



#### **OBJECTIVE:**

DEMY OF HIGHER EDUCATION (Deemed to be University)

n 3 of UGC Act. 1956 )

The Centre for Interdisciplinary Research (CFIR) was established in October 2018 with the objective to create a platform for promoting research across different disciplines at Karpagam Academy of Higher Education (KAHE) headed by Capt. Dr. K. P. SRIDHAR. CFIR has long recognized the value of interdisciplinary research in pushing fields forward and accelerating scientific discovery. Important research ideas often transcend the scope of a single discipline or program. CFIR also understands that the integration of research and education through interdisciplinary training prepares a workforce that undertakes scientific challenges in innovative ways. Thus, CFIR gives high priority to promoting interdisciplinary research and supports it through a number of specific solicitations. CFIR also encourages researchers to submit unsolicited interdisciplinary proposals for ideas that are in novel or emerging areas. This site is meant to be a guide to the different mechanisms through which CFIR promotes and supports interdisciplinary research. We also provide support for filing patents.

#### **MEMBERS:**

- 1. Capt. Dr. K. P. SRIDHAR (HEAD)
- **2.** Dr. S. Baskar
- 3. Dr. C. Prajitha
- 4. Lt. S. Nithya
- 5. Mr. S. Prabhakaran
- 6. Mrs. D. Yashika

#### FUNDED PROJECT RECEIVED SO FOR:

Sl. No.	Name of the Project	Amount Sanctione d	Principal Investigator	Co-Principal Investigator	In collaboration with
1.	SUDDHA VAAYU: An Electrical Chamber for Detection and Mitigation of Air Pollution	Rs. 69,52,000		Capt. Dr.K.P.Sridhar	IITD-New Delhi
2.	Collecting Particulate Matter in Air Using Filters Placed on the Top of aMoving Car	Rs.18,81,000		Capt. Dr. K. P. Sridhar	IITD-New Delhi
3.	Design and Developmentof Novel Mechanical Gripper Robotic Arm forBore Well Rescue Operations	Rs. 54,18,380	Capt.Dr.K.P.Sridhar		Nil
4.	Implementing Automatic Brain Abnormality Detection System Using Reactive Optimized Convolution Neural Networks	Rs. 32,28,790	Capt.Dr.K.P.Sridhar		Nil

5.	Development of a FullyAutomated Municipal Solid Waste Segregator with Advanced SensingModule Using Applications Specific Integrated Micro Controllers	Rs. 32,64,360	Dr. S. Baskar		Nil
6	A Novel, Low Cost Automated Agrobot for plant Disease Analysis and Control	Rs. 87. 97,537	Dr. S. Baskar	Capt.Dr.K.P.Sridhar	Nil

#### NUMBER OF PATENT: 71 Nos.

**COPY RIGHT: 6 Nos** 

## **TNSTC STUDENT PROJECT APPLIED: 22Nos.**

# **DEVICE DESIGNED & DEVELOPED BY CFIR AT A GLANCE:**



MULTISTAGE AIR PURIFICATION CHANNEL

SIX FACE AIR FILTRATION BOX

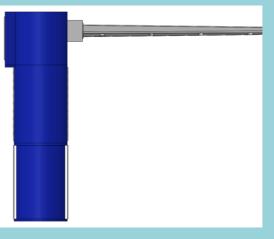
ATMOSPHERIC AIR FILTRATION CHAMBER







OUTDOOR AIR PURIFIER



VERTICAL AIR PURIFIER



OXYGEN LEVEL INDICATOR



LEG RELAX PEDAL



PACKED BED REACTOR APPARATUS

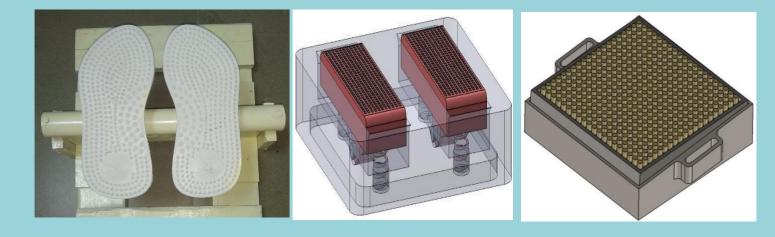


MULTI-STATION PEDAL OPERATED HAND WASHING MACHINE

PORTABLE HAND WASH STATION



BIODEGRADABLE HEPA FILTER



FOOT RELAX PEDAL

TRAVELER ACUPUNCTURE PEDAL TRAVELLING PEDAL



WATER TANK CLEANER



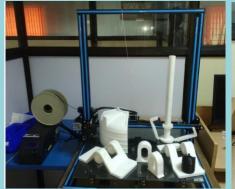
TANK CLEANER



TANK CLEANER



NAPKIN PRODUCTION



RPT DESIGN TOOLS



**RPT MACHINE** 

#### FOR INSTITUTIONS CONSULTANCY WORK:

Our goal is to be your innovative caretaker and industry connection. If you are creating innovations as a part of your research at the CFIR, we can help you with many aspects of yourinnovation journey.

Among other things we:

- Help manage the intellectual property rights associated with your work,via copyright, patent applications, and trademark management
- Help you meet compliance requirements by disclosing the works and inventions you createdthrough our Innovation Portal
- Help you connect with companies or organizations interested in licensing innovations fromyour research
- Help you connect with companies interested in exploring research collaborations

### FOR INDUSTRY RESEARCH CONSULTANCY WORK:

The CFIR is home to experts in fields ranging from green technology to education science. Inventors and developers across our campus have created innovative work that is ready to be put to use in research and in the marketplace. We invite investors and industryto work with us in mutually beneficial partnerships to bring KAHE innovations to the world.

#### **CENTRE FOR MENSTRUAL HYGIENE MANAGEMENT AND SDG**

Our goal is more specific to have introductions to support the global goals. For that we have set up a centre (USSDG) to motivate and support the programs as listed by UNDP. More goals are concentrated and we are conducting programs based on the goals.



#### FOR STARTUPS:

If you have an idea for a start-up based on or using CFIR research, simply contacts us o set up a meeting.

- We'll discuss your business idea, walking you though the strengths and weaknesses of yourproposal
- We'll walk you through an intellectual property inventory to figure out what may be protectable or who might be in your way
- We can help you decide if this innovation can support a new business, since sometimes a one-off product is better licensed to an existing company who doesn't have to build everything from the ground up

#### **CONTACT TIME:**

A meeting will be conducted on every Monday (In Person) at CFIR office, Karpagam Academy of Higher Education, Coimbatore.

## Further Queries Contact:

The Head, The Centre For Interdisciplinary Research (CFIR), Karpagam Academy of Higher Education, Coimbatore – 641021 Mobile No: 0422- 2980011-255