for control and monitoring of the state of the system. Additionally, it should allow capturing of

the microscope camera image and should provide several real-time vision processing functionalities, such as:

- tracking of moving objects and exporting their trajectories to \*.csv file
- counting of moving objects
- thresholded view which simplifies visual identification of moving objects
- moving object trace recording etc.

1. Participant should provide the latest technology equipment and test software along with complete installation, manuals and extensive training to students to use the equipment.

2. Commercial rates quoted for items should be best in Industry with full terms and conditions including 3 years warranty of these items.

### **3. Eligibility:**

This Expression of Interest (EOI) is open for Manufacturers, Retailers, Whole sellers, distributors, who are in the business of supplying 2-dimensional magnetic maneuverer system with microscale precision attached with a high-resolution optical microscope.

### **4. Selection Process:**

The Selection of Proposals shall be done on the basis of IHFC policies, rules, procedures and statutes, and in conformity with the best practices through an objective selection procedure in line with vision of IHFC.

**EOI Opening Date** : 06 June,2023.

**Last date for submission:** 27 June, 2023.

**Extended date for submission:** 25 August, 2023.

Interested parties can submit their technical cum commercial proposal with

kind attention – VP- Operations - IHFC

Sub : Proposal for Bacteridrome Advance

..along with (As per Annexure) in the PDF or Excel and email it to [contact@ihfc.co.in](mailto:contact@ihfc.co.in)

Thanks

IHFC Team

5. Annexure