



# One Week Faculty Development and Research Knowledge Sharing Program on Mechanical, Mechatronics and Soft-computing Engineering 6 - 10 September , 2021

Jointly organised by:



Curtin University, Malaysia

and

Indian Institute of Information  
Technology Bhagalpur, India



## Chief Patron

### Prof. Simon Leunig

Pro Vice-Chancellor & President  
Curtin University Malaysia

### Prof. Arvind Choubey

Director  
Indian Institute of Information Technology Bhagalpur

## Patrons

### Prof. Vincent Lee Chieng Chen

Interim Deputy Pro Vice-Chancellor  
Curtin University Malaysia

### Prof. Tuong-Thuy Vu

Dean, Faculty of Engineering and Science  
Curtin University Malaysia

### Prof. Ramasamy Nagarajan

Dean, Research and Development  
Curtin University Malaysia

### Prof. Beena Giridharan

Dean, Learning and Teaching  
Curtin University Malaysia

## Convenor

### Dr. Sukanta Roy

Head of the Department  
Department of Mechanical Engineering  
Curtin University Malaysia

## Co-Convenor

### Dr. Gaurav Kumar

Head of the Department  
Department of Mechatronics Engineering  
Indian Institute of Information Technology Bhagalpur

## Introduction

The Department of Mechanical Engineering, Curtin University Malaysia and the Department of Mechatronics Engineering, Indian Institute of Information Technology Bhagalpur is jointly organizing an One Week Faculty Development and Research Knowledge Sharing Program on "Mechanical, Mechatronics and Soft-computing Engineering" from September 06-10, 2021. Due to COVID-19 pandemic restrictions, the program will be hosted in a virtual platform.

This one week program is designed to bring Researchers and Academia from these prominent institutes for sharing their research idea and recent developments in the field of Mechanical, Mechatronics and Soft-computing Engineering. Participants (staff/students/industry) from different national and international Institutions/Universities and Industries are expected to participate.

## Objectives

- To provide a forum to exchange views and research ideas in the field of Mechanical, Mechatronics and Soft-computing Engineering.
- To offer learning on basics, emerging trends & challenges in the above fields.
- To improve faculty's ability in carrying out research, testing & consultancy in the Mechanical, Mechatronics and Soft-computing.
- To provide a platform for future research collaborations between the organizing and participating Institutions/ Universities and Industries .

## Registration

To attend and receive the certificate of participation, the registration is compulsory via the below link or scan the QR code:



<https://forms.gle/r46Fbd8TrrP1sJKC7>

## Program Schedule

### Inauguration Ceremony

6 September 2021 (Monday)

**1:00 pm – 1:10 pm:**

Inaugural Speech by Prof. Simon Leunig, Pro Vice-Chancellor & President, Curtin University Malaysia

**1:10 pm – 1:20 pm:**

Introductory Speech by Prof. Arvind Choubey, Director, Indian Institute of Information Technology Bhagalpur

**1:20 pm – 1:30 pm:**

Welcome note by Prof. Tuong-Thuy Vu, Dean of Faculty of Engineering and Science, Curtin University Malaysia

### Speakers and Topics

6 September 2021 (Monday)

**1:30 pm – 2:30 pm:**

Topic: **Recent Trends in Soft Computing**

Speaker: Prof. Arvind Choubey, Indian Institute of Information Technology Bhagalpur

**2:45 pm – 3:45 pm:**

Topic: **Recent Development in Training Artificial Neural Networks**

Speaker: Dr. Garenth Lim King Hann, Curtin University Malaysia

**4:00 pm – 5:00 pm:**

Topic: **Development of Handheld Device for Heartbeat Monitoring using Artificial Intelligence**

Speaker: Dr. Sandeep Raj, Indian Institute of Information Technology Bhagalpur

7 September 2021 (Tuesday)

**1:30 pm – 2:30 pm:**

Topic: **Natural Fiber Reinforced Polymer Composites in Research**

Speaker: Dr. Sujan Debnath, Curtin University Malaysia

**2:45 pm – 3:45 pm:**

Topic: **High Temperature Deformation Behavior of 2219 Aluminum Alloys Micro-Alloyed with Silver**

Speaker: Dr. Purnendu Kumar Mandal, Indian Institute of Information Technology Bhagalpur

**4:00 pm – 5:00 pm:**

Topic: **Acoustic Materials Design Towards Noise Control of a Local Palm Oil Mill: An Industrial Research Project Perspective**

Speaker: Dr. Mahmood Anwar, Curtin University Malaysia

8 September 2021 (Wednesday)

**1:30 pm – 2:30 pm:**

Topic: **Vibration and Predictive Analysis for Machinery**

Speaker: Prof. Vincent Lee Chieng Chen, Curtin University Malaysia

**2:45 pm – 3:45 pm:**

Topic: **Investigations on Shape Memory Alloy (SMA) Behaviour in the development of MEMS devices**

Speaker: Dr. Tameshwer Nath, Indian Institute of Information Technology Bhagalpur

**4:00 pm – 5:00 pm:**

Topic: **Machining of Nickel based super alloys with advanced cutting tools**

Speaker: Dr. Moola Mohan Reddy, Curtin University Malaysia

9 September 2021 (Thursday)

**1:30 pm – 2:30 pm:**

Topic: **Smart Sensor and Data Analysis for Human Motion and Activity Detection**

Speaker: Dr. Wong Wei Kitt, Curtin University Malaysia

**2:45 pm – 3:45 pm:**

Topic: **Continuum Damage Mechanics Application for Engineering Alloy**

Speaker: Dr. Abhinav Gautam, Indian Institute of Information Technology Bhagalpur

**4:00 pm – 5:00 pm:**

Topic: **Role of Mechanical Engineers in Mitigating Climate Change**

Speaker: Dr. Man Djun Lee, Curtin University Malaysia

10 September 2021 (Friday)

**1:30 pm – 2:30 pm:**

Topic: **Introduction to Electric Vehicle Technology**

Speaker: Dr. Gaurav Kumar, Indian Institute of Information Technology Bhagalpur

**2:45 pm – 3:45 pm:**

Topic: **Renewable Energy Integration for off-grid wind power generation**

Speaker: Dr. Sukanta Roy, Curtin University Malaysia

### Closing Ceremony

**3:50 pm – 4:00 pm:**

Vote of thanks by Prof. Arvind Choubey, Director, Indian Institute of Information Technology Bhagalpur

**4:00 pm – 4:10 pm:**

Closing remarks by Prof. Ramasamy Nagarajan, Dean, Research and Development, Curtin University Malaysia

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