

CURRICULUM VITAE

Name: Dr. Kumari Namrata

Father's Name: Dr. Bimal Kumar

Present Position: Associate Professor

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DATE OF BIRTH: 03/01/1975

Present Address: C/O- Dr. Kumari Namrata
Qr. No. C\7
NIT,CAMPUS,
ADITYAPUR
JAMSHEDPUR, JHARKHAND
Pin Code:831014



EDUCATIONAL QUALIFICATION:

| S. No. | Degree | Board/University | Year | Percentage/CGPA |
|--------|---------------------|------------------|------|-----------------|
| 1. | Ph.D | NIT, Jamshedpur | 2017 | NA |
| 2. | M.Tech/M.E/M.S/M.Sc | NIT, Jamshedpur | 2001 | 8.00 (CGPA) |
| 3. | B.Tech/B.E/B.Sc | B.C.E, Patna | 1998 | 70 % |

Ph. D Thesis Topic: Estimation of Solar Radiation and Its Effect on The Performance of Solar Power Generation.

M. Tech Thesis Topic: Disturbance Rejection Of Discrete-Time NMP, Bicausal Plant Using 2-Periodic Controller

RESEARCH INTERESTS: Solar Power Generation and Conversion, Solar radiation estimation, Modeling and simulation of energy based system, Microgrid – Modeling, Operation and Control, Renewable energy sources.

RESEARCH AWARDS/FELLOWSHIPS RECEIVED:

RESEARCH PUBLICATIONS (With Full Details):

INTERNATIONAL REFREED SCI/SCOUPUS JOURNALS:

- Namrata, K., Sharma, S. P. And Seksena, S. B. L., " Comparison of estimated daily global solar radiation using different empirical models", International Journal of Science and Advanced Technology, vol.02,132-137, 2012.

- b) Namrata, K., Sharma, S. P. And Seksena, S. B. L Estimation of global and diffuse solar radiation for Jamshedpur, Jharkhand, India”, International Journal of Science and Advanced Technology,vol.02,44-47, 2012.
- c) Namrata, K., Sharma, S. P. And Seksena, S. B. L Estimation of global and diffuse solar radiation for Jamshedpur, Jharkhand, India”, International Journal of Science and Advanced Technology,vol.02,138-142, 2012.
- d) Namrata, K., Sharma,S. P. and Seksena,S.B. L,” Estimation of global solar radiation in Jharkhand (India) region” Smart Grid and Renewable Energy,Vol 4, 348-352(2013)
- e) Namrata, K., Sharma, S. P. And Seksena, S. B. L.,,” Comparison of different models of diffuse solar radiation in Jharkhand (India) region” Applied Solar Energy (Springer) vol.03, 219-224, 2015.
- f) Namrata, K., Sharma, S. P. And Seksena, S. B. L,” Comparative analysis of solar energy potential for some cities of Jharkhand (India)”, Energy Education Science and Technology Part-A: Energy science and Research vol.03, 3129-3150,2015.
- g) Namrata, K., Sharma, S. P. And Seksena, S. B. L.,,” Empirical models for the estimation of global solar radiation with sunshine hours on horizontal surface for Jharkhand (India)”,Applied Solar Energy(Springer),vol.03,2016.
- h) Rawani, Atwari & P. Sharma, S & D. P. Singh, K & Namrata, Kumari,”Analytical modeling of parabolic linear collectors for solar power plant,” 2018 Journal of Mechanical Science and Technology. 32. 4993-5004.
- i) Bhushan Mahajan, K. Namrata, Akanksha Varshney, “Estimation of solar radiation flux using MATLAB for Amravati, Maharashtra, India”, Carbon Science and Technology Journal, Vol. 10, Issue 1, 2018, pp. 34-38.
- j) Bhushan Mahajan, K. Namrata, Akanksha Varshney, “Estimation of the monthly average global and diffuse solar radiation for the city Bareilly, Uttar Pradesh, India”, Carbon Science and Technology, Vol. 10, Issue 1, 2018, pp. 1-6.
- k) Bhushan Mahajan, K. Namrata, “Performance Evaluation of developed Emperical models for predicting”, International Journal of Renewable Energy Research-IJRER, 2019.(Accepted)
- l) Namrata, K., Sharma,S. P.,” Comparison of Estimated Daily Global Solar Radiation Using Different Empirical Models.”, International Journal of Science and Advanced Technology, ISSN : 2221-8386, vol:2 issue:4 (2004).
- m) Namrata, K., Sharma, S. P.,” Estimation of solar radiation using different regression constants for Jharkhand, India.”, Science Direct Elsevier Energy Procedia (2011).
- n) Namrata, K., Sharma, S. P.,” Prediction of Solar Power Plant Capacity For Jamshedpur, Jharkhand, India.”, Science International Journal of Science and Advanced Technology ISSN : 2221-8386,vol:2 issue:4 (2012)
- o) Namrata, K., Sharma, S. P.,” Estimation and comprision of diffuse solar radiation on horizontal surface using different model over Jharkhand, India.”, Science International Journal of Science and Advanced Technology ISSN : 2221-8386,vol:2 issue:2 (2012).
- p) Namrata, K., Ansari, F., Dhiraj, Rajiv, K.,” Real Time Implementation of Scada System for Ratio Control Based Filling Plant.”, International Journal of Electronics Engineering vol:4 issue:1 pp:7-11 (2012).

PAPER SUBMITTED IN SCI JOURNALS:

NATIONAL CONFERENCES:

INTERNATIONAL CONFERENCES:

- q) Namrata, K., Sharma, S. P. and Seksena, S.B. L., "Estimation and comparison of global and diffuse solar radiation for Jharkhand, India using different regression constants.", International Conference on Modelling, Optimization and Computing, 10-12 April 2012.
- r) Namrata, K., Sharma, S. P. and Seksena, S.B. L., "Estimation of direct and diffuse solar radiation on horizontal surface for Ranchi.", International conference on Global Scenario in Energy and Environment, 14-16 March 2013.
- s) Namrata, K., Prabhakar, N., "Hybrid photovoltaic & fuel cell integrated system: A feasible eco-friendly power system for rural and suburban areas", World Renewable Energy Congress(WREC)-2013, Murdoch University, Perth, Australia (2013)
- t) Namrata, K., Sharma, S. P. and Seksena, S.B. L., "Determining regression constants for calculating global solar radiation at Jharkhand (India) region.", 3rd The International Conference on Renewable Energy Research and Applications, 19-22 Oct 2014.
- u) Namrata, K., Sharma, S. P. and Seksena, S.B. L., "Estimation, comparison and validation of global solar radiation using new regression constants for Jharkhand region(India).", Global conference on Energy and Sustainable Development, 24-26 Feb, 2015.
- v) Namrata, K., Sharma, S. P. and Seksena, S.B. L., "Assessment of Solar Radiation in Jharkhand.", Renewable energy and environment, 1-3 Nov, 2017.
- w) A. Samadhiya and K. Namrata, "A multi objective control technique for interfacing hybrid renewable energy sources in an islanded microgrid subsequent to unbalanced and non linear load conditions," 2017 Innovations in Power and Advanced Computing Technologies (i-PACT), Vellore, 2017, pp. 1-7
- x) S. Tripathi, K. Namrata and S. Chakraborty, "Modeling and simulation of multijunction solar Or sun based cell, " 2018 International Conference on recent innovations in Electrical, Electronics and communication engineering (ICRIEECE), Bhubaneswar.
- y) B. Mahajan, K. Namrata, A. Varshney and A. Pundir, "Modelling and Simulation of Solar Radiation using Different Models for Amravati, Maharashtra India," 2018 International Conference on Sustainable Energy, Electronics, and Computing Systems (SEEMS), Greater Noida, India, 2018, pp. 1-5.
- z) K. Namrata, A. Pundir, A. Varshney and B. Mahajan, "Validation and Simulation of Hourly Global Solar Radiation of Cities from each of the Five Indian Zones," 2018 International Conference on Sustainable Energy, Electronics, and Computing Systems (SEEMS), Greater Noida, India, 2018, pp. 1-4.
- aa) K. Namrata, Akanksha Varshney and Sanjay Bajpai, "Automated resting of faults of an automotive system", 5th International Conference for convergence in Technology 2019, Pune. (Accepted and Presented)
- bb) Namrata, Pragya Rani, Simran, Akshit Samadhiya and Dr. Kumari Namrata, "Control Strategy of Hybrid Energy Storage System for a Standalone Photovoltaic System," International Conference on Advances in Electronics, Electrical & Computational Intelligence (ICAEEC) 2019, IIIT Allahabad. (Accepted and Presented)
- a) A. Samadhiya and K. Namrata, "Modeling and control of a cascaded H-bridge multilevel inverter for a hybrid generation sources based islanded microgrid," International Conference on Computing, Power and Communication Technologies (GUCON) 2019, Noida. (Accepted)

RESEARCH PROJECTS/Consultancy Projects:

Project Title- Implementation of Biogas plant with grid integration under National initiative for design innovation (NID) Project (Approved in 2018).

CONFERENCE/WORKSHOP ORGANIZED:

TEQIP-III sponsored 6 days short term course (STC) on “ Recent Advancements in HVDC and FACTS (RAHF-2019)” to be organized in the department of Electrical Engineering, N.I.T. Jamshedpur during 23rd-28th September,2019.

Ph. D. Supervised (With Full Details):

- a) Akshit Samadhiya (Ongoing) – Enrolled in 2018-19
- b) Nishant Kumar (NPIU) (Ongoing) –Enrolled in 2018-19, Part Time

MEMBER OF EDITORIAL BOARD OF THE JOURNALS:**TEACHING EXPERIENCE:**

| Position Held | Institution | From | To | Nature of Job |
|---------------------|---------------------|------------|------------|---------------|
| Associate Professor | N.I.T Jamshedpur | 01/06/2018 | Present | Teaching |
| Assistant Professor | N.I.T Jamshedpur | 29/11/1999 | 31/05/2018 | Teaching |
| | | | | |

AWARDS, HONOURS & RECOGNITIONS:

- a) Best Poster Award (IEEE Conference held in Wisconsin, USA (ICREA 2013)).

REVIEWER OF INTERNATIONAL JOURNALS AND BOOKS:

- a) Reviewer of International Journal of Renewable Energy- Hindawi Publishers.

MEMBER OF PROFESSIONAL ACADEMIC BODIES:

- a) The Indian Society for Technical Education - Life(LM 28774)

INVITED TALKS/SEMINARS GIVEN:

Resource Person of the short term course on “Recent Trends in Microgrid & its Real time implementation using OPAL-RT (RTM-2019) “ conducted by Department of Electrical Engineering, N.I.T. Jamshedpur , sponsored by TEQIP-III & co-sponsored by Opal-RT from 27TH May, 2019 to 1ST June, 2019.

Any Other Information:**(a)**

| Courses Taught | | |
|-------------------------------------|---------------|------------------------------|
| Course Title | Level (UG/PG) | Branch |
| Microprocessor and Microcontrollers | UG | Electrical Engineering |
| Basic Electrical Engg. | UG | Computer science |
| Basic Electrical Engg. | UG | Metallurgy |
| Microprocessor Based System | UG | Electrical Engineering |
| Energy Systems | PG | Power System |
| Energy Systems | PG | Power Electronics and Drives |
| Microprocessors and Peripherals | PG | Power Electronics and Drives |
| Green Energy | PG | Power Electronics and Drives |
| Green Energy | PG | Power Electronics and Drives |

(b)

| Conducting Laboratory Classes | | |
|-------------------------------|---------------|---------------------------|
| Course Title | Level (UG/PG) | Branch |
| Microprocessor Lab | UG | Electrical Engineering |
| Basic Electrical Engineering | UG | Computer Science |
| Basic Electrical Engineering | UG | Metallurgical Engineering |

(c) ACADEMIC ACTIVITIES –

Lab Incharge (Microprocessor Lab),Warden (14 Semesters), NSS Activities, Sports Activities (URJA),