Name: Dr. DOLA SINHA

Department: Electrical Contact

Nos.: 09647361722

Qualifications: Ph.D (Engg.)

Designation: Assistant Professor

VIDWAN ID: 180570

Experience (Teaching / Research / Industry, in years): 14 years

Date of Joining at the Present Institution: 01.12.2012

Examinations Cleared: Nil

Qualifications Summary (Reverse chronological order):

Degree	Institute	From - To	Subjects
PhD	ISM Dhanbad	2008-2012	Power Electronics
M.Tech	NIT Durgapur	2004-2006	Industrial Electrical Systems
B.E	Asansol Engg. College	2000-2004	Electrical Engineering
H.S	WBCHSE	1997-1999	Science
M.P	WBBSE	1997	General

Experience Summary:

Designation,	Organization,	Date From - Date To
Assistant Professor	Dr. B. C. Roy Engg, College, Durgapur	01.12.2012- till date
JRF	ISM Dhanbad	July 2008- July 2012
Senior Lecturer	Dr. B. C. Roy Engg, College, Durgapur	Feb 2008- July 2008
Lecturer	Dr. B. C. Roy Engg, College, Durgapur	Dec 2005 – Feb 2008

Specialization/Research Interest:

Power Electronics Inverter, High frequency heating, Solar Energy System, Load flow study, Nanomaterials, DSSC, Block chain, IoT etc.

Awards & Recognitions

Best paper/ scholarship/Position in university exam / awards while at industry/ other organizations etc.

Secured 2nd position in the model competition at university level under my guidance.



~1~

- Best paper award in IEEE International conference on Science, Technology, Engineering and Management, 2017
- Best paper award in IEEE International conference on Industrial Electronics Control and Robotics, 2010.
- > MHRD Fellowship as Junior Research fellow at 2008 from ISM Dhanbad.
- > Awarded as "Sangeet Bivakar" in Rabindra Sangeet at 1999.

Courses taught:

B.Tech: Power Electronics, Utilization of Electric Power, Basic Electrical Engineering, Power Electronics Lab, Basic Electrical Engineering Lab, Drives Lab

M.Tech: Advanced power system analysis, Power System Operation and control, Nonconventional energy, Power system hardware lab, Mi-Power based software lab.

Online Mode of Teaching: Online classes have been taken through Google meet link using smart board (WACOM) similar to class room teaching with ppt presentation, excel sheets and other software like MATLAB Simulink, PSIM etc.

Publications (35):

Journal (17):

International Journals (15)

- Chinmoy Chakraborty, Chaity Sarkar, Dola Sinha, Design of a Priority Based Local Energy Market Using Blockchain Technology, BCREC Engineering & Science Transaction (BEST), July 2021, Vol.2., No: 1, PP: 119-125, ISSN: 2582-9068.
- Sinha D., De D., Ayaz A., "Photo sensitizing and Electrochemical Performance analysis ofMixed natural dye and Nanostructured ZnO based DSSC", Sadhana Springer, Vol. 45, 175, 2020, DOI: <u>https://doi.org/10.1007/s12046-020-01415-0</u>
- Sinha, D., "Induction based Water Heating Arrangement from Photovoltaic Array", BCRECEngineering & Science Transaction, Vol. 1, Issue 1, pp. 29-34, 2020, ISBN : 2582-9068.
- Ayaz A, Sinha D., De D., "Performance Analysis of Mixed Natural Dye and Nanostructured TiO₂ based DSSC", Int. journal of Innovative and exploring Engineering, vol.9, no.7.,pp 453-456, ISSN 2278-3075, May, 2020. DOI: <u>10.35940/ijitee.G5327.059720.</u>
- 5. D. Sinha D. De, D. Goswami, Ayaz A., and Mondal A., "ZnO and TiO₂ nanostructured

photovoltaic cell", Materials Today proceedings, Elsevier, vol. 11, No.2, pp-782-788, 2019. DOI: <u>https://doi.org/10.1016/j.matpr.2019.03.043</u>

- Sinha D., De D., Ayaz A, "Performance and stability analysis of curcumin dye as a photo sensitizer used in nanostructured ZnO based DSSC", Spectrochimica Acta Part A, Elsevier, vol.193, pp 467-474. 2017, DOI: https://doi.org/10.1016/j.saa.2017.12.058.
- Sinha D., Sarkar A., Das Bairagya D., Pal S., Bandyopadhyay S. and Ghosh R., "Fuzzy based DC/DC Boost Converter Design to Enhance Efficacy of Photovoltaic Application", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Special Issue, ISSN (E): 2249-8001. pp. 421-428, June, 2018.
- Sinha D., De D., D. Goswami Ayaz A, "Fabrication of DSSC with nanostructured ZnO photoanode and natural dye sensitizer", Materials Today proceedings, Elsevier, vol. 5, pp 2056-2063, 2018. DOI: <u>https://doi.org/10.1016/j.matpr.2017.09.201</u>
- Sinha D and Hui N. B, "Fuzzy logic based dual axis solar tracking system", International Journal on computer application, vol. 155, no.12, pp. 13-18, December, 2016. <u>DOI:</u> <u>10.5120/ijca2016912496.</u>
- Sinha D, Sadhu P.K, Pal N and Hui N.B, "Genetic Neural-based Modeling of AC Resistance of Heating coil used for High Frequency Inverter-fed Induction Cooker", Neural Computing & Applications, Springer Verlag, 2012 vol. 22, no 7&8, pp 1379-1386, 2013, <u>DOI:</u> <u>10.1007/s00521-012-0822-8</u>)
- 11. **Sinha D**, Sadhu P. K, Pal N, "Mathematical Analysis of the Mirror Inverter based High Frequency Domestic Induction Cooker", International Journal of Current Engineering and Technology, Inpressco, vol. 1, no. 1, pp. 271-277, 2011.
- 12. Pal N, Sadhu P. K., Sinha D, Bandyopadhyay A, "Selection of Pan Material a Tool to Improve Output Heating Response of Hybrid Resonant Inverter Fed Four Zones Induction Cooker", Journal of Energy, Heat and Mass Transfer, Asia and the Pacific, vol. 33, p.p.-169-185, 2011.
- Pal N, Sadhu P. K., Sinha D, Bandyopadhyay A, "Selection of Power Semiconductor Switches – a Tool to Reduce Switching & Conduction Losses of High Frequency Hybrid Resonant Inverter fed Induction Cooker", International Journal of Computer and Electrical Engineering, Vol. 3, No. 2, pp. 265-270, 2011.
- Sinha D, Bandyopadhyay A, Sadhu P. K., Pal N, "Optimum Construction of Heating Coil for Domestic Induction Cooker", Proce. of AIP, ISSN: 1551-7616 (2010), 1298, 439–444, DOI: <u>10.1063/1.3516346</u>.

15.Sadhu P. K, **Sinha D**, Pal N and Bandyopadhyay A, "A New Generation IGBT Based High-Frequency Mirror Inverter for Induction Heating", International Journal of Electrical Engineering and Electrical Systems, Vol. 03, Issue No. 01, Fall Edition 2010, pp. 38-44, 2010.

National Journals (02)

- 16. Sadhu P.K, Pal N., Sinha D., and Chatterjee T. K, "A Comparative Survey on High Efficient Clean Heat Production through Microwave Oven and Induction Cooker", Journal of Indian Institution of Industrial Engineering, Navi Mumbai, Vol II & Issue No. 23, May 2011, pp 08-12.
- Sadhu P. K., Pal N. and Sinha D, "An Energy Efficient MCT based H.F. Inverter for Operating CFL from Solar PV Charged Batteries", Journal of IEEMA, Mumbai; Volume 1, No – 11, July 2010, P.P. – 84-88.

Conferences (15):

- Dutta S, Majumdar K, Sinha D, Renewable energy harvesting through Maglev windmill, (Accepted), MMETFP, Organized by PANDIT DEENDAYAL ENERGY UNIVERSITY, Gujrat, will be held on 20-21 November, 2021.
- Sarkar A., Sinha D., Banerjee R., "Automatic Dominion Of DC Smart Grid Enclosing Multilevel Inverter Amidst To Renewable Source", IEEE conference on NCETSTEA 2020, Feb.6-7, 2020, International Conf., IEEE, ISBN: 978-1-7281-4362-0,DOI: 10.1109/NCETSTEA48365.2020.9119926.
- Pal S. and Sinha, D. "A Different Multi-input DC-DC Converter for Renewable Power System Application". Intelligent Techniques and Applications in Science and Technology. ICIMSAT 2019. Learning and Analytics in Intelligent Systems, vol 12. Pp. 578-588, Springer, Cham. International Conf., ISBN: 978-3-030-42363-6, DOI: <u>https://doi.org/10.1007/978-3-030-42363-6_68</u>.
- Goswami D., Sinha D. and De D., Nanostructured ZnO and Natural Dye Based DSSC for Efficiency Enhancement, 3rd International conference on Science, Technology, Engineering and Management, 23-24th March, 2017. Int. Conf. IEEE, (Awarded as Best paper). DOI: <u>10.1109/ICONSTEM.2017.8261430</u>
- Sinha D., Roy D. and Pal S., "Fuzzy logic based solar PV power prediction, International Conference on Advanced Dynamics and Vibration Control", 2016, Narosa publishers, pp 270-276, Organised by NIT Durgapur.

- Sinha D., De D. and Pal S., "Efficient Utilization of Solar Power in High Frequency Applications", IEEE conf. on Micro-electronics, Computing and Communication 2016, 23-25 January, 2016, Int. Conf., IEEE, DOI: <u>10.1109/MicroCom.2016.7522527</u>
- Mazumdar D., Sinha D., Panja S., and Dhak D. K., "Design of LQR Controller for Solar Tracking system", IEEE conference on ICECCT 2015 held at Coimbatore, March, 2015. pp. 432-435, Int. Conf. IEEE., DOI: <u>10.1109/ICECCT.2015.7226000</u>
- 8. **Sinha Dola**, "Simulation of IGBT fed Mirror Inverter based H.F. Induction Cooker", International Conference on Industrial Engineering Science and Applications (IESA-2014), at NIT Durgapur, India. pp. 227-230., Int. Conf. of Springer , ISBN 978-93-80813-27-1,.
- Sinha D., Das A. B, Dhak D. K, Sadhu P.K, "Equivalent Circuit Configuration for SolarPV cell", International Conference on Non Conventional Energy(ICONCE 2014) January, 2014, Kalyani, India, P.P. 79-81. Int. conf. IEEE, DOI: <u>10.1109/CCWC.2018.8301713</u>
- Mudi J, and Sinha D, "Comparative study among different wind turbines used for wind energy system", International Conference on Non Conventional Energy (ICONCE 2014) January, 2014, Kalyani, India, P.P. 229-233., Int. Conf., IEEE, DOI: <u>10.1109/ICONCE.2014.6808715</u>
- Sinha D, Sadhu P. K, Dipak Kr. Dhak, Energy Efficient High Frequency Inverter for Operating CFL from Solar PV System, International Conference on Energy System Modeling and Optimization (ESMOC 2013) December, 2013, NIT Durgapur, India
- Sinha D, Bandyopadhyay A, Sadhu P. K., Pal N, "Performance of H.F. Mirror Inverter with Different Semiconductor Switches for Induction Heating", International Conference on Emerging Trends in Electrical and Computer Technology" (ICETECT 2011), at St.Xavier's Catholic College of Engineering, Chunkankadai, Tamilnadu – 629807, India, pp 465-468, March, 2011. Int. conf. IEEE., DOI:<u>10.1109/ICETECT.2011.5760161</u>
- Sinha D, Bandyopadhyay A, Sadhu P. K., Pal N, "Computation of Inductance and AC Resistance of a Twisted Litz-Wire for High Frequency Induction Cooker", International Conference on Industrial Electronics, Control & Robotics (IECR 2010), during 27th to 29th December, 2010 at NIT, Rourkela, Orissa, India. (Awarded as Best paper). pp 85-90. Int. Conf. IEEE., DOI: 10.1109/IECR.2010.5720156
- 14. Sadhu P. K., Pal N, Bandyopadhyay A, Sinha D, "Review of Induction Cooking a Health Hazards Free Tool to Improve Energy Efficiency as Compared to Microwave Oven", International Conference on Computer and Automation Engineering (ICCAE 2010) organized by IACSIT, Sichuan University and IEEE, Computational Intelligence Society,

held in Suntec City, Singapore during February 26 - 28, 2010, Volume 5, P.P. – 650-654.

15. Sadhu P. K., Pal N, Sinha D, Bandyopadhyay A, "Energy Efficient Induction Heated Cooking – Range using MCT based Hybrid Resonant Converter", 2nd International Conference on Computer and Automation Engineering (ICCAE 2010) organized by IACSIT, Sichuan University and IEEE, Computational Intelligence Society, held in Suntec City, Singapore during February 26 - 28, 2010, Volume 5, P.P. – 637-641.

Book Chapter (03):

- Sinha, D., "Adaptive Neuro-Fuzzy Approach for Forecasting of Solar Power Generation", vol 602. pp. 429-439, Lecture Notes in Electrical Engineering, Springer, Singapore. 2020, ISBN 978-981-15-0829-5, DOI: <u>https://doi.org/ 10.1007/978-981-15-0829-5 42</u>.
- De D., Sinha D., Ayaz A., "Performance Evaluation of Beetroot Sensitized Solar Cell Device", vol 602. pp. 223-228, Lecture Notes in Electrical Engineering, Springer, Singapore. 2020, ISBN978-981-15-0829-5, DOI: <u>https://doi.org/10.1007/978-981-15-0829-5 22</u>.
- 3. Sinha D, Sadhu P and Pal N, "Design of an induction heating unit for hyperthermia treatment", chapter 11, *Advances in therapeutic engineering, CRC Press, USA,* 2012. http://www.crcpress.com/product/isbn/9781439871737

Supervision of Ph.D/M.Tech / B.Tech Projects:

Supervision of Ph.D

- 1. Abdul Ayaz, Dola Sinha, "Fabrication of nanostructured metal oxides based photovoltaic cell", 2020, MAKAUT (Thesis submitted)
- 2. Debashis Sur, Dola Sinha, "Design of litz wire based power efficient, thermal resistive, robust domestic Induction cooker", 2018, NIT Durgapur (Registered)
- 3. Sucharita Pal, Dola Sinha, "Design of multi-input interleaved dc-dc boost converter for efficient utilization of renewable sources", 2018, MAKAUT (Registered).

Projects: UG project guided: (12)

Name of the Students	University	Name of	Title of the project	Year of
	Roll No.	the		submis
		supervisor		sion
Santanu Nandi	12001617049	D. Sinha	IOT based energy	2021
Shounak Kr. Paul	12001617042		transaction	
Tushar Kanti Chatterjee	12001617018			
Rahul Mondal	12001617054			
Sukalyan Karmakar	12001617027			
Rohan Banerjee	12001617053			
Sazid Mondal	12001617047			
Rintu Dey	12001617061			
RAJNISH KUMAR	12001616070	D. Sinha	IOT BASED POWER FLOW CONTROL	2020
RITESH KUMAR	12001616064			
ROHIT KUMAR	12001616062			
RASHMI KUMARI	12001616068			
PRIYA SRIVASTAVA	12001616077			
SAGAR SHARMA	12001616060	D. Sinha	Wireless power transfer system	2020
ABHIMANYU SINGH				
PUSHPAJ	12001616143			
NITISH KUMAR	12001616085			
NITISH KUMAR TANTI	12001616084	•		
NIKHIL BHARADWAJ	12001616089			
PREETY KUMARI	12001616078			
RASHMI GUPTA	12001616069			
SUBRATA DAS	12001615109	D. Sinha	Automatic load Control by Arduino via energy meter	2019
SOURAV MITRA	12001615099			
SOURAV BARIK	12001615096			
SOUMYADEEP				
SAMANTA	12001615094			
SOURAV ROY	12001615101			
SOURAV SENAPATI	12001615102			
SUBHANKAR MONDAL	12001615108			

Pranoy Kumar Das	12001614066	D. Sinha	Miniature Tesla Coil Based	2018
Samridh Sarkhel	12001614083		On Slayer Circuit	
Subhajit Das	12001614100			
Subhendu Dey	12001614103			
Chandan Qiha	12001615127			
	12001013127			
Chandan Arya	12005514003	D. Sinha	Efficient utilization of dye	2018
Payal Rani	12005514011	and D. De	sensitized solar cell	
ABHISHEK KUMAR	12001613005	D. Sinha	Detection of Power theft using microcontroller	2017
ANIKET RAJ	12001613018			
ANKITA GHOSH	12001613020			
CHIRANJIT TIWARY	12001613034			
GAUTAM KUMAR	12001613043			
Richa	12000513038	D. Sinha	Fabrication of Dye	2017
Saluka Sinha	12000513044	and D. De	sensitized solar cell	
Anuradha Kumari	12000513009			
Sweta Singh	12000513056			
AJIT KUMAR RAWANI	12001612008	D. Sinha	Fabrication of wireless	2016
RUPESH SARKHEL	12001612075		F	
NARESH KUMAR SHARMA	12001612060			
ABHIJEET THAKUR	12001612002			
KESHAV KUMAR	12001612049			
ADARSH KUMAR ABHISHEK	12001612005			
AJIT KUMAR	12001612007			
Krishna Kanta Ahir	12001611028	D. Sinha	Simulation of induction	2015
Rudra Prakash Banerjee	12001611050		cooker	
Rintu Roy	12001611045			
Sankha Bandyopadhyay	12001611051			
Bipin Jha	12001611011			
ANIMESH KUMAR	12001610060	D. Sinha	Study on Solar Photovoltaic	2014
RAHUL KUMAR SAW	12001610007		cell	

RAVINDRA KUMAR	12001610024			
YADAV				
GHANSHYAM KUMAR	12001611068			
MRINMAY ROY	12001610050			
SHIVSHANKAR PRASAD	12001610056			
Palach Kr. Choch	007011	D Chulk a	IDC Capitalizada datastar	2012
	097011	D. Sinna	LPG Gas leakage detector	2013
Rahul Burman	097011	D. Sinna	LPG Gas leakage detector	2013
Rahul Burman Saikat Mondal	097011 097014 097034	D. Sinna	LPG Gas leakage detector	2013
Rahul Burman Saikat Mondal Ananta Khan	097011 097014 097034 097052	D. Sinna	LPG Gas leakage detector	2013

• PG project guided: (16)

Name of the Students	University Roll No.	Name of the supervisor	Title of the project	Year of submission
Mukul Ghosh	12013319001	D. Sinha	Online control circuit monitoring	2021
Suchismita Dutta	12013418004	D. Sinha and K. Mazumdar	IoT based tilting bridge incorporated with renewable energy	2020
Arijit Sarkar	12013417009	D. Sinha	Delineation of solar inverter with curtails THD contrivance employing level shift techniques	2019
Rumi Ghosh	12013417004	D. Sinha	Application on solar incubator using maximum power point tracking system	2019
Anupam Dey	12013417010	D. Sinha	Automatic control of DC smart grid amidst to renewable sources	2019
Debashis Das Bairagya	12013417006	D. Sinha and S. Saha	Fuzzy based DC/DC Boost Converter Design to Enhance Efficacy of Photovoltaic Application	2019
Swagata Bandopadhyay	12013416002	D. Sinha	Multi-input interleaved boost converter for efficient utilization of solar power	2018
Kalyani Kumari	12013415006	D. Sinha	Maximum power point tracking for solar energy system	2017
Diana Goswami	12013415005	D. Sinha and D. De	Design and performance analysis of dye sensitized solar cell	2017
Abdul Ayaz	12013414001	D. Sinha	Fabricationandperformanceanalysisofnaturaldyebaseddyesensitizedsolarcell	2016
Dhaneswar Roy	12013414005	D. Sinha and D. Dhak	Intelligence based solar PV power prediction	2016
Syed Saifiqul Islam	12013413015	D. Sinha and D.Dhak	An energy enhancement approach for solar power system	2015

Madhumita Hota	12013413009	D. Sinha and S. Ghosh	MPPT based design of converters for solar PV system	2015
Debabrata Majumdar	12013413005	D. Sinha	Dual axis solar tracking system	2015
Joyti Mudi	12020212005	D. Sinha	Developing a stabilized wind energysystem to enhance efficiency	2014
Amiya Bandhu Das	12020212002	D. Sinha	Design of MPPT based solar PV system	2014

Invited Lectures:

• Provide invited talk on Fabrication of Solar Cells to Haji Md. Sarafat Mondal Govt. Polytechnic College, (Rampurhat Govt. Polytechnic), Ningha, Birbhum, West Bengal on 30th March, 2021.

Participation in seminar/conference/symposium/workshop/discussion meeting

• Talk on workshop on Patent filling, search and drafting and IP protection, organized by IPR Cell, Department of R&D, BCREC on 25th April, 2019.

Presented paper in International conference:

- 1. Automatic Dominion of DC Smart Grid Enclosing Multilevel Inverter Amidst To Renewable Source", IEEE conference on NCETSTEA 2020, Feb.6-7, 2020, at BCREC, Durgapur.
- ZnO and TiO₂ nanostructured photovoltaic cell, 2nd International conf on "Emerging Materials: Characterization and Applications" held on 15-17th March, 2017 at NIT, Durgapur.
- 3. Fabrication of DSSC with nanstructured ZnO photo-anode and natural dye sensitizer, 2nd International conf on Material Science, organized by Tripura University, Agartala, on 16-18th February, 2017.
- 4. Fuzzy logic based solar PV power prediction, ICADVC 2016, held on February 2016 at NIT, Durgapur.
- 5. Efficient Utilization of Solar Power in High Frequency Applications, IEEE conf. on Micro-electronics, Computing and Communication 2016, 23-25 January, 2016 at NIT, Durgapur.
- Simulation of IGBT fed Mirror Inverter based H.F. Induction Cooker, International Conference on Industrial Engineering Science and Applications (IESA-2014), at NIT Durgapur, India. ISBN 978-93-80813-27-1.
- Energy Efficient High Frequency Inverter for Operating CFL from Solar PV System, International Conference on Energy System Modeling and Optimization (ESMOC 2013) December, 2013, NIT Durgapur, India.
- 8. Computation of Inductance and AC Resistance of a Twisted Litz-Wire for High Frequency Induction Cooker, in the proceeding of IEEE sponsored International Conference on "Industrial Electronics, Control & Robotics" (IECR 2010) during 27th

to 29th December, 2010 at NIT, Rourkela, Orissa, India. (Awarded as Best paper)

 Optimum Construction of Heating Coil for Domestic Induction Cooker, in the proceeding of International Conference on Modeling, Optimization and Computing (ICMOC 2010) organized by NIT, Durgapur during 28 to 30th October, 2010, P.P. 439– 444.

Participation in faculty development programmes

- 1. Modern trends on Electrical engineering and its application, organized by Electrical Engineering Department, 20-24th December, 2020
- 2. Robotics, ATAL FDP organized by NIT Durgapur 9th December to 13th December, 2020.
- Recent advances and fundamentals of nanomaterials for applications in Photonics: during 15-19th February, 2017, TEQIP (CoE) sponsored organised by Dept. of Physics, NIT Durgapur,
- 4. Tutorial on Neural network for energy system, organized by, NIT Durgapur, during 09-11th November, 2013.

Participate in short term courses

- 1. Advances in welding technology, organized by Dr. B. C. Roy Engg College, Durgapur, on 7th February, 2015.
- 2. Intellectual property rights and cyber security, during 14-18th April, 2014 TEQIP II sponsored, organized by NIT Durgapur.
- Recent trends in machine intelligence, data mining and soft computing techniques and its impact on research and development, during 23-24th November, 2013, organized by Dr. B. C. Roy Engg College, Durgapur.
- 4. Evaluation of Electrical systems, during 1-2 April, 2008, TEQIP sponsored organized by Dept. of EE, NIT Durgapur.

Organization of events (Dr. B. C. Roy Engineering College):

Organized webinars:

- Innovation and intellectual property protection, on 28th January, 2021
- Matlab and Simulink Fundamentals, on 30th April, 2021

Participation in administrative committees (selected)

- In Charge of Department of Research and development, 22nd September, 2021 onwards
- Joint Convenor, Tech Fest Committee, 2020

Departmental activities:

- 1. In charge of Power Electronics lab
- 2. In charge of M. Tech Lab.
- 3. Departmental project coordinator (Since June, 2018): Project distribution among the students of UG and PG, continuous assessment of their work, seminar arrangement, marks tabulation etc.
- 4. Research and Development committee: MODROB project submitted on Electrical Drives lab., Project presentation for any exhibition/competition.
- 5. Question paper moderation committee: Moderator of Basic Electrical Engineering question paper (ES EE101), Utilization of Electric Power (EE-702), Advanced power system analysis (PSM-101) and Non Conventional Sources of Energy (PSM-301A).

Institutional activities:

- 1. Key monitoring authority for student activities (Tech fest/Teachers day celebration) and certification.
- 2. Departmental coordinator of Wall magazine Committee (Since July, 2018): Coordinate with the departmental students for participation in Wall magazine competition.
- 3. Departmental coordinator of NSS activities: Coordinate the students for neighborhood visit; organize interaction and workshop program with NDRF officials.
- 4. Member of R & D cell: Various research activities like guiding students to participate in exhibition, sending project proposals to different funding agencies, MODROB project proposal submission.
- 5. Associate editor of BES journal: After the final acceptance of the paper, formatting and necessary editing is carried out for publication.
- 6. Convenor of Scientific Purchase Committee (SPC): Associate with installation of on grid 30KW solar power generation station at college premises.
- 7. Member of Prevention, Prohibition and Redressal committee: Deal with allegations of harassment of students and employees (specially female).

Project Ideas Submitted to Govt. Agencies/ On-going Projects / Research Ideas under preparation & execution

S1 .	Title of the project	Submitted to	Status
No.			
1.	Fuzzy based Solar Egg-Incubator	PRISM, DSIR	Granted Rs.
			2.3lakhs
2.	Solar energy based automated seed	RAFTAAR,	Reached to final
	sowing bot for cultivation	Cohort 5	round

Patent Applied:

A SOLAR POWERED AUTOMATED SEED SOWING BOT, Indian Patent File Ref. No. 202031036378, Filed on 18/08/2020, Published on 10th September, 2021.

Membership of professional bodies: Institute of Engineers (IE)