

# JSS Mahavidyapeetha JSS Academy of Technical Education, Noida





#### **FACULTY PROFILE**

#### 1. Personal Details

NAME	DR. AMIT KUMAR AHUJA	
DEPARTMENT	ELECTRONICS AND COMMUNICATION ENGINEERING	
DESIGNATION	PROFESSOR	
PHONE	9012228855	
EMAIL ID	amit.ahuja@jssaten.ac.in	
Date of Joining (JSSATEN)	07/11/2022	

### 2. Experience

Total Experience in Years: 21 Teaching: 21	Industry: - 00	Research: -07
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#### 3. Qualifications

COURSES	S SPECIALIZATION Year of Award INSTIT		INSTITUTION	UNIVERSITY	
B.E.	Electronics Engineering	2001	Maharashtra College of Engineering, Nilanga, District Latur	Swami Ramanand Teerth Marathwada University, Nanded	
M.Tech.	Digital Communications	Bundelkhand Institute of Engineering and Technology (BIET) Jhansi		Uttar Pradesh Technical University, Lucknow	
Ph.D.	QoS in Wired & Wireless Communication Systems/ Green Communications	2017	Mahavidyalaya, Ena	- ndra Saraswathi Viswa nathur, Kanchipuram, nennai	
Post Doc.	-	-			

#### **Research & Publications**

Papers Published in Web of Science indexed Journals	International: 06	National: 00			
Papers Published in SCOPUS indexed Journals	International: 02	National: 00			
Papers Published in other Journals	International: 02	National: 00			
Papers Presented in Conferences / Symposium	International: 03	National: 00			
Books / Book chapters Published	04 Book Chapters (Scopus Indexed)				

#### 4. Research Guidance

PhD Guide? Give field & University	-	-
PhDs / Projects Guided	Ph.D. Awarded: - Guiding: -	Projects at Master's Level: 10 Projects at Bachelor's Level: 35+

#### 5. Grants

## i. Funds Received (Projects)

#### Grants Received as Coordinator/Convener

Project Name	ect Name Grant Amount		Duration in Years	Grant issuing authority/ Body / Organization	
AICTE-IDEA LAB	46,34,000/-	17 June 2021	2 Years	All India Council of Technical Education (AICTE, New Delhi)	
UP Engineering Students Projects Grant Scheme	20,000/-	January, 2020	1 Year	Uttar Pradesh Council of Science and Technology (UP-CST)	
Conference Grant	75,000/-	05 January 2010	1 Year	All India Council of Technical Education (AICTE, New Delhi)	
FDP Grant	78,000/-	January 2018	1 Year	Dr. APJ Abdul Kalam Technical University, Lucknow	

## ii. Patents

Sl. No.	Title Details	Details of award of patent / Filed
1	A Receiver for Improving Signal Recovery in Communication Systems and a Method Thereof (Utility Patent)	Filed & Published
2	Smart LPG Theft-Prevention-System (Utility Patent)	Filed & Published
3	Antitheft LPG Smart Lock (Design Application)	Granted; Certificate Received
4	RFID based Anti-leakage, Anti-theft, Auto-Resettable Gas-Cylinder Smart Lock (Design Application)	Granted; Certificate Received
5	Antileakage, Antitheft, Auto-Resettable LPG Smart Lock (Design Application)	Granted, Certificate yet to be received
6	Portable Bottle with Water Heating, Cooling and Purification Capability (Design Application)	Granted, Certificate yet to be received
7	IoT Enabled Smart Diaper	Granted, Certificate Received
8	Smart Mask	Granted, Certificate Received
9	One Design Applications have been filed. Details will be divulged upon receiving their results.	Filed

# iii. Consultancy

Title of the work	Amount in Rs.	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
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#### 6. Awards Received

	Certificate of Appreciation by Mr. Sanjay Srivastava, Director, TI-University Program, Texas Instruments, India and Mr. Nagesh Singh, Director, Sapience Consultancy.
	Memento of Appreciation by Texas Instruments for Fostering an Ecosystem bridging Government, Industry and Academia
	❖ Awarded a cash Prize for being 'Best Teacher' at MIET, Meerut in the year 2007.
Appreciations	❖ Certificate of appreciation for being 'Jury in Debate Program' given by Sh. A.K. Manuwal, Chief General Manager, Dedicated Freight Corridor Corporation of India Limited (DFCCIL), Meerut for event conducted during Vigilance Awareness Week from 28th October − 2nd November, 2019.
	Certificate of Appreciation from Mr. Yashwant Veas, Amar Ujjala Foundation for Contribution in Blood Donation Camp.
	Certificate of Honor presented for Technical Jury in Project Competition at Subharti University, Meerut
	One of the Invention Published in Dainik Jagran all India Edition covering 11 States, 7.5 Crores Readers, 3 March 2021.
	Rajan Nanda Scholarship (Escorts Limited, Tractors Division, Faridabad) from VI-X standard for getting First Position in the Class.

#### 7. Publications

## i. International Journals

Sl. No	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1	A New Receiver for a Digital Passband System with CPSK Modulation: The STTS-CPSK receiver	A.K. Ahuja, Ram Chakka	Journal of Scientific & Industrial Research, IF: http://nopr.niscair .res.in/handle/123 456789/50656	Vol. 78, October, 2019, pp. 671-677, ISSN: 0022-4456 (Print), 0975-1084 (Online).	Web of Science/ Scopus	1.056 (Thompson Reuters JCR 2020). H-Index: 54	National Institute of Science Communication and Information Research (NISCAIR)
2	First Order Correlations in Simulated and Real Digital Traffic: Importance, Study and Analysis	A.K. Ahuja, R. Chakka and T.S. Pathak	Journal of Scientific & Industrial Research (JSIR), IF: 1.056. http://hdl.handle. net/123456789/33 826	Vol. 75, March, 2016, pp. 159-171, ISSN: 0022-4456 (Print),	Web of Science/ Scopus	1.056 (Thompson Reuters JCR 2020). H-Index: 54	National Institute of Science Communication and Information Research (NISCAIR)

		I	I	0077 1004	1		
				0975-1084 (Online),			
3	New Receiver for a Passband System for CFSK Modulation: The STTS-CFSK Receiver	R. Chakka, A.K. Ahuja	Journal of Scientific & Industrial Research, http://nopr.niscair .res.in/handle/123 456789/45486	Vol. 77, Dec., 2018, ISSN: 0022-4456 (Print), 0975-1084 (Online), pp. 692- 699,	Web of Science/ Scopus	IF: 1.056 (Thompson Reuters JCR 2020). H-Index:54	National Institute of Science Communication and Information Research (NISCAIR)
4	Analysis of the Performance- Improvement due to a New Receiver for Baseband Telecomns, and Development of a Fast-Predictive Model	A.K. Ahuja, R. Chakka	Journal of Scientific & Industrial Research (JSIR) http://nopr.niscair .res.in/handle/123 456789/29340	Vol. 73, pp. 577-587 Sept., 2014, ISSN: 0022-4456 (Print), 0975-1084 (Online),	Web of Science/ Scopus	IF: 1.056 (Thompson Reuters JCR 2020). H-Index: 54	National Institute of Science Communication and Information Research (NISCAIR)
5	New Receivers in Digital Communications, Performance Evaluations and Comparisons	R. Chakka, A.K. Ahuja	Journal of Scientific & Industrial Research (JSIR), http://nopr.niscair .res.in/handle/123 456789/33108	Vol. 74, pp. 618-629, Nov., 2015, ISSN: 0022-4456 (Print), 0975-1084 (Online),	Web of Science/ Scopus	IF: 1.056 (Thompson Reuters JCR 2020),	National Institute of Science Communication and Information Research (NISCAIR)
7	BER Reduction in Signal Receivers towards Greening of Digital Communications	A.K. Ahuja, R. Chakka and P.V. Krishna	International Journal of Communication Networks and Distributed Systems (IJCNDS), Inderscience https://doi.org/10. 1504/IJCNDS.20 14.057989	Vol., 12, pp. 82–94, Jan, 2014. ISSN: 1754-3924 (Online), 1754-3916 (Print)	Scopus	Cite Score 2020: 1.581, H-Index: 17	Inderscience
8	A New Approach for BER Reduction and its Impact on Telecomn Performance	A.K. Ahuja, R. Chakka	Journal of Scientific & Industrial Research (JSIR), http://hdl.handle. net/123456789/16 052	Vol., 72, pp. 149- 159, March 2013, ISSN: 0022-4456 (Print), 0975-1084 (Online),	Web of Science/ Scopus	IF: 1.056 (Thompson Reuters JCR 2020). H-Index: 54	National Institute of Science Communication and Information Research (NISCAIR)

## ii. National Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1	BER comparison of MIMO OFDM system under different fading environment	Neha Rani, A. K. Ahuja	Design Engineering Journal (Toronto), Information Matrix for the Analysis of Journals (ub.edu)	Vol 2021, Issue 07. ISSN: 0011-9342	Scopus	1.41	Roger Media Publishing
2	Measurement of MF Receiver Performance Deviation Using Conventional and Practically Derived Threshold for Binarized Image Signals	Bimla Pandey, A. K. Ahuja	International Journal of Advanced Research in Computer and Communication Engineering.	Vol. 5, Issue 8, August 2016, ISSN (Online) 2278-1021 ISSN (Print) 2319 5940, August-2016	DOAJ, Google Scholar, Mendeley	-	IJARCCE

#### iii. Conferences

Sl.	Title of the	Name(s) of	Name of the	Volume No.	WOS /	Impact	Publisher
No.	paper Author(s)		Conference Issue No. Year		Scopus Factor		Publisher
1	Symlet2 Based Wavelet Filter Bank for Uncorrelated Digital Signal Recovery: Some Advantages over Matched Filter	A.K.Ahuja, R. Chakka	International Conference on Computing and Communication Systems at Vellore Institute of Technology (VIT), Vellore,	In: Communications in Computer and Information Science (CCIS). Vol 269. Springer, Berlin, Heidelberg. pp. 782-791, 9–11 Dec., 2011	Scopus	0.476	Springer
2	Performance Evaluation and Comparison study of OFDM in AWGN and Colored Noise Environment	Nikita Goel, A. K Ahuja	International Conference on Data Analytics and Management (ICDAM – 2020), an Indo-European Conference jointly organized by Wyzykowski University (Poland) and B.M. Institute	Lecture Notes on Data Engg. & Communication Technology (Springer). 292 Downloads till 17-07-2021, pp. 337-346, Published on 5 Jan, 2020. ISBN:978-981-	Scopus	0.42	Springer

			of Engineering & Technology (India). https://doi.org/10.1 007/978-981-15-8335-3_27	15-8335-3 (Online), IF: 0.44 https://doi.org/10. 1007/978-981-15- 8335-3_27			
3	BCH/ Hamming/ Cyclic Coding Techniques: Comparison of PAPR Reduction Performance in OFDM System	P. Kumar, A.K. Ahuja, Ram Chakka	International Conference on Intelligent Computing and Applications (ICICA) Organized by Department of Computer Engineering, D.Y. Patil College of Engineering, Pune, India during 20-22 December 2016. https://doi.org/10.1 007/978-981-10- 5520-1_50	Advances in Intelligent Systems and Computing (AISC), Springer, Singapore Vol 632. pp. 557-566, Dec., 2017, ISBN: 978-981-10-5520-1 (Online), 978-981-10-5519-5 (Print) https://doi.org/10.1007/978-981-10-5520-1_50; (794 Downloads, 4 Citations).	Scopus	0.61	Advances in Intelligent Systems and Computing (AISC), Springer, Singapore,
4	Speech Signal De-Noising using Wavelet and Standard Software: Performance Evaluation and Comparison Study	Lavi, A. K. Ahuja	5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON-2018), held at MMMUT Gorakhpur, 10.1109/UPCON.2 018.8597032	2-4 Nov., 2018, pp. 1-6, ISBN: 978-1-5386-5002- 8, (76 Full Text Views), 94 Patents of Dolby on this Technology IF. 3.557. (Source- IEEE), IEEE Explore,	Scopus/ WoS	-	IEEE
5	Green Communication Technology: Issues & Challenges	A.K. Ahuja, Ram Chakka	International Conference on Green Technology: Issues and Challenges. Sponsored by SERB, DBT, DST (Govt. of India)	Department of Chemistry, Chaudhary Charan Singh University (CCS), Meerut; 22-24 September, 2022	-	-	Indica Publishers and Distributors Private Limited, Delhi

# iv. Workshops/Conferences Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	One Day Webinar on 'Aerospace Défense Symposium'	Keysight Technologies Pvt. Ltd., India,	26 August, 2021
2	Two Days National Level workshop for Higher Educational Institutes on "Transform Through NAAC Accreditation Process",	Institute for Academic Excellence (IAE), Hyderabad in collaboration with Collegiate Education & Technical Education Department, Telangana State.	21-22 June, 2021
3	Webinar on "Advanced OBE – Identifying Weaker Students and Remedial Action Taken"	InPods Educational Technology, Pune	16 May, 2020.
4	National Conference on 'Quality of Technical Education through National Assessment and Accreditation Council'	Ambedkar Institute of Advanced Communication Technology and Research, Delhi	18-19 July, 2018
5	Wipro Mission 10x Academic Leadership Workshop	Wipro Technologies Campus, Electronics City, Bangalore	3-6 March, 2014
6	4 <sup>th</sup> International Conference on "Recent Trends in Computing, Communication and Information Technologies (OBCOMS-2011)"	Vellore Institute of Technology (VIT), Vellore	9-11 Dec., 2011
7	Short term course on LTE and Wi-Max	IIT Kanpur	9-11 May, 2011
8	Workshop on Recent Trends in Image Processing	Shobhit University, Meerut	23 Oct., 2010
9	Seminar on VLSI Technology	Bit Mapper Integration Technology Private Limited, Pune	28 Feb., 2000.

# v. Workshops / Conference (Organized)

Sl. No.	Name of the workshop / Conference	Organized by	Date	Role
1	IDEATHONE'21.1(Innovative Idea Competition) & its Award Ceremony in the august Presence of Dr. Neeraj Saxena, Advisor-II (IDC), AICTE, New Delhi and Dr. Dhananjay V. Gadre, Professor NSUT and NSC Member, AICTE-IDEA Lab	AICTE-IDEA LAB, MIET, Meerut	15 Oct27 Nov., 2021 (Ideathone) 24 Dec., 2021 (Award Ceremony)	Convener
2	Three Days National FDP on 'Design, Simulation & Measurement of Different Types of Antenna for 5G Applications using HFSS'	Department of ECE, MIET, Meerut with Entuple Technologies, Bangalore as Technical Partner	2-4 Nov., 2020.	Convener
3	Robochamps-2018: A National Level Robotics Championship	Department of ECE, MIET, Meerut	14-16 September, 2018	Convener
4	TI Sponsored Faculty development program on 'Analog Integrated Circuits'	Texas Instrumentation (Sapience Technologies) and Department of ECE, MIET, Meerut	7–9 September, 2018	Convener
5	AKTU Sponsored Faculty Development Program on 'Mobile and Wireless Communication'	Department of ECE, MIET, Meerut	15–19 June, 2018	Convener
6	AICTE sponsored National Conference on 'Emerging Technologies in VLSI (NCETVLSI-2011)'	Department of ECE, MIET, Meerut	18 <sup>th</sup> Sept., 2011	Convener
7	Quick Learn Workshop on 'MATLAB and its Applications in Chemical Engineering' for faculty of Chemical Engg., MIET, Meerut	Department of ECE, MIET, Meerut	16– 17 Dec., 2014	Convener & Resource Person
8	Three days certification course on 'Primer Workshop on MATLAB' conducted for interdisciplinary students.	Department of ECE, MIT, Meerut	23–26 Sept., 2015	Convener & Resource Person
9	One-week certification course on 'Quick Learn Program on MATLAB' conducted for the inter-disciplinary students	Department of ECE, MIET, Meerut	27–31 Dec., 2016	Convener & Resource Person

# vi. Conference Attended (those sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body)

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	International Conference on Green Technology: Issues and Challenges	Department of Chemistry, Chaudhary Charan Singh University (CCS), Meerut, Sponsored by SERB, DST (Govt. of India)	22-24 Sept., 2022
2	One Week FDP on AICTE-IDEA Lab	Netaji Subhash University of Technology (NSUT), Dwarka, New Delhi, Sponsored by AICTE, New Delhi.	9-13 August, 2021
3	One-week STTP on "Research and Development in Wireless Communication Application using NetSim and MATLAB"	Pondicherry Engineering College (PEC), Pondicherry, India, Sponsored by AICTE, New Delhi	23–28 Nov., 2020
4	International Virtual Conference on "Role of Technology in the Era of Covid-19 for Education"	Organized by USREC (Uttarakhand Science Education & Research Centre)	7-8 June, 2020
5	Online National Workshop on Outcome Based Education (OBE),	Jointly Organized by State Project Implementation Unit - Uttar Pradesh (Technical Education Quality Improvement Program-III), Dr. APJ Abdul Kalam Technical University, Lucknow, and, The Institution of Engineers	10 June, 2020.
6	Design Thinking for Strategy & Innovation for the Directors/ Principals/ Deans/ HODs/ Faculties of affiliated Engineering Colleges of AKTU, Lucknow.	Jointly by IIM Lucknow and AKTU, Lucknow under TEQIP Scheme	13-15 March, 2020
7	One-Week Faculty Development Program on "5G Communication", NITTTR Chandigarh	Sponsored by NITTTR, Chandigarh	18- 22 Nov., 2019
8	One-week Refresher Course on "Universal Human Values and Professional Ethics"	Value Education Cell, Dr. APJ Abdul Kalam Technical University, Lucknow, Sponsored by AKTU, Lucknow.	10-17 Dec., 2018
9	One-week Faculty Development Program on "Universal Human Values and Professional Ethics"	Value Education Cell, Dr. APJ Abdul Kalam Technical University, Lucknow, Sponsored by AKTU, Lucknow.	10-16 May, 2018

10	Seminar on "Intellectual Property and Innovation Management in Knowledge Era"	Organized by NRDC and MIET, Meerut. Sponsored by NRDC	23 Sept., 2011
11	One-week Short Term Course on Wireless Communication	NITTTR Chandigarh	20-24 July, 2009
12	Workshop on Current Trends of CAD Tools for VLSI Design	C-DAC, Noida	12 April, 2007
13	Short Term Course on Digital Signal & Image Processing	IIT Roorkee	10-14 Dec., 2007

#### 8. Details of NPTEL / COURSERA courses completed

l. N	Name of the subject	Organized by	ate of completion / Award	Grade / Marks
-	-	-	-	-

#### 9. Membership of Professional Bodies:

Fellow-Institution of Electronics & Telecommunication Engineers (IETE), F-201897

#### 10. Any other information you will like to share about your professional experience

#### Invited Talks/ Resource Person in FDP/ Seminars/ Webinars/ Workshops/ Guest Lectures etc.:

- 1. A Special Lecture on 'National Education Policy-2020', in ATAL FDP 'Integration of WSN & IoT for Agriculture', 2 13 January, 2023. Lecture was held on 11th Jan, 2023.
- **2.** A Special Lecture on '*Innovative Teaching and Learning Methods*', in ATAL FDP '*Integration of WSN & IoT for Agriculture*', 2 13 January, 2023. Lecture was held on 12<sup>th</sup> Jan, 2023.
- **3.** Invited talk on 'Human Values and Professional Ethics: Some Discussions', Orientation Program for First Year Students, 15<sup>th</sup> November, 2022.
- Invited Talk on "Green Communication Technology: Effects and Requirements", International Conference on Green Technology: Issues & Challenges, 22-24 September, 2022, Chaudhary Charam Singh University, Meerut. (International Level)
- 5. AKTU Sponsored FDP on "Outcome based Education and NBA Accreditation" at Buddha Institute of Technology, Gida, Gorakhpur held on 01-04-2021. The topic delivered was "Program Curriculum and Teaching Learning Process".
  (State Level)
- **6.** AICTE Sponsored ATAL FDP (427) titled "Sensors Technology: Mobile Computing & Wireless Networks" held between 7–11, September, 2020. Topic: "Research Challenges of Communication Engineering at Physical Layer". Lecture was held on 7<sup>th</sup> September, 2020. (National Level)
- 7. IEEE Sponsored five days' Workshop on 'Advanced Design in RF', 16–20 Nov., 2020, HRMIT, Delhi. Topic: "Different Aspects of Wired and Wireless Communications". (National Level)

- **8.** Panel discussion (Research in Engineering & Technology and Technical Education), Golden Jubilee Celebration, NITTTR Chandigarh, 15 21 November, 2016. Topic Covered: "Student Evaluation Methods followed by Engineering College" (Taken on 17<sup>th</sup> November, 2016). (National Level)
- Guest lecture on 'GSM Technology' in AICTE sponsored staff development program on 'Mobile Computing & Wireless Networks', conducted by IT dept, at MIET, Meerut, 8-13 January, 2010. Lecture title: GSM Technology (National Level)
- **10.** Two Days Quick Learn Workshop on '*MATLAB and its Applications in Chemical Engineering*': 16<sup>th</sup> 17<sup>th</sup> Dec., 2014, for faculty of Chemical Engg., MIET, Meerut. (Institute Level)
- 11. Coordinator and resource person of 3 days certification course on 'Primer Workshop on MATLAB'; 23–26 Sept., 2015, conducted for interdisciplinary students of Meerut Institute of Technology (MIT), Meerut.

  (Institute Level)
- 12. Coordinator and resource person in Two weeks certification course on 'MATLAB Step-2: An Advanced Level Course on MATLAB'; 15–24 June, 2017, conducted for the inter-disciplinary students of MIET, Meerut. (Institute Level)
- **13.** Coordinator and resource person of a week certification course on 'Quick Learn Program on MATLAB'; 27–31 Dec., 2016, conducted for the inter-disciplinary students of MIET, Meerut. (Institute Level)
- **14.** Lecture on "Role and Perspective of Communication Systems" in "Govt Inter College, Ramnagar, Uttarakhand", 2016 on the eve of National Science Festival. (State Level)