



ICIRTES - 2023



**INTERNATIONAL CONFERENCE ON
INNOVATIONS AND RECENT TRENDS
IN ENGINEERING AND SCIENCE**

Samarth Educational Trust

**Arvind Gavali College of Engineering
Satara, Maharashtra, India**

In Association With

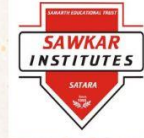
Department of Medical Biology

**Faculty of Medicine, Nigde, Omer Halisdemir
University, Nigde, Turkey**



10, 11 June 2023

Final Program



Samarth Educational Trust

Arvind Gavali College of Engineering

In Association With

Department of Medical Biology

Faculty of Medicine, Nigde

Omer Halisdemir University

Nigde, Turkey

**International Conference on Innovations and
Recent Trends in Engineering and Science
ICIRTES - 2023**

INVITATION

Saturday, 10th June 2023 and Sunday, 11th June 2023

**Venue: Arvind Gavali College of Engineering, Satara,
Maharashtra, India**

Mode of Conduction: Hybrid Mode

ESTEEMED GUESTS

| | |
|--|---|
| Dr. Chandrakant Lokhande Research Director D. Y. Patil University, Kolhapur | Hon. Shri Arvind Gavali Chairman Samarth Educational Trust, Satara |
|--|---|

GUESTS OF HONOR

| | |
|---|---|
| Hon. Shri Omkar Waikar Director and BOG Member Supreme Silicones Pvt. Ltd. | Hon. Shri Nishant Gavali Secretary Samarth Educational Trust |
|---|---|

PATRON

Dr. Vilas Pharande
Principal
Arvind Gavali College of Engineering



ICIRTES - 2023

June 11 2023

To

June 12 2023

Conference Schedule [Day 1, 10th June 2023]

| Day – 1 | | 10 June 2023 |
|----------------|--|---|
| 09.15 – 09.30 | | Arrival of all Program Coordinators and Participants |
| 09.30 – 10.00 | | Registration and Breakfast |
| 10.00 – 10.30 | | Welcome to the Session Chairs (Day 1) and Delegates |
| 10.30 – 11.30 | | Inauguration of ICIRTES – 2023 and Proceedings of the Conference followed by Panel Discussion |
| | | |
| 11.30 – 13.00 | | Conference Sessions |
| 13.00 – 14.00 | | Lunch Break |
| 14.00 – 15.30 | | Conference Sessions |
| 15.30 – 16.00 | | High Tea |
| 16.00 – 17.30 | | Conference Sessions |
| Day – 1 | | Concludes |

Conference Schedule [Day 2, 11th June 2023]

| Day – 2 | | 11 June 2023 |
|----------------|--|--|
| 09.15 – 09.30 | | Arrival of all Program Coordinators and Participants |
| 09.30 – 10.00 | | Registration and Breakfast |
| 10.00 – 10.30 | | Welcome to the Session Chairs (Day 2) and Delegates |
| 10.30 – 13.30 | | Conference Sessions |
| 13.30 – 14.30 | | Lunch Break |
| 14.30 – 16.00 | | Conference Sessions |
| 16.00 – 17.30 | | Valedictory Function and Panel Discussion |
| Day – 2 | | Concludes |

| Day – 1 | | 10 June 2023 | |
|-----------------------------|--|--|--|
| Conference Sessions | | Presentations | |
| Department: | | Computer Science and Engineering [Offline Mode] | |
| Seminar Hall No. 201 | | Interactive Panel | |
| | | | |
| 11.30 – 11.45 | | Dengue Malaria Prediction using CNN | |
| 11.45 – 12.00 | | Product Recommendation System | |
| 12.00 – 12.15 | | A Novel Online Medicine Donation System | |
| 12.15 – 12.30 | | Plant Leaf Disease Detection using CNN | |
| 12.30 – 12.45 | | Online Personal Health Care | |
| 12.45 – 13.00 | | Adhyayan Online Platform | |
| 13.00 – 14.00 | | Lunch Break | |
| 14.00 – 14.15 | | Inventory Management System | |
| 14.15 – 14.30 | | Custom Named Entity Recognition Using Spacy | |
| 14.30 – 14.45 | | Online RTO Service Management System | |
| 14.45 – 15.00 | | Intelligent Quality Control System for Product Manufacturers through ML | |
| 15.00 – 15.15 | | Real Estate Search Based on Data Mining | |
| 15.15 – 15.30 | | Cotton Plant Disease Detection Using CNN | |
| 15.30 – 16.00 | | High Tea | |
| 16.00 – 16.15 | | Voice Authenticated Storage System | |
| 16.15 – 16.30 | | Sign Language Recognition Using CNN | |
| 16.30 – 17.00 | | Women Security System | |
| 17.00 – 17.15 | | Realtime Face Mask Detection using CNN | |
| 17.15 – 17.30 | | A Review Paper on Replacing Unethical Energy With Ethical Energy | |

| Day – 1 | | 10 June 2023 | |
|-----------------------------|--|---|--|
| Conference Sessions | | Presentations | |
| Department: | | Electronics and Telecommunication Engineering | |
| Seminar Hall No. 101 | | Interactive Panel [Offline Mode] | |
| | | | |
| 11.30 – 11.45 | | Gesture Recognition Based Virtual Mouse and Keyboard | |
| 11.45 – 12.00 | | Voice Based Medical Assistant Chatbot | |
| 12.00 – 12.15 | | IoT Based Smart Lift Management System | |
| 12.15 – 12.30 | | IoT Based Dam Irrigation System | |
| 12.30 – 12.45 | | Automatic Answer Checker | |
| 12.45 – 13.00 | | Wireless mobile charger | |
| 13.00 – 14.00 | | Lunch Break | |
| 14.00 – 14.15 | | Accelerometer Based Hand Gesture Controlled Robo-Car | |
| 14.15 – 14.30 | | Fingerprint Door Lock System | |
| 14.30 – 14.45 | | Sign Language For Deaf and Mute People | |
| 14.45 – 15.00 | | IoT Based Digital Notice Board | |
| 15.00 – 15.15 | | Greeting Voice Controlled Robot Using Arduino Board | |
| 15.15 – 15.30 | | Automatic Answer Checker | |
| 15.30 – 16.00 | | High Tea | |
| 16.00 – 16.15 | | IoT Based Electricity Theft Detection System | |
| 16.15 – 16.30 | | Military Spying Robot | |
| 16.30 – 17.00 | | Crop Prediction and Leaf Disease Detection | |
| 17.00 – 17.15 | | Web Development based “Smart Agriculture System” | |
| 17.15 – 17.30 | | IoT Based Internet Operated Robot Controlled System | |
| 17.30 – 17.45 | | Traffic Light Control System | |

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| Day – 1 | 10 June 2023 |
| Conference Sessions | Presentations |
| Department: | Electrical Engineering |
| Seminar Hall No. 304 | Interactive Panel [Offline Mode] |
| | |
| 11.30 – 11.45 | Self-Balancing Robot |
| 11.45 – 12.00 | Battery Swapping System For Electrical Vehicle |
| 12.00 – 12.15 | Voice Controlled Robotic Vehicle |
| 12.15 – 12.30 | Total Harmonics Distortion (THD) And Switching Losses Reduction by Arduino Based Seven Level Inverter |
| 12.30 – 12.45 | Automatic Drip Irrigation System Using Microcontroller & Electrical Devices |
| 12.45 – 13.00 | Solar Operated Mobile Pesticide and Fertilizer Sprayer |
| 13.00 – 14.00 | Lunch Break |

| Day – 1 | | 10 June 2023 | |
|-----------------------------|---|---------------------|--|
| Conference Sessions | Presentations | | |
| | | | |
| Seminar Hall No. 208 | Interactive Panel [Online Mode] [Time: GMT + 5.30] | | |
| | | | |
| 11.30 – 11.45 | Food sector globalization and its logistic importance | | |
| 11.45 – 12.00 | E-commerce roles in the daily food sector after COVID-19 | | |
| 12.00 – 12.15 | Use of Cargo Stations in Cargo Transportation | | |
| 12.15 – 12.30 | The importance of logistics in the renewable energy industry | | |
| 12.30 – 12.45 | A natural anticancer Agent: Caryophyllene | | |
| 12.45 – 13.00 | A healthy herbal tea with biological activities: Mulberry leaves | | |
| 13.00 – 14.00 | Lunch Break | | |
| 14.00 – 14.15 | Argumentative comparison of cancer treatment methods based on medicinal plants and not related to medicinal plants according to recent research and developments | | |
| 14.15 – 14.30 | The Importance of Disaster Logistics for a Sustainable Disaster Management | | |
| 14.30 – 14.45 | The Role of Media and Communication in the Science and Technology during the Covid-19 Pandemic | | |
| 14.45 – 15.00 | The role of logistics in dropshipping | | |
| 15.00 – 15.15 | Fruit Segmentation | | |
| 15.15 – 15.30 | Performance evaluation of sports prostheses and adaptations for lower limb amputees in District Rahimyar Khan, Pakistan | | |
| 15.30 – 16.00 | High Tea | | |
| 16.00 – 16.15 | Evaluating the effect of air gap between the skin and bolus on flatness and dose distribution of electron beams using Monte Carlo simulation | | |
| 16.15 – 16.30 | Exploring Phage Therapy as an Alternative Treatment for Helicobacter pylori Infections: A Review of Current Research | | |
| 16.30 – 17.00 | A review of the methods of increasing the production of medicinal metabolites of plants | | |
| 17.00 – 17.15 | In vitro assessment of the plant-based formulation containing combination of Cistus x incanus L. and Scutellaria lateriflora L. for their antimicrobial and antibiofilm properties | | |
| 17.15 – 17.30 | Intake of Ultra-processed Food is Associated with Oxidative Stress and Inflammatory Biomarkers in Metabolic Syndrome Patients | | |

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|-----------------------------|---|
| Day – 2 | 11 June 2023 |
| Conference Sessions | Presentations |
| Department: | Mechanical Engineering |
| Seminar Hall No. 304 | Interactive Panel [Offline Mode] |
| | |
| 10.30 – 10.45 | Zero Energy Water lifting Technology in Rural India |
| 10.45 – 11.00 | Design and Fabrication of a Section Bending Machine |
| 11.00 – 11.15 | Metal or Non-metal Sorting Using Metal Detection |
| 11.15 – 11.30 | Robotic Arm with Vehicle |
| 11.30 – 11.45 | Design and development of 360-degree rotating fire protection system |
| 11.45 – 12.00 | Pneumatic Jet Machine |
| 12.00 – 12.15 | Multipurpose Agriculture 3 – Wheel Pesticides Sprayer |
| 12.15 – 12.30 | Road Power Generation by Using Flip-plate Mechanism |
| 12.30 – 12.45 | Radial and Axial Relief Grinding Machine |
| 12.45 – 13.00 | Design and Fabrication of Automatic Ground Clearance Machine |
| 13.00 – 13.15 | Design and Fabrication of Semi-automatic Mulching Machine |
| 13.15 – 13.30 | Machine Learning Based Nutrient Deficiency Detection in Rice Crop |
| 13.30 – 14.30 | Lunch Break |
| 14.30 – 14.45 | Hybrid Electric Vehicle |
| 14.45 – 15.00 | Design and Manufacturing of Hydraulic Cutter |

| Day – 2 | 11 June 2023 |
|-----------------------------|---|
| Conference Sessions | Presentations |
| Department: | Civil Engineering |
| Seminar Hall No. 304 | Interactive Panel [Offline Mode] |
| | |
| 10.30 – 10.45 | Analytical Investigation on Mitigation of Short Column Effect in Partial Infilled Frames |
| 10.45 – 11.00 | Retrofitting of RC Structure |
| 11.00 – 11.15 | Analyse and Design of Equitable Water Supply for Rural Water Distribution Network |
| 11.15 – 11.30 | Experimental Analysis on Green Concrete |
| 11.30 – 11.45 | Design Of Modular Multi-Storied Steel Frame Building |
| 11.45 – 12.00 | Rain Water Harvesting |
| 12.00 – 12.15 | Design Of Paving Tiles Using Bagasse and Fly ash |
| 12.15 – 12.30 | Marine Pollution (Oil Spillage) and its Removal |
| 12.30 – 12.45 | Study Of Glass And Steel Fibre In Concrete |
| 12.45 – 13.00 | Study and Suggestive Measures for Landslides |
| 13.00 – 13.15 | Cell Filled Concrete Pavement |
| 13.15 – 13.30 | A Research on Green Building in India |
| 13.30 – 14.30 | Lunch Break |
| 14.30 – 14.45 | Study of E- waste Disposal |
| 14.45 – 15.00 | Automated Highway Systems |
| 15.30 – 15.45 | Design of Paving Tile using Industrial Waste Bagasse |
| 15.45 – 16.00 | Utilization of plastic waste for making plastic bricks |

| Day – 2 | | 11 June 2023 | |
|-----------------------------|---|---|--|
| Conference Sessions | | Presentations | |
| Seminar Hall No. 208 | | Interactive Panel [Online Mode] [Time: GMT + 5.30] | |
| 10.30 – 10.45 | Meta-Analysis on Some Plant Extracts Benefits on Neuropsychiatric Disorders Models Studied in Zebrafish | | |
| 10.45 – 11.00 | Feeding Ecology of Fish Populations from River Oituz | | |
| 11.00 – 11.15 | The Trophic Spectrum of Certain Fish Species from the Rancaciov River | | |
| 11.15 – 11.30 | Pros and Cons in the Developing Countries Regarding E-commerce Roles in the Daily Food Sector After COVID-19: Current Challenges and Recommendations | | |
| 11.30 – 11.45 | Zebrafish as a Model to Study the Effects of Environmental Concentrations of Antibiotics | | |
| 11.45 – 12.00 | Use of Information Technologies in Logistics: Example of E-Logistics | | |
| 12.00 – 12.15 | Advantages and Disadvantages of Use LC MS in Clinic | | |
| 12.15 – 12.30 | Reliable Treatment of Oxidative Stress Induced by SARS-CoV-2 | | |
| 12.30 – 12.45 | Ketogenic Medical Nutrition Therapies and Their Use in Diseases | | |
| 12.45 – 13.00 | Childhood Obesity and Prevention Strategies | | |
| 13.00 – 13.15 | A Study on the Biological Activities of <i>Aspalathus linearis</i> | | |
| 13.15 – 13.30 | Chestnut (<i>Castanea sativa</i>): Evaluation of Biological Activity | | |
| 13.30 – 14.30 | Lunch Break | | |
| 14.30 – 14.45 | Evaluation of <i>Cucumis sativus</i> in Terms of Biological Activity | | |
| 14.45 – 15.00 | <i>Curcuma longa</i>: Biological activities | | |
| 15.00 – 15.15 | Biological Potential of Lettuce | | |
| 15.15 – 15.30 | Biological Potential of Cress Plant, Known for its Nutritional Properties | | |
| 15.30 – 16.00 | Biological Activities of Edible Cherry Plum | | |

| Day – 2 | | 11 June 2023 | |
|-----------------------------|--|--|--|
| Conference Sessions | | | |
| Department: | | | |
| Seminar Hall No. 201 | | Interactive Panel [Online Mode] [Time: GMT + 5.30] | |
| 11.30 – 11.45 | | A Study on the Biological Activities of Pomegranate | |
| 11.45 – 12.00 | | Morphology, Ecology and Color Change of <i>Leocarpus Fragilis</i> (Dicks.) Rostaf | |
| 12.00 – 12.15 | | Slime Molds (MYXOMYCETES) | |
| 12.15 – 12.30 | | Fecal Calprotectin Elimination Level in Colorectal Crcinoma | |

Greetings from Arvind Gavali College of Engineering!

We are delighted to inform you that Samarth Educational Trust, Arvind Gavali College of Engineering in association with the Department of Medical Biology, Faculty of Medicine, Nigde, Omer Halisdemir University, Nigde, Turkey has organized The International Conference on Innovations and Recent Trends in Engineering and Science (ICIRTES-2023) on the 10th and 11th of June, 2023 in a Hybrid Mode.

The event will provide a platform for under-graduate, post-graduate students, faculty members, research scholars, industry personnel, and scientists in both Engineering and Science to present their ideas and concepts pertaining to recent innovations in the streams.

The conference also provides an opportunity for discussion on the solutions related to recent environmental issues such as pollution, flood, earthquakes, and disaster management.

We are looking forward for your gracious participation.

All the accepted papers will be published in ICIRTES-2023 Proceedings under ISBN: 978-81-961931-0-2 (Online – Electronic) and in Hard Bound (ISBN: 978-81-961931-1-9).

Dr. Gayatri Mirajkar
Convenor
ICIRTES – 2023

Chief Patrons:

Hon. Shri Arvind Gavali
Chairman
Samarth Educational Trust

Hon. Shri Nishant
Gavali Secretary
Samarth Educational Trust

Patron:

Dr. Vilas Pharande
Principal
Arvind Gavali College of Engineering
Satara, Maharashtra, India

Conveners:

Dr. Zeliha Selamoglu - Nigde Omer Halisdemir University, Turkey
Dr. Gayatri Mirajkar - Arvind Gavali College of Engineering, India
Dr. B. M. Nayak - Arvind Gavali College of Engineering, India

Co-Conveners:

Dr. N. D. Jadhav - Arvind Gavali College of Engineering, India
Dr. A. A. Desai - Arvind Gavali College of Engineering, India
Dr. M. Salman Warimani - Arvind Gavali College of Engineering, India
Mrs. A. D. Kasture - Arvind Gavali College of Engineering, India

Technical/Scientific Board:

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Dr. Antoni Sureda - University of Balearic Islands, Spain
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Dr. Sachio Aburatani - National Institute of Advanced Industrial Science
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Dr. A. B. Gholap - Arvind Gavali College of Engineering, India
Dr. P. R. Bamane - Arvind Gavali College of Engineering, India

Organizing Committee:

Mr. A. V. Gujar - Arvind Gavali College of Engineering, India
Dr. Maria Daglia - Pavia University, Italy
Mr. S. P. Patil - Arvind Gavali College of Engineering, India
Dr. Eva Urgeova - University of SS. Cyril and Methodius in
Trnava, Slovak Republic
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