





KATHAN

E-Magazine of UPL University of Sustainable Technology



Rotary

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Mr. Kishore Surti, Treasurer ARES

Issue No. 52 April-2023

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Mrs. Rupali Attarde (Assistant Professor-CO)

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Ms. Amishi Popat (Assistant Professor-EST)

Mr. Apurba Chakraborty (Assistant Professor-CT)

Dr. Mari Kumar (Assistant Professor-M.Sc.)

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#Student Editors





SAURABH SINGH Computer Engi. 4th sem

DARSHAN PRAJAPATI Computer Engi. 4th sem





ANJALI YADAV MSc 2nd sem

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DEV JOSHI EE 4th sem

DIPALI PATEL CE 4th sem





DEV JOSHI ME 6th sem

Anand Patel EE 4th sem



Kaushil Mehta CT 4th sem

Meet Rathod CT 4th sem



REVA FEST

REVA FEST "2023" "Annual Cultural Festival" of UPL University of Sustainable Technology was celebrated on 21st April 2023 at Ankleshwar gymkhana under the theme of G20. Mr. P.M Shah, Chairman, DISH was invited as a chief guest at the Function. PDG Devendra Shastri, Rotary International District 3060 and Mr. Nitin Shah, Unit head, Sajjan India has graced the occasion as Guest of Honour.

The program was graced by honorable guests from nearby industries, respected Rotary members, Management and office bearers of UPL University of Sustainable Technology, faculty and staff members, students and Parents. Mr. Ashok Panjwani, President, UPL University praised the performances of students.

The program included various forms of dances, music, theatre fest, announcement of best student award, star of SRICT alumni award, etc.



GLIMPSES OF REVA FEST













PROUD MOMENT STAR OF SRICT SILVER AWARD

At university campus every student's success is recognized in some or the other way. Students are expected to show exceptional performance not only during their stay on campus but also in their professional fields after graduation. Their off-campus performance definitely brings a good name to the institute and makes entire fraternity of University feel gratified.

After graduation of five years, alumni becomes eligible to apply for the "STAR OF SRICT Silver Award". This year, three admission batches were eligible for these awards. From admission batch 2013, Ms. Shreya Kundu received the award.

She is an alumni from B.E. Environmental Science & Technology, Batch 2013-17 and at present, she serves as Executive - Environment & Sustainability at UPL-Ltd.



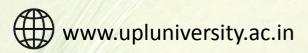
ELOCUTION COMPETITION

Under the banner of G20, Azadi ka Amrut Mahotsav (AKAM) and in association with IQAC, UPL University of Sustainable Technology organised an Elocution Competition on the theme of "Activities and objectives of the G-20 working group of Nations" on 13th April 2023. The judges of this activity were Mr. Samir Jariwala (Head-Mechanical Engineering dept.) and Dr. Jigisha Modi (Associate Professor- CT department).

First position was secured by Mr. Siddhant (6th Sem CT)

Second position was secured by Vishwam Patel (6th Sem CE)

Third position was secured by Tikul Bhatt (4th Sem CO)



GLIMPSE OF ELOCUTION COMPETITION







WORKSHOP ON MICROSOFT POWER BI







UPL University of Sustainable Technology offered a DATA SCIENCE course to the final semester and recently passed out students to mould their career in this emerging field of AI and ML. As a part of this course an hands on workshop on "Microsoft Power BI" was organised at the campus by IIT Professor Mr. Mayank Vyas covering Python Programming and Microsoft Power BI with hands-on experience. The training was well accepted by the participants and found worthy to be applied in future projects.

EVENT @ YUVA SANWAD

Under the aegis of National Service Scheme (NSS) & G20, UPL University of Sustainable Technology organized program "YUVA SANWAD". The chief guest of the program was Mrs. Neha Pujara (Winner of gold medal for Fitness & Bodybuilding competition of National level in Dec'2022 at ICN Goa). The event - "Yuva Samvad - India@2047" is suggested by the Ministry of Youth Affairs to be conducted in Universities across the country. The purpose of this event is to enable the voice of the youth to be heard for shared dreams and visions for the country as it moves from Amrit Mahotsav to Amrit Kaal. In the program Elocution, Presentation and Debate competitions were also organized. More than 24 students participated in all events







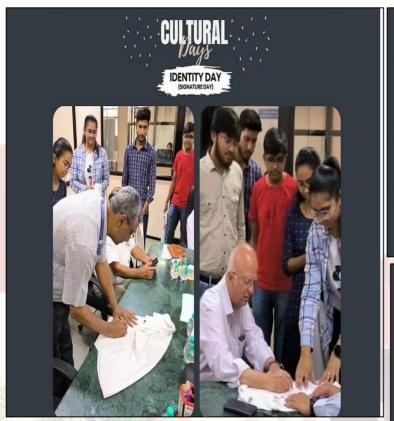
CULTURAL DAYS

To celebrate "Cutltural Week" Rotaract Club of UPL University of Sustainable Technology has organized "Cultural Days" in coordination with the Department of Mathematics, Science & Humanities at University campus from 17th April 2023 to 19th April 2023.

17th April 2023 – Identity Day 18th April 2023 – Heriatge Day 19th April 2023 – Teamwork Day



GLIMPSE OF CULTURAL DAYS











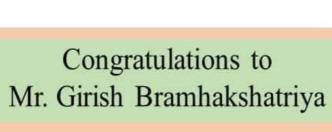




FACULTY ACHIEVEMENTS











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FACULTY ACHIEVEMENTS

- Name of faculty: Dr. Snehal Lokhandwala
- Training topic: GRI Standards
 - *Date*: 24-25 April-2023
- Organized By: KPMG, Bangalore





FACULTY ACHIEVEMENTS

- Name of faculty: Dr. Pratibha Gautam and Mr. Kunal Majmudar
 - Training topic: GRI certified training programme on the New GRI Standards 2021 for sustainability reporting
 - Date: 19th 20th April, 2023
 - Organized By: KPMG, Mumbai







TECHNICAL ARTICLE

Recent Electrical Trends Modernizing the Industry

Technology that responds to growing energy demands, plus new lifestyle products for the home, are increasing the sophistication of residential building projects and the demand for electricians who are upto-date with emerging technologies. Not all electrical contractors are knowledgeable or have the resources to install these trending products, so having those capabilities can give you an edge and help your business grow.

Trend #1: Residential Energy Production

Growing Energy Demand

Energy demand has been growing steadily and is expected to continue accelerating into the foreseeable future. Due in part to the WFH environment fostered by the pandemic, weekday residential demand rose 20-30 percent in 2020 alone1. Wherever people work in the future, researchers predict global energy needs will grow 57 percent more by 2050.

Due to rising costs, as well as carbon footprint consciousness, more and more homeowners are becoming interested in producing and controlling their own energy supply. This is fueling the popularity of young technologies already available to the residential market, such as distributed energy resources, renewable energy and energy storage options.

Renewable Energy

Solar power is the most popular source of renewable energy in residential projects, and consumer interest continues to grow. Sales of solar panels and other components fell slightly in 2020 due to pandemic-related declines in industry activity, but the solar market is already showing signs of strong recovery and growth. Solar panels have become more efficient and inexpensive to install. Analysts expect more than 3 million to be installed in the United States in 2021 and more than 4 million in 2023. Demand is also increasing for other residential solar-powered products such as garden lighting and gate openers.

• Distributed Energy Resources (DERs)

Distributed energy resources are essentially small-scale power generation technologies ranging from 1 kW to 10,000 kW. Home solar panels are part of the growing trend of distributed energy resources — a mix of solar resources, wind, vehicle charging stations, battery storage, etc. — that are giving homeowners more control over their own energy.

Energy Storage

The growth of DERs relies on an accompanying growth in energy storage. The cost of battery storage has been falling dramatically, making it a cost-effective option for more homeowners. Storage technologies help homeowners avoid grid dependence by providing a more reliable energy supply that isn't dependent on factors like the hours of sunlight. For homeowners who still rely at least partly on the grid, storage products can help during a power outage or allow consumers to avoid buying energy during peak-rate times.

• Grid Parity

Grid parity occurs when the price of using alternative energies – like solar – is equal to or less than the price of using power from conventional sources, such as fossil fuel electricity from the grid. Grid parity makes residential energy production a financially viable alternative rather than a luxury. Grid parity is also the point at which utilities can produce energy from renewable resources as inexpensively as from fossil fuels. With prices dropping steadily for renewable energy, grid parity has already been reached for some sources in many states, and this trend will continue to progress.

Trend #2: Building Information Modeling (BIM)

BIM uses digital 3D models to give builders a view of buildings, roads, infrastructure and utilities before construction begins. It allows projects to be built virtually before they are constructed physically, eliminating many inefficiencies and problems that can arise during the construction process. For electrical contractors and crews, it enables better coordination with other trades. For example, it's evident in advance if electrical conduits would be blocked by a steel beam. BIM can also be used to study and develop potential solutions to promote energy efficiency.

Trend #3: LED

LED lighting is becoming more efficient, long-lived and popular every year. As more homeowners look to sustainable lighting, it's important for electricians to be educated on high-quality lights and bulbs. They should also understand other lighting technology that can improve energy efficiency and accessibility, such as smart lighting that can be controlled via a smartphone or voice commands.

Trend #4: Internet of Things (IoT) & 5G — Smart Homes & Smart Cities

Of course, lighting isn't the only component of homes that can be "smart" today. The Internet of Things includes many home devices that connect to the internet and communicate with each other. The popularity of these technologies is increasing as the 5G network expands across the country. Smart devices require a great deal of data and 5G has ten times the data transmission capacity of older 4G networks. 5G is also helping to spread digital technologies to more rural areas. The IoT can work a lot faster in more places now, and electricians will be seeing more and more existing and new smart technology products in home construction.

Sophisticated systems can use sensors, cameras and even machine learning to automate lighting, security, music, temperature and entertainment systems. These systems can even interact in complex ways, such as televisions that can lower their volume in response to alerts of a possible fire or intruder.

Beyond the smart home, many large and midsize American cities are implementing smart city initiatives which include clean energy goals and backup grid power systems. Future trends will probably include more integration and connectivity of smart homes with their smart cities.

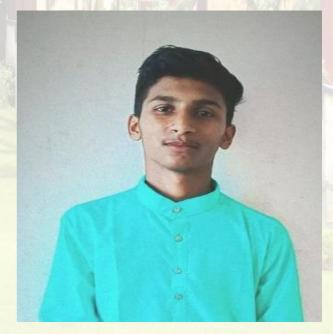
Trend #5: Charging Options

Many smart devices are powered by USB cords, leading to an increase in new homes equipped with USB charging outlets. In addition, the increasing popularity of electric vehicles means more homes will be built with electric vehicle charging stations in the garage. These new charging options need to be installed properly by licensed and experienced electrical subcontractors.

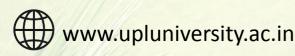
Trend #6: High-Tech Safety Equipment

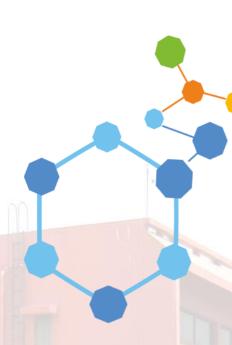
In addition to tech solutions to energy demand and home automation and efficiency, there are new technological advances geared directly toward the safety of your crews. For example, an innovative type of personal protective equipment (PPE) has been developed that warns users when they approach a dangerous electrical field. The wearable voltage sensor can connect to a smartphone, thereby keeping everyone on-site and in the office informed about the issue. Other wearable devices use machine learning to track conditions on a site and identify multiple types of potential hazards.

There are also permanent electrical safety devices (PESDs) that quickly and safely validate zero electrical energy from outside electrical cabinets. Small, portable ultrasonic equipment is now being used to detect conditions such as arcing, tracking, and corona which have unique sound characteristics in the ultrasound spectrum.



Palve Pratik DEE, Sem-4 B.E.





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