G.Narayanamma Institute of Technology & Science
(for women)
Autonomous
Shaikpet, Hyderabad-500104

CIRCULAR **Date: 22/09/2023**

All the students are hereby informed that IEEE –IES Chapter, Student Branch GNITS is hosting an illuminating presentation in collaboration with IEEE-IES Hyderabad Section on "LATEST TRENDS IN BATTERY ENEGRY STORAGE SYSTEMS" facilitated by Mr. B. Koti Reddy, Scientific Officer, Department of Atomic Energy, Heavy Water Plant(Manuguru).

We request all the students to attend the session and make the best out of it.

- **Date:** 25th September,2023
- **Venue:** IT Seminar Hall, GNITS
- **Time:** 10am-12:30pm

(Dr. Himabindu.T)	(Dr. N. Malla Reddy)	(Dr. K. Ramesh Reddy)
IEEE SB Counsellor GNITS	Mentor IEEE SB GNITS	Principal, GNITS

CC-copy to:
1. Principal office
2. All the Deans
3. All the HOD's-Request to circulate among the students
4. IEEE SB Coordinator GNITS- Dr. Renuka Devi SM
5. Faculty Advisors- Mrs. K. Swarna Latha, Power Electronics Society (PELS), EEE Dept.
   Dr. C. Padmaja, Sensors Council, ECE Dept.
5. Office copy

IEEE Hyderabad Section

IEEE Industrial Electronics Society

GNITS IEEE Student Branch

IEEE Industrial Electronics Society IEEE GNITS Student Branch Chapter

INVITED TALK ON

LATEST TRENDS IN BATTERY ENERGY STORAGE SYSTEMS

25 September 2023

10AM -12:30PM

IT Seminar Hall,
G.Narayanamma Institute
of Technology and Science
(for Women), Hyderabad

B.KOTI REDDY

Scientific Officer, Department of Atomic Energy, Heavy Water Plant (Manuguru)

Scan& Register:-

Registration link :-

https://events.vtools.ieee.org/event/register/374877

B. Koti Reddy
Scientific Officer
Department of Atomic Energy, India
#+91 9441550380, kotireddy1965@gmail.com

1. **Title of the talk**: **Latest Trends in Battery Energy Storage Systems**
2. **Speaker's Present position**: Working as Deputy Maintenance Manager(Electrical) at Heavy Water Plant(Manuguru) and responsible for O & Maintenance of electrical power systems with 50 MW load.
3. **Experience** : 30+ Years' experience Installation Operation and Maintenance of HT and LT Sub Stations, Machines, Batteries, VFDs, EV, 12 MW Solar Power Plant. Working with Electrical software tools such as E-TAP, Homer Pro and PV Syst. Internal Auditor for ISO 9001, 14001 and 45001. Senior Member in IEEE.
4. **Educational Qualifications :**
   - **Ph D** from LPU in 2023.
   - **M. TECH** JNTU-Kakinada in 2017.
   - **MBA** (HRM) from Dr. B.R. Ambedkar Open University in 2004.
   - **AMIE** from The Institution of Engineers (India)], Kolkata in 1990.
   - **Diploma** in Electrical Engineering in 1983.
5. **Publications:**
   - 12 papers published in SCI/Scopus indexed Journals
   - Five book chapters published on Energy Efficiency, AI/Ml, safety and microgrids.
   - One text book on Electrical equipment (Wiley publishing).
6. **Other activities**:
   - Attending Seminars / Webinars as speaker and participant.
   - Working group member in new IEEE Standard 3001.9 preparation committee.
7. **Roles Playing:**
   - Commissioning, Maintenance and Project Engineer.
   - Recruiter (Interviews Committee Member) and Trainer for new recruits.
   - Project Guide for Engineering Students (UG/PG).
   - Resource person for Faculty Development Program.

Abstract of Talk

- This talk provides a comprehensive exploration of BESS with a focus on understanding, implementing, and optimizing this transformative technology.
- It begins with an introductory overview of BESS, highlighting its pivotal role in the evolving energy landscape.
- The subsequent section delves into the fundamental terms & definitions and applicable codes associated with BESS.
- Then elucidates the diverse range of battery technologies available, insights into their characteristics and applications.
- Real-world applications of BESS are showcased
- Sizing estimations are provided with practical guidance in this regard.
- Understanding the charging and discharging characteristics of a Li-ion battery will be discussed.
- Case studies/success stories showcase real-world applications, demonstrating the tangible benefits of BESS.
- Will discuss strategies for optimizing BESS performance and potential opportunities in the BESS sector.
- Latest advancements such as solid state & Li-air batteries and emerging technologies such as Digital Twin, providing an outlook for what lies ahead.
- In conclusion, this talk equips participants with a holistic understanding of BESS, its current significance & promising future, ultimately empowering stakeholders to make informed decisions in the realm of energy storage and management.
- Application of softwares tools- E Tap, Python, Matlab and Homer Pro
- Practical Demo of Li ion Battery charge and Discharge Curves

GNITS IEEE Student Branch	**IEEE GNITS SB ACTIVITIES**	IEEE Hyderabad Section

Latest Trends in Battery Energy Storage Systems

Student Activity Centre: IEEE SB GNITS

EVENT DETAILS

Type of activity: SB Event
Subsection: Hyderabad
Name of the Event: Latest Trends in Battery Energy Storage Systems
Dates/Duration: 25/09/2023
Organized by: IEEE IES chapter GNITS SB
Sponsored by: GNITS
Host Organization: SB GNITS

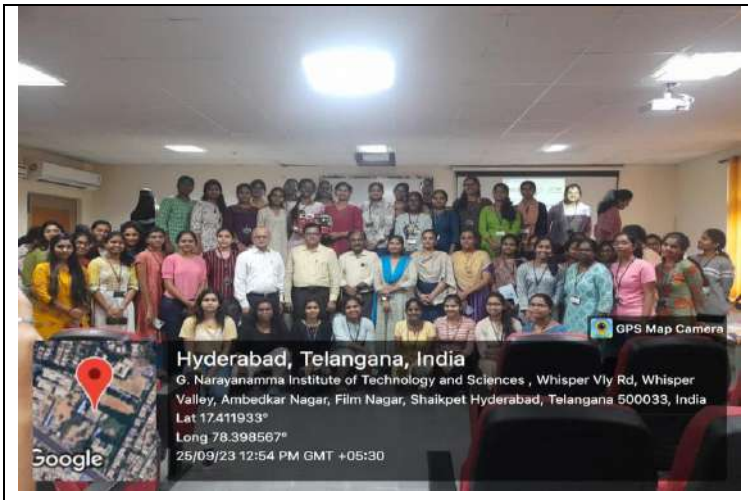
EVENT HIGHLIGHTS

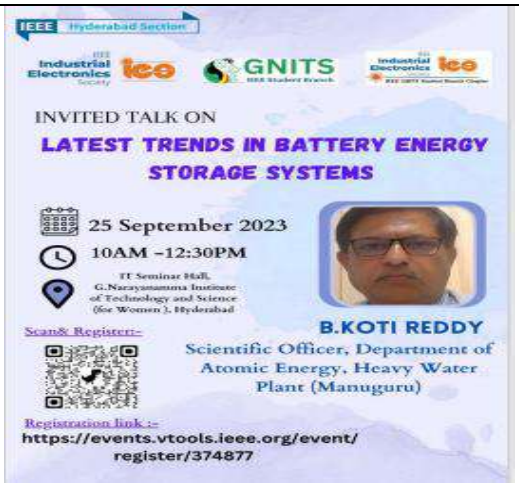
IEEE IES chapter GNITS SB in association with IEEE IES Hyderabad Section had an excellent technical talk titled **"Latest Trends in Battery Energy Storage Systems"** by Mr.Koti Reddy, Scientific officer, Dept. of atomic energy. This talk provides a comprehensive exploration of BESS with a focus on understanding, implementing, and optimizing this transformative technology. It begins with an introductory overview of BESS, highlighting its pivotal role in the evolving energy landscape.

The subsequent section delves into the fundamental terms & definitions and applicable codes associated with BESS. Then elucidates the diverse range of battery technologies available, insights into their characteristics and applications. Real-world applications of BESS are showcased Sizing estimations are provided with practical guidance in this regard. Understanding the charging and discharging characteristics of a Li-ion battery will be discussed. Case studies/success stories showcase real-world applications, demonstrating the tangible benefits of BESS. Will discuss strategies for optimizing BESS performance and potential opportunities in the BESS sector. Latest advancements such as solid state & Li-air batteries and emerging technologies such as Digital Twin, providing an outlook for what lies ahead. In conclusion, this talk equips participants with a holistic understanding of BESS, its current significance & promising future, ultimately empowering stakeholders to make informed decisions in the realm of energy storage and management. Application of softwares tools- E Tap, Python, Matlab and Homer Pro.Practical Demo of Li ion Battery charge and Discharge Curves.

Mr. B. Koti Reddy Garu gave a prototype of "Testing bed of Battery cells under different temperatures" to Dr.Himabindu.T for further applications of the prototype. Guest Dr.Rajgopal, Senior IEEE member also addressed the session in view of benefits about the battery storage devices. Dr.Tripura.P, Chair, IEEE IES HYD SECTION (online mode), Dr.K.Ramesh Reddy, Principal, Dr.N.Malla Reddy, Mentor, IEEE SB GNITS, Prof.P.Ramakrishna, HoD, Dr.Himabindu.T (Vice-Chair, IEEE IES HYD SECTION), SB Counselor, GNITS, Mr.Ramana Reddy, Mrs.K.V.S Sowmya, Mrs.K.V.Dhanalaxmi, faculty and students of EEE dept. participated in the session.

Registered participants:
Attended participants:
IEEE members: 08
Non-IEEE members: 107
Special awards/achievements (if any): Mementos given to guests





Department of

G. Narayanamma Institute of Technology and Science
(for Women) Autonomous
Department of Electrical & Electronics Engineering

Technical talk on **"LATEST TRENDS IN BATTERY ENEGRY STORAGE SYSTEMS"**
Speaker: **Mr. B. Koti Reddy**, Scientific Officer, Dept. of Atomic Energy, Heavy Water Plant, Manuguru
Date: 25-09-2023 Time: 10:00am to 12:30pm
Venue: IT Seminar Hall, F-Block, GNITS

S.no	Name of the Faculty	Designation	Signature
1.	Dr. N. Malla Reddy	Dean H&S & Head	N. Malla Reddy
2	Dr. P.V.C Reddy	HOD	
3	K. V. Soumya	Assistant Professor	
4.	Dr. P V Rajaiah	GM(R&D), BHEL	
5.	Dr. Himabindu T	Assistant Prof (EEE)	25/09/2023
6	K.V Dhanalakshmi	Asst. Prof (EEE)	25/9/23
7	G. Ramana Reddy	Assoc prof	G.Reddy 25/09/23

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M Tech.

Date: 25-09-2023 Time: 10:00am to 12:30pm
Venue: IT Seminar Hall, F-Block, GNITS

S.no	Regd. No.	Student Name	Signature
1.	22251D5401	A. Deepika	A. Deepika.
2.	22251D5402	K. Shara	K. Shara
3.	22251D5403	O. Anusha	O. Anusha.

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EEE-B

S.no	Regd. No.	Student Name	Signature
1	20251A0259	K Anucha	Anu
2.	20251A0278	C. Hari Sahithi	Sahithi
3	20251A0276	B. Soumya Sree	Soum
4	20251A0251	E. Sai Sruthi	Sruthi
5	20251A0274	B. Gouthami	Gouthami
6.	20251A0272	A. Hindu Sri	Hindu
7.	20251A0275	Srilekha	Srilekha
8.	21255A0220	B. Harshitha	Harshitha
9.	20251A0294	Prerna	Prerna
10.	20251A0253	Farheen	Farheen
11.	21255A0217	P. Jahnavi Sai	P. Jahnavi Sai
12.	20251A0254	G. Bhoomika	Bhoomika
13	21255A0228	K. Sruthi	Sruthi
14	21255A0229	Ch. Yogeshwari	Yogeshwari
15	20251A0292	Mrinalini	Mrinalini
16	20251A0287	Reena	Reena
17	21255A0225	J. Triveni	Triveni
18	20251A0270	R. Nehanjali	Nehanjali
19	20251A0269	R. Sathvika	Sathvika
20	20251A0285	Nazneen Sultana	Nazneen
21	20251A0271	Nagma Shaik	Nagma
22	20251A0265	Sai priya	Saipriya
23	21255A0224	M. Harika	Harika
24	20251A0281	E. Anusha	Anusha
25	20251A0250	D. Sai Sruti	Sai Sruti

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Date: 25-09-2023 Time: 10:00am to 12:30pm
Venue: IT Seminar Hall, E-Block, GNITS

S.no	Regd. No.	Student Name	Signature
1.	20251A0243	A. Gayathri	
2.	20251A0291	S. Sujitha	
3.	20251A0260	K. Sindhu	
4.	20251A0277	Tabitha Roselin	
5.	20251A0279	Dasari Chandu	
6.	20251A0264	Shekhar N	
7.	20251A0290	Sadadi Shruthi	
8.	21255A0216	R. Bhavana	
9.	21255A0227	Ch. Nikhitha	
10.	21255A0218	A. Sai Shanthi	
11.	21255A0228	K. Swathi	
12.	21255A0229	Ch. Yegneshwari	
13	21255A0215	M. Vidya	
14.	21255A0221	K. Deekshitha	
15.	20251A0275	B. Srilekha	
16	20251A0261	K. Sri Harshitha	
17	20251A0286	P Mrudula	
18	20251A0293	V prathika	
19	20251A0258	R. Sannidhi	

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EEE - B

S.no	Regd. No.	Student Name	Signature
1.	21255A0222	B. Sahithi	Sahithi
2.	21255A0219	R. Susmitha	R Susmitha
3	21255A0283	B. Vidyasri	Vidya
4.	20251A0282	G. Bhargavi	G Bhargavi
5.	20251A0283	K. Deepika	K Deepika
6.	21255A0224	M. Havika	Havika
7.	20251A0268	R. Shreya	Shreya
8.	20251A0249	Ch. Sai Sreepa	Sreepa
9.	20251A0267	P. Mounika	
10.	20251A0258	K. Vinuthna	
11.	20251A0280	D.V. Nakshatra	Nakshatra
12.	20251A0289	S. Shruthi	Shruthi
13.	20251A0266	P. Vaishnavi	Vaishnavi
14.	20251A0256	Gr. Naga Mallika	Naga
15.	20251A0257	Aparna k	Aparna

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EEE-A

S.no	Regd. No.	Student Name	Signature
1.	20251A0235.	Jhansi laxmi	Jhansi
2	20251A0244	P. Pooja	P. Pooja
3.	20251A0286	Huma Sultana	Huma
4	20251A0221	R. Aarathi Suhasini	Suhasini
5	20251A0222	S.L.S. Himamsa	Himamsa
6	20251A0208	Vemela	Vemela
7	20251A0215	K. Vidmahi	K. Vidmahi
8	20251A0224	T. Dhana lakshmi	T. Dhana lakshmi
9.	20251A0246	P. Jayanthi	P. Jayanthi
10.	20251A0217	Meghana	Meghana.
11.	20251A0219	M. Raghavi	Raghavi
12	20251A0243	P Tejasree	Tejasree
13	21255A0202	C. Maha laxmi	C. Mahalaxmi
14	21255A0213	R. Vaishnavi	Vaishnavi
15	20251A0214	K. ADITI	
16.	20251A0206	B. Deekshetha Goud.	
17.	20251A0213	K. Sri Varsha	K. Sri Varsha
18.	20251A0207	D. Nitya Spoorthy	DNS
19	20251A0211	G. Sravidhi	
20.	21255A0205	K. Geethanjali	K. Geetha
21.	20251A0223	T. Priya	Priya
22.	21255A0207	K Premika	K. premika

(Dr. Himabindu T)
Student Branch Counsellor
IEEE GNITS

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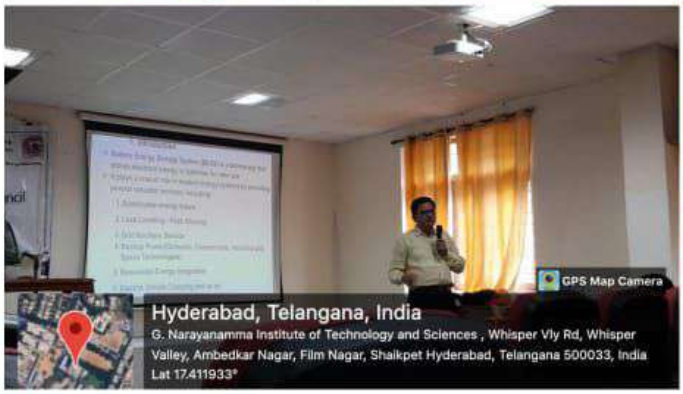
S.no	Regd. No.	Student Name	Signature
20	20251A0240	K. SaiDeepthi	Saideepthi
21	20251A0238	J. Meghana	Megha
22	20251A0203	A. Sneha	Sneha
23	21255A0208	L. Mounika	Mouny
24	20251A0230	Ch. Chaitanyasri	Chai
25	20251A0216	M. Lahari	lahari
26	20251A0241	P. Nikitha	Nikf
27	20251A0242	P. Apoorva	Apr
28	20251A0210	G. Divya	G. Div
29	20251A0231	Faiza Rumana	Faiza Rumana
30	20251A0220	Akansha	Akansha
31	20251A0229	Ch Aishwarya	Aish
32	21255A0203	Sravanthi	Sravanthi
33	21255A0209	Sangeetha	Sangeetha
34	20251A0234	G. Nandini	Nandini
35	20251A0247	R. Gayathri	R Gayathri
36	20251A0227	B. Lahari	B.lahari
37	20251A0202	A. Tanmayee	Tanmayee
38	20251A0201	A. Srivarsha	Srivarsha
39	20251A0245	P. Srilakshmi	Srilakshmi
40	20251A0226	B. Jyoshna	B Jyoshna
~~41~~	~~20251A0201~~	~~Varsha~~	
41	20251A0209	G. LakshmiPriya	Laksh
42	21255A0214	Y. Sharanya	Sharu
43	20251A0233	G. Tejaswi	Tejaswi
44	21255A0210	B. Venitha	
45	21255A0211	M. Pranitha	
46	21255A0212	K. Dhanalakshmi	
47	21255A0209	T. Abhilaya	

EEE-A

1.	20251A0239	K. Bhavana	K. Bhavana
2.	20251A0220	N. Akanksha	N. Akanksha
3.	20251A0218	M. Vaishnavi	M. Vaishnavi
4.	20251A0905	B. Vasantha	B. Vasantha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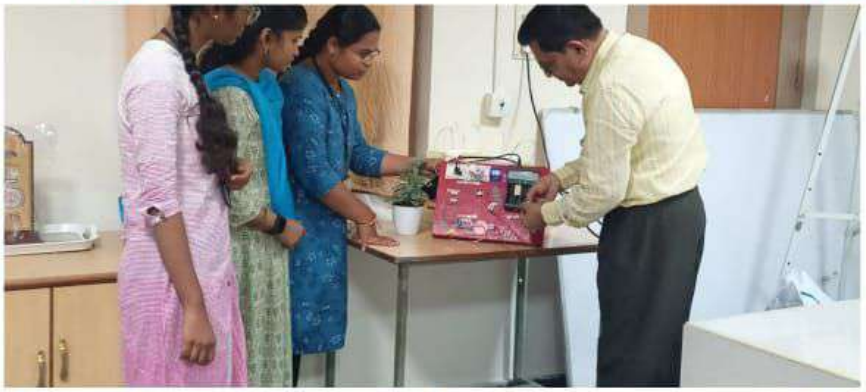
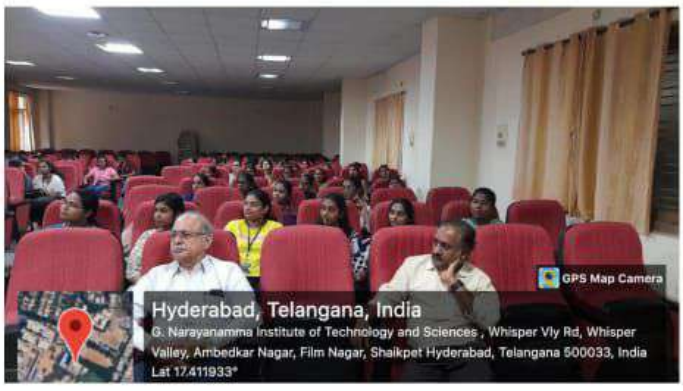
Lat 17.411933°

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