

# Bhaskaracharya College of Applied Sciences (University of Delhi)

Sector II, Phase I, Dwarka, New Delhi – 110075

## FACULTY PROFILE

Title	Dr.	First Name	Avneesh	Last Name	Mittal	Photograph
Designation		Assistant Professor				
Department		Electronics				
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Email Io	d	avneesh.mittal@bcas.du.ac.in				
Education Qualific			Institutio	Institution		
Ph.D		Electronics		Universit	University of Delhi	
M. Tech	1	Microwave Electronics		Universit	University of Delhi	
M.Sc.		Physics, Spl Electronics		Universit	University of Delhi	
Research Interests/ Specialization						
Adaptive control using Genetic Algorithm						
Teaching Interest						
Instrumentation Electronics, Numerical Methods, Microprocessor and Microcontroller						
Achievements/Patents						

### **Publications (Last Five Years)**

Year of Publication	Title	Journal	Co-author/s
2012	Genetic Algorithm Based Tuning of Fixed Bias PID Controller for a Nonlinear Constant Temperature Water Bath under Load Disturbances	J. Automation & Systems Engineering 6-2 (2012), pp. 96-109	Avneesh Mittal, Avinashi Kapoor, T. K. Saxena
2012	Genetic Algorithm Based Incremental PID Temperature Controller For Long Dead Time Nonlinear Bath	Int. J. of Engineering & Science Research, Volume-2, Issue-6, June 2012	Avneesh Mittal, Avinashi Kapoor, T. K. Saxena
2012	Design and Development of Advanced Cross Assembler for 8085 Microprocessor	Int. J. of Computer Applications (0975-8887), ICNICT 2012, Nov 2012, pp. 11-13.	Shashank Bansal, Avneesh Mittal, Vijay Sharma, O. P. Sharma and T. K. Saxena
2013	Adaptive Tuning of PID Controller for a Nonlinear Constant Temperature Water Bath under Set Point Disturbances using GANFC	J. Automation & Systems Engineering 7-4 (2013), pp. 143-163.	Avneesh Mittal, Avinashi Kapoor, T. K. Saxena
2013	High Speed Measurement and Control of Temperature through Multitasking/ Multithreading using VB- 5.0.	Int. J. of Computing, Intelligent and Communication Technologies, Volume 2, Issue 2, April 2013, pp: 1-4	Dheeraj Kesharwani, Avneesh Mittal, Vijay Sharma, Priyanka Jain, T. K. Saxena
2013	Genetic Algorithm based Neuro Fuzzy Tuning of PID Controller for a Nonlinear Temperature Water Bath with Feedforward Control	IEEE Xplore: 978-1-4799- 1441-8/13/\$31.00 ©2013 IEEE, pp: 34-38	Avneesh Mittal, Priyanka Jain, Avinashi Kapoor, T. K. Saxena
2013	Implementation and Comparison of different Inverse Solver and Image Priors used in EIT using 89C51 based Setup	IEEE Xplore: 978-1-4799- 1441-8/13/\$31.00 ©2013 IEEE, pp: 50-53.	Udayan Trivedi, Avneesh Mittal, Ravinder Aggarwal, T. K. Saxena
Publications (La	st Five Years) International Co	nference	
2011	Autotuning PID Parameters of a Temperature Bath Using Genetic Algorithm	7th International Conference TIMA 2011, CEERI Chennai, Madras Institute of Technology, Anna University Chennai and International	Avneesh Mittal, Sapna Katiyar, Avinashi Kapoor, T. K. Saxena
2011	ANT Colony Algorithm Based Adaptive PID Temperature Controller	Society of Automation, Asia Pacific District 14, during January 6-8, 2011	Sapna Katiyar, Avneesh Mittal, Abdul Quaiyam Ansari and T. K. Saxena
2013	Fully Computer Controlled Particle Swarm Optimization Based PID Temperature Controller	International Conference on Acoustics 2013 New Delhi Technologies for a Quieter India organized by Acoustical	Ajeet K. Rathor, Prashant K. Sharma, Avneesh Mittal, Poonam Sethi Bist, Sanyog Rawat, Virender Kundu, and T.K. Saxena

2013	Fully Computer Controlled Electrical Resistive Tomography System To Produce Cross Sectional Images Using Embedded Technology	Society of India (ASI), French Acoustical Society (SFA) and CSIR- National Physical Laboratory held during November 10-15, 2013	Udayan J Trivedi, Avneesh Mittal, Ravinder Aggarwal, Vijay Sharma, T.K.Saxena
2012	Upgradation of Large Size Oedometer and Permeability Equipment to Make it Fully Computer Controlled Unattended System	1st International Conference ICIAICT 2012 Gautam Budha University in collaboration with Computer Society of India	Vijay Sharma, Avneesh Mittal, Sanjeev Bajaj and T.K. Saxena
2012	Design and Development of Low Cost Speed Controller for BLDC Motor of Soleckshaw® using 89C51 Microcontroller		Ritika Saxena, Garima Sharma, Shobhit Saxena, Avneesh Mittal, Alok Bhatnagar and T.K. Saxena
	Publication	s (Last Five Years) National Confe	rence Publications
2016	Systematic shortlisting of candidate molecules and biosimilar / biobetter product development: an undergraduate research effort	Journal of Bioanalysis & Biomedicine 8:5 (Suppl)  http://dx.doi.org/10.4172/1948-593X.C1.023  Impact Factor 3.49	Balaram Pani, Pooja Gupta, Ranjeet S. Thakur, Avneesh Mittal, Purnima Anand, Deepika Bhaskar and Uma Chaudhry
2016	Systematic and Extensive Analysis of the US-FDA Biotherapeutics: Possibility of producing biosimilars in Emerging markets	Conference Proceedings BioMedCon 2016: National Conference on Recent Advanced in Biomedical Science: Diagnosis and Research and 2nd Annual Scholar's Meet of SBMLS	Anannnya Tuli, Nivita Gugnani, Suchita Reddy, L. Nandini Krishna, Surbhi Lal, Balaram Pani, Ranjeet S. Thakur, Avneesh Mittal, Purnima Anand, Deepika Bhaskar and Uma Chaudhry
2016	Alarming increase in the cases of childhood obesity (Where are we heading?)	Conference Proceedings: National Symposium on Lifestyle Disorders (NSLD): Understanding the molecular mechanisms	Shruti Jindal, Pragya Ahuja, Divya Bindra, Divya Khurana, Prerna Angrish, Akash Kumar, Rishi Kashyap, Balaram Pani, Ranjeet Singh Thakur, Avneesh Mittal, Purnima Anand, Neha Bansal, Uma Chaudhry and Daman Saluja#
2016	Role of gut micro biome in childhood obesity	Conference Proceedings: National Symposium on Lifestyle Disorders (NSLD): Understanding the molecular mechanisms	Prerna Singh, Neetika Naudiyal, Pulkit Singhal, Prerna Angrish, Bhoomika Shokeen, Juhi Kumari, Akash Kumar, Rishi Kashyap, Devyani Das, Manisha, Balaram Pani, Ranjeet Singh Thakur, Avneesh Mittal, Purnima Anand, Neha Bansal, Uma Chaudhry and Daman Saluja
2013	Genetic Algorithm Based Neuro Fuzzy Temperature Controller	Third National Conference on Innovations in Indian Science Engineering & Technology to be held during February 25-27,	Avneesh Mittal, Priyanka Bhutani, Jyotsna Yadav, O.P. Sharma and T.K. Saxena.
2013	Self Organizing PID like Fuzzy Temperature Controller.	2013 organized by Swadeshi Science Movement of India, at CSIR-National Physical Laboratory, New Delhi	Avneesh Mittal, Priyanka Bhutani, Jyotsna Yadav, Vijay Sharma and T.K. Saxena.
2013	Mobile Operated Remote Control for Home Appliances.	, , , ,	Nirley Gupta, Avneesh Mittal, Priyanka Jain, Poonam Sethi Bist and T.K. Saxena.

2012	Design and Development of 89C51 Based PID Temperature Controller		Srishty Sharma, Avneesh Mittal, Poonam Sethi Bist, J. P. S. Suri, Vibha Gupta and T. K. Saxena
2012	0 to ±15V Computer Controlled Dual Tracking Power Supply Based on 89C51 Microcontroller		Akhilesh Chopra, Avneesh Mittal, Poonam Sethi Bist, Ashish Vats, Romika and T. K. Saxena
2012	Fully Computer Controlled Frequency Synthesizer Developed using 89C51 Microcontroller		Shivangi, Avneesh Mittal, Poonam Sethi Bist, Ashish Vats, Romika and T. K. Saxena
2012	Low Cost 12-175 V 2kHz Portable AC supply for Electro Luminescent Devices	National Symposium on Instrumentation (NSI – 37) held during October 30, 31 &	Deepika Yadav, Avneesh Mittal, Poonam Sethi Bist, D. Harnath, Virendra Shanker and T. K. Saxena
2012	Development of Fully Computer Controlled Triaxial Testing Machine	November 1, 2012 organized by Instrument Society of India, IISc. Bangalore at CSIR- Central Scientific Instruments	Sanjeev Bajaj, Vijay Sharma, Avneesh Mittal, Jattinder Singh, T. Ramamurthy and T. K. Saxena
2012	Analog Computer: Solving Falling Body Equation	Organisation, Chandigarh	Sheetanshu Saxena, Rohan Bajaj, O.P. Sharma, Avneesh Mittal and T. K. Saxena
2012	Design and Development of 89C2051 Based Programmable Running Lights		Siddhisagar Mishra, Rohan Bajaj, Sheetanshu Saxena, O. P. Sharma, Avneesh Mittal and T. K. Saxena
2012	Design and Development of 89C2051 Based Computer Controlled Car		Shashank Bansal, Sheetanshu Saxena, Rohan Bajaj, Vijay Sharma, Avneesh Mittal and T. K. Saxena
2012	Low Cost Fully Computer Controlled Transistor Binning System		Laxmi Kant Tiwari, Ishita Dhawan, Aarti Neema, Arvind K. Gupta, Avneesh Mittal, S. K. Mahajan and T. K. Saxena
2011	Temperature Profiling of Oven using Artificial Neural Network Based Adaptive PID Controller.		Rohit Kumar Maurya, Sujata, Avneesh Mittal, S. K. Mahajan and T. K. Saxena
2011	Software for Automatic Fault Detection in Assembled System at Assembly Line in Industry	National Symposium on Instrumentation (NSI – 36)	Sachin Arya, Avneesh Mittal, O.P Sharma and T. K. Saxena
2011	89C51 Microcontroller based micro-copter controlled system.	held during October 20-22, 2011 organized by Instrument Society of India, IISc. Bangalore at Invertis	Jerald Jose, Laxmi Kant Tiwari, Avneesh Mittal, O. P. Sharma and T. K. Saxena
2011	Design and Development of 89C51 Based Rotary Inverted Pendulum Controller.	University, Bareilly, NH-24, Bareilly	Rahul Kumar Singh, Umang Samadhiya, Avneesh Mittal, S. K. Mahajan and T. K. Saxena
2011	Design and Development of Microcontroller Based		Vini Gupta, Himanshi Uttam, Vishal Kumar Rai, Avneesh Mittal, S. K.Mahajan and T. K. Saxena

	Fertilizer Feed Rate Controller.	
2011	Design and Development of 89C51 based Dimmable Electronic Ballast	Mohit Kumar Singh, Neha Parveen, Shalu Chaudhary, Avneesh Mittal, S. K. Mahajan and T. K. Saxena
2011	89C51 Microcontroller Based 2D Solar Tracker	Siddharth Shukla, Vartika Singh, Shamit Agarwal, Bhanu Pratap Singh, Avneesh Mittal, S. K. Mahajan and T. K. Saxena

### Project (Minor/Major)

1. Major Project under University of Delhi Innovation Project entitled "To understand the role of maternal factors in childhood obesity and promote metabolic fitness".

PIs:- Dr. Avneesh Mittal, Dr. Purnima Anand, Dr. Neha Bansal Awarded the Most Significant Research Outcomes

#### Any other information

- Secretary, Staff Council w.e.f. 2016-17
- Convener, Central Purchase Committee 2016-17
- Co-convener, NSS
- Nodal Officer, NIRF
- Member Core Committee NAAC
- Worked as Bursar November 2013- June 2016
- Co-coordinator for the two days National workshop on "Intellectual Property Rights: Culmination of Research"