IITI DRISHTI CPS Foundation
5th Meeting of Hub Governing Body (HGB)

The 5th of the Hub Governing Body (HGB) of IITI DRISHTI CPS Foundation was held on August 25, 2023 (Friday) at 10:00-11:30 am; at Abhinandan Bhavan, IIT Indore, and virtually through Zoom meeting. The following were Present:

1.	Prof. S. Joshi, Director (Officiating), IIT Indore	Chairman, Board of Directors, and Chairman, HGB
2.	Dr. I. A. Palani, Dean, Research and Development, IIT Indore	Ex-officio and Member, HGB
3	Prof. Bhupesh Kumar Lad, Professor, IIT Indore	Project Director and Member Secretary
4	Dr. Maitrayee Nanda, Ex-Secretary AR & DB, DRDO, Ministry of Defence, Government of India	Member, HGB
5	Dr. JBV Reddy, Scientist, Department of Science and Technology	DST/ Mission Representative
6	Dr. Anurag Mishra, Scientist, Department of Science and Technology	DST/ Mission Representative
7	Mr. Amit Agarwal, Managing Director, Cyber Infrastructure (P) Ltd, Indore	Member, HGB
8	Prof. Uday Shankar Dixit, IIT Guwahati	Member, HGB
9	Mr. Aditya Vyas	CEO, IITI DRISHTI CPS Foundation
10	Ms. Neelima Alam	Representative of Financial Adviser, DST

Leave of absence was granted to the following HGB members and Special Invitees:
1. Prof. Asim Tewari, Professor, IIT Bombay (Member, HGB)
2. Prof. Arnab Bhattacharya, Professor, IIT Kanpur (Member, HGB)
3. Prof. A.K. Darpe, Professor, IIT Delhi (Member, HGB)

ITEM No. 1
Opening Remark by the Director, HGB

Prof. Bhupesh Kumar Lad, Project Director, IITI DRISHTI CPS Foundation, IIT Indore, welcomed all HGB members and special invitees to the 5th meeting of the Hub Governing Body (HGB).

ITEM No. 2
Actions taken by the hub and confirmation on minutes of last HGB Meet

Mr. Aditya Vyas, CEO, IITI DRISHTI CPS Foundation, IIT Indore, welcomed all the members, took approval on minutes of the previous HGB meeting. He covered various hub operations as well as the actions done in response to the fourth HGB meeting's suggestions.

- Incubated startups secured next round of funding and collaborated with relevant industries. Mobilab received an additional 5 crores, while Medhini received 12 crores grant in collaboration with African Health Business and the United Nations.

- The hub primarily focuses on enhancing technology in the healthcare and smart manufacturing sectors, working in partnership with relevant industry.
- Hub organized a two-day startup boot camp and a technology exhibition, "SETU" (Stakeholder Engagement in Technology Upgradation) for Accelerated Commercialization for commercialization of technologies by bringing together prominent stakeholders, industry experts, and visionaries.
- Also launched three issues of its outreach bulletin DRISHTIKON, programs such as SHAKTI 1.0, Post-Doc Entrepreneurship Program, Faculty Entrepreneurship program, and showcased technologies at the 2nd National Workshop on Technology Innovation in Cyber Physical Systems (TIPS) in New Delhi from April 6-8, 2023.

ITEM No. 3
Research Project Proposals received by the hub and grading as per the new DST guidelines.

Dr. Atreyee Ghosh, Consultant- Digital Twin Technology, IITI DRISHTI CPS Foundation, continued the meeting by briefing about the projects onboarded under various programs of the IITI DRISHTI CPS Foundation and the startups promoted by the hub. The details of the projects and the startups are as follows: -

S.no	Name of technology	Team	Brief
1	**DR-Biomarking**	Sayantan Ghosh, Health Tech	Portable Immunoassay for diagnosing and prognosticating Diabetic Retinopathy with the help of proteomic biomarkers present in tear samples connected with smartphones.
2	**RETITECH**	Pratyush De, and Dipta Talukder, Health Tech	A non-invasive technology that can detect the affected retina caused due to increased sugar with the help of fundus images of the retina within a very short time.
3	**iGLU: Intelligent Glucometer**	Dr. Amit M. Joshi, Health Tech	Modelling and simulation-based intelligent diet control mechanisms aid in monitoring diabetes which includes short NIR optical spectroscopy and a detector that receives light variations based on glucose levels, integrated with ML-based glucose prediction
4	**ASOCT Analyzer**	Jahnavi Sai Ganta, Health Tech	A deep neural network specifically trained to segment the morphology from ASOCT images for Primary angle-closure glaucoma (PACG), a condition that may lead to permanent vision loss, is one of the leading causes of irreversible blindness worldwide and has no known cure.
5	**SCENT-SENSE**	Dr. Ragesh G K, Health Tech	The hardware and software parts of the e-nose system, such as the sensor array, data collecting and processing units, along the user interface designed for Aroma analysis and Evaluation in Ayurveda
6	**HREADAI**	Dr. Puneet Gupta, Health Tech	The remote photoplethysmography(rPPG) based method uses a person's face video dataset comprising videos of masked subjects' faces and pulse information to detect heart rate.
7	**Digital Assistant Attorney**	Dr. Tanveer Ahmed, Smart City and Societies	India's first digital twin of a lawyer that analyses fact-based cases and performs an Intelligent, personalized case prediction along with secure and confidential data handling

8	**BrainSync**	Jha Rohan, Krish Agrawal, and Rupal Shah, Health Tech	EGG signals are studied and classified using machine learning and deep learning techniques which can be used as a preprocessing toolbox to detect the depression/thoughts of a person and lie detection.
9	**AI Accelerator**	Narendra Singh Dhakad, Smart City and Societies	Novel memory cell that can perform in-memory computation effectively for data-intensive applications to overcome the Von-Neumann bottleneck
10	**PUF Secure Key**	Neha Maheshwari, Smart City and Societies	Implementation of arbiter PUF on FPGA security and privacy of the data and avoid unauthorized or counterfeit devices getting access to data
7	**TH-code based**	Akul Pradeep, Abdul Haleem, Ruhaan Chowdhry, Smart City and Societies	Alphanumeric coordinates: TH-CODE converts Latitude & Longitude for precise location and the application will implement AI using Deep Learning to identify specific areas.
8	**DT-Mechanical Ventilator**	Dr Deepak Agrawal, Health Tech	Digital Twin of ventilator which utilizes heterogenous data to create probabilistic predictive models for proactive maintenance of the mechanical ventilator using AI/ML techniques for neurotrauma patients.
9	**Digital Oncologist Assistant**	Dr Harshal Gupta, Health Tech	AI-aided breast cancer treatment will assist oncologists in making reasonable and safe decisions by reducing decision error and response time that help patients achieve personalized treatment with the help of the computational framework
10	**Easiofy Solutions**	**Founder**: Meenal Gupta **Co-Founder**: Noor Fatma **Co-Founder**: Sheetal Tarkas	Using ImagiXAI as a cost-effective, reliable, and secure cloud based PACS (Picture Archiving and Communication System) that automates the process of creating 3D models of the CT/MRI/PET scans and allows you to visualize them.
11	**mSense**	**Founder:** Mr. Shiv Shankar Maurya **Co-Founder:** Ms. Surekha Gupta **Co-Founder:** Mr. Vipin Agrawal	AI-powered defect detection system is developed that identifies quality defect issues by capturing images as well as sound by the technology
12	**Pressage**	**Founder:** Aman Bhambra **Co-Founder:** Kamalpreet Singh **Co-Founder:** Atul Sharma	Presage provides an AI and IoT-based predictive maintenance tool for asset management of rotating machinery to reduce asset breakdown and improve decision time by providing a single platform to monitor and manage asset health.
13	**Mobilab**	**Founder:** Mr. Sahil Jagnani **Co-Founder:** Mr. Ankit Chowdhury **Co- Founder:** Ms. Pooja Poddar	Mobilab provides an IoT-enabled, battery-powered, portable low-cost device with an inbuilt validated disease prediction model with a reduced diagnostic time of only 30 minutes
14	**Nemi**	**Founder:** Akshay Bajpayee **Co-Founder:** Akanksha Bajpayee	An online portal that integrates an AI-based career guidance system. The platform integrates skill-intensive courses for students, offers solutions for personality development, and ensures the provision of internships and jobs to learners

The Hub Governing Body (HGB) committee members took the record of the same and suggested the following: -

1. The committee advised to make a financial plan for future activities of the hub.

2. The committee recommended to organise more events like SETU to connect with stakeholders, line ministries, startups, etc.
3. The committee recommended seeking the assistance of the HGB technical staff in order to collaborate with more technologists.

ITEM No. 4
The meeting concluded with a vote of thanks to the Chair and HGB members.

Prof. Bhupesh Kumar Lad
(Project Director and Member Secretary)

Prof. Suhas S. Joshi
(Chairman)