



# Bhaskaracharya College of Applied Sciences (University of Delhi)

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

## FACULTY PROFILE

Title	Dr.	First Name	AMIT	Last Name	KUMAR	Photograph
Designation		Associate Professor				
Department		Electronics				
Address (Campus)		Bhaskaracharya College of Applied Sciences (University of Delhi) Sector II, Phase I, Dwarka, New Delhi – 110075				
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Email Id		<a href="mailto:amit.kumar@bcas.du.ac.in">amit.kumar@bcas.du.ac.in</a>				
Educational Qualification		Subject			Institution	
Ph.D.		Electronic Science			University of Delhi	
M.Phil.						
M. Tech						
M.Sc.		Electronic Science			University of Delhi	
Research Interests/ Specialization						

Material Science, Nanostructures,			
Teaching Interest			
Digital Signal Processing, Signals & Systems, Network Analysis, etc.			
Achievements/Patents			
Publications			
Year of Publication	Title	Journal	Co-author/s
41, 26-31 (2016)	<i>Effect of physicochemical properties of analyte on the selectivity of polymethylmethacrylate:Carbon nanotube composite sensor for detection of volatile organic compounds</i>	Materials Science in Semiconductor Processing	Amandeep Kaur, Inderpreet Singh, <b>Amit Kumar</b> , Peta Koteswara Rao, Pramod Kumar Bhatnagar
81, 065701 (2010)	<i>Self-trapping mechanism in green phosphorescent dye-doped polymer light-emitting diodes</i>	Physica Scripta	Devinder Madhwal, SS Rait, A Verma, <b>A Kumar</b> P. K. Bhatnagar, P. C. Mathur, K Tada, M. Onoda
130, 331–333 (2010)	<i>Increased luminance of MEH-PPV and PFO based PLEDs by using salmon DNA as an electron blocking layer</i>	Journal of Luminescence	Devinder Madhwal, S.S. Rait, A. Verma, <b>Amit Kumar</b> , P.K. Bhatnagar, P.C. Mathur, M. Onoda
45, 3300 (2010)	<i>Development and characterization of an efficient bio-white polymer light-emitting diode with red and green phosphorescent dyes as dopants</i>	Journal of Material Science	Devinder Madhwal, S. S. Rait, <b>A. Kumar</b> , A. Verma, K. Tada, M. Onoda, P.K.Bhatnagar and P.C.Mathur
130, 2157-2160 (2010)	Enhanced luminance of MEH-PPV based PLEDs using single walled carbon nanotube composite as an electron transporting layer	Journal of Luminescence	Inderpreet Singh, Devinder Madhwal, A Verma, <b>A Kumar</b> , S Rait, I Kaur, P.K. Bhatnagar, P.C. Mathur
252, 3953 (2006)	<i>Improved electrical and optical properties of MEH-PPV light emitting Diodes using Ba buffer layer and porphyrin</i>	Applied Surface Science	<b>Amit Kumar</b> , P. K. Bhatnagar, P. C. Mathur, K Tada, M. Onoda
40, 3849 (2005)	<i>Optical characterization of Alq3/MEHPPV composite films</i>	Journal of Material Science	<u><b>Amit Kumar</b></u> , P.K.Bhatnagar, P.C.Mathur, K.Tada, M.Onoda
98, 024502 (2005)	<i>Temperature and electric field dependences of mobility in light emitting diodes based on poly [2-methoxy-5- (2-ethylhexoxy)-1, 4-phenylene vinylene]</i>	Journal of Applied Physics	<u><b>Amit Kumar</b></u> , P. K. Bhatnagar, P. C. Mathur, M. Husain, Sandip Sengupta, Jayant Kumar
Conference Publications			
December	26th International Conference of International	Review for recent trends in VLSI designs and	

<b>18-20, 2020</b>	Academy of Physical Sciences	future alternatives due to Nanotechnology
<b>October 10-11, 2020</b>	8th Annual Covention organised by Indian Association of Physics Teachers	Teaching Physics Through Distructive Technologies under NEP 2020
<b>September 26-28, 2020</b>	National Webinar on Dimensions of National Education Policy 2020	Counteracting Indian Social Divide through National Education Policy 2020
<b>September 15, 2020</b>	AICTE Sponsored International e-Conference on Innovation in Rural Empowerment, Social Dynamic & Welfare in India	Role of National Education Policy on Rural Empowerment: Analysis amid Covid-19 Pandemic
<b>August 23-25, 2020</b>	Virtual International Conference on Innovation for New Normal	Electronic Waste, as a New Indo-Chinese Battlefield
<b>August 23-25, 2020</b>	Virtual International Conference on Innovation for New Normal	Online-learning a Success Story: Report of One Day National Workshop on Primers of Artificial Intelligence
<b>August 21-23, 2020</b>	National e-Conference on National Education Policy - 2020	Role of Recent Disruptive Technologies in Higher Education & National Education Policy 2020
<b>August 20-21, 2020</b>	Recent Advances in Technology & Engineering (CRATE-2020)	Computer vision: Adding more scences to Artificial Intelligence
<b>August 20-21, 2020</b>	International e-Conference on Cutting Edge Smart Materials & Nanotechnology	Recent Progress in Moletronics: A Review
<b>July 2020 24,</b>	National e-Conference on SDG-4, COVID-19 Re-calibrating Indian Education System	Wavelet Signal Processing: An introduction & its recent application in Combat against Covid-19 Pandemic
<b>July 2020 24,</b>	National e-Conference on SDG-4, COVID-19 Re-calibrating Indian Education System	Online-teaching amid Covid-19 Pandemic: An Experience
<b>July 2020 22,</b>	National e-Conference on Emerging Trends in Physical Sciences	Recent trends in VLSI designs due to advances in Nanotechnology
<b>July 2020 11,</b>	National Conference on Industry 4.0: Exploring New Horizons and Challenges for New Normal Post Covid-19	Artificial Intelligence to Combat Corona Pandemic: Discussion Paper
<b>July 2020 4-5,</b>	International e-conference on Advances in Information Technology, Bussiness Management and e-Commerce	Wavelets as new mathematical tool for signal Processing
<b>July 2020 1-2,</b>	Multidecipilinary National e-Conference "Rejuvenation through Innovation: Need of the hour"	Role of disruptive technologies in education during & after Covid-19 scenario
<b>June 29-30, 2020</b>	International Sanskrit e-Conference on INSIGHT INTO SANSKRIT KNOWLEDGE WORLD	Sanskrit as language for artificial intelligence & robotics
<b>June 27-28, 2020</b>	International e-conference on "Digital Education: Scope and Challenges in India"	Indian Universities on crossroad to define New Normal
<b>June 12-13,</b>	International webinar on "Indian Culture: An	Clues for Improvements in Science Education

<b>2020</b>	Evergreen Relevant Foundation for Global Peace"	from Ancient Indian Education System
<b>June 5, 2020</b>	National Webinar on "Environmental perspective of Covid-19"	Study of e-waste management in pre-Covid era with suggestions for post-Covid time in Indian perspective
<b>May 30-31, 2020</b>	National Webinar on "Emerging Trends, Issues, Challenges & Opportunities Post Corona Crisis	Learning Physics through Augmented Reality
<b>May 29, 2020</b>	International e-Conference on Covid-19, Pandemic: Issues, Challenges and opportunities for trade, e-commerce and Employment	Current Status & Future Challenges for Electronic Industry in India
<b>May 16-17, 2020</b>	National webinar on "Impact of Covid-19 on India: Educational vis a vis Cultural Perspective	Suggestions for Higher Education in India during COVID pandemic
<b>March 29-31, 2019</b>	National Conference on Recent Trends and Advancements in Chemical Sciences	Enhanced Performance of Single Layer MEH-PPV Light Emitting Diode using Alq <sub>3</sub> Electron Transporting Layer and LiF:Al Cathode Contact"
<b>October 16-17, 2015</b>	National Conference on Inspired Learning 2.0	Essence, Trends and proposed Design for Microbial Sensing
<b>October 16-17, 2015</b>	National Conference on Inspired Learning 2.0	Learning through Biomimicry
<b>October 16-17, 2014</b>	National Conference on Inspired Learning	Augmented Reality in Education
<b>June 12-16, 2006</b>	10th Asian conference on Solid State Ionics	Development and Characterization of polyfluorene based Light emitting diodes and their color tuning using Forester resonance energy transfer
<b>July 03-08, 2005</b>	ICMAT 2005 & IUMRS-ICAM	Electric Field and Temperature Dependence of Hole Mobility in Light Emitting Diodes Based on MEHPPV
<b>July 03-08, 2005</b>	ICMAT 2005 & IUMRS-ICAM	Improved electrical and optical properties of MEH-PPV light emitting Diodes using Ba buffer layer and porphyrin
<b>Project (Minor/Major)</b>		
<p><b>Major Project:</b> Development of an accurate &amp; reliable biosensor based on Raman Scattering &amp; Photoluminescence emission in Single Walled Carbon Nanotubes for Medical Diagnostics And Mutation Detection in Diseased DNA, Department of Biotechnology, Ministry of Science &amp; Technology, Govt. of India (2012-2015).</p> <p><b>Minor Project:</b> Development of wireless sensor for detection and real time monitoring of microorganisms, University of Delhi, UG Research Initiative in Colleges, Innovation Project (2015-2016)</p>		