

SAKSHI SARATHE



Nationality: Indian

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Date of Birth: 08/01/1997

Gender: Female

 **Email address:** sakshisarathe.96@gmail.com

 **Address:** Bhopal, Madhya Pradesh

EDUCATION

Masters in Energy (Renewable Energy)

Maulana Azad National Institute of Technology [2020-Current]

Address: Kamala Nagar Road, 462003, Bhopal, Madhya Pradesh (India)

www.manit.ac.in

Bachelor in Engineering (Electronics & Instrumentation)

Samrat Ashok Technological Institute [2015-2019]

Address: Civil Lines, 464001, Vidisha, Madhya Pradesh (India)

www.satiengg.in

RESEARCH INTEREST

Sensors, Renewable Energy, Water Resource Management, Biomedical Instrumentation, Nanotechnology etc.

WORK EXPERIENCE

Industrial Training

Bharat Heavy Electrical Limited [10/08/2017-23/08/2017]

City: Bhopal

Country: India

Area of Work: Water Turbine Manufacturing Block

Supervisor: Anil Markam, DGM, FTM Fabrication, BHEL, Bhopal

TECHNOLOGY EXPERTISE

Ansys fluent, MATLAB, PLC & SCADA, HOMER, Microsoft Office.

PUBLICATIONS

Review of various types of renewable-powered desalination technologies with economic analysis.

[Jan 2022]

<https://doi.org/10.1016/j.matpr.2022.01.175>

Application of Alternative Clean Energy (Book Chapter)

Sustainable Developments by Artificial Intelligence and Machine Learning for Renewable Energies

[May 2022]

PROJECTS

RURAL OUTREACH | 2nd Semester (B.E.)

[2017]

The objective of the outreach was to gather information regarding the availability of primary facilities (electricity, school, water, sanitation etc) to each house in the village near vidisha, Madhya Pradesh (India) and providing solution, it involves water and electricity conservation, low-cost housing, skilling rural youth, and sanitation related activities among others.

TEMPERATURE CONTROLLED DC MOTOR USING PWM | 6th Semester (B.E.)

[2018]

In many applications, it is important to control the speed of DC motor where precision and protection are essence. Here we will use a technique called PWM (pulse width modulation) to control the speed of DC motor.

We can achieve speed control of DC motor using mechanical or electrical techniques but they require large size hardware to implement but Microcontroller based system provides easy way to control the speed of DC motor.

Our object of making this project is for reducing the power consumption. And also, to assist people who are disabled and are unable to control the operation of fan. It may also be used for monitoring changes in environment. In near future, it can also be used in different industries and electronic devices

ECG & HEARTBEAT MONITORING SYSTEM | 7th & 8th Semester (B.E.)

[2018-19]

The goal of this project was to create a device that can simultaneously improve task efficiency of an in-home caretaker and promote a safer environment for their patients.

An ECG Sensor with disposable electrodes attaches directly to the chest to detect every heartbeat. The electrodes of ECG sensor will convert heart beat to electric signal. The device is used to measures continuous heart beat and give rate data of heart beat. This device can be used by trained doctor and medical assistances.

PERFORMANCE ANALYSIS OF MODIFIED MULTIPLE SLOPE SOLAR STILL (MASTER'S THESIS) (Ongoing)

[2021-22]

With the increase in population the demand for fresh drinking water is also increasing. Therefore, the proposed model in my thesis gives the solution to the problem of freshwater scarcity. My work started with gathering information regarding availability of freshwater for drinking purpose in different areas and reviewing different water purification and desalination techniques. Among all Solar Stills are the traditional and most effective naturally operating method for purification of water.

In my thesis the proposed model is designed and simulated using Ansys Fluent software and the performance is analysed and compared with the existing conventional solar stills.

SOCIAL AND POLITICAL ACTIVITIES

Volunteer | National Service Scheme (NSS)

[2017]

Samrat Ashok Technological Institute (SATI), Vidisha

Volunteer & Member | Scouts and Guides

[2008-2011]

St. Mary's Convent Sr. Sec. School, Bhopal

CERTIFICATIONS

Recent trends in clean energy (RTCE-2021) Workshop

[08th – 12th March, 2021]

MANIT, Bhopal

Advanced Research Methods (ARM-2021) Workshop

[06th – 10th March, 2021]

MANIT, Bhopal

Online Certification on “A Brief Introduction on Microsensors”

[18th Jan- 12th Feb 2021]

NPTEL Online Certification

Solarizer Workshop based on Solar Applications

[16th -18th Dec 2016]

IIT Bombay (Maharashtra)

PLC & SCADA Training

[21st June- 05th July 2017]

Centre for Research and Industrial Staff Performance (CRISP), Bhopal

ACHIEVEMENTS

AICTE Training and Learning FDP on "Sustainable Transport Sources for Future Mobility Application"

[22nd – 26th November 2021]

MANIT, Bhopal

One of the organising committee members, responsible for organising the online workshop for students.

International conference on "International Conference on Advancement in Materials, Manufacturing and Energy Engineering (ICAMME 2021)

[18th-20th February, 2021]

MANIT, Bhopal

Acted as 'Session Moderator' and 'Reviewer' to international conference on "International Conference on Advancement in Materials, Manufacturing and Energy Engineering" '2021 in MANIT, Bhopal.

CBSE Cluster XI Basketball Tournament

[2008]

Organised By: Central Board of Secondary Education (CBSE), New Delhi

Location: Sagar Public School, Gandhi Nagar, Bhopal (MP)

Sports Fiesta'09 Basketball Tournament and Athletics

[2009]

Organised By: Education Edge and Directorate Sports and Youth Welfare (DSYW), MP.

Location: Tatya Tope Stadium, Bhopal (MP)

Inter School Sports Meet | Basketball

[2012]

Organised By: Dainik Bhaskar Sports Olympiad

Location: Tatya Tope Stadium, Bhopal (MP)

Quiz Competition

[2015]

Secured 3rd position in "e-brick Quiz Competition" conducted by Samrat Ashok Technological Institute, Vidisha.

Full Attendance

[2011]

Received Full Attendance award for perfect attendance for the year 2010-11

St. Mary's Convent Sr. Sec. School, Bhopal

HOBBIES

Watching sports

Playing Basketball

Swimming

Sketching

LANGUAGE SKILLS

Mother tongue(s): **Hindi**

Other language(s): **English**