Centre for Energy Engineering

Placement Brochure

2011-2016

Central University of Jharkhand

Brambe, Ranchi - 835205

Jharkhand, India

www.cuj.ac.in

About CUJ

The President of India gave assent to The Central Universities Act, 2009 that envisages establishing and incorporating universities for teaching and research in the various states.The Central University of Jharkhand came into being under this Act on 1st of March, 2009.

CUJ has 7 schools and 22 centres imparting quality education in Science, Technology, Social Science, Languages, Business Management and Journalism & Media Technologies, mostly conducting 5 year integrated courses and PhD programmes.

About the Centre

The centre for Energy Engineering comes under the school of Engineering and Technologies. The centre is committed to the mission and goals of the University for not only Teaching and research but also overall development of the region and the country by emphasizing on the need of renewable energy technologies and their applications for the common masses. The centre is currently offering five years integrated M. Tech. programme in Energy Engineering. The centre is under process of developing new high quality research facilities related to Energy Engineering.

Mission: - Energy is the essence of human existence and catalyst for the development of a Nation. The continuously increasing global energy consumption and depleting conventional energy resources like fossil fuels are a great challenge to mankind in the twenty-first century. The uses of these conventional resources are also held responsible for environmental pollution and the global warming. Now, it is the time to look ahead and work in the precise direction for the best utilization of present conventional energy resources by developing more efficient technologies, to find out some viable alternative sustainable energy technologies and also to protect our environment for the next generation. The mission of this centre is to produce highly skilled manpower in the field of Energy Engineering, build a world class teaching and research infrastructure, develop new efficient energy technologies and devices, and to promote extensive activities in diverse area of renewable energy.

Message from The VC

I am pleased to know that students of Energy Engineering are bringing out a placement brochure. Pursing our motto 'Knowledge to Wisdom' we strive to the methods of academic inquiry instead of giving priority to the search for knowledge. We also seek to promote wisdom by rational means as wisdom being the capacity to realize what is of value in life, for oneself and for others. Wisdom thus include knowledge but much else besides. A basic task ought to be to help humanity learn how to create a better world.

Considering the globalisation of economy that prevails now placement is an important activity of every institution. The Placement Brochure provides the recruiters an insight about qualities of education imparted and expertise of our students relevant to the employer's recruitments. We give you freedom and extend all physical facilities to carry out your own recruitment process at our university campus. I hope you will find our students very competent and you will visit us again year after year. We welcome your interest at our institute as a potential employer. Though the School of Technology is in its infant stage it has the capability to become a Centre of Excellence in the years to come.

I wish the students of the School all the best in their endeavour.

Prof. A.N.Mishra
Vice-Chancellor

Message from The HOD

It is indeed a great pleasure for me to introduce Centre for Energy Engineering, Central University of Jharkhand, Ranchi which is striving consistently for achieving excellence since its inception in 2011. We follow the best practices in teaching and research, a number of teachers have been able to get research and development projects, have good publications to their credit and have organized a few successful extension activities. The five year integrated course in Energy Engineering seeks to inculcate its students through theory and practical courses, the ability to understand, conceptualize, design & develop cost-effective renewables, energy efficient devices & systems.

As the first batch is passing through the portal of CUJ this year, we take the opportunity to invite you to our university and urge to interact with our students and faculties to have a first-hand feel about us. We are sure that our students would be able to match your expectations and contribute significantly in achievement of the goals of your organization.

Prof. S.K.Samdarshi
Dean, School of Engineering &
Head, Centre for Energy Engineering

Faculty Profile

Prof. S. K. Samdarshi

Professor, Head

PhD (Solar Energy)
Area of interest: Solar energy, Energy materials, Energy education
Years of work experiences: 27
Publications in international journals: 43
Books: 04
Patent: 01
Email: drsksamdarshi@rediffmail.com
Web: www.cuj.ac.in/samdarshi.php

Dr. Basudev Pradhan

Assistant Professor & Ramanujan fellow

PhD (Organic solar cells)
Area of interest: Solar cells, Organic solar cells,Dye-Sensitized solar cells, Organic electronics, Nanoscience & Nanotechnology

Years of work experiences: 12
Publications in international journals: 21
Email: basudev.pradhan@cuj.ac.in
Web: www.basu.co.nr, www.cuj.ac.in/BasudevPradhan.php

Dr. Sachin Kumar

Assistant Professor

PhD (Alternate fuel)
Area of interest: Pyrolysis of waste plastics and biomass, Alternate fuels for I. C. engines and catalysis
Years of work experiences: 05
Publications in international journals: 21
Patent: 01
Email: sachin.kumar.01@cuj.ac.in
Web: www.cuj.ac.in/sachin.php

Mr. Partha Sarathi Panja

Assistant Professor

M. Tech (Design and Production Engineering)
Area of interest: Thermal Engineering, Automobile Engg., I.C. Engine
Years of work experiences: 30
Publications in international journals: 01
Email: partha.panja@cuj.ac.in
Web: www.cuj.ac.in/parthapanja.php

Mr. Bishnu Mohan Jha

Assistant Professor

Ph.D (Manufacturing) Thesis submitted
Area of interest: Manufacturing Engineering, Power electronics, DSP Signal processing

Years of work experiences: 05
Publications in international journals: 03
Email: bishnu.jha@cuj.ac.in
Web: www.cuj.ac.in/bishnu.php

Centre's updates:

- **Dr. Basudev Pradhan**, has been awarded the prestigious "Ramanujan Fellowship" by the Department of Science and Technology (DST), Government of India.
- **Dr. Basudev Pradhan**, has been awarded Research Grant for Young Scientists by the Science and Engineering Research Board, Department of Science and Technology (DST), Government of India and also UGC Start-Up Research Grant, Government of India.
- **Dr. Sachin Kumar**, has been awarded **UGC Start-Up Research Grant**, Government of India. The duration of this project is three years.
- **Prof. S. K. Samdarshi** is the **editor-in-chief of SESI Journal** published by Solar Energy Society of India. He is also coordinator of Centre of Excellence-GEET.
- **Dr. Basudev Pradhan** is an editorial board member of **Springer Journal, Applied Physics A**.

Institutional Recognition:

- Ministry of Human Resource Development (MHRD), Govt. of India has selected Central University of Jharkhand (CUJ), Ranchi to set-up a **Centre of Excellence (CoE) in Green & Efficient Energy Technology (GEET)**. CUJ is the youngest in the list of 19 prestigious institutions including 7 IITs, 3 IISERs, 2 National Laboratories and 7 others (NITs, and Universities) to get the CoE. All new centres will be devoted to Training and Research in Frontier areas of Science and Technology (FAST).
- **Solar Radiation Resource Assessment (SRRA)** station established at Central University of Jharkhand campus under MoU with CWET, Chennai with funds from Ministry of New and Renewable Energy (MNRE), Government of India.
- An innovative plan initiated by Centre to establish **2MW Grid-connected Roof Top Solar Photovoltaic Power Plant** is being considered for subsidy funding by MNRE with other major institutions organizations of the country. At a Capacity Utilization Factor of ~18% in the region it may help generate funds for the University through feeding of extra power the grid.

GREEN AND EFFICIENT ENERGY TECHNOLOGY
CENTRE OF EXCELLENCE

Workshops Organised:

- **Two days training Programme on "Functioning and Maintenance of Solar Radiation Resource Assessment (SRRA) Station"** of Eastern Region states, jointly organised by Centre for Energy Engineering, CUJ and Centre for Wind Energy Technology (CWET) of Ministry of New and Renewable Energy, New Delhi, are jointly organizing training programme on officers on July 1-2, 2014.
- One day program on **AKSHAY URJA DIWAS** (an awareness campaign about the developments of renewal energy in India, celebrated on August 20 every year since 2004.

Department's Status:

- Number of faculty members:
  - Permanent : 05
  - Contractual : 03
- Number of students
  - M.Tech : 36
  - Ph.D : 04
- Number of non-teaching/technical staff: 01
- Research paper published in last 5 years
  - Journals 42
  - International conferences 36
- Research papers by students: 03

Ongoing Research Projects

Name of the Investigator	Title of the project & duration	Amount sanctioned (in ₹ Lakh)	Funding Agency
Dr. Basudev Pradhan	Developmemt of High-efficiency organic photovoltaic devices, 5 years (2013-17)	87.40	SERB-DST
Dr. Basudev Pradhan	Development of highly efficient inverted organic solar cells (2014-2017)	23.00	SERB-DST
Dr. Basudev Pradhan	Development of Highly Efficient Hybrid Solar Cells, 3 years (2014-16)	6.00	UGC
Dr. Sachin Kumar	Production of Liquid Fuel from Mixed Waste Plastics by Thermal and Catalytic Pyrolysis, 3 years (2014-16)	6.00	UGC
Prof. S. K. Samdarshi Dr. Basudev Pradhan Dr. Sachin Kumar	Centre of Excellence on Green and Efficient Energy Technology (2014-18)	250	MHRD

Program offered

- 5 years Integrated M. Tech (Energy Engineering)
- PhD (Energy Engineering)

The courses at the centre for Energy Engineering are categorised as follows:

Core Courses
Solar PV Technology
Solar Thermal Technology
Energy System Modelling & Analysis
Emerging Renewable Energy Resources
Energy Efficient Buildings
Materials Science for Energy Applications
Machine Design for Energy Applications
Introduction to Renewable Energy Resources
Bio-Energy Systems
Wind Energy Technology
Electrochemical Energy Conversion
Fuels and Combustion Technology

Mechanical Courses
Theory of Machines
Refrigeration and Air Conditioning
Steam Power System
Heat and Mass Transfer
Engineering Thermodynamics
I.C. Engines and Gas Turbines
Conventional Power Generation Systems
Fluid Mechanics
Numerical Methods & Computational Techniques
Computer programming & Data Structure

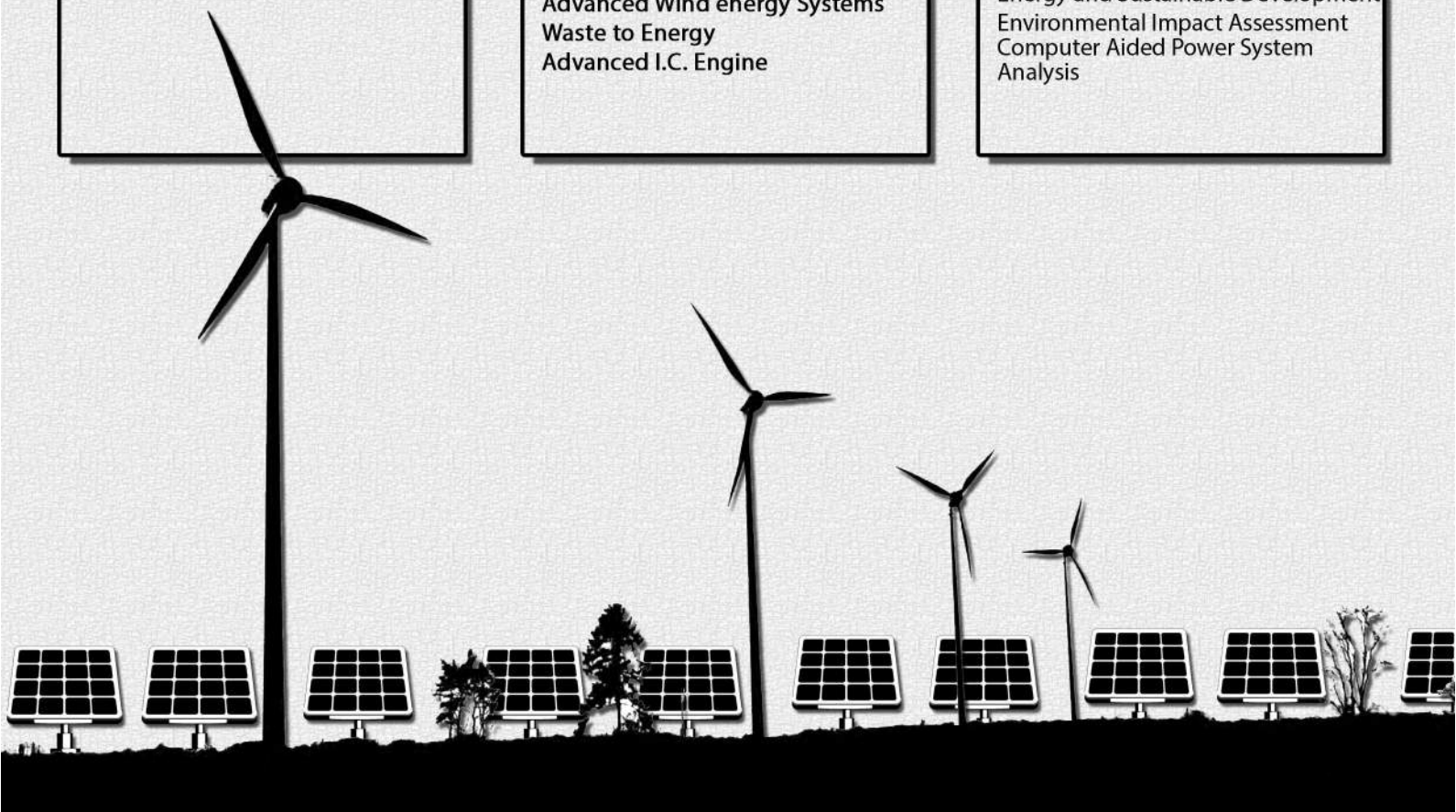
Electrical Courses
Basisc of Electronics
Basics of Electrical Engineering
Electromagnetic Energy Conversion
Measurement and Instrumentation
Electric Circuit Theory and Network
Electrical Power Systems
Power Electronics
Control System

Management Courses
Project Management
Energy Economics
Energy Auditing & Management

Open Elective
Renewable Energy Resources
Energy and Environment
Energy and Society
Direct Energy Conversion
Basics of Energy Management
Rural Energy Technology

Elective I
Advanced Energy Storage
Advanced PV Technology
Nuclear Power Engineering
Small Hydropower Systems
Organic Photovoltaic Devices
Smart Grid & Hybrid Systems
Advanced Wind energy Systems
Waste to Energy
Advanced I.C. Engine

Elective II
Power Generation Economics
Grid Integration of Renewable Energy Sources
Energy Efficient Lighting
Hydrogen Energy
Alternative Fuels for Transportation
Energy and Sustainable Development
Environmental Impact Assessment
Computer Aided Power System Analysis



Student's Profile
2011-2016

Aman Anand (21 yrs.)

email-id : anand.aman007@gmail.com

Area of Interest : Energy management & auditing, Energy & environment and Energy economics

Project/Work (s) done : Transparent conducting electrodes, Opimum configuration for grid conneccted 2 MW solar power plant integrated power supply in CUJ/ PMCL, Purulia

Anamika Sudhanshu (21 yrs.)

email-id : anamika.sudhanshu@cuj.ac.in

Area of Interest : Dye sensitised solar cell, PID controller, Solar photocatalysis, Solar thermal

Project/Work (s) done : Study on PID controller design to make temperature data logger,Fabrication & characterisation of dye sensitised solar cell/ SAIL, Bokaro

Anand Kumar (24 yrs.)

email-id : nndkmr169@gmail.com

Area of Interest : Solar photovoltaics, Energy management & auditing, Energy efficiency

Project/Work (s) done : Study of electrical characteristics of photovoltaics module/ SAIL, Bokaro

Anik Chakraborty (22 yrs.)

email-id : anikc7@gmail.com

Area of Interest : Solar photovoltaic, Energy management & auditing, Energy economics, Hydrogen energy

Project/Work (s) done : Building energy management- Experimental evaluation of building thermal performance

Student's Profile
2011-2016

Ankur Agrawal (21 yrs.)

email-id : ankur.agrawal@cuj.ac.in

Area of Interest : Solar photovoltaics, Energy management & auditing, Energy efficient buildings, Bio-energy

Project/Work (s) done : Study and design of digestor for biogas production/ JUSCO, Usha Martin, Jamshedpur

Annu Kumari (21 yrs.)

email-id : annukumarig3@gmail.com

Area of Interest : Energy audit, Solar cell, Waste to energy, Fuel cell

Project/Work (s) done : Treatment of water using solar disinfection method/ SAIL, Ranchi

Ashish Sharma (22 yrs.)

email-id : ashshr28@gmail.com

Area of Interest : Micro grid integration, Energy management & auditing, Energy efficient buildings, Carbon credit, Solar photovoltaics

Project/Work (s) done : Integration of PMSG based wind turbine with grid, Indirect solar drying integrated with PCM, Reactive power compensators

Atfa Enam (22 yrs.)

email-id : atfaenam.edu@gmail.com

Area of Interest : Bio-fuels, Waste to energy, Polymer fuel cells

Project/Work (s) done : Waste heat reovery in iron & steel plant, Analysis of solar radiation data by neural network in MATLAB, Production of bio-diesel/ SAIL, Ranchi

Student's Profile
2011-2016

Ayban Bodra (23 yrs.)

email-id : aybanbodra@gmail.com

Area of Interest : Bio-Energy, Solar photovoltaic, Dye sensitised solar cells

Project/Work (s) done : Design of deenbandhu biogas plant, Solar thermal energy/ PTPS, Patratu

Chokro Angaria (23 yrs.)

email-id : chokro.angaria@cuj.ac.in

Area of Interest : Bio-energy, Energy management & auditing

Project/Work (s) done : Solar panel with water immersion cooling technique, Energy consumption behaviour in rural India/ PTPS, Patratu

Dharmveer Singh (22 yrs.)

email-id : dharmveersingh111@gmail.com

Area of Interest : Solar photovoltaics, Bio-fuels Solar thermal

Project/Work (s) done : Fabrication and characterisation of mono-crystalline silicon solar cell/ PTPS, Patratu

Dheeraj Kumar Gupta (22 yrs.)

email-id : dheeraj.gupta@cuj.ac.in

Area of Interest : Bio-energy, Bio-fuels, Solar photovoltaics, Renewable energy resources

Project/Work (s) done : Synthesis & characterization of cobalt electrolyte, Design of deenbandhu biogas plant/ PTPS, Patratu

Student's Profile
2011-2016

Gaurav Mahto (21 yrs.)

email-id : gaurav.mahto@cuj.ac.in

Area of Interest : Solar photovoltaics, Renewable energy policies, Bio-energy, Energy efficient buildings

Project/Work (s) done : Environmental factors affecting the performance of solar pv module, Small scale gasification based biomass power generation

Kaushik Saikia (22 yrs.)

email-id : kaushik.saikia@cuj.ac.in

Area of Interest : Micro grid integration, Bio-energy, Energy management & auditing

Project/Work (s) done : Environmental factors affecting the performance of solar photovoltaic module, Temperature controller using PID/ NEEPCO, Assam

Kumar Gaurav (22 yrs.)

email-id : kumar.gaurav2009123@gmail.com

Area of Interest : Bio-fuels, Organic solar cells, Energy management & auditing and Nuclear Energy

Project/Work (s) done : Energy consumption behaviour in rural India/ DVC, Koderma

Manas Vridhi (21 yrs.)

email-id : manasvridhi@gmail.com

Area of Interest : Renewable energy resources ,Energy & environment

Project/Work (s) done : Energy management & financial analysis of available energy resource at GYPSUM/ NTPC, Haryana

Student's Profile
2011-2016

NAGMANI (22 yrs.)

email-id : nagmani@cuj.ac.in

Area of Interest : Solar photo-catalysis, Dye sensitised solar cells

Project/Work (s) done : Gas sensing studies of multifunctional metal oxide, Characterisation & performance study on visible active titania polymorphs for solar application, Titanium dioxide nanomaterials/ PTPS, Patratu

NEHA KUMARI (21 yrs.)

email-id : nehakumari1905@gmail.com

Area of Interest : Solar photovoltaics, Bio-energy, Energy management & auditing

Project/Work (s) done :Fabrication & Characterisation of Dye Sensitized Solar cell using natural dye/ TATA power, Jamshedpur

NITU KUMARI (22 yrs.)

email-id : kumarinitu0405@gmail.com

Area of Interest : Dye sensitised solar cells, Solar photovoltaics Bio-energy

Project/Work (s) done : Study on PID controller design to make temperature data logger, Fabrication & characterisation of dye senditized solar cell/ SAIL, Bokaro

POOJA KUMARI (22 yrs.)

email-id : poojakumari187@gmail.com

Area of Interest : Energy policies, Energy management & auditing, Solar cells, Bio-fuels

Project/Work (s) done : Zinc oxide nanoparticles activity & disinfectant process, Synthesis and characterisation of ZnO nanoparticles/ DVC, Maithan, PTPS, Patratu

Student's Profile
2011-2016

Pradeep Kumar (22 yrs.)

email-id : pradeep.kumar@cuj.ac.in

Area of Interest : Solar photovoltaics, Energy management & auditing, Energy efficient buildings, Bio-energy

Project/Work (s) done : Study of electrical characteristics of photovoltaic module, Small scale gasification based biomass power generation/ PTPS, Patratu

Prakash Kumar Sahu (21 yrs.)

email-id : connectprakashkumar@gmail.com

Area of Interest : Energy system modeling, Energy management & auditing, Energy policy

Project/Work (s) done : Callibration of angstrom constant, Performance evaluation of water based hybrid PV/T collector, Heat loss factor of a double glass evacuated tubular collector/ PTPS, Patratu

Purnendu Kartikay (20 yrs.)

email-id : purnendu.kartikay@gmail.com

Area of Interest : Energy management & auditing, Solar cooling systems, Energy econimics, Dye sensitised solar cell

Project/Work (s) done : Performance analysis of solar operated triple effect vapour absorption air-conditioning system, Energy efficient buildings & energy management in buildings, Fabrication,electrochemical characterization and performance analysis of the working electrode of dye sensitized solar cell

Roma Raj (21 yrs.)

email-id : romaraj93@gmail.com

Area of Interest : Dye sensitised solar cells, Energy management & auditing, Solar photovoltaics

Project/Work (s) done :High efficiency solar cell using perovskite material, Synthesis & characterisation of perovskites for dye sensitised solar cells/ PTPS, Patratu

Student's Profile
2011-2016

Rupchand Korah (23 yrs.)

email-id : rupchandkorah@gmail.com

Area of Interest : Bio-energy, Energy management & auditing

Project/Work (s) done : Biodiesel production from waste cooking oil, Energy consumption behaviour in rural India/ PTPS, Patratu

Sachin Zachariah (21 yrs.)

email-id : sachinenergyengg@gmail.com

Area of Interest : Energy management & auditing, Energy efficient buildings, Solar cells, Solar thermal, Smart grid

Project/Work (s) done : Fabrication & study of Opto-electronics properties of CdS thin flim and perovskite solar cell/ DVC, Chandrapura

Sajjan Paswan (24 yrs.)

email-id : sajjan6600@gmail.com

Area of Interest : Energy efficient buildings, Bio-fuels, Solar photovoltaics

Project/Work (s) done : Fabrication and characterisation of dye sensitised solar cell, Estimation of power generation by solar panel using solar car/ NTPC, Nagpur

Satya Prakash (21 yrs.)

email-id : st.prakash8797@gmail.com

Area of Interest : Energy efficient buildings, Bio-fuel energy, Energy management & auditing, Solar photovoltaics, Hydro power

Project/Work (s) done : Study of electrical characteristics of solar photovoltaic module/ SAIL, Bokaro

Student's Profile
2011-2016

SHRINKHALA SAHAY (22 yrs.)

email-id : shrinkhala1992@gmail.com

Area of Interest : Solar photovoltaics, Bio energy, Enery management & auditing

Project/Work (s) done : Fabrication & characterisation of dye sensitised solar cell using natural dye/ IICM, Ranchi

SNEH LATA (21 yrs.)

email-id : snehpuja@gmail.com

Area of Interest : Solar photovoltics, Energy management & auditing, Energy policy, Energy system modelling

Project/Work (s) done : Callibration of angstrom constant, Performance evaluation of air based hybrid PV/T collector, Heat loss factor of a double glass evacuated tubular collector/ PTPS, JSPL, Patratu

SONALI BHADURI (21 yrs.)

email-id : sonali.bhaduri93@gmail.com

Area of Interest : Solar thermal , Energy efficient buildings, Smart grid, Passive solar architecture

Project/Work (s) done : Fabrication & study of Opto-electronics properties of CdS thin flim and perovskite solar cell/ SECL,Dankuni

UPASNA RANJAN (21 yrs.)

email-id : upasna.sinhacee16@gmail.com

Area of Interest : Energy management & auditing, Solar photovoltaics, Dye sensitised solar cells

Project/Work (s) done : Zinc oxide nanoparticles activity & disinfectant process under illumination of source light, Synthesis & characterisation of cobalt oxide nanostructure/ PTPS, Patratu

Student's Profile
2011-2016

Hemant Kumar (22 yrs.)

email-id : hemant.kumar@cuj.ac.in

Area of Interest : Solar photovoltaics,Organic solar cells, Energy management & auditing, Nuclear Energy

Project/Work (s) done : Experimental studies on hybrid photovoltaic thermal (PV/T) systems, Fabrication & characterisation of dye sensitised solar cell / SAIL, Bokaro

Awareness activities by the department

THE ENERGIEA

(An Energy Society of CUJ)

THE ENERGIEA is an energy society formed by the students of centre for energy engineering and came into existence on 13th February 2014. It aims at providing a platform for students to promote awareness about renewable sources of energy for relating energy with other field of science and engineering. It is also dedicated towards organising awareness programs for conservation of energy.

On 20th August 2014, The Energiea organised a programme on Akshay Urja Diwas, stressing the need of developing and deploying new and renewable energy for supplementary the energy requirement of the country. The inaugural function was graced by Prof Arvind Kumar, head of Mechanical Engineering, BIT, Mesra, as a chief guest in the presence of Prof S K Tiwari, VC (in-charge) of CUJ, Prof Arunabha Datta, dean of academics, Prof S K Samdarshi, head of Centre for Energy Engineering and Mr Shashank, a leading entrepreneur of solar Energy in Jharkhand state besides other faculty members and students.

The Logo of this society have a tag line "Power to Power" which means conversion of solar, wind, hydro, geothermal and fossil fuel for efficient energy generation and the people associated with Energiea have the power to generate energy.

Research papers by students

- Ayan Saha, **Anik Chakroborty** (2014), *Develpoment of Sn-Zn-Bi lead free solder*, TECHNICA-2014, NIT Jamshedpur, pp. 28-29

- Pratish Rawat, Saurabh Mehrotra, **Prakash Kumar Sahu**, K.Sudhakar (2014), *Performance evaluation of solar photovoltaic/thermal hybrid water collector*, ETPESS-2014, JNU New Delhi, ISBN: 978-93-83083-84-8, pp. 267-274

- Mary Debbarma, Pratish Rawat, Saurabh Mehrotra, **Sneh Lata**, K.Sudhakar (2014), *Energy and exergy analysis of solar photovoltaic/thermal hybrid air collector system*, ETPESS-2014, JNU New Delhi, ISBN: 978-93-83083-84-8, pp. 206-212

Media Reflections:

ऊर्जा का बेहतर उपयोग करें : वर्मा

सेंट्रल यूनिवर्सिटी में प्रशिक्षण कार्यक्रम का आयोजन, विशेषज्ञों ने रखे विचार

भास्कर संवाददाता | रांची

कार्यक्रम में उपस्थित ऊर्जा विकास निगम लिमिटेड के अध्यक्ष एसएन वर्मा व अन्य।

राज्य में ऊर्जा का उत्पादन काफी हो रहा है लेकिन इसका उपयोग बेहतर तरीके से होना चाहिए। उक्त बातें मंगलवार को झारखंड ऊर्जा विकास निगम लिमिटेड के अध्यक्ष सह प्रबंध निदेशक एसएन वर्मा ने कही। वे सेंट्रल यूनिवर्सिटी ऑफ झारखंड में आयोजित दो दिवसीय प्रशिक्षण कार्यक्रम को संबोधित कर रहे थे।

उन्होंने कहा कि ऊर्जा का डिस्ट्रीब्यूशन सही तरीके से नहीं होने के कारण सभी क्षेत्रों में बिजली नहीं मिल पाती है। इसके लिए उन्होंने ऊर्जा के उत्पादन, संरक्षण व संचरण पर जोर दिया। उन्होंने देश के विभिन्न क्षेत्रों में ऊर्जा संचरण को लेकर बनाए गए ग्रिड और ग्रिड से संबद्धता पर बहुमूल्य विचार रखे। उन्होंने कहा कि आज ऊर्जा पर निर्भरता को देखते हुए मांग व आपूर्ति में सामंजस्य बनाए रखना कठिन चुनौती है। आज भारत में कोयला, जल, नाभिकीय, सौर आदि से ऊर्जा उत्पादन किया जा रहा है। मौके पर सीयूजे के प्रो. एस. के. तिवारी, डॉ. एसके समदर्शी, डॉ. जी. गिरिधर सहित अन्य उपस्थित थे।

सीयूजे में अक्षय ऊर्जा दिवस का आयोजन

अक्षय ऊर्जा दिवस पर दीप प्रज्ज्वलित कर कार्यक्रम का उद्घाटन करते अतिथि।

डीवी रदार » रांची

सेंट्रल यूनिवर्सिटी ऑफ झारखंड में बुधवार को अक्षय ऊर्जा दिवस पर कार्यक्रम का आयोजन किया गया। मौके पर ऊर्जा के संरक्षण और इसके वैकल्पिक स्रोत पर चर्चा की गई। सीयूजे के सेंटर फॉर एनर्जी एंड एनर्जिया, स्टूडेंट्स द्वारा बनाई गई एनर्जी सोसाइटी की ओर से क्विज, ड्रामा, पेंटिंग और लेख प्रतियोगिता का आयोजन किया गया। कार्यक्रम का उद्घाटन वीआईटी मेसरा के मेकेनिकल इंजीनियरिंग के हेड प्रो अरविंद कुमार ने किया। अपने संबोधन में मुख्य अतिथि ने कहा कि ऊर्जा की बचत इसका अनावश्यक उपयोग पर रोक लगा कर की जा सकती है। उन्होंने कहा कि हम ऊर्जा का सही उपयोग कर ही हमें विकसित देश की श्रेणी में आने में मदद करेगा।

मौके पर मास कॉम डिपार्टमेंट के डीन प्रो एसके तिवारी ने कहा कि गुजरात सरकार सोलर एनर्जी का बेहतर उपयोग कर रही है। मौके पर इंटरप्रनौर शाशांक ने कहा कि एक 50 वाट के बल्ब को वर्ष भर जलाने के लिए 324 किलों कोयले की खपत होती है। उन्होंने कहा कि कोयले की अधिकांश खपत घरों में बल्ब जलाने में होता है मौके पर प्रभारी वीसी प्रो एसके तिवारी सहित स्टूडेंट्स व अन्य फैकल्टी उपस्थित थे।

THE TIMES OF INDIA — Ranchi

Central University of Jharkhand to help in development of solar atlas

Jaideep Deogharia, TNN | Jul 5, 2014, 04.30PM IST

RANCHI: Central University of Jharkhand (CUJ) is gearing up to contribute substantially to the national programme of the ministry of new and renewable energy.

CUJ's Centre for Energy Engineering is likely to help the ministry in assessing and quantifying solar radiation availability along with weather parameters with a view to develop a solar atlas for the country. For the purpose, around 191 solar radiation resource assessment (SRRA) stations are being built across the country. One such station has already started functioning at the administrative building of CUJ's new campus in Cheri Manatu.

Apart from making vital data available to the Centre for Wind Energy Technology (C-WET) in Chennai, the university will also be utilizing the data available for internal researches. The ongoing research on photoactive nano particles is one such example. The university also plans to set up a 2MW solar power plant with the support of the ministry, talks for which are in the initial stages.

S K Samadarshi, head of energy engineering here, said solar power is the future of power and a lot of research work is going on to seriously find an alternate to the conventional and fossil fuel. "To carry out research, the basic requirement is correct knowledge of the available raw material and the ministry's project to create solar atlas is, in fact, mapping the available resource with extreme accuracy," he said.

According to data collected and processed at the SRRA station in CUJ, the capacity utilization factor of a solar plant in Ranchi is 18% as against the factor of 22% in Rajasthan, based on the

the pioneer

2-DAY TRAINING PROGRAMME ON SRRA BEGINS AT CUJ

Wednesday, 02 July 2014 | PNS | Ranchi

A two-day training programme on "Functioning and Maintenance of Solar Radiation Resource Assessment (SRRA) Station officers" of Eastern Region States, jointly organised by Centre for Energy Engineering, CUJ and Centre for Wind Energy Technology (CWET) of Ministry of New and Renewable Energy, New Delhi began at the Central University Jharkhand (CUJ) campus on Tuesday.

In his inaugural address Jharkhand State Electricity Corporation Ltd chairman SN Verma said the State produced "enough" power yet the crisis is caused by inefficient distribution. Power produced in Jharkhand is distributed to outside the State, he informed.CUJ vice-chancellor (in-charge) Prof SK Tewari recalling his more than decade-long stay in Gujarat said people in that State enjoy 24-hour power supply. He brought home the point that despite having uninterrupted power supply, the Gujarat Government was focussing on solar power.

He thanked the centre for initiating the two-day training programme on the topic and hoped that it would lead to a meaningful discourse. Director of MNRE Dr G Giridhar also graced the occasion.Head of Centre for Energy Engineering Prof SK Samdarshi gave the welcome address while Dr BasudevPradhan proposed the vote of thanks.A large number of faculty members and students attended the programme.

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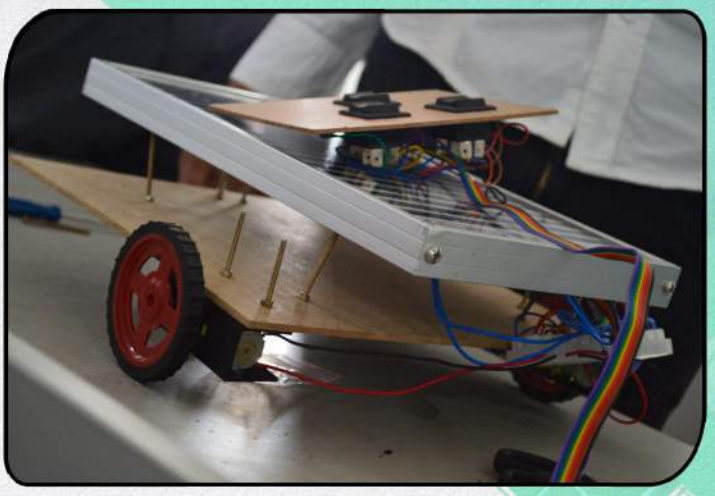

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