

Expression of Interest to purchase Engineering Design Products Developed at training Workshops at Design Innovation Centre, UIET, Panjab University, Chandigarh

A. EOI is invited for Early Stage Partnership for the following:

- 1. To purchase prototypes developed at the DIC during training Workshops**
- 2. To take training to co-develop products of utility at the DIC and explore market for utility and feedback.**

The Design Innovation Centre (DIC) is a Project sponsored at UIET, PU by MHRD for giving training to engineering students and community to develop useful products. A variety of prototypes and products are routinely developed by the trainees at Training Workshops and further improvement. EOI is invited from MSME and Startups to organise training in partnership with the DIC-UIET and take the prototypes developed at such training Workshops to marketplace.

In view of the Covid pandemic, the following useful designer products and training on their fabrication are immediately available at the DIC-UIET:

i. Touchless Hand Sanitizer:

DIC-UIET, jointly with the Central Workshop has fabricated a variety of Touchless hand sanitizers to dispense desired amounts of disinfectant. These are electronically operated, and dispense the sanitizer automatically, when hand is taken in close proximity to the dispenser nozzle. The dispensers can be fabricated with container volume of 1 litre to higher volumes at costs varying from Rs 700 to Rs 2000, aesthetically from Acrylic or wood. If required, foot operated sanitizers, seen commonly in the market can also be fabricated.

ii. Document Sanitizing Box :

Papers, documents and files can carry coronavirus around and become a source of infection. However, the virus can be very effectively killed by temperatures above 60C. At temperatures reaching 90C, as many as a million viruses in a droplet can be completely killed as per literature. Interns at the DIC-UIET have developed a Document Sanitization Box. The Box can be made in variable sizes. A typical box of 6 cuft can sanitize 2 to 3 Kg of paper in 15 minutes. The temperature is automatically controlled for the fixed duration and can be kept running continuously for several hours. It can

sanitize anything that can stand 95C for 15 minutes. It is particularly made for documents since these cannot be sanitized with alcohol or water based disinfectants. The Document Sanitizing Box can be made aesthetically at fabrication cost of Rs 5000/- to 10000/- using GI Sheet, MDF board or any heat resistant polymer.

B. While the above products and training are immediately available at the DIC-UIET, a variety of other items are also designed through such training sessions.

Some representative examples are as follows:

- i. IoT based switch to replace existing modular switches for home and commercial applications.*
- i. Real time traffic vehicle classification and monitoring system*
- ii. Real Time Multifunctional traffic light system*
- iii. Pupillometer for critical care of patients in trauma*
- iv. Technology for design and development of transparent dental aligners*
- v. Devices for the measurement of bite and hand grip forces, foot pressure etc*
- vi. Hybrid solar-rickshaw.*
- vii. Autonomous aerial vehicles (Drones) with variable specifications for remote jobs and surveillance.*

C. Invitation for submitting EOI :

Parties interested in one or more of the above technologies/ products may submit EoI throughout the year. Please feel free to visit us at the DIC and submit the following details:

- i. Formal details of the EOI applicant (Address, Registration, PAN, TAN, UID).*
- ii. Kind of partnership proposed (Training, Licensing, Commercialisation, joint product development, R&D, equity sharing, Down payment, Royalty etc.)*
- iii. Plan to utilise the knowhow during the next 3 months.*
- iv. Terms of benefit sharing with DIC-UIET.*

Interested parties may contact Dr Rakesh Tuli (9915035511), Dr Manu Sharma (09888509778) or Dr Naveen Aggarwal (9814865455). The written offer should be received in sealed cover in the office of Project Officer (Att Mr Bhupinder Singh) , DIC- UIET, Block 1, UIET, Panjab University.