# ICT BASED TWO DAYS WORKSHOP

ON

# "ARDUINO FOR PHYSICS EXPERIMENTS"

18th - 19th January, 2024

Organized By



# SCHOOL OF PHYSICS SHRI MATA VAISHNO DEVI UNIVERSITY,

KATRA (J&K)-182320

In Collaboration With



**IIT BOMBAY** 

POWAI, MUMBAI, MAHARASHTRA - 400076

#### INTRODUCTION:

Arduino is a simple, low price, easy to develop open source code system which can be easily implemented in Physics Lab due to wide availability of sensors and transducers. Arduino platform can, therefore, be used as an alternative for conducting experiments in Physics, taking measurements and collecting data. Moreover, the reorganization of experiments from Electrical, Electronics and Mechanical engineering can be carried out in Physics laboratories with Arduino to develop new experiments for determining the useful properties of materials. The workshop is open for all the faculty members, technical Staff, research scholars and students of SMVDU. The objective of this workshop shall be to introduce the use of Arduino to participants of various schools at SMVDU which will enable them to learn the use this versatile platform to explore and perform desired Physics experiment.

#### MODE AND CONTENTS OF WORKSHOP:

Each day of the workshop consists of three to four lecture/hands-on-experimental sessions (of approximately 1 to 1.5 hour duration each) by resource persons from IIT Bombay. The sessions will cover the following:

- ☐ Arduino to enhance Physics learning and teaching
- ☐ Arduino hardware demonstrations
- ☐ Hands on experiments using Arduino and Spoken tutorials.
- ☐ Arduino on Cloud
- ☐ Spoken Tutorial Experiments with Arduino on Cloud
- ☐ Hands on experiments on CircuitJS.

### REGISTRATION FEES

(To be paid to J&K Bank, SMVDU)

Participants	Amount Rs.
In-house/ Local/ Campus	150/- (Inclusive of GST)

<sup>\*</sup>The registration fees will include registration kit and Tea/Coffee during session breaks. Seats are limited to 60 participants only.

#### ORGANIZING COMMITTEE:

Patron: Dr. Sunil K. Wanchoo (Head, SoP & Dean, FoS)

Coordinator: Dr. Pankaj Biswas, Asst. Professor

Co-Coordinator: Dr. Jitendra Sharma, Asst. Professor

Resource. Persons (FOSSEE):

1: Mr. Rajesh Kushalkar, Sr. Proj. Manager, IITB

2: Mr. Nagesh Karmali, Sr. Proj. Manager, IITB

3: Ms. Firuza Karmali, Sr. Proj. Manager, IITB

4: Mr. Pratik Bhosale, Proj. Research Asst., IITB

5: Ms. Nirmala Venkat, Sr. Proj. Manager, IITB

Team Manager (FOSSEE):

Ms. Vineeta Parmar, Sr. Proj. Manager, HTB

Ancillary Staff: Mr. Dinesh Sharma, Lab. Asst. Network Centre, SMVDU

## HOW TO REGISTER

All participants are required to fill the google form (link provided below). Please upload the registration fee receipt and before submitting the form.

https://forms.gle/8Aq9FB6W2ryrEyxH9

The participants may upload the J&K Bank Challan after depositing the requisite fee to A/C: 0477040100000023.

## Last Date of Registration is 17th Jan., 2024.

After completion of the Workshop, all the participants will get certificates.

### ADDRESS FOR CORRESPONDENCE:

Dr. Pankaj Biswas, Assistant Professor

Email: pankaj.biswas@smvdu.ac.in

(M): +91 9419113597

Dr. Jitendra Sharma, Assistant Professor

Email: jitendra.sharma@smvdu.ac.in

(M): +91 9622220321

Office, School of Physics

Email: office.sop@smvdu.ac.in

Phone: 01991-285524 Ext. (2505)