

# ETPEC'22

## Emerging Trends in Power, Energy and Control

Vignan.ac.in/etpec22

### Introduction

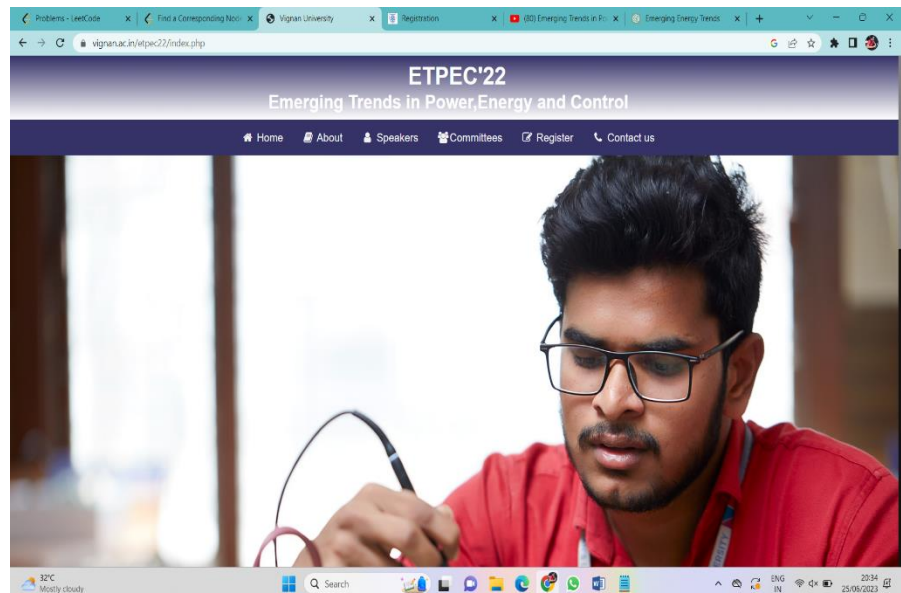
Emerging trends in power, energy, and control are shaping the landscape of our rapidly evolving world. One notable trend is the increasing focus on renewable energy sources, such as solar and wind power, to mitigate the environmental impact of traditional fossil fuel-based energy generation.

This shift is driven by advancements in solar panel efficiency, wind turbine technology, and energy storage systems, enabling a more sustainable and decentralized energy infrastructure. Additionally, there is a growing emphasis on smart grid technologies and energy management systems that optimize energy distribution and consumption, leading to improved efficiency and reduced energy wastage. Furthermore, the integration of artificial intelligence and machine learning algorithms in power systems is revolutionizing control and automation, allowing for real-time monitoring, predictive maintenance, and optimized energy usage. As we venture into the future, these emerging trends hold the potential to reshape our energy landscape, promote sustainability, and pave the way for a cleaner and more efficient world.

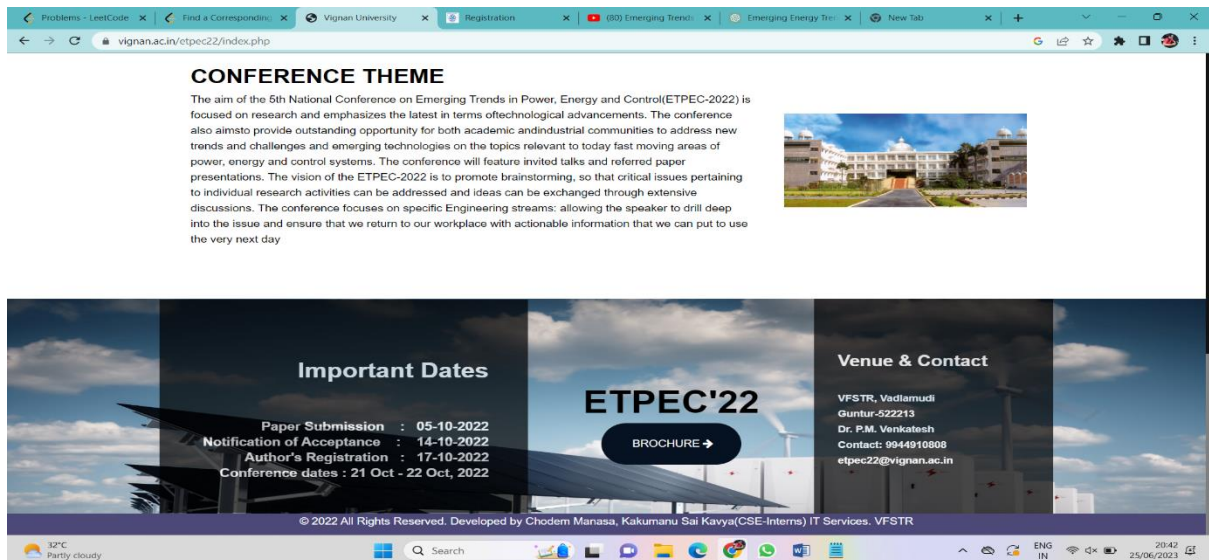
### Modulus

We have six modulus.

- Home
- About
- Speakers
- Committees
- Register
- Contact Us



In Each and Every pages header and footer will remains same. In header every six modulus are present and In footer some important dates, brochures, Venue & contact.



## Technology Used

- HTML
- CSS
- PHP
- XAMPP SERVER

## Functionalities implementation

We have six modulus and every modulus having some functionalities.

- In home page, we have conference theme. This is conference we have mention about Emerging trends in power, Energy and Control.
- In About page, we have mention about us, Right choice for your career and after that It includes Our conferences and contact us option is also present.
- In Speakers Modulus, we have mention about our speakers. And his/her professional details.
- In Committees Modulus, we have five sub-modulus.
  1. Chief patrons
  2. Convener
  3. Organizing secretaries
  4. Organizing Committee
  5. Technical Advisory committee
- In Register Modulus, we have mention Registration link, Registration fees and Account details and Last date for the Registration
- At last Modulus is contact us. We have provided our contact details and email id and google map is also present

## **Future Scope**

The future scope for emerging trends in power, energy, and control is vast and promising. With the increasing demand for clean and sustainable energy, there will be continued advancements in renewable energy technologies.

This includes the development of more efficient solar panels, innovative wind turbine designs, and breakthroughs in energy storage systems such as advanced batteries and hydrogen storage. Integration of these technologies with smart grids and energy management systems will further optimize energy distribution and enable efficient load balancing.

The application of artificial intelligence and machine learning will continue to expand, enabling advanced control algorithms for grid stability, predictive maintenance, and energy optimization. Moreover, the emergence of electric vehicles and the need for widespread charging infrastructure will drive advancements in power electronics, wireless charging technologies, and intelligent grid integration. The convergence of power, energy, and control will play a crucial role in shaping the future energy landscape, facilitating a cleaner, more sustainable, and resilient energy system.

## **Recommendations**

We can improve some front-end part so that it look attractive and add some more committees and committee member and it's include professional profile.