

Faculty Details proforma for DU College Web-site



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Title Dr.	First Name	Amit	Last Name	Garg	Photograph
Designation	Associate Professor				
Address	Department of Electronics				
	Acharya Narendra Dev College				
	University of Delhi				
	Govindpuri, Kalkaji				
	New Delhi-110019				
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Educational Qua	lifications				
Degree	Institution				Year
Ph.D.	Department of Elect	ronic Scien	ce. UDSC. New	Delhi	2003
M.Sc	Department of Elect				1995
(Electronics)	2 • p • · · · · · · · · · · · · ·				
B.Sc(H)	Hansraj College, Del	lji-110007			1993
Electronics		- -			
Career Profile					
Associate Professor, Department of Electronics					
Working at Ach	narya Narendra Dev Co	ollege since	1997		
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Administrative A		0 T	1 2000 3.5 20	10	
1.	Bursar of the College from July 2008- May 2019				
2.	PIO of the College from July 2008- May 2019				
3.	Chairman, ANDC inStart Foundation, a section 8 Company to promote Incubation of				
	Startups				
4.	Teacher in charge 1999-2001, 2006-08, 2019-21				
5.	Teacher Representative in Governing Body May 2007-08 for one year, 2019-2020				
6.	Staff Council Secr	etary 1998-	2000		
Areas of Interest / Specialization					
• New Materials for gas sensing, water purification membranes, harnessing of solar energy.					
•	Laser Material interaction				
•	Science Education				
Subjects Tought (Lest Eine Veers)					
Subjects Taught (Last Five Years)					
1. Operational Amplifiers and Applications					
2. Microprocessors and Microcontrollers					
3. Robotics (La					
4. Programmin	ng with LabVIEW (Lab)				

- 5. Applied Physics (Lab)
- 6. Semiconductor Devices (Lab)

Research Guidance

Students registered for Ph.D.

- 1. Vishal Dhingra, Growth and characterization of graphene oxide loaded with nanocrystalline ZnO clusters for gas sensing application
- 2. Shani Kumar, Growth and Characterization of a Composite System based on Reduced Graphene Oxide for Water Purification Application

Publications Profile (Last Five Years)

- Chetna, ;Shani Kumar, Amit Garg,; Arijit Chowdhuri ; Amit Jain; Avinashi Kapoor A novel method of electrochemically growing ZnO nanorods on Graphene Oxide as substrate for gas sensing applications", Mater. Res. Express(2019) 6 075039
- 2. Shani Kumar, Amit Garg,; Arijit Chowdhuri, Sonication Effect on Graphene Oxide (GO) Membranes for Water Purification Applications" by Mater. Res. Express(2019) **6** 085620
- 3. Shani Kumar, Amit Garg, Arijit Chowdhuri, Comparison of water purification properties of Graphene Oxide (GO) Membranes with tuned interlayer spacings, Mater. Res. Express 6 (2018) 015604,
- 4. Chetna, Shani Kumar, A.Garg, A.Chowdhuri, , A.Jain, A.Kapoor, Structural and optical properties of electrochemically deposited ZnO nanorods by using graphene oxide and ITO as substrate material: A comparative study, Mater. Res. Express 5 (2018) 095024
- Shani Kumar, Amit Garg and Arijit Chowdhuri, Effect of concentration variation in Graphene Oxide (GO) membranes for water flux optimization, 2nd International conference on Condensed Matter and Applied Physics (ICC-2017), Bikaner, Rajasthan, 24-25 November, 2017. AIP Conference Proceedings 1953, 030280 (2018)
- 6. Shani Kumar, Vishal Dhingra, Amit Garg, Arijit Chowdhuri, Investigating gas sensing mechanism of graphene oxide (GO) thin films through cross-selectivity to various gases, AIP Conference Proceedings **1728**, 020672 (2016)
- 7. Chetna, Shani Kumar, A. Garg, A. Chowdhuri, V. Dhingra, S. Chaudhary, A. Kapoor, Zinc oxide doped graphene oxide films for gas sensing applications, AIP Conference Proceedings **1728**, 020579 (2016)

Conference / Presentations /Workshops(Last Five Years)

- 1. Garg, A, Chowdhuri, A and Kumar, S. "Enhancing water filtration capacities by tailoring interlayer spacings of Graphene Oxide (GO) membranes" 3rd International Conference on Materials Science and Materials Chemistry, Vienna, AUSTRIA, pp 40; October14-15, 2019
- 2. Garg, A, Kumar, S and Chowdhuri, A. Mildly Reduced Graphene Oxide (MRGO) Membranes for Water Purification Applications,. 3rd International Conference on Materials Science and Materials Chemistry 2019, Vienna, Austria; October 14-15,2019,
- 3. Sharma, P, Verma, Garg, A. Artificial Intelligence Assisted Smart Mirror, PP-28, International Conference on Advances in Smart Materials and Emerging Technologies (ASMET-2020), at IGDTUW, Kashmeere Gate, Delhi, January 23-24, 2020
- 4. "Carbon dioxide (CO2) detection at room temperature using Graphene oxide (GO) coating on Quartz Crystal Microbalance (QCM)" – Jatinder Pal Singh, Siddharth Das, Priya Chopra. Shani Kumar, Amit Garg, Charu Khosla Gupta and Arijit Chowdhuri - National Conference on New Trends in Nanotechnology and Applications (NTNA - 2020), 06 – 07 February 2020 held at Atma Ram Sanatan Dharma College (University of Delhi)
- 5. "Room temperature detection of H2 and H2S gases by Graphene oxide (GO) films using Surface Plasmon Resonance (SPR) technique" – Anshuman Tripathi, Yogesh Shukla, Akash Gupta, Shani Kumar, Amit Garg and Arijit Chowdhuri – International Conference on Advanced Materials Energy & Environmental Sustainability (ICAMEES-2018) 14 – 15 December 2018, University of Petroleum & Energy Studies, Dehradun, Uttarakhand, INDIA
- 6. Shani Kumar, Amit Garg and Arijit Chowdhuri, Comparison of water purification properties of Cu and Ag nanoparticles decorated Graphene Oxide (GO) membranes, International Conference on recent

advances in Nanoscience and Nanotechnology, Jawaharlal Nehru University(JNU), 19-20 Dec-2016, Delhi.

- 7. Vishal Dhingra, Shani Kumar, Amit Garg and Arijit Chowdhuri, Graphene Oxide (GO) thin films loaded with Cu and Ag nanoparticles for gas sensing applications International Conference on recent advances in Nanoscience and Nanotechnology, Jawaharlal Nehru University(JNU), 19-20 Dec-2016, Delhi.
- 8. Shani Kumar, Amit Garg and Arijit Chowdhuri, Development of Graphene Oxide (GO) membrane embedded with Cu nanoparticles for water purification applications, International Conference on Advances in Nanomaterials and Nanotechnology, Jamia Millia Islamia, 4-5 Nov-2016, Delhi.
- 9. Attended 36th Edition of Bridge 2018 conference at New Delhi , FOSTERING INDIA FOR INDUSTRY 4.0 , ICT Academy, 12 December 2018
- 10. TiE Global Summit III, Entrepreneurship: Driving Employment, Driving Growth, New Delhi, 29 November, 2018.
- 11. Coordinator, Education Conclave 2018 titled " Education Deconstructed: Dialogue with Experts", Acharya Narendra Dev College (University of Delhi), New Delhi on November 2, 2018.
- 12. Attended ICT academy Coordinator Meet -2017, New Delhi, 11th January 2018.
- 13. Attended National Digital India Mission Programme, August 1, 2018, organized by Confederation of Indian Universities, India International Centre, New Delhi

Research Projects (Major Grants/Research Collaboration)

- 1. Development of an All-In-One module for real time Agriculture Data Acquisition and Processing, One year duration for Rs. 5,00,000/- funded by University of Delhi, 2015-16
- 2. Development of a multisensor gesture controlled Wheelchair System for Persons with Disability, One year duration for Rs. 5,00,000/- funded by University of Delhi, 2015-16
- 3. Development of low cost computer controlled science laboratory using sensors and open source hardware and software tools of One year duration for Rs. 6,00,000/-(2013-15)
- 4. Principal Investigator of UGC Major Research Project "Investigating Science Hands-on to Promote Innovation and Research at the Under-graduate Level" of three year duration for Rs. 10,54,300/- completed in March-2012
- 5. Glucose Detection-a Biosensing Approach of One year duration for Rs. 10,00,000/- funded by University of Delhi, 2012-13
- 6. Mobile Phone as a real time sensor based undergraduate laboratory of One year duration for Rs. 10,00,000/- funded by University of Delhi, 2012-13
- 7. Mentor, Innovative Student Project 2011, "Development of Phototherapy Blanket for treatment of Jaundice in Infants" of one year duration for Rs.1,00,000/-, Innovation and Entrepreneurship Development Centre(IEDC), National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology (DST)
- 8. Mentor, Innovative Student Project 2010, "Low Cost Glucometer" of one year duration for Rs.1,00,000/-, Innovation and Entrepreneurship Development Centre(IEDC), National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology (DST) Completed in March-2012

Awards and Distinctions

- 1. Recipient of the Meritorious Teachers' Award of the Directorate of Higher Education, Government of NCT of Delhi for the year 2012-13. Received cash award of Rs. 1,00,000/- on this occasion from Smt. Sheila Dixit, Hon'ble Chief Minister of Delhi in the august presence of Dr. A.K. Walia, Hon'ble Minister for Higher Education.
- 2. Most Promising Innovation by University of Delhi -The University of Delhi invited proposals to select Innovation Projects during 'Research Display' on 19 November 2016 at the time of Convocation of University of Delhi. The selection was based on any Innovation shown or any significant research findings that are likely to have an impact on meeting global challenges in future. Innovation Project entitled "Development of a multisensor gesture controlled Wheelchair System for Persons with Disability", ANDC 311 was selected for research display at the university convocation. The project was awarded as the "Most Promising Innovation" in the Physical Sciences category.
- 3. Teacher Excellence Award for Innovation by University of Delhi on 93rd Foundation Day of the

University on 1st May, 2015 by Prof. Upendra Baxi, Former Vice Chancellor of University of Delhi in presence of Prof. Dinesh Singh.

Association With Professional Bodies

- 1. Society of Photo-Optical Instrumentation Engineers (SPIE), USA
- 2. Optical Society of India

Other Activities

- Reviewer of many international journals
- Faculty Adviser, University of Delhi at ANDC SPIE Student Chapter
- Member, Committee of Courses, Department of Electronic Science, University of Delhi, South Campus for a period of two years w.e.f 23.02.2019.
- Member, Department Research Committee, Department of Electronic Science, University of Delhi South Campus for two years w.e.f 03.01.2019
- Subject Expert, University Grants Commission to evaluate the syllabi for B.Sc.(H) Electronics UG course under the recently introduced Choice Based Credit System(CBCS) under LOCF (2019)
- RUSA, Institutional Coordinator
- Member of the preliminary screening committee to shortlist potential Business Plans for 2017 for "Electropreneur Park"
- Jury Member for National Level Exhibition and Project Competition (NLEPC)-2012- 2015 under INNOVATION IN SCIENCE PURSUIT FOR INSPIRED RESEARCH (INSPIRE) programme, Department of Science and Technology
- Convener(Physics/Electronics) of a two-day teachers' workshop for P.G.Ts : Science Pedagogy: Laboratory learning to Classroom teaching" in Physics, Chemistry and Biology on January 20-21, 2016.

Signature of Faculty Member