

The Zenith

September, 2022

Volume 5, Issue 5



Contents:

**Chip-free, wireless
electronic 'skin'(2)**

Expert

**Lecture/Seminars/Industrial
Visits Organized (5)**

**Workshop on Cadence Tool
Training (11)**

**Workshop on MATLAB
Programming and Arduino
(12)**

**Industrial Training /
Seminar/FDP by Staff (13)**

**E-GANESHA Competition
(16)**

Chip-free, wireless electronic 'skin'

Wearable sensors are ubiquitous thanks to wireless technology that enables a person's glucose concentrations, blood pressure, heart rate, and activity levels to be transmitted seamlessly from sensor to smartphone for further analysis.

Most wireless sensors today communicate via embedded Bluetooth chips that are themselves powered by small batteries. But these conventional chips and power sources will likely be too bulky for next-generation sensors, which are taking on smaller, thinner, more flexible forms.

Now MIT engineers have devised a new kind of wearable sensor that communicates wirelessly without requiring onboard chips or batteries. Their design, detailed today in the journal *Science*, opens a path toward chip-free wireless sensors.

The team's sensor design is a form of electronic skin, or "e-skin" -- a flexible, semiconducting film that conforms to the skin like electronic Scotch tape. The heart of the sensor is an ultrathin, high-quality film of gallium nitride, a material that is known for its piezoelectric properties, meaning that it can both produce an electrical signal in response to mechanical strain and mechanically vibrate in response to an electrical impulse.

The researchers found they could harness gallium nitride's two-way piezoelectric properties and use the material simultaneously for both sensing and wireless communication.

In their new study, the team produced pure, single-crystalline samples of gallium nitride, which they paired with a conducting layer of gold to boost any incoming or outgoing electrical signal. They showed that the device was sensitive enough to vibrate in response to a person's heartbeat, as well as the salt in their sweat, and that the material's vibrations generated an electrical signal that could be read by a nearby receiver. In this way, the device was able to wirelessly transmit sensing information, without the need for a chip or battery.

"Chips require a lot of power, but our device could make a system very light without having any chips that are power-hungry," says the study's corresponding author, Jeehwan Kim, an associate professor of mechanical engineering and of materials science and engineering, and a principal investigator in the Research Laboratory of Electronics.

"You could put it on your body like a bandage, and paired with a wireless reader on your cellphone, you could wirelessly monitor your pulse, sweat, and other biological signals."

Kim's co-authors include first author and former MIT postdoc Yeongin Kim, who is now an assistant professor at the University of Cincinnati; co-corresponding author Jiyeon Han of the Korean cosmetics company AMOREPACIFIC, which helped motivate the current work; members of the Kim

Research Group at MIT; and other collaborators at the University of Virginia, Washington University in St. Louis, and multiple institutions across South Korea.

Pure resonance

Jeehwan Kim's group previously developed a technique, called remote epitaxy, that they have employed to quickly grow and peel away ultrathin, high-quality semiconductors from wafers coated with graphene. Using this technique, they have fabricated and explored various flexible, multifunctional electronic films.

In their new study, the engineers used the same technique to peel away ultrathin single-crystalline films of gallium nitride, which in its pure, defect-free form is a highly sensitive piezoelectric material.

The team looked to use a pure film of gallium nitride as both a sensor and a wireless communicator of surface acoustic waves, which are essentially vibrations across the films. The patterns of these waves can indicate a person's heart rate, or even more subtly, the presence of certain compounds on the skin, such as salt in sweat.

The researchers hypothesized that a gallium nitride-based sensor, adhered to the skin, would have its own inherent, "resonant" vibration or frequency that the piezoelectric material would simultaneously convert into an electrical signal, the frequency of which a wireless receiver could register. Any change to the skin's conditions, such as from an accelerated heart rate, would affect the sensor's mechanical vibrations, and the electrical signal that it automatically transmits to the receiver.

"If there is any change in the pulse, or chemicals in sweat, or even ultraviolet exposure to skin, all of this activity can change the pattern of surface acoustic waves on the gallium nitride film," notes Yeongin Kim. "And the sensitivity of our film is so high that it can detect these changes."

Wave transmission

To test their idea, the researchers produced a thin film of pure, high-quality gallium nitride and paired it with a layer of gold to boost the electrical signal. They deposited the gold in the pattern of repeating dumbbells -- a lattice-like configuration that imparted some flexibility to the normally rigid metal. The gallium nitride and gold, which they consider to be a sample of electronic skin, measures just 250 nanometers thick -- about 100 times thinner than the width of a human hair.

They placed the new e-skin on volunteers' wrists and necks, and used a simple antenna, held nearby, to wirelessly register the device's frequency without physically contacting the sensor itself. The device was able to sense and wirelessly transmit changes in the surface acoustic waves of the gallium nitride on volunteers' skin related to their heart rate.

The team also paired the device with a thin ion-sensing membrane -- a material that selectively attracts a target ion, and in this case, sodium. With this enhancement, the device could sense and wireless transmit changing sodium levels as a volunteer held onto a heat pad and began to sweat.

The researchers see their results as a first step toward chip-free wireless sensors, and they envision that the current device could be paired with other selective membranes to monitor other vital biomarkers.

"We showed sodium sensing, but if you change the sensing membrane, you could detect any target biomarker, such as glucose, or cortisol related to stress levels," says co-author and MIT postdoc Jun Min Suh. "It's quite a versatile platform."

This research was supported by AMOREPACIFIC.

Source: www.sciencedaily.com

**Department of Electronics and Telecommunication Engineering in
 collaboration with IETE Nashik subcenter**

Organizes

Expert talk on

“Data Mining Methodology and Data Warehousing”

By

Dr. Abhijit Jadhav, DIT, Pimpri, Pune

Date & Time : 4 August, 3.00 pm to 5 pm



Join zoom meeting :
Meeting ID : 971 1886 6594
Passcode : ENTC

NBA Accredited 8 Programmes | Permanently affiliated to SPPU, Pune. | NAAC Accredited with A Grade

- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students’ Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized webinar on “Being Professional” by Mrs. Shilpa Kulkarni, HR Professional on 8th August 2022.

K. K. Wagh Education Society's
**K. K. Wagh Institute of
 Engineering Education and Research**
(An Autonomous Institute from A. Y. 2022-2023) Website: www.ergg.kkwagh.edu.in
Department of Electronics & Telecommunication Engineering
 in collaboration with IETE
 Organizes Expert Talk on

“ Being Professional ”
 by
Mrs. Shilpa Kulkarni,
 HR Professional

on 8th August, 2022 10:25 AM to 12:15 PM
 Venue : AV Hall, Third Floor, E & TC Department.

Dr. S. A. Patil (Ugale) Dr. D. M. Chandwadkar Dr. K. N. Nandurkar
U.G. Co-ordinator Dean, Student Affairs, HOD, E & TC Engg Principal

- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students’ Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized workshop on “Raspberry Pi” by Mr. D. D. Khartad on 8th August 2022 for SE students.

K. K. Wagh Education Society's
**K. K. Wagh Institute of
 Engineering Education and Research**
(An Autonomous Institute from A. Y. 2022-2023) Website: www.ergg.kkwagh.edu.in
Department of Electronics & Telecommunication Engineering
 in collaboration with IETE
 Organizes Workshop on

“Raspberry Pi”
 by
Mr. Dipankar D. Khartad
 Assistant Professor, KKWIEE & R, Nashik
on 8th August, 2022

Session	Time	Class	Venue
Session -I	01:00 pm to 03:00 pm	TE E& TC-B	AV Hall, 3 rd Floor,
Session -II	03:00 pm to 05:00 pm	TE E& TC-A	E & TC Department

Dr. S. A. Patil (Ugale) Dr. D. M. Chandwadkar Dr. K. N. Nandurkar
U.G. Co-ordinator Dean, Student Affairs, HOD, E & TC Engg Principal



- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students' Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized workshop on "How to prepare report in Latex" by Mrs. S. A. Shevgekar on 8th August 2022 for SE students.

K. K. Wagh Education Society's
K. K. Wagh Institute of Engineering Education and Research
 (An Autonomous Institute from A. Y. 2020-2021) Website: www.angg.kkwagh.edu.in
 Department of Electronics & Telecommunication Engineering
 in collaboration with IETE
 Organizes Workshop on

"How to prepare Report in latex"
 by
Mrs. Shweta Shevgekar
 Assistant Professor, KKWIEE & R, Nashik

on 8th August, 2022

Session	Time	Class	Venue
Session -I	01:00 pm to 03:00 pm	TE EA, TC-A	PU Lab, 4 th Floor,
Session -II	03:00 pm to 05:00 pm	TE EA, TC-B	E & TC Department

Dr. S. A. Pelli (Ugale)
U.G. Co-ordinator

Dr. D. M. Chandwasikar
Dean, Student Affairs, HOD, E & TC Dept.

Dr. K. N. Handurkar
Principal

- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students' Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized workshop on "Data Mining Methodology and Data Warehousing" by Dr. Abhijit Jadhav, DIT Pimpri, Pune on 20th August 2022.

K. K. Wagh Institute of Engineering Education & Research, Nashik

Department of Electronics and Telecommunication Engineering in collaboration with IETE Nashik subcenter
 Organizes
Expert talk on
"Data Mining Methodology and Data Warehousing"
 By
Dr. Abhijit Jadhav, DIT, Pimpri, Pune
Date & Time : 4 August, 3.00 pm to 5 pm

Join zoom meeting :
 Meeting ID: 971 1886 6594
 Passcode: ENTC

NBA Accredited 8 Programmes | Permanently affiliated to SPPU, Pune. | NAAC Accredited with A Grade

- A session on "Overall Student Development through Career Kattorum" has been scheduled in KKWIEER on Saturday, 20th August 2022 for all branch students. "Career Katta" is a joint venture of Maharashtra State Department of Higher and Technical Education in association with Maharashtra Information Technology Assistance Centre. This session has been delivered by Mr. Yashwant Shitole, President -Maharashtra Information Technology Support Center as well as Maharashtra State Coordinator - Career Katta activity. While interacting with students, he said that, in upcoming days, in accordance with the new educational policy, students should go beyond book knowledge and try to acquire various skills. Various activities are being implemented under Career Katta will definitely help overall Student Development. Mr. Yashwant Shitole asserted that if the students take advantage of it, students will get job and self-employment opportunities through Career Katta

platform. Prof. Seema R. Baji (Asst. Professor - E&TC Dept.), College Coordinator as well as Nashik District Coordinator of Career Katta forum has coordinated the session.

K. K. Wagh Education Society's
K. K. Wagh Institute of Engineering Education and Research
 (An Autonomous Institute from A. Y. 2022-2023) Website: www.angg.kkwagh.edu.in
 Department of Electronics & Telecommunication Engineering
 in collaboration with IETE
 Organizes Expert Talk on

“Overall Student Development through Career Katta forum”

on 20th August 2022 01:45 PM TO 02:30 PM
 Venue : Dr. P. C. Ray Hall, Chemical Engineering Department.

Mr. Yashwant Shitole
 President
 Maharashtra Information Technology Support Center,
 Maharashtra State Coordinator - Career Katta

Dr. D. M. Chandwadkar
 Dean, Student Affairs, HOD, E & TC Engg.

Dr. K. N. Nandurkar
 Principal

Dr. S. A. Patil (Ugale)
 U. G. Co-ordinator

Prof. S. R. Baji
 Technical Education Coordinator
 Nashik District - Career Katta



- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students' Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized workshop on “UPSC/MPSC Preparation” by Dr Dr. Jayandra D. Lekurwale on 22nd August 2022 for TE students.

K. K. Wagh Education Society's
K. K. Wagh Institute of Engineering Education & Research, Nashik
 Department of Electronics & Telecommunication Engineering
 In Collaboration with IETE Nashik Sub-Center

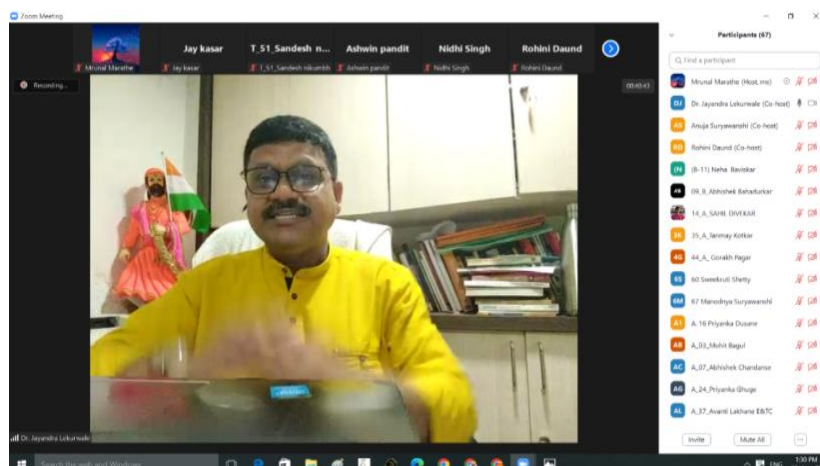
Organizes
 Expert Talk On
“UPSC/MPSC Preparation”
 By
Dr. Jayandra Dinkar Lekurwale
 H.O.D. of Defence and Strategic Studies,
 Dr. Annasaheb G.D. Bhandale Mahila Mahavidyalaya, Jalgaon

On 22 August 2022 at 1:00 pm
 On Zoom Meeting Platform(Link-<https://zoom.us/j/92164892687?pwd=VjRXYUJ2aU5wL1dLcEpMMmRlMmhpdz09>)

Dr. S. A. Patil (Ugale)
 U.G. Co-ordinator

Dr. D. M. Chandwadkar
 Dean, student Affairs, HOD, E & TC Engg.

Dr. K. N. Nandurkar
 principal



- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students' Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized seminar on "Get Certified, Get Ahead" by Mr. Saurav Bhattacharjee on 22nd August 2022 for TE students.



- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students' Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized seminar on "Radio Telescope Design" by Mr. Ashish Mhaske, Scientist and Technical officer IUCAA on 22nd August 2022 for TE students.



- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students' Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized webinar on "Project selection guidelines" by Mr Jagdish Ugale, R&D Manager, Thermo Fisher Scientific Ind. Pvt. Ltd. Satpur on 27th August 2022 for TE students.



- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students' Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized workshop on "Design thinking ,Critical thinking & Innovation design" by Prof R. Y. Ghegade, on 22ndAugust 2022 for TE students.



- Department of Electronics and Telecommunication Engineering of K.K.Wagh Institute of Engineering Education and Research Nashik, Students' Association of Electronics Engineers (SAEE) in collaboration with IETE Nashik subcenter organized workshop on "How to design your bright future" by Mr. Nikhil Jain, Chief Manager Engineering, Siemens Ltd. Nashik on 22ndAugust 2022 for TE students.



Two days workshop on Cadence Tools Training

- A two day workshop on "**Cadence tool training**" by **Entuple Technologies** was organized on 17th and 18th August. The workshop started with a Warm Introduction of VLSI Design flow by Nagaraju.

Day 1 17/08/2022

- ASIC Design Flow Manual is covered. Hands on practice of Digital Design flow for few examples on tools
- INCISIVE - Used for Functional Simulation,
- GENUS - Used for Synthesis and pre-Layout Timing Analysis,
- INNOVUS - Used for Physical Design is done by students.

Day 2 18/08/2022

- FULL CUSTOM IC DESIGN FLOW is covered.
- Hands on practice of Analog Design flow for few examples on tools Virtuoso Schematic Editor, Spectre, Virtuoso Layout Editor, Assura (or) PVS, Quantus-QRC and finally GDSII is done by students.
- As a result the workshop turned to be very informative covering all the aspects of VLSI within the given time constraint yet presenting with a maximum visual impact to our students.
- There was also some direct Q&A session at the end where students shared their difficulties and all were addressed.



Two days workshop on MATLAB Programming and Arduino

- K. K. Wagh Institute of Engineering Education and Research, Nashik in collaboration of IETE Nashik subcenter conducted Two days workshop on MATLAB Programming and Arduino on 25/08/2022 to 26/08/2022.
- During two days workshop Mr. Kunal Khandelwal of Designtech Systems Pvt.Ltd, Pune guided students on various aspects.

Day 1 25/08/2022 Thursday

- MATLAB Programming and Simulink
- MATLAB Onramp and
- Simulink onramp

Day 2 26/08/2022 Friday

- Arduino Uno and Sensor Interfacing using MATLAB,
- Building GUI for LED Blinking with Arduino Uno,
- an obstacle detection project with HC-SR04 Ultrasonic sensor.

Photographs



Industrial Training / Seminar/Workshop done by Staff

- Prof. Dr. D. M. Chandwadkar and Dr. S. A. Patil (Ugale) participated in the Professional Development programme on Innovative use of Educational Media and Technology” conducted by National Institute of Technical Teachers Training and Research, Chennai from 01/08/2022 to 05/08/2022 (One week) through online mode.



- Prof. Dr. D. M. Chandwadkar and Dr. S. A. Patil (Ugale) filed patent named “DESIGN AND DEVELOPMENT OF E-JACKET FORWOMEN’S SAFETY: RAKSHIKA”

Abstract : Objectives: According to the reports of WHO, NCRB-social-government organization 35% women all over the world are facing a lot of unethical physical harassment in public places such as railway-bus stands, footpaths etc. Method/Analysis: Using Controller for the hardware devices is the most efficient and it consumes less power. The purpose of the project is to provide security for the women. In case of emergency situations, a woman will press an emergency button which will activate the MC60 for location tracking and an email/sms will be sent to the family members of the woman. A shock circuit is used to give the mild pulses to the attacker for self-defense and a sounder is used to grab the attention of the surrounding and throw the attacker offguard. Findings: We analyzed that there is no security device for our total safety. The user has to carry multiple devices. We are proposing an ALL-IN-ONE security device that has all the features in one click.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221044123 A

(19) INDIA

(22) Date of filing of Application :02/08/2022

(43) Publication Date : 19/08/2022

(54) Title of the invention : DESIGN AND DEVELOPMENT OF E-JACKET FORWOMEN'S SAFETY: RAKSHIKA

(51) International classification :F41H0009100000, H04W0004900000, H04W0012060000,
F41H0015000000, G08B0015020000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No :NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)KNSandarkar

Address of Applicant :K. K. Wagh Institute of Engineering Education & Research, Anant Dhuri, Parbhavati, Nashik

2)Dr. Dinesh Madhukar Chandwadkar

3)Dr. Sumita Aniruddha Patil

4)Neha Shashikant Tiwasonkar

5)Swarali Surendra Varkhede

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr. Dinesh Madhukar Chandwadkar

Address of Applicant :K. K. Wagh Institute of Engineering Education & Research Nashik

2)Dr. Sumita Aniruddha Patil

Address of Applicant :K. K. Wagh Institute of Engineering Education & Research Nashik

3)Neha Shashikant Tiwasonkar

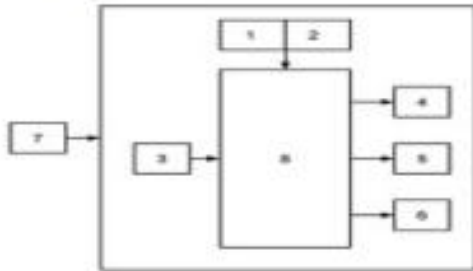
Address of Applicant :K. K. Wagh Institute of Engineering Education & Research Nashik

4)Swarali Surendra Varkhede

Address of Applicant :K. K. Wagh Institute of Engineering Education & Research Nashik

(57) Abstract :

Objective: According to the reports of WHO, NCRB-social-government organization 35% women all over the world are facing a lot of unethical physical harassment in public places such as railway-bus stands, footpaths etc. Method/Analysis: Using Controller for the hardware devices is the most efficient and it consumes less power. The purpose of the project is to provide security for the women. In case of emergency situations, a woman will press an emergency button which will activate the MCU for location tracking and an email/text will be sent to the family members of the woman. A shock circuit is used to give the mild pulses to the attacker for self-defense and a siren is used to grab the attention of the surrounding and throw the attacker off-guard. Findings: We analyzed that there is no security device for our total safety. The user has to carry multiple devices. We are proposing an ALL-IN-ONE security device that has all the features in one click.



No. of Pages : 7 No. of Claims : 6

Workshop on “Financial Literacy- Module: I”

A workshop on “Financial Literacy - Module: I” was scheduled for staff members of the KKWIEER on Saturday, 27th August 2022 by E&TC Department, Career Katta forum. This session has been delivered by Mr. Rohit Mishra, SEBI Securities Smart Trainer, North Maharashtra & Marathwada Region. Securities and Exchange Board of India (SEBI) is a statutory regulatory body entrusted with the responsibility to regulate the Indian capital markets. It monitors and regulates the securities market and protects the interests of investors by enforcing certain rules and regulations. The objective of SEBI behind such a kind of workshop is to educate people regarding financial aspects. No matter the age, young and old adults alike have a hard time learning something unless they understand and internalize the significance of the information and how it can best serve them long-term. What is the investment? How to invest? etc. This workshop was coordinated by Prof. Seema Baji (Assist Professor - E&TC Dept.), Career Katta - College level as well as Nashik District Coordinator, President of State Level Financial Literacy committee.



E-Ganesha Competition-2022

The “E - Ganesha Competition - 2022” was held on 29th August 2022 in department of E&TC Engineering at Karmaveer Kakasaheb Wagh Institute of Engineering Education & Research (K.K.W.I.E.E.R.), Nashik in collaboration with IETE Nashik Sub-centre. The respective teaching staff members and students were present for the competition.

The session was marked by the presence of guest lecturer Mr. Nikhil Jain (Chief Manager-Engineering, Siemens Ltd, Nashik) along with Prof. Dr. D. M. Chandwadkar. The session was preceded by the chief guest’s session on “How to Design your Bright Future”.

The competition received overwhelming response from the students. Everyone presented their ideas and visions for an electronically inspired ganesha festival celebration. Various projects were presented, such as smart room using bidirectional counter, automatic prasad dispenser, infinite mirror chandelier, and many more. The chief guest and H.O.D evaluated each and every project, understood the workings and provided valuable feedback for the students to work on their ideas in a better way.

After evaluating all the projects, the winners were announced. The chief guest expressed their ideas and valuable feedback for every project. The session culminated with motivation among the students to explore ideas in a creative way and work on their own design and ideas to create a better future.



The poster is for the "E-Ganesha Competition-2022" organized by K.K. Wagh Institute of Engineering Education & Research, Nashik, in collaboration with IETE Nashik Sub-Center. The competition is a project-based event where students create Ganesha decorations using electronics. The poster includes details about registration (no fee), date (29 August 2022), venue (Basic Electronics Lab, 3rd floor), and a maximum of 5 participants. It also lists attractive prizes and provides contact information for student and staff co-ordinators. Logos for NBA, NAAC, and IETE are displayed at the bottom.

K. K. Wagh Education Society's
K. K. Wagh Institute of Engineering Education & Research, Nashik
Department of Electronics & Telecommunication Engineering
In Collaboration with IETE Nashik Sub-Center
Organizes
“E-Ganesha Competition-2022”
(Project Competition: Ganesha Decoration using Electronics)

- No Registration Fee.
- Date of competition: 29 August, 2022
- Venue: Basic Electronics Lab, 3rd floor, E&TC Department, KKWIEER.
- Maximum No. of Participants: 5

Attractive Prizes

Student Co-ordinators:
• Ankit Gorane(9322179231)
• Isha Pawar(9423692533)

Staff Co-ordinators:
• Prof.A.B.Suryawanshi(8793506544)
• Prof.R.V.Chothe (8149995708)

Dr. S.A.Patil (Ugale)
U.G Co-ordinator

Dr. D. M.Chandwadkar
Dean, Student Affairs, HOD, E & TC Engg

Dr. K. N. Nandurkar
principal

K.K. Wagh Education Society's
**K. K. Wagh Institute of
 Engineering Education & Research, Nashik**
 Department of Electronics & Telecommunication Engineering
 In Collaboration with IETE Nashik Sub-Center

“Winners of E-Ganesha Competition-2022”
 (Project Competition: Ganesha Decoration using Electronics)

Winners	Project Name
First	"Density Based Auto Light Intensity Control"
Second	"Security System And Smoke Detector"
Third	"Automatic Prasad Dispenser Machine"
Consolation	"Automatic Waste Segregation Dustbin"

Date:
29 Aug, 2022

Student Co-ordinators:
 • Ankit Gorane(9322179231)
 • Isha Pawar(9423692533)

Staff Co-ordinators:
 • Prof.A.B.Suryawanshi(8793506544)
 • Prof.R.V.Chothe (8149995708)

Dr. S.A. Patil(Ugale)
 (UG Co-ordinator)

Dr. D.M. Chandwadkar
 (Dean, Student Affairs, HOD,E&TC Engg.)

Dr. K.N. Nandurkar
 (Principal)

Photographs



Reviewing and Understanding Student's Ideas



Inauguration Ceremony



SAEE Committee

Student Achievement

- Our student Kaustubh A Patil got Silver Honor in International Astronomy and Astrophysics competition. The International Astronomy and Astrophysics Competition is an international science competition that enables students from all countries to prove their skills and to unleash their creativity in the fields of astronomy and astrophysics.

International Astronomy and
Astrophysics Competition
Edition of 2022



SILVER HONOUR

presented to

Kaustubh Aniruddha Patil

Date of Issue: 25. July 2022
Country: India
School: K K Wagh Institute of Engineering Education and Research, Nashik, Maharashtra
Verify-ID: F-2022-F073EBD1378

for participating in the final round of the International Astronomy and Astrophysics Competition of 2022. The final round was a supervised exam of twenty questions which required comprehensive astronomy and astrophysics knowledge. The participant scored 13 points and was placed among the top 10% of all participants.


Fabian Schneider, Team Coordinator


Romi Ali, Program & Outreach Coordinator

This document was issued by the International Astronomy and Astrophysics Competition. The validity of this document and other documents issued by the International Astronomy and Astrophysics Competition may be verified with the verify-ID online on this page: <https://iaac.space/verify>.

BE Electronics

Sr. No	Name	Company	Package (LPA)
1.	Atal Sanskruti Laxmikant	Bosch, Pune	5
2.	Bagul Bhushan Ashok	Bosch, Pune	5
3.	Bhamre Harshal Hemant	Bosch, Pune	5
4.	Chaudhary Hitesh Ramesh	Bosch, Pune	5
5.	Deshmukh Chaitanya Chakradhar	Bosch, Pune	5
6.	Kariya Disha Kamlesh	Bosch, Pune	5
7.	Patil Gaurav Divakar	Bosch, Pune	5
8.	Pawar Akshada Sandeep	Bosch, Pune	5
9.	Ruikar Sakshi Jayant	Bosch, Pune	5
10.	Shegaonkar Sejal Milind	Bosch, Pune	5

BE E&TC

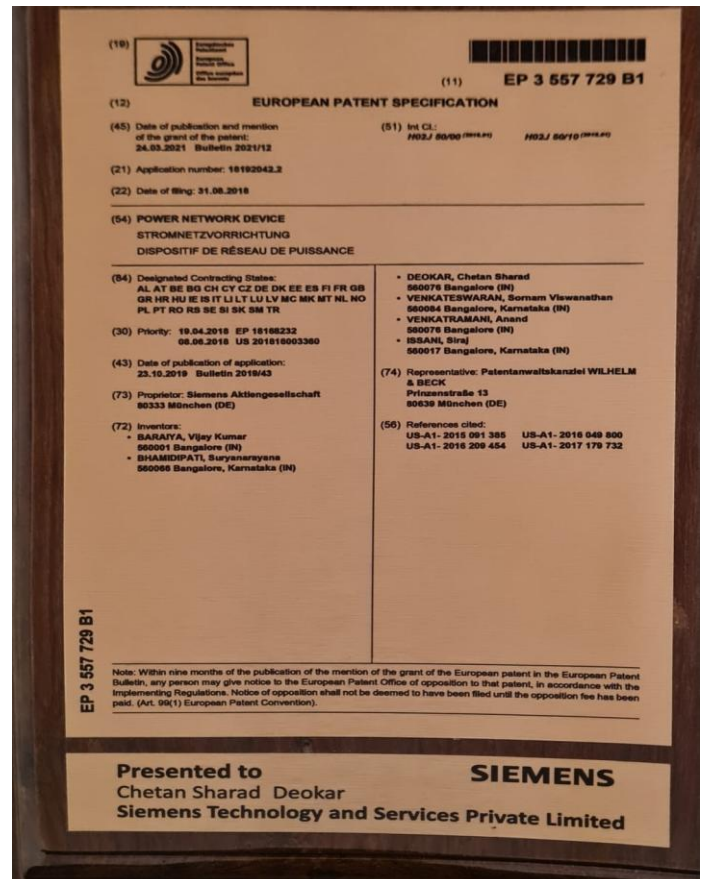
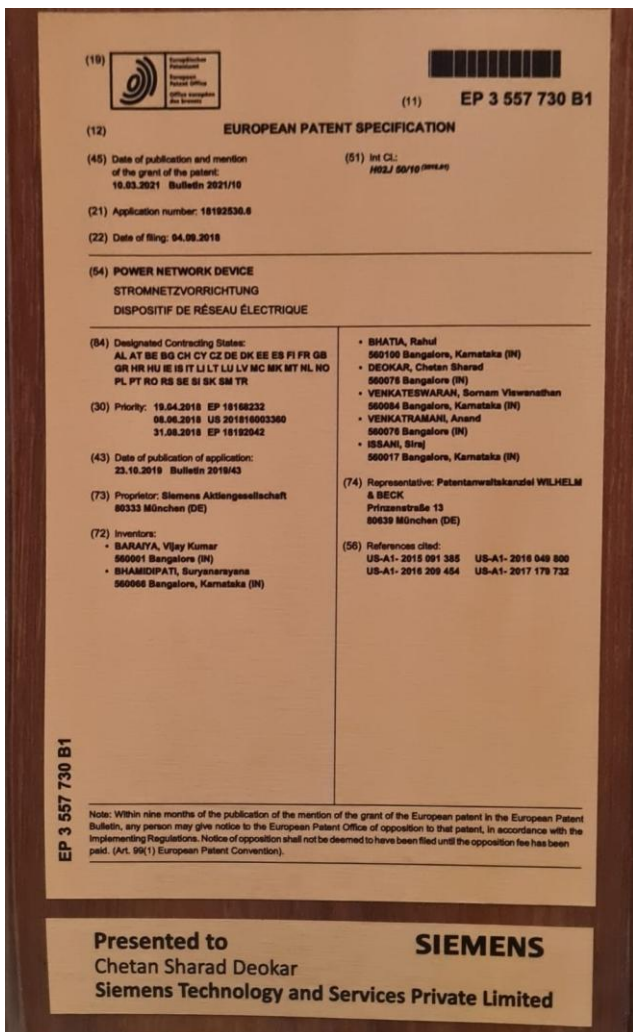
Sr. No	Name	Company	Package (LPA)
1.	Aher Om Ravindra	Bosch	5
2.	Bais Tanishq Atul	Bosch	5
3.	Bhavani Tirth Girish	Bosch	5
4.	Dalvi Atharva Mahesh	Bosch	5
5.	Kamde Subodh Niranjana	Bosch	5
6.	Katkade Sandhya Minnath	Bosch	5
7.	Khandagale Yadnyesh Babasaheb	Bosch	5
8.	Lohiya Neha Prashant	Bosch	5
9.	Nalawade Omkar Baban	Bosch	5
10.	Pagare Gaurav Anil	Bosch	5
11.	Patil Piyush Shailendra	Bosch	5
12.	Rane Sayali Chetan	Bosch	5
13.	Sabhapatikar Dewang Avinash	Bosch	5
14.	Shrivastava Aditi Navneet	Fin IQ	10
15.	Surse Gaurav Digamber	Bosch	5
16.	Thosar Parth Mangesh	Bosch	5

Alumni Achievement

- Alumnus of Department of Electronics & Telecommunication Engineering, Mr. Chetan Deokar published his patent Power Network Device.

Abstract

A physically compact power network device (100) physically disposable on a current carrying conductor (101) is provided. The power network device (100) includes at least a sensor module (103) measuring one or more parameters associated with the current carrying conductor (101), a processor (105) detecting a condition in the power network based on the one or more parameters, and a linear mode power harvesting module (102) harvesting power from an induced voltage (Vind) proportional to the line current (IL) using an impedance regulation module (102A), a dynamic burden impedance (102B), and a voltage limiting module (102C). The power network device (100) may also include an indicator module (106) indicating the condition, a parameter conditioning module (104) dynamically conditioning the parameters using a single-stage amplifier configurable for a predefined range of amplification factors, to improve accuracy of measured parameters.



Published By

Department of E&TC

K.K. Wagh Institute of Engineering

Education & Research, Nashik

Hirabai Haridas Vidyanagari,

Amrutdham, Panchavati

Nashik-422003

Editor: Mrs. Snehal D. Raut

E-mail: sdraut@kkwagh.edu.in

Vision

Provide quality education to create engineering professionals of global standards by keeping pace with rapidly changing technologies to serve the society.

Mission

M1: To educate the students with the state-of-the-art technologies and value based education to meet the growing challenges of industry.

M2: To provide scholarly ambience & environment for creating competent professionals.

M3: To inculcate awareness towards societal needs.