CURRICULUM VITAE

Dr. Nand Kishor

Professor, Department of Electrical Engineering
Motilal Nehru National Institute of Technology Allahabad, India

Email address: nand_research@yahoo.co.in
nandkishor@mnnit.ac.in

Contact number: +91-532-2271411 (O)

1. Personal Information

Nationality Indian

2. Education

Ph. D.	*Thesis Title*-	Integrated Control of Small Hydro Power Plants
	Institute:	Indian Institute of Technology, Roorkee, India
Master of Technology	*Specialization*-	Energy Management
	University:	Devi Ahilya University, Indore, India
Bachelor of Engineering	*Branch*-	Electrical Engineering
	Institute:	Malaviya Regional Engineering College Rajasthan University, Jaipur, India

3. Professional Experience: 17 years (More than 14 years after award of PhD degree) -

Period	*Post held*	*Employer*
August 2018 to till date	Professor	Motilal Nehru National Institute of Technology, (MNNIT) Allahabad, India
Nov. 2017 to August 2018	Associate Professor	University of Agder, Grimstad, Norway
October 2013 to Nov. 2017	Associate Professor	Motilal Nehru National Institute of Technology, (MNNIT) Allahabad, India
Aug 2012 to October 2013	Marie Curie Experienced Researcher (Marie Curie Fellow)	Department of Electrical Engineering Aalto University, Espoo, Finland
Feb 2012 to August 2012	Associate Professor	Motilal Nehru National Institute of Technology, Allahabad, India
Feb 2012 to Feb 2009 to	Assistant Professor	Motilal Nehru National Institute of Technology, Allahabad, India
June 2006 to Feb 2009	Lecturer	Motilal Nehru National Institute of Technology, Allahabad, India

March 2006 to June 2006	Lecturer	College of Science and Technology, Phuentsholing, Bhutan
January 2006 to March 2006	Lecturer	National Institute of Technology, Patna, India
May 1999 to March 2003	Lecturer	Royal Bhutan Institute of Technology (RBIT) Phuentsholing, Bhutan

4. Pedagogical Qualification/Experience

4.1 Teaching Experience: Lecture Courses taught:

At RBIT: From 1999-2003: [Responsible to conduct Lecture class, Tutorial (Exercise) class and Practical (Laboratory works) conduct examination, evaluate and grade them]

- Instrumentation and Control (Under-graduate level): *Taught for 3 years (1 semester per year)*
- Process Control (Under-graduate level): *Taught for 2 years (1 semester per year)*
- Hydroelectric Power Plant (Under-graduate level): *Taught for 2 years (1 semester per year)*
- Generation and Transmission (Under-graduate level): *Taught for 3 years (1 semester per year)*
- Digital Signal Processing (Under-graduate level): *Taught for 1 year (1 semester per year)*

At MNNIT: 2006-2019 [Responsible to conduct Lecture class, Tutorial (Exercise) class and Practical (Laboratory works), conduct examination, evaluate and grade them]

- Basic Electrical Engineering (Under-graduate level): *Taught for 3 years (1 semester per year)*
  Book Referred for the course: Electrical Engineering Fundamentals by. Vincent Del Toro
- Electrical Machines-I (Under-graduate level): *Taught for 6 years (1 semester per year)*
  Book Referred for the course: Electrical Machines by D P Kothari
- Electrical Machine-II (Under-graduate level): *Taught for 8 years (1 semester per year)*
  Book Referred for the course: Electrical Machines by D P Kothari
- FACTS Devices (Under-graduate level): *Taught for 2 years (1 semester per year)*
  Book Referred for the course: Understanding FACTS by N. G. Hingorani
- EHV AC & DC Transmission (Under-graduate level): *Taught for 3 years (1 semester per year)*
  Book Referred for the course: HVDC Power Transmission Systems by K R Padiyar, Extra High Voltage A.C. Transmission Engineering by R D Begamudre.
- Neural Network & Fuzzy Systems (Under-graduate level): *Taught for 2 years (1 semester per year)*
  Books Referred for the course:
  Fuzzy Logic with Engineering Applications by Timothy J. Ross, Neural Networks: A Comprehensive Foundation by Simon Haykin.
- HVDC Transmission (Post-graduate level): *Taught for 4 years (1 semester per year)*
  Book Referred for the course: HVDC Power Transmission Systems by K R Padiyar
- Advanced Power System Operation and Control (Post-graduate level): *Taught for 5 years (1 semester per year)*
  Book Referred for the course: Power System Stability and Control by P S Kundur.
- *Advanced Power System Protection* (Post-graduate level): Taught in 2018-19, Odd semester
  Book Referred for the course: A. T. Johns, Salman K. Salman
- *Advanced Power System Dynamics* (Post-graduate level): Taught in 2018-19, Even semester (current semester)
  Book Referred for the course: Power System Stability and Control by P S Kundur.

Course Instructor during last 5 years (2014-2019): at MNNIT Allahabad, India

Sl. No.	Name of the Course	Total teaching hours per week (Lecture-Tutorial-Lab)	Year and Semester (July YYYY-June YYYY)	No. of students in class
1	(i) HVDC Transmission, EE2233, (Post-graduate level), (ii) Modern Electrical Machines, EE1605, (Under-graduate level) (iii) AC Machine Lab (Under-graduate level, Group E1)	3-1-0 3-1-0	2014-15, Even	9 68 34
2	(i) Advanced Power System Operation and Control, EE2105, (Post-graduate level) (ii) AC Machines, EE1501, (Under-graduate level) (iii) Power System Protection Lab ((Post-graduate level)	3-1-0 3-1-0 0-0-3	2015-16, Odd	17 69 17
3	(i) HVDC Transmission, EE2233, (Post-graduate level) (ii) EHV AC & DC Transmission, EE1831, (Under-graduate level), Elective course (iii) Power System Lab (Under-graduate level, Group E2)	3-1-0 3-1-0 0-0-3	2015-16, Even	10 32 36
4	(i) Advanced Power System Operation and Control, EE2105, (Post-graduate level) (ii) AC Machines, EE1501, (Under-graduate level) (iii) Power System Protection Lab ((Post-graduate level)	3-1-0 3-1-0 0-0-3	2016-17, Odd	16 71 16
5	(i) HVDC Transmission, EE2233, (Post-graduate level) (ii) Power System-I, EE1403, (Under-graduate level) (iii) Power System Lab (Under-graduate level, E2)	3-1-0 3-1-0 0-0-3	2016-17, Even	9 76 38
6	(i) Advanced Power System Operation and Control EE2105, (Post-graduate level) (ii) Power System-II (Under-graduate level) (iii) Power System Protection Lab ((Post-graduate level)	3-1-0 3-1-0 0-0-3	2017-18, Odd	17 73 17
7	(i) Advanced Power System and Protection (Post-graduate level) (ii) AC Machines, EE1501, (Under-graduate level) (iii) Power System Protection Lab ((Post-graduate level)	3-1-0 3-1-0 0-0-3	2018-19, Odd	16 78 18
8	(i) Power System Dynamics (Post-graduate level) (ii) Simulation of Power System Network lab (Post-graduate level)	3-1-0 0-0-3	2018-19, Even	14 14
9	(i) Advanced Power System Operation and Control EE2105, (Post-graduate level) (ii) High Voltage Engineering (Under-graduate level) (iii) Advanced Power System and Protection Lab ((Post-graduate level) [Use of MATLAB and DIgSILENT software]	3-1-0 3-0-0 0-0-3	2019-20, Odd	21 23 23
10	(i) Power System-I (Under-graduate level) (ii) Simulation of Power System Network lab (Post-graduate level) [Use of MATLAB and DIgSILENT software]	3-1-0 0-0-3	2019-20, Even	84 21

e-Courses Development

Recorded video lectures for the Course- Power System-I, 2nd Year, Undergraduate, Electrical Engineering can be found at:

https://www.youtube.com/channel/UCqTC-lx5NwW5rPF3HU2J0Fg

Course Instructor during Nov 2017-May 2018: University of Agder, Grimstad, Norway

- Spring semester: Renewable Energy in Power Grid, ENE229 (Under-graduate level), (4 hr lecture + 4 hr exercise class) per week (Teaching material uploaded on Canvas)

Course Curriculum Development: Involvement for-

- Under graduate courses in Electrical Engineering at MNNIT Allahabad, India
- Post graduate (Master of Technology in Power System) courses at MNNIT Allahabad, India
- Post graduate course in Renewable Energy and Hydropower Engineering at College of Science and Technology, Bhutan

The responsibility has been to develop frameworks for the different courses at under graduate and post graduate levels in the lines of 'Programme educational objectives (PEOs) and Programme outcomes (POs).

4.2 External (Outside Institute) Evaluation/Examination Experience: Thesis evaluation at Master's and PhD level:

- Gujarat Technical University, Ahmedabad, India: Evaluation for Master and Phd Thesis, 2015-16
- University of Kerala, Thiruvanathapuram, India: Evaluation for PhD Thesis, 2016-17
- National Institute of Technology, Tiruchirapalli, India: Evaluation for PhD Thesis, 2018
- Technical University of Madrid, Spain: Evaluation for PhD Thesis, 2018
- Universiti Brunei Darussalam: Evaluation for PhD Thesis, 2018
- National Institute of Technology, Kurukshetra (India), 2019
- Indian Institute of Information Technology, Bhubaneswar, 2020

4.3 Research Supervision

4.3.1 M. Tech Thesis (i.e. Post-graduate level): 20 numbers, At MNNIT (Allahabad), India

2006-2007
(i) Modeling and simulation of hydro power plant for dynamic studies
(ii) Energy efficient communication protocol for clustering network of wireless sensors

2007-2008
(i) State-space modeling and simulation of hydro-hydro power system
(ii) Fuzzy model representation of thermosiphonic solar water heating system

2008-2009
(i) Study of dynamic performance of restructured asynchronous tie-lines power system with fuzzy based controller and parameter uncertainties

2009-2010
(i) Optimized design of bioreactor for stem cell growth
(ii) Electrical analog representation of hydro power plant components for identifying penstock dynamics

2010-2011
(i) Computational intelligence in modeling and control of run-off river hydro power plant

2011-2012
(i) Harmonic compensation in conventional and wind conversion system
(ii) Phasor measurement unit in wide area monitoring and control
(iii) Power flow control in PV/battery system with environmental conditions
(iv) Interline power flow controller in two transmission line
(v) Control of fuel cell/battery in distributed generation system

2014-15
(i) Signal Processing and Classification of Events in PMUs data for Real-time Monitoring (This thesis won POSOCO award 2016 under Master's Thesis category, http://posoco.in/ppsa)
(ii) Small-signal analysis of power electronics interfaced generation resources in a micro grid

2015-16

(i) Development of visualization toolbox for monitoring of electromechanical oscillations (This thesis won POSOCO award 2017 under Master's Thesis category and placed at rank 3 in the order of merit, http://posoco.in/ppsa)

(ii) Steady-state and Dynamic analysis of Northern region Indian power grid model

2016-17

(i) Modeling and control of multi-terminal VSC HVDC interconnected system

(ii) Impact of hydropower plant on power system oscillation mode

2019-20

(i) Home energy management in cyber-physical environment

4.3.2 Ph.D. Level supervision: At MNNIT (Allahabad), India

Completed/Awarded: 11 numbers

(i) Dr. Prakash Kumar Ray, Thesis title- *Study of disturbances and frequency regulation in hybrid distributed generation system*.

Supervised by: Dr. Nand Kishor (Main Supervisor) and Dr. Soumya Ranjan Mohanty

(ii) Dr. Shashi Kant Pandey, Thesis title - *Frequency regulation in hybrid power system*

Supervised by: Dr. Soumya Ranjan Mohanty and Dr. Nand Kishor

(iii) Dr. (Mrs) Deepshikha Agarwal, Thesis title- *Applications of wireless sensor network in offshore wind farm.*

Supervised by: Dr. Nand Kishor (Sole Supervisor)

(iv) Dr. (Mrs) Rehana Parveen, Thesis title- *Study on fault detection and protection in offshore wind farm connected to onshore grid*

Supervised by: Dr. Soumya Ranjan Mohanty and Dr. Nand Kishor

(v) Dr. Vijay P Singh, Thesis title- *Load frequency control in power system in perspective to smart grid operation*

Supervised by: Dr. Paulson Samuel and Dr. Nand Kishor

(vi) Dr. Modem Narayan, Thesis title- *Study power quality in hybrid distributed generation system.*

Supervised by: Dr. Soumya Ranjan Mohanty and Dr. Nand Kishor

(vii) Dr. Sulabh Sachan, Thesis title- *Electric vehicle integration management in distributed network.*

Supervised by: Dr. Nand Kishor (Sole Supervisor)

(viii) Dr. Lalit Kumar, Thesis title- *Wide area monitoring and control of low frequency oscillations,*

Supervised by: Dr. Nand Kishor (Sole Supervisor)

(ix) Dr. Omkar Yadav, Thesis title- *Active power regulation in non-synchronous grid with HVDC inter-connection*

Supervised by: Dr. Richa Negi and Dr. Nand Kishor

(x) Dr. (Ms). Shweta, Thesis title- *Study of power system stability & protection using wide area signals*

Supervised by: Dr. Nand Kishor (Main Supervisor) and Dr. S. R. Mohanty

(xi) Dr. (Mrs.) Rupal Singh H., Thesis Title- *Disturbance detection, classification and control of DG power system*

Supervised by: Dr. S. R. Mohanty and Dr. Nand Kishor

Current Supervision: 2 numbers

5. Administrative Experience: At MNNIT (Allahabad), India

(i) Associate Dean (Research & Consultancy) Since September 2018- till date

(ii) Convener, Department Doctoral Programme Committee, August 2015 – August 2017, August 2019- till date

Responsibility: Selection and admission process of PhD students, their advising on course selection, assist in semester progress evaluation, notification on deliver of Open-seminar towards Thesis submission and finally PhD viva-voce (Examination).

(iii) Faculty in charge (Electric Supply Works and Maintenance), April 2014 - Dec 2015

Responsibility: Ensure power supply in the Institute campus in case of power cut/failure, Routine related maintenance works, etc.

(iv) Warden-in-charge (PG Boys Hostel), Nov. 2010- August 2012

Responsibility: Ensure comfortable accommodation (stay) in the hostel, student's mess (food) and co-curricular activities.

(v) Faculty-in-charge (Central Library), Oct 2007- Nov. 2010 and 30 June 2016 – 30 June 2017

Responsibility: Ensure time books purchase on recommendation of Staff, Organizing Books Exhibition, and related activities.

(vi) Outreach Institute Activity: Appointed by the Institute as Expert: on advising the Technical

Specification preparation, committee for set-up of 5kW/10 kW PV solar plant at 250 police stations of Uttar Pradesh state in India.

(vii) Convener, Department Post-graduate Committee, August 2009-August 2011

Responsibility: Selection and admission process of PhD & Master students, their advising on course selection, assist in semester progress evaluation, notification on deliver of Open-seminar towards Thesis submission and Thesis examination.

(viii) Member- Department Post-Graduate Committee, Oct 2006- Aug 2012

(ix) Coordinator- B. Tech Final Year Project, July 2007-May 2011

6. <u>Experience in organizing Conferences/Work/shops/Short-term Courses:</u> At MNNIT (Allahabad), India

National/International Conference

Sl. No.	In the Capacity of	Title	Period		Organised at	Sponsored by	National / International
			From	To			
1	Role: Program Secretary, Responsible for final selection of papers, distribution sessions, keynote lectures into program	International Conference of Power Control, Embedded and Systems (ICPCES-2014)	Nov. 13, 2014	Nov. 15, 2014	MNNIT	IEEE Uttar Pradesh Section	International
2	Role: Technical Committee Chair, Responsible for Call for papers, review process, decision on paper, distribution sessions, keynote lectures into program	Student's Conference of Engineering & Sciences 2014 (SCES-2014),	May 28, 2014	May 30, 2014	MNNIT	IEEE Uttar Pradesh Section	National
3	Role: Technical Program Chair, Responsible for Call for papers, review process, decision on paper, distribution sessions,	Student's Conference of Engineering & Sciences 2015 (SCES 2015)	Nov. 6, 2015	Nov. 8, 2015	MNNIT	IEEE Uttar Pradesh Section	National

	keynote lectures into program						
4	Role: Technical Program Chair, Responsible for Call for papers, review process, decision on paper, distribution sessions, keynote lectures into program	International Conference of Power Control, Embedded and Systems (ICPCES-2017)	March 9, 2017	March 11, 2017	MNNIT	IEEE Uttar Pradesh Section	International
5	Role: Technical Program Chair, Responsible for Call for papers, review process, decision on paper, distribution sessions, keynote lectures into program	UPCO 2020	Nov. 27 2020	Nov. 29, 2020	MNNIT (All virtual event to be oeganized)	Technical Co-sponsored by IEEE PES Society IEEE IAS and different associated chapters of IEEE UP Section (R10)	International Details can be visited at: http://www.mnnit.ac.in/upcon2020/

Workshop/Faculty Development Programme/Short term courses (minimum 05 working days duration)-

Sl. No.	In the Capacity of	Title	Period		Organised at	Sponsored by	Amount [in lakhs] 1 lakh = 0.1 million
			From	To			
1	Role: Organizing Secretary	National Workshop on Networked and Embedded Control (NECES-2016)	July 15, 2017	July 16, 2017	MNNIT	IEEE Joint Societies Chapter of Industrial	Indian Rs. 3.45

						Electronics, Power Electronics & Control (Under IEEE UP Section & TEQIP-II MNNIT	
2	Role: Coordinator (Convener)	Short Term Course on "Distributed Generation Resources and its Integration Impact on Grid" (DGSIG-2015)	Jan. 28, 2015	Feb. 1, 2015	MNNIT	Self-financed	Rs. 0.51
3	Role: Coordinator (Convener)	Summer internship program in Electrical Engineering (SIPEE-2016),	June 21, 2016	July 16, 2016	MNNIT	IEEE UP Section	Rs. 3.0
4	Role: Coordinator (Convener)	Summer internship program in Electrical Engineering (SIPEE-2017),	June 19, 2017	July 14, 2017	MNNIT	IEEE UP Section	Rs. 2.88

National Programs like GIAN Course (http://www.gian.iitkgp.ac.in/) as course coordinator

Sl. No.	In the Capacity of	Name of Program	Period		Organised at	Sponsored by
			From	To		
1	Course Coordinator: Dr. Nand Kishor Foreign Speaker: Prof. Kjetil Uhlen, NTNU, Norway https://www.youtube.com/watch?v=fVDnLJ-k-pc	Title: Smart power grid-operation and control: Use of PMUs	November 6, 2017	November 10, 2017	MNNIT Allahabad India	GIAN, MHRD, New Delhi
2	Course Coordinators: Dr. Richa Negi & Dr. Nand Kishor Foreign Speaker: Prof. Lennart Soder, KTH University, Sweden https://www.youtube.com/watch?v=4FOinjSmww4	Title: Integration of High Penetration of Solar and Wind Power in Power Systems: Experiences and Challenges	November 13, 2017	November 17, 2017	MNNIT Allahabad India	GIAN, MHRD, New Delhi

7. <u>Areas of Research Interest</u>

- Renewable energy resources: Integration to form hybrid system, their operation, control & protection.

- Smart grid technologies: PMUs application for wide area monitoring, control, protection and resiliency.
- Electric vehicle integration management, Cyber–physical systems for smart grid.
- ICT in electric power/energy systems.
- Wind farm integration into grid: Its impact and damping of oscillations, HVDC systems.

8. External Funded/Sponsored Research Projects: *(A)* ***At MNNIT (Allahabad), India***

(i) Title: Intelligent control of helicopter/twin rotor control system using backstepping technique
Funded by:- Department of Science and Technology, New Delhi
Principal Investigator (PI)/Project Manager: Dr. Shubhi Purwar, Co-PI: Dr. Nand Kishor
Status: Completed, Period: Sept.2009-Sept 2012, Amount: Indian Rs. 2.380 Millions

(ii) Title: Embedded power quality disturbance detection system for the distributed generation source connected grids
Funded by:- Department of Science and Technology, New Delhi
PI: Dr. Soumya Ranjan Mohanty, Co-PI: Dr. Nand Kishor
Status: Completed, Period: April 2015 for 3 years, Amount: Indian Rs. 3.265 Millions

(iii) Title: Operation of the Smart Grid with Wide Area Information (OperaGrid)
Funding Scheme:- DST-RCN Call for Joint Research Proposals- 2014 (Indo-Norway Joint Proposal call)
PI/Project Manager: Dr. Nand Kishor, Co-PI: Dr. Soumya Ranjan Mohanty
Status: Completed, Period: May 2015 for 3 years+ 6 months, Amount: Indian Rs. 1.812 Millions

(iv) Title: Efficiency increase of III-V multijunction solar cells and modules with sunlight concentrators for photovoltaic installations
Funding scheme: DST- RMES 2016 (Indo-Russia Joint Proposal call)
Lead PI/Project Manager & Institution: Dr. Nand Kishor, MNNIT Allahabad, Co-PI: Dr. Richa Negi
Other Participants: Dr. Mihir Kumar Das, IIT Bhubaneshwar (IIT BBS)
Total cost: Indian Rs. 6.9 Millions (MNOK 0.8625); MNNIT Allahabad share: Indian Rs. 3.7 Millions, IIT BBS: Indian Rs. 3.2 Millions
Russian side: IOFFE Physical-Technical Institute, Russia, Total cost: 15 Million Rubbles
Status: Sanctioned in February 2018, Period: 2 years

(v) Title: Study on Cyber-physical Approach for Electric Power Grid
Funding scheme: Core Research Grant, Science & Engineering Research Board, New Delhi
PI: Dr. Nand Kishor Co-PI: Dr. Shubhi Purwar (MNNIT Allahabad) and
Co-PI: Dr. Saikat Chakrabarti (IIT Kanpur)
Status: Approved on 26 Nov. 2019 for 3 years, Amount: Indian Rs. 6.8 Millions

(B) ***At University of Agder, Grimstad, Norway***

(vi) Title of the Project: Integrated Energy System Management in Smart Grid Environment

Funding: Faculty of Engineering Sciences, UiA

PI: Dr. Nand Kishor Amount: 2.1 Million NOK = INR 16.8 Millions

(viii) Title: Integrated Renewable Resources and Storage: Operation and Management [IReSOpM]

Funding Scheme:- DST-RCN Call on Energy Research- 2018 (Indo-Norway Joint Proposal call)

Lead PI/Project Manager & Institution: Dr. Nand Kishor, transferred to (when left University of Agder, Norway) Dr. Van Khang Huynh (from Norway side) & Dr. Richa Negi (from India side)

Other participants(s): Norway side: Dr. Nils Ulltveit-Moe (UiA), Dr. Timothy C. Lommasson (NORCE), Kirsti Midttømme (CMR)

India side: Dr. Asheesh K Singh (MNNIT), Dr. S. N. Singh (MMMUT), Dr. Ajay Singh Raghuvanshi (NIT Raipur)

Status: Recently sanction (agreed from February 2019) for 3 years

Amount: 2.5 MNOK (Norwegian side)

9. Details of participation as invited Participants to National / International Conference(s)

- Participated as author to present papers at IEEE First International Colloquium on Smart Grid Metrology (SMAGRIMET 2018) Split, Croatia, 25-27 April 2018.
- Participated as author to present papers at IEEE PowerTech 2017 Conference, Manchester, UK, 18-22 June 2017
- Participated as author to present papers at IEEE ISGT ASIA 2013 Conference, Bangalore, India, 10-13 November 2013.
- Participated as author to present papers at IEEE PowerTech 2013 Conference, Grenoble, France, 16-20 June 2013.
- Participated as author to present papers at IEEE Power and Energy Conference, IEEE PECon 2010, Malaysia, 29 Nov – 1 Dec. 2010.
- Participated as author to present paper at IEEE Innovative Smart Grid Technologies, IEEE ISGT 2010 (Europe), Sweden, 11-13 October 2010.
- Participated as author to present papers and act as session chair at IEEE Congress on Evolutionary Computation, Singapore, Sept. 25-28, 2007.
- Participated as author to present a paper at IEEE Power India Conference, New Delhi, India. April 10-12, 2006.
- Participated as author to present a paper at International Conference on Computer applications in Electrical Engineering Recent Advances, Department of Electrical. Engineering, Indian Institute of Technology, Roorkee, India. Sept. 29- Oct. 1 2005.
- Participated as author to present a paper at National Power Systems Conference, Department of Electrical Engineering Indian Institute of Technology, Madras, Chennai, India. Dec. 27-30, 2004.
- Participated as author to present a paper at 27th National Systems Conference, Department of Electrical. Engineering, Indian Institute of Technology, Kharagpur, India. Dec. 17-19, 2003.

10. Work-shop Attended

- "The Nordic Workshop in Power System Protection and Control" 23rd May 2017, NTNU, Trondheim, Norway.
- Mini-conference on "Monitoring and Control of Power System Dynamics using Phasor Measurement Technology" organized under The REAL-SMART project, funded by the European Commission Marie Curie FP7 IAPP, 16th November, 2012, ABB Corporate Research, Baden-Dättwil, Switzerland.

- Two-day IEEE workshop on "Applications of power electronics to electric utilities & motor control", March 29-30, 2005, organized by Deptt. of Electrical Engineering, Indian Institute of Technology, Delhi, India.
- Two-day IEEE workshop on "Power system of the 21st century- various issues & possible solution", November 6-7, 2004, organized by Deptt. of Electrical Engineering, Indian Institute of Technology, Delhi, India.
- "Workshop on Efficient use of Boilers" organized by National Institute –Industry Forum for Energy and Indian Boilers Manufacturers Association on 9th January 1999 held at Indore, India.

11. Details of Summer/Winter School Attended

Title: Power Electronic Applications, *Organized by*: NERIST, Nirjuli-791109, India.

Period: 8th July to 18th July 2002.

12. Invited Talk Delivered (Outside India):

- Title: Hybrid Distributed Generation System- Disturbance Detection and Frequency Regulation; 30th May 2011, Division of Electric Power Systems, School of Electrical Engineering, KTH University, Stockholm, Sweden. Invited by Dr. Luigi Vanfretti.
- Title: Future Electric Power System: Prospects and Challenges; 8th November 2011, School of Electrical and Mechanical Engineering, Reykjavik University, Iceland. Invited by Guðrún Sævarsdóttir, Dean, School of Science and Engineering.
- Series of lectures on signal processing applications in power system, From 18th August – 22nd August 2014, Electric Power Research Group, Dublin Institute of Technology, Ireland. Invited as part of Science Foundation Ireland - India consortium. Invited by Dr. Malabika Basu.
- Title: Modeling and Dynamic Behaviour of Hydropower Plants-Wide area Measurement Based, 19th May 2017, ETSI Telecomunicación, Universidad Politécnica de Madrid (ETSIT-UPM), Madrid, Spain. Invited by Dr. Jesus Fraile Ardunay.

13. Research Collaborations:

- Dr. Marcelo Gradella Villalva, Universidade Estadual de Campinas University of Campinas, Brazil.
  Research problem: PV modeling, characterization, power in a single phase study, etc.
  Form of collaboration: Joint authorship in papers.
- Dr. Jesús Fraile Ardanuy, Escuela Técnica Superior de Ingenieros de Telecomunicación, Universidad Politécnica de Madrid, Spain
  Research problem: Variable speed hydropower operation, control design
  Form of collaboration: Joint authorship in papers and in joint editorship of published books.
- Dr. Malabika Basu, Dublin Institute of Technology, Ireland
  Research problem: Application of signal processing and support vector machines for fault diagnosis
  Form of collaboration: Invitation for Expert lectures.
- Dr. Kjetil Uhlen, NTNU, Norway
  Research problem: Monitoring of wide area low frequency oscillations and controller design
  Form of collaboration: Joint authorship in papers,Research Project and joint editorship of published book.
- Dr. Anurag Srivastava, Washington State University

Research problem: Integrated renewable energy systems
Form of collaboration: Joint Editorialship in IEEE Transaction on Industrial Informatics (Special Section) and in submission of research project.

- Dr. Sean McLoone, Queen's University, Belfast, UK
  Research problem: Operation of renewable energy systems in smart grid
  Form of collaboration: DST-UKIERI research proposals/Workshop

14. <u>Research Publications:</u>

List of publications in International Journals/ conferences: Refer Attachment

Book chapters-

- Shashi Kant Pandey, Soumya R. Mohanty, ***Nand Kishor***, J. P. S Catalão, Chapter- An advanced LMI-based-LQR design for load frequency control of an autonomous hybrid generation system", in: Technological Innovation for the Internet of Things, Ed. L.M. Camarinha-Matos, SPRINGER, Heidelberg, Germany, April 2013.
- Deepshikha Agarwal, ***Nand Kishor***, Chapter- Application of Wireless Sensor System for monitoring of offshore wind-farms, in: Book- Wireless Sensor Systems for Extreme Environments: Space, Underwater, Underground and Industrial, Editors: Habib F. Rashvand, Ali Abedi, Publisher- Wiley. ISBN: 978-1-119-12646-1.

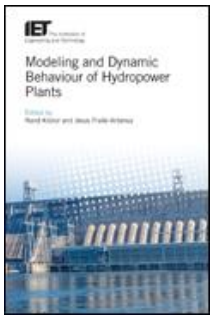
15. <u>Award / Grant obtained / offered</u>

- Institute Fellowship sanctioned by Ministry of Human Resource and Development, India.
  Amount: Indian Rupees (IRs). 10, 000/ - per month plus IRs. 20, 000 per year as contingency
- IEEE Computational Intelligence Society travel grant to attend the "Second Latin-American Summer School on Computational Intelligence", EVIC 2005 at Universidad de Chile, Santiago, Chile, Dec 14-16, 2005.
  Amount: USD 500.00
- IEEE Computational Intelligence Society Young researcher grant offered for 2nd International Symposium on Evolving Fuzzy Systems, Sept. 7-9, 2006, Lake District.
  Amount: Approx. BP. 390 (full registration fee, accommodation and local travel)
- Department of Science and Technology Young Scientist travel grant to attend and present paper in IEEE Congress on Evolutionary Computation, Sept. 25-28, 2007, Singapore.
  Amount: IRs. 10,000/- (Approximately)
- Centre for Cooperation in Science & Technology among Developing Societies travel grant to attend and present paper in IEEE Congress on Evolutionary Computation, Sept. 25-28, 2007, Singapore.
  Amount: IRs. 10,000/-
- Marie Curie Experienced Researcher by the REAL-SMART Consortium, which is a Marie Curie FP7 Industry Academia Pathways and Partnerships project (IAPP) at Aalto University.

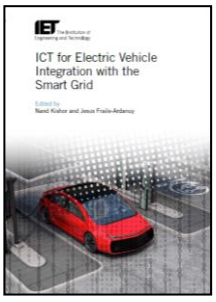
Amount: Euro 4600 per month

- Masters student won POSOCO award 2017 under Masters Thesis category. http://posoco.in/ppsa, Secured at 3rd position in Top 10.
- Masters student won POSOCO award 2016 under Masters Thesis category. http://posoco.in/ppsa
- Received ERIGrid Transnational Access award (4th call) along with PhD candidate (Dr. Lalit Kumar) to carry our research work at SINTEF lab, Trondheim for 4 weeks (Jan 2019). https://erigrid.eu/transnational-access/
- Received ERIGrid Transnational Access award (5th call) along with Masters/PhD candidates (from NIT Raipur) to carry our research work at TECNALIA, Spain for 4 weeks (June-July 2019).
- Received Indo-Finland (DST- Academy of Finland) Researcher Mobility Grant for one month (September 2019) visit to Tampere University of Technology, Finland to work with Prof. Sami Repo.

16. Books Published:



1. Book title- Modeling and Dynamic Behaviour of Hydropower Plants,
   Editors: Dr. Nand Kishor and Dr. Jesus Fraile-Ardanuy,
   Publisher: The Institution of Engineering and Technology (IET), UK.
   ISBN 978-1-78561-195-7
   http://www.theiet.org/resources/books/pow-en/hydroplants.cfm



2. Book title- ICT for Electric Vehicle Integration with the Smart Grid
   Editors: Dr. Nand Kishor and Dr. Jesus Fraile-Ardanuy
   Publisher: The Institution of Engineering and Technology (IET), UK.
   ISBN-13: 978-1-78561-762-1
   https://shop.theiet.org/ict-for-electric-vehicle-integration-with-the-smart-grid

17. Editorial Experience:

(i) Wind Energy, Hindwai Publisher, (2012-2016)

(ii) Guest Editor, IEEE Transactions on Industrial Informatics, Special Section on "Cloud Computing in Smart Grid Operation and Control". Published in 2018. The other guest editors included M. A. S. Masoum (Curtin University, Australia), Amiya Nayak (University of Ottawa, Canada) and Anurag Srivastava (Washington State University, USA).

(iii) Associate Editor/Subject Editor, IET Renewable Power Generation, UK. (January 2018- for 3 years).

(iv) Associate Editor/Subject Editor, IET Generation, Transmission & Distribution, UK. (January 2018- for 3 years).

(v) Guest Editor, IEEE Transactions on Industrial Informatics, Special Section on "Deep learning and data analytics to support the smart grid operation with renewable energy". Call for paper is active. The other

guest editors include Dr. Anurag Srivastava (Washington State University, USA), Dr. Hemanshu Pota (University of New South Wales, Australia).

(vi) Guest Editor, The Journal of Engineering, IET, UK, Special Issue on "Industry 4.0: Infrastructure Developments". Call for paper is active. The other guest editors include Prof. Joel J P C Rodrigues (UFPI, Brazil), Prof. Neeraj Kumar, TIET (India) and Dr. Francesco Verde, UNF II (Italy).

18. Technical Reviews for Journals/Books/Research Proposal

18.1 Journals – Regular reviewer for -

- IEEE Transactions on Industrial Applications
- IEEE Transactions of Automatic Control
- IEEE Transactions on Industrial Electronics
- IEEE Transactions on Energy Conversion
- IEEE Transactions on Smart Grid
- IEEE Transactions on Sustainable Energy
- IEEE Sensors Journal
- IEEE Transactions on Power System
- IET Renewable Power Generation, IET Generation, Transmission and Distribution
- Applied Soft Computing, Elsevier Science
- International Journal of Electrical Power and Energy Systems, Elsevier Science
- International Journal of Hydrogen Energy, Elsevier Science
- Journal of Solar Energy, Elsevier Science

18.2 Books-

- Title- Modelling and Controlling of Hydropower Stations, Authors: German Munoz-Hernandez, Sa'ad Mansoor and Dewi Jones, Springer publication.
- Title- Modelling and Simulation of Small Scale Hydro Generation Systems: The State Space Approach, Authors: René Wamkeue & Innocent Kamwa, Publisher: IET, UK.
- Title- Wind and Solar Power Systems: Design, Analysis, and Operation, Third Edition
  Authors: Mukund R. Patel and Omid Beik, Publisher: CRC

18.3 Research Proposal-

Evaluation of the Alberta Ingenuity nanoWorks Program Application of Dr. Wayne Heibert

19. Recognitions:

- Biography included in Marquis Who's who in Science and Engineering 2006-2007.
- Biography included in Marquis Who's Who in World, 2007 & 2009.
- Invited as an expert by Elsevier Science, UK to create Scirus Topic Page on Hydro power plant modeling and control. http://topics.scirus.com/Hydro_power_plant_modeling_and_control.html

- Biography included in "2000 Outstanding Intellectuals of the 21st Century" published by International Biographical Centre, Cambridge, England.

20. Professional Affiliation

- IEEE Senior Member (2012)
- IEEE Industrial Electronics society
- IEEE Power and Energy Society

21. List of refrees

1. Prof. S. P. Singh
   Professor, Department of Electrical Engineering
   Indian Institute of Technology, Roorkee
   Roorkee-247667, INDIA
   Phone: +91-1332- 285827, 285825
   Email: spseefee@iitr.ernet.in
2. Prof. Kjetil Uhlen
   Professor
   Department of Electrical Power Engineering
   Norwegian University of Science and Technology (NTNU)
   Elkraft, 7491 Trondheim, Norway
   Phone: +47 73 59 72 04
   Email: kjetil.uhlen@ntnu.no

Complete list of publications

Scopus citations index:

Scopus Author ID: 9840976200

h-index: 22; Documents: 148; Citations: 2425; as on 15 August 2020

(of 146 documents considered for the h-index, 22 have been cited atleast 22 times)

Kishor, Nand

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Author ID: 9840976200

Affiliation(s):

Motilal Nehru National Institute of Technology Allahabad, Allahabad, India View more

E-mail: nand_research@yahoo.co.in

Other name formats: Kishor, N.

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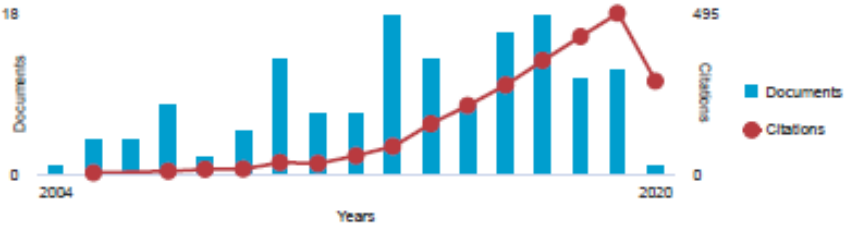


Kishor, Nand

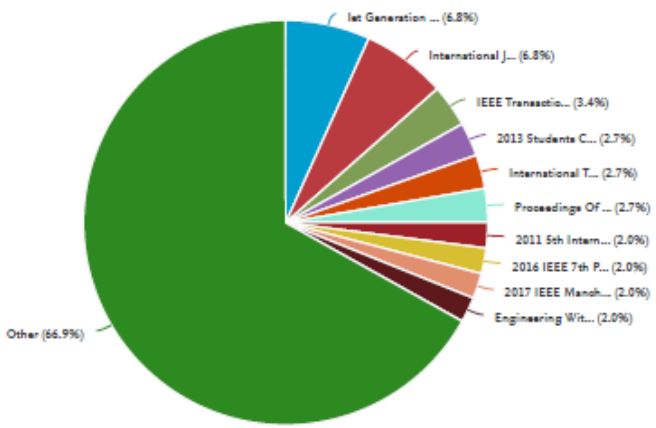
Motilal Nehru National Institute of Technology Allahabad, Allahabad, India

Author ID:9840976200

Source	Documents
Iet Generation Transmission And Distribution	10
International Journal Of Electrical Power And Energy Systems	10
IEEE Transactions On Sustainable Energy	5
2013 Students Conference On Engineering And Systems Sces 2013	4
International Transactions On Electrical Energy Systems	4
Proceedings Of The 18th Mediterranean Electrotechnical	4

Documents by source

148



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http://scholar.google.co.in/citations?hl=en&user=GSsZsWUAAAAJ&view_op=list_works&pagesize=100

IRINS:

http://mnnit.irins.org/profile/60797

ORCiD ID: orcid.org/0000-0002-6325-6017

A1. Papers in international journals:

Total: 72 nos*;* *Science Citation Index (Thomson Reuters):* ***69 nos.***

IEEE + IET Publications: 15 + 12; Elsevier Science Publications: 29; Taylor & Francis Publications: 5

Springer Publications: 4; Inderscience Publications: 1; Wiley Publications: 4; Other Publications: 2

2020

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2019

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[69] Vijay Pratap Singh, **Nand Kishor**, Paulsen Samuel, Navdeep Singh, Small-signal stability analysis for two-mass and three-mass shaft model of wind turbine integrated to thermal power system, *Journal-Computers and Electrical Engineering*, Publisher: *Elsevier Science,* Vol. 78, pp.271-287, 2019, ***Impact factor: 2.189.***

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Power and Energy Systems, Publisher: *Elsevier Science*, Vol.107, pp.19-33, 2019. ***Impact factor: 3.610***.

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2018

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2017

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2015

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