



DR. RAJESH KUMAR

Professor, ECED

Qualifications: Ph.D, M.Tech, M.Phil, M.Sc/University Diploma

Area of Interest: Instrumentation & Control, Artificial Intelligence

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CURRICULUM VITAE

Work Experience (Total : 19 Years)

- Professor at G.B Pant Institute of Engineering and Technology, Department of Electronics and Communication Engineering, Pauri Garhwal, Uttarakhand from April 20th, 2019 to present.
- Professor at Graphic Era deemed to be University, Dehradun, India from May 5th to 2009 to 16th March 2019
- A.P at Graphic Era deemed to be University, Dehradun, INDIA from Jan 1st 2005 to May 2009.
- Lecturer at Graphic Era Institute of Technology, Dehradun, INDIA from Sept. 16th 2002 to Jan 2005.
- Lecturer at Aditya Institute of Technology, Mehrauli, New Delhi, INDIA from Sept. 16th 2001 to Sept.15th 2002.

Research Interests:

- Artificial Intelligence (Artificial neural network & fuzzy logic)
- Process Automation
- Robust control

Education:

- Doctor of Philosophy (Ph.D.) , Indian Institute of Technology(IIT) Roorkee, India, May 2009.
- Master of Technology (M.Tech.), Regional Engg. College(REC/NIT) Kurukshetra, India, 2000.
- Master of Philosophy(M.Phil), University of Roorkee(IIT) Roorkee, 1999
- University Diploma/Equivalent M.Sc, University of Roorkee(IIT) Roorkee, 1998

Administrative Experience:

1. Principal/Director, IIMT Noida (few days),2011
2. Head of Deptt.(Instrumentation & control Engg.), Graphic Era deemed to be university, Dehradun
3. Head of Deptt.(Electronics & Instrumentation Engg.), Graphic Era deemed to be university, Dehradun
4. NSS Program Officer , Graphic Era deemed to be university, Dehradun
5. Asstt. Proctor, Graphic Era deemed to be university, Dehradun
6. Expert member, Board of Studies, Department of Electronics & Instrumentation Engineering, IET, Rohilkhand University, Bareilly
7. Expert member, Uttarakhand Public Service Commission, Govt. of Uttarakhand, Haridwar, Uttarakhan
8. Expert Member, Promotion Board, IRDE,DRDO, Govt. of India, Dehradun

Sponsored and Consultancy Projects:

Completed:

1. Development of Robust control Algorithm for inertially stabilized platform, IRDE, DRDO, Govt. of India, (**Principal Investigator: Dr. Rajesh Kumar**).

Research Publications:

Books:

1. Rajesh Kumar, Fundamental of Artificial neural network & fuzzy logic, Laxmi publication, India, 2009
2. Rajesh Kumar, Measurement & Instrumentation, SK & sons, 2010.

Journal Papers:

National Journal:

1. Parvesh Saini, **Rajesh Kumar**, Design and analysis of Robust multivariable PI controller for paper machine headbox using PSO, Journal of Graphic Era University, vol-x, pp-xx-xxx, 2019, ISSN: 0975-1416 (Print) | 2456-4281 (Online)
2. Parvesh Saini, **Rajesh Kumar**, Design of IMC based PI controller for Paper Machine Headbox, Journal of Graphic Era University, Vol.7, issue 1, 71-82, March 2019, ISSN: 0975-1416 (Print) | 2456-4281 (Online).
3. Anita Singh, **Dr. Rajesh Kumar**, Dr. R.P.Tripathi, Review of developed object detection techniques for auto detection system, Journal of Graphic Era university, vol-6, issue-2, pp 231-37, 2018, ISSN 0975-1416(print).
4. Anita Singh, **Dr. Rajesh Kumar**, Dr. R.P.Tripathi, "Proposed Design Of Futuristic Mobile Anti-Terrorist Security System", Journal of Institution Engineers, **SPRINGER, 2016.**
5. Kumar Rajesh, Juneja Pradeep, Ray A.K, "Development of strategy of wet end retention control through simulation of classical PID and artificial neural network models, IPPTA Journal, Vol.23, no.2, April-June, 2011, pp-179-186. (ISSN: 03795462), **Scopus indexed.**
6. Kumar Rajesh, A.K.Ray, "Artificial neural network for solving paper industry problem-A Review", Journal of Scientific & Industrial Research, vol.65, pp565-573, July 2006 (ISSN:0022-4456). Impact Factor: 0.514 (JCR 2010), **SCI Indexed**
7. Kumar Rajesh, A.K.Ray, & S.Mukherjee "Artificial neural network modeling and control for pressurized headbox of paper Machine, IPPTA Journal, vol.22, no.2, April-june, 2010., **Scopus indexed.**
8. Pradeep Juneja, A. Dhote, R. Kumar, Control of brown stock washing process in a paper mill using ANN Strategy, IPPTA Journal, Jan 2010., **Scopus indexed**, (ISSN: 03795462)
9. Kumar Rajesh, A.K.Ray, & S.Mukherjee "Advances in design of control system for paper Machine Headbox, IPPTA Journal, vol.21, no.4, Oct .Dec, 2009, pp-171-174., (ISSN: 03795462)

International Journal:

10. Saurabh Rawat, Rajesh Kumar, "A Contemporary Approach to Component-Based Software Testing", International Journal of Computer Technology & Applications, Vol 8(3), 334-337, ISSN:2229-6093, PP 334-337, May-june 2017, **UGC approved, Googal scholar. Peer reviewed.**
11. Saurabh Rawat, Rajesh Kumar, 'O' Model for Component-Based Software Development Process, *International Journal of Computational Engineering Research (IJCER)*, Volume, 06, | Issue, 12, December 2016, ISSN (e): 2250 – 3005, pp 28-31. **Googal scholar**
12. Parvesh Saini, Rajesh Kumar, "Brief Review & Mathematical modeling of air cushioned pressurized paper machine Headbox", International Journal of Engg. & Technology, 7(3.4) 2018, 57-65. (**Scopus indexed**).
13. Parvesh Saini, **Rajesh Kumar**, Stability analysis of paper machine headbox using a new PI(D) tuning technique, **International Journal of Engineering & Technology**, 7 (2.6) (2018) 39-45, (**Scopus indexed**).
14. Parvesh Saini, **Rajesh Kumar**, Nalini Rajput, "Temperature Control Techniques for Continuous Stirred Tank Reactor (CSTR) – Review", Engineering and Automation Problems, No. 1, pp. 106 – 111, 2017.
15. **Pravesh saini, Preeti, Rajesh Kumar**, "Control of the paper making subsystem: A brief Review", International Journal of control theory & application, vol.no.10, issue no.18(2017), pp 199-204. (**SCOPUS Indexed, Listed in UGC**).
16. Parvesh Saini, **Rajesh Kumar**, Nalini Rajput "Cascade - PID Control of a Nonlinear Chemical Process" **NONLINEAR STUDIES**, Vol. 23, No. 4, pp. 561-568, 2016, **Scopus indexed**
17. Rajesh Kumar, Saurabh Rawat, Cubical representation and minimization through cubical technique A tabular Approach, International Journal of applied Engg. Research, ISSN 0973-4562, vol 11, no. 7, pp 4822-4829, 2016, **scopus indexed.**
18. Minisha Moudgil, Rajesh Kumar, "Design of robust controller for multivariable paper making approach flow system", International Journal of Electrical and Electronics Engineers ISSN- 2321-2055, IJEEE, Volume 07, Issue 01, Jan- June 2015.
19. Rajesh Kumar, Sanjeev Kumar, Performance Analysis of Robust Controllers for Inertially Stabilized Platform", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 14 (2015) pp 33924-33928, **Scopus indexed.**
20. Anita Singh, **Rajesh Kumar**, R. P. Tripathi, S.P. Gaba & J. P. Singh, [Modeling & Simulation For Transformation Matrix, Rotation Matrix & Remaining Energy](#), **International Journal of Applied Engineering Research (IJAER)** Volume 10, Number 10, (2015), pp.27101-27110, Print ISSN 0973-4562, Online ISSN 1087—1090, **Scopus indexed**

21. Debika Thakuria, Daisy Sharma, **Rajesh Kumar**, Continuous System Simulation and Neural Network Modeling, **International Advanced Research Journal in Science, Engineering and Technology**, Vol. 2, Issue 4, April 2015. Googal scholar indexed, IF: 1.918, ISSN (Online) 2393-8021 ISSN (Print) 2394-1588.
22. Daisy Sharma, Debika Thakuria, **Rajesh Kumar**, "Various Tuning Methods for the Control of pH in Head box of a Paper Machine" SSRG International Journal of Electrical and Electronics Engineering (SSRG-IJEEE) – volume 2 Issue 5 May 2015 ISSN: 2348-8379.
23. Puneet Dhaka, Rajesh Kumar, "Design & Development of Robust Control for Paper Making Headbox System" ,International Journal of Enhanced Research in Science Technology & Engineering, ISSN: 2319-7463 Vol. 3 Issue 5, May-2014, pp: (432-438), Impact Factor: 1.252, Available online at: www.erpublishations.com Page | 432
24. Kumar Rajesh, Mandeep guleria, "Robust control of non linear parameters of Paper machine Headbox", International journal of application or innovation in engg. & management(IJAEM), vol.2,issue 6, June 2013, pp.259-264(ISSN 2319-4847) ISRA Journal Impact Factor: 2.379, **Google Scholar indexed**.
25. Garima Nautiyal, **Rajesh Kumar**, "Spectrum sensing in cognitive Radio using Matlab" International Journal of engg. & advanced Technology, vol-2, issue-5, June 2013, pp 529-532. (ISSN 2249-8958), Impact factor: 1.0, **Google Scholar indexed**
26. Sweta Goyal, **Rajesh Kumar**, ANN control of Paper Drying Process, International journal of application or innovation in engg. & management(IJAEM), vol.2, issue 7, June 2013, pp.100-107(ISSN 2319-4847), **Google Scholar indexed**
27. Om Prakash Verma, Rajesh Kumar, "Intelligent Temperature controller for Water bath System", World Academy of science, engg & Technology, International Journal of Computer Science & Engg., Vol.6, No.9, 2012, pp 1232-1238(EISSN: 2010-3778), **Scopus indexed**
28. Navita Sajwan, Rajesh Kumar "Artificial Neural Network Modeling For Tensile Strength of Paper in Paper Manufacturing Process" International Journal of Information Technology and Knowledge Management July-December 2011, Volume 4, No. 2, pp. 409-412.
29. Navita Sajwan, Rajesh Kumar "Designing Aspects of Artificial Neural Network Controller" International Journal of Scientific & Engineering Research Volume 2, Issue 4, April-2011.(ISSN 2229-5518), **Google Scholar indexed**.
30. Kumar Rajesh, A.K.Ray, & S.Mukherjee "Artificial neural network modeling and control of Retention process in the wet end", International journal of Information technology & knowledge management, *July-December 2010, Volume 2, No. 2, pp. 259-264. (ISSN: 0973-4414, Scopus indexed*
31. Kumar Rajesh, A.K.Ray, & S.Mukherjee, "Using a neural network system for basis weight control", IETECH (International Engg. & Technology) Journal of advanced computations, vol-1, pp 74-78, 2007. .(ISSN:0973-087X)

International Conferences:

32. Parvesh saini, Rajesh Kumar, Pradeep juneja, Worst case sensitivity analysis of controllers for stock consistency of paper machine subsystem, ICACCM2020, International conference on computing, communication & materials, Aug 21-22nd 2020, Tula's Institute Dehradun, Scopus.
33. Rajesh Kumar, Artificial neural network modeling & Control of paper machine headbox parameters, accepted & presented in International conference on Smart machine Intelligence & Real time computing(SMARTCOM-2020), 26-27th June 2020.(**Scopus indexed**).
34. Rajesh Kumar, Development of Robust control Algorithm for inertially stabilized platform, accepted & presented in International conference on Smart machine Intelligence & Real time computing(SMARTCOM-2020), 26-27th June 2020.(**Scopus indexed**).
35. Parvesh saini, Rajesh Kumar, Pradeep juneja, Sensitivity analysis of stock consistency models for paper machine headbox using Particle Swarm Optimization based controller, accepted & presented in International conference on Smart machine Intelligence & Real time computing(SMARTCOM-2020), 26-27th June 2020.(**Scopus indexed**).
36. Parvesh Saini, Rajesh Kumar, Pradeep Juneja, Deepak, Robustness analysis of decoupled PID controller for paper machine headbox, International conference on Power Electronics & IOT applications in Renewable energy & its control(PARC), 28-29Feb 2020, Mathura,UP **DOI: [10.1109/PARC49193.2020.236664](https://doi.org/10.1109/PARC49193.2020.236664), IEEE conf.**
37. Parvesh Saini, Rajesh Kumar and Pradeep Juneja, Design of PI controller for consistency of stock in paper machine headbox using Particle Swarm Optimisation (PSO), International Conference on Innovative Sustainable Computational Technologies (CISCT-2019), 11-12 October 2019, Graphic Era Deemed to be University, Dehradun, India
38. Parvesh saini, **Rajesh Kumar**, Decoupling control of headbox using particle swarm optimization algorithm. 2nd international conference on intelligent communication and computational techniques, IEEE, Jaipur Rajsthan, 28-29 sept, 2019.
39. Parvesh saini, **Rajesh Kumar**, Design of PID controller for paper making Headbox using particle swarm optimization, IEEE, 4th International conference on Internet of things: smart innovation and usages, 18-19 April, Ghaziabad, UP, **IEEE Xplore: 29 July 2019, DOI: [10.1109/loT-SIU.2019.8777500](https://doi.org/10.1109/loT-SIU.2019.8777500), Scopus.**

40. Parvesh saini, **Rajesh Kumar**, A Novel PID Controller Design Technique for a MIMO Process, INDIACOM-2018, 12TH INDIACOM – 2017, 5TH International Conference on Computing for Sustainable Global Development, 14-16, March 2018, Delhi (India).
41. Parvesh saini, **Rajesh Kumar**, Comparative Analysis of PID Tuning Techniques for MIMO system, INDIACOM-2018, 12TH INDIACOM – 2017, 5TH International Conference on Computing for Sustainable Global Development, 14-16, March 2018, Delhi (India).
42. Parvesh saini, **Rajesh Kumar**, Neeraj Singh, Ashutosh Dixit, "Comparative Analysis of PID tuning techniques for Paper Machine Headbox", 1st International Conference on 'Recent Innovations in Electrical, Electronics and Communication Systems (RIEECS - 2017)', 28 - 29 October 2017, Dehradun.
43. Parvesh Saini, **Rajesh Kumar**, Ishfaq Ahmed, Rahul Bisht, "Design of Controller and Stability Analysis of Paper Machine Headbox using Bode's Integral Method", 1st International Conference on 'Recent Innovations in Electrical, Electronics and Communication Systems (RIEECS - 2017)', 28 - 29 October 2017, Dehradun .
44. Anita Singh, **Dr. Rajesh Kumar**, Dr. Rakesh Prakash "Study and Analysis of Different kind of Data Samples of Vehicles for Classification by Bag of Feature Technique" 2nd International conference on Soft Computing: Theories and Applications 2017 (SoCTA2017), Bundelkhand university, Jhansi, 22-24 Dec. 2017. (**Scopus indexed, ASIC series of springer**).
45. Nalini Rajput, Parvesh Saini, **Rajesh Kumar**, Preeti Verma, "H- Infinity based Robust Temperature Control Method of a Non-linear Chemical Process", 11TH INDIACOM – 2017, 4TH International Conference on Computing for Sustainable Global Development, 1ST – 3RD, March 2017, Delhi (India).
46. Singh Anita, Kumar Rajesh, Thriphti Dr. Rakesh Prakash, "Comparative Study and Analysis of Edge Detection Algorithms and Texture Analysis for Thermal and Digital imaging",
47. Shahsi singh, Rajeev Marathe, **Rajesh Kumar**, " Sliding Mode Control based line-of-sight(LOS) stabilization of Electro-Optical sighting System", 1st IEEE International conference on Power Electronics, Intelligent control, & energy System(ICPEICES), 4-6 July 2016, pp1-6., **Scopus indexed**
48. Parvesh Saini, **Rajesh Kumar**, Priyanka Sharma and Nalini Rajput, "Design and Comparative Analysis of Controllers for Continuous Stirred Tank Reactor (CSTR)" Proceeding of International Conference on Intelligent Communication, Control and Devices, Advances in Intelligent Systems and Computing 479, pp. 351 – 365, 2016. (DOI 10.1007/978-981-10-1708-7_41), **Scopus indexed**
49. Parvesh Saini, **Rajesh Kumar**, Nalini Rajput, "Temperature Control Techniques for Continuous Stirred Tank Reactor (CSTR) – Review", 2nd International Conference on Mathematical Techniques in Engineering Applications (ICMTEA2016), Dehradun 2016, April 2016.
50. Parvesh Saini, Rajesh Kumar, " Design & comparative analysis of controllers for CSTR", International conference on intelligent comm..., control & devices(ICICCD-2016),, 2-3 April, 2016, **Springer ASIC series, Scopus indexed**
51. Anita Singh , Dr.Rajesh Kumar, Dr. R.P.Tripathi & Uttkarsh Arya , "Vehicle Target Area and Tyre Detection Image Processing Technique, **6th IEEE International Advance Computing Conference(IACC)** ,27-28 Feb 2016, **IEEE DOI10.1109/IACC.2016.74.**, **Scopus indexed**
52. Minisha Moudgil, Rajesh Kumar, "**Design of robust controller for multivariable paper making approach flow system**", International conference, ICEMIT, 21-23 Feb, 2015, IET, MJP Rohilkhand University.
53. Anita Singh, Dr. Rajesh Kumar, Dr. R. P. Tripathi ,**Design & Development of a Simulation System for Ballistic Missile**, **IEEE** international conference on Electrical, Computer and communication technologies, 5-7 March 2015, SVS engg. College, Coimbatore, Tamilnadu, Pages: 1 - 4, DOI: [10.1109/ICECCT.2015.7225938](https://doi.org/10.1109/ICECCT.2015.7225938) *The proceedings of ICECCT 2015 will be archived in IEEE Xplore.*, **Scopus indexed**
54. Minisha Moudgil, Rajesh Kumar, " Multivariable robust control of an approach flow system" International conference on industrial Instrumentation & Control(ICIC-2015) Year: 2015, Page(s):228 - 231, *The proceedings of ICIC-2015 will be archived in IEEE Xplore.*, **Scopus indexed**
55. Minisha Moudgil, Rajesh Kumar, Multiple-input Multiple-output Paper Machine System Control Using Fuzzy-PID Tuned Controller, Proceedings of 5th International conference on soft computing for problem solving, IIT Roorkee, Saharnpur campus, Dec 18-20 Dec. 2015, **published by Springer**, pp 145-155, 2016., **Scopus indexed**
56. Minisha Moudgil, Rajesh Kumar, Improved wet end stability of paper machine using Robust controller Accepted in IEEE conference in Kolkata.

57. Daisy Sharma, Rajesh Kumar, "Fuzzy tuned proportional integral derivatives control of paper machine headbox", IEEE conference ,Jamia milia University,2015, IEEE conference(INDICON),17-20 Dec2015,pp1-4,DOI: [10.1109/INDICON.2015.7443647](https://doi.org/10.1109/INDICON.2015.7443647), Scopus indexed
58. Kumar Rajesh, A.K.Ray, S.Mukerjee "Design of Artificial neural network controller for fine flow head box control in paper mill", International conference on Intelligent systems and Networks(IISN-2007), Computational intelligence laboratory &MAIMT, Jagadhari, Haryana, pp. 348-452. Feb. 23-25, 2007.
59. Kumar Rajesh, A.K.Ray, S.Mukherjee " Evaluation of performances of artificial neural network taxonomy for paper machine head box controller design", International conference on Recent Advances and applications of computer in Electrical Engineering, Engg. College Bikaner, Rajasthan, March 24-25,2007.
60. Kumar Rajesh, A.K.Ray, S. Mukherjee" Design of artificial neural network controller for consistency control in paper machine headbox", International conference on Recent Advances and applications of computer in Electrical Engineering, Engg. College Bikaner, Rajasthan, March 24-25,2007.
61. Kumar Rajesh, A.K.Ray, S. Mukherjee " Artificial neural network modeling of the paper machine", International conference on Recent Advances and applications of computer in Electrical Engineering, Engg. College Bikaner, Rajasthan, March 24-25,2007.
62. Kumar Rajesh, A.K.Ray,S.Mukherjee, "Back-propagation neural network for solving paper Industry problems", International Conference on Computer applications in Electrical Engg Recent Advance, (CERA-2005). I.I.T.Roorkee., pp.338-342, Sept.29 to 1st Oct 2005.

National Conferences:

63. Anjana kothari, Rajesh Kumar, **Fuzzy controller design for inertially stabilised platform**, National Conference on Future Aspects of Artificial intelligence in Industrial Automation (NCFAAIIA 2012) Proceedings published by International Journal of Computer Applications® (IJCA), pp-5-10, 19-20th May 2012.
64. Rajesh Kumar, A.K.Ray, **Design of level control loop for bleach plant using Freelance-2000 controller**, Conference: AICHE annual meeting 2010,IIT Roorkee
65. Kumar Rajesh , Navita sajwan, **Designing aspects of artificial neural network controller**, National seminar on emerging trends in Industrial Automation & Soft Sensor, 4-5th Sept.2010, Graphic Era University, Dehradun.
66. Rajesh Kumar, pradeep juneja, Afzal sikandar, "Stabilizing integral plants with time delay using PID controller", National seminar on emerging trends in Industrial Automation & Soft Sensor, 4-5th Sept.2010, Graphic Era University, Dehradun, pp63-65.
67. Kumar Rajesh, Rupali bhandari, Anamika Bhatia, **Level control using fuzzy logic controller**, National conference, 22,23Jan 2009, MIT Moradabad.
68. Kumar Rajesh, A.K.Ray, S. Mukherjee, **Modeling and control for pH of stock using artificial neural network**, National conference on AchemE, Thapar University,Patiala, Feb.24,25, 2009.
69. Rajesh kumar, Yogesh Kumar, Pankaj Aswal, **Optimization control & planning of self managing management system**, National conference on AchemE, Thapar University,Patiala, Feb.24,25, 2009.
70. Kumar Rajesh, A.K.Ray "**Comparison between different artificial neural network controllers for water bath temperature control**", National conference on Advances in chemical engg. & Tech. Sant Longowal Institute of Engg. and Technology, Sangrur, Punjab, March 26-27, 2007.
71. Kumar Rajesh, A.K.Ray, S. Mukherjee "**Paper machine head box control using different artificial neural network taxonomy**", National conference on Grand challenge in electrical engg, Rayat Institute of Technology & Information Technology, Railmajra, Ropar,Punjab. April 28-29 2007.
72. Kumar Rajesh, A.K.Ray, & S.Mukherjee "**Application of Artificial neural network (ANN) based control System in the paper industry: A Review**", National conference on Frontiers In applied and computational mathematics (FACM-2005), Thaper Institute of Engg. & Technology, Patiala, pp 199, March 4-5 2005.
73. Kumar Rajesh, A.K.Ray,S.Mukherjee, "**ANN based soft computing technique for simulating Paper industry problems**", All India seminar on emerging trends in mechanical Engg., National Institute of Technology Kurukshetra, pp 547, March 29- 30,2005.
74. Kumar Rajesh, A.K.Ray, S.Mukherjee, "**Application of Fuzzy logic control system in Pulp and Paper Industry**", National workshop on Leveraging IT and process automation in pulp and paper industry. (IPPTA), Cochin, Kerla, pp.1 21st &22nd of Oct.. 2005.
75. A. Gupta, R.U. Khan, V.K. Singh, M. Tanveer, D. Kumar, A. Chakraborti, and R.B. Pachori, A novel approach for classification of mental tasks using multiview ensemble learning (MEL), *Neurocomputing*, In press, 2020.

Short-Term Courses and Conference Organized/Attended: During 2019-20

S.N.	Programme	Duration	Organised by
1.	Faculty Development programme on Virtual Instrumentation and signal analysis using Labview	1 st to 6 th July 2019	UTU, Tula's Institute, Dehradun
2.	One week short term course on "FPGA and Mentor Graphics Tools"	10-14 th Oct. 2019	ECE, GBPIET Ghurdauri
3.	TEQIP short term course on Emerging technologies and soft computing techniques for combating climate change and sustainable development	11-15 Nov. 2019	CED, GBPIET, Ghurdauri
4.	TEQIP sponsored one week workshop on	25-29 th Nov, 2019	ECE, GBPIET, Ghurdauri

	Antenna: Design, Fabrication & Measurement Techniques		
5.	One day TEQIP workshop on Review of available SWAYAM/NPTEL/MOOCs courses in Electrical Engg.	14 th Dec,2019	EED, GBPIET, Ghurdauri
6.	One day TEQIP workshop on Review of available SWAYAM/NPTEL/MOOCs courses in Electrical Engg.	24 th Dec,2019	EED, GBPIET, Ghurdauri
7.	Faculty Development programme on Designing & simulation using Solidworks	20 th to 24 th Jan 2020	UTU, DBIT, Dehradun
8.	Uttarakhand Educator's Summit 2019	10 th Dec. 2019	Uttarakhand Govt.

Subjects Taught:

- Digital electronics, Power plant Instrumentation, Intelligent Instrumentation, Control system, Soft computing techniques, VLSI technology, Measurement & Instrumentation, EMMI, Artificial neural network & fuzzy logic, Transducers, Microprocessors, Advanced process control, Adaptive control, Process control, Electrical measurement & measuring Instrument

Ph. D. Thesis Supervision:

Completed:

- Anita Singh, Modeling, simulation and analysis of Automated target detection & shooting objects, July 28th 2018.
- Parvesh Saini, Intelligent Robust control of paper making sub system under parametric uncertainties, July 28th 2020

In Progress:

- Sanjeev Gaba,
- Yogesh Kumar

M. Tech. Thesis Supervision:

Completed: 15

Awards & Honors:

- University colour Award in Athletics, University of Roorkee(IIT Roorkee), 1999

Professional Activities:

Professional Affiliation:

- ISTE

Key Note Speaker: During 2020 only

S. No.	Title of Lecture/ Academic Session	Title of Conference/Seminar etc	Date(s) of the event	Organized by	Whether International/ National/State
1.	Invited talk on Artificial Intelligence based control techniques	Webinar/Guest lecture/Seminar	2 nd June 2020	EED, Gurukul Kangari vishwavidhyalaya, Haridwar	Seminar
2.	Invited talk on Computational intelligence	Webinar/Guest lecture/Seminar	28 th June 2020	BBD Northern India Institute of Technology, Lucknow	Seminar

Conference/ Workshop/ FDP/Seminar Organised:

S.N.	Title of Conference/ Seminar etc	Date(s) of the event	Organized by	As a member of organizing/ advisory committee	Whether International/ National/State/Regional/ University or College Level
1.	International conference on Smart machine intelligence and real time computing(SMARTCOM-2020)	26-27 th June 2020	ECE,CSE and EE, GBPIET	Organizing Secretary	International

2.	IEEE International Conference on emerging trends in comm.. Technologies(ICETCT-2016)	18 th -19 th Nov. 2016	Graphic Era University., Dehradun	Organizing Secretary	International
3.	DST, Govt. of India sponsored NATIONAL Conference on Future aspects of Artificial Intelligence in Industrial Automation	19 th -20 th May 2012	Graphic Era University., Dehradun	Convener	National
4.	DST, Govt. of India sponsored NATIONAL SEMINAR on Emerging Trends in Industrial Automation & Soft Sensor,	4 th -5 th Sept. 2010.	Graphic Era University., Dehradun	Convener	National