



Dr. TARANA AFRIN CHANDEL

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Hyperlinks of (Google Scholar Citation, |Orchid Id, Scopus, |Web Of Science, |Research gate, |linked in, |Wordpress)

Educational Qualification:

- 1) **PhD** (*Renewable Energy*), from Integral University. Enrolled on 26 August 2017
Topic of Thesis: *Performance Evaluation of Solar Photovoltaic Module using Photoluminescence Image Analysis*, Submitted on 24 December 2021, awarded 3rd November 2022
- 2) **M.Tech:** (*Microelectronics, VLSI Design*) from Uttar Pradesh Technical University, Lucknow, UP in September 2009, **First class.**
Topic of Thesis: “*Design and Implementation of Reconfigurable ALU on FPGA*”
- 3) **BSc Engineering** (*Electronics and Communication Engineering*) from Magadha University, Bihar, in March 2002, **First class with distinction**
Topic of project: “*Automatic Room Light Controller*”
- 4) **Diploma** (3 years, *Electronics and Communication Engg*) from Aligarh Muslim University in September 1993, **First class**
- 5) **High School** from UP Board, **First class.**

UGC-NET: *UGC Net Qualified held on 30 June 2013*

PROFESSIONAL WORK EXPERIENCE:

Total Experience: Academic (21 years 2 months 10 days) +Industrial (5years) = 26Years 2 month

Academic Experience: 21 years

- i. **Associate Professor L-II**, (Redesigned), Integral University, Lucknow, UP since February 2021

- ii. **Associate Professor (Jr.)**, Integral University, Lucknow, UP since August 2012
- iii. **Sr. Assistant Professor**, Integral University, Lucknow, UP, from August 2011 to July 2012
- iv. **Assistant Professor**, Integral University, Lucknow, UP, from Feb. 2010 to June 2011
- v. **Lecturer**, Integral University, Lucknow, UP, from 26 July 2004 to January 2010

Industrial Experience: 5 years, 5 months

- i. **Manager (QA & PPC) & Management Representative for ISO 9001** in M/S Pramode Telecom Pvt Ltd from 1 June 2003 to 25 July 2004.(1y, 2m)
- ii. **Jr. Engineer** in M/S Bharti Telecom Ltd from August 1995 to 28 October 1998.(3yrs,3m)
- iii. **Trainee Engineer** in M/S DCM Data System from June 1994 to May 1995.(1yr)

Thesis & Project Guided

- (i) **23 M. Tech** thesis guided since 2012 (22 awarded, 1 in process).
- (ii) **52 B.Tech** project since 2005.

Research Link

1. **Google citation link:**
<https://scholar.google.co.in/citations?user=p8D9oKIAAAAJ&hl=en>
2. **Research Gate:** <https://www.researchgate.net/profile/Tarana-Chandel-2/research>
3. **Publon:** <https://publons.com/researcher/4058075/tarana-afrin-chandel/publications/>
4. **Web of Science (Researcher ID):** ABF-3087-2020,
<https://www.webofscience.com/wos/author/record/ABF-3087-2020>
5. **Scopus Author ID:** 57209463881;
<https://www.scopus.com/authid/detail.uri?authorId=57209463881>
6. **ORCID ID: 0000-0002-8605-6018**, <https://orcid.org/0000-0002-8605-6018>
7. **Linked in:** <https://www.linkedin.com/in/dr-tarana-afrin-chandel-209b6261/>
8. **Wordpress:** <https://taranaafrinchandel.wordpress.com/about-me/>
9. **Academia:** <https://integralunivrsity.academia.edu/DrTaranaAfrinChandel>
10. **Linkedin:**

MAJOR ACHIEVEMENTS

Research Project:

1. Submitted a project to Integral University for seed money on 31 December 2023 titled *Designing and Fabrication of a Low Cost Instrument to Determining the Seed Quality for Sustainable Agriculture*
2. Submitted a project to Jacobs Foundation Research Fellowship Program 2022 titled *Testing Of Solar Cell For Flexible Solar Panel* on 16 January 2022
3. Project sanctioned: *Performance Analysis of 1MW Grid Connected Solar Photovoltaic System using Image Analysis* is sanctioned by **Institute of Engineer, Kolkata-700020; West Bengal, India** IEI for three years with Reference No is R.6/2/DR/2017-18/RDDR2017015. PSN: **IU/DSR/2018-PSN002**--- completed
4. I have submitted a project title *A Novel Method for Determining the Effect of Salinity on Agricultural Seasonal Crops in India, in UPCST*

Patent

1. *“Low Cost Micro Crack Measuring Instrument For Detection Of Faults On Site In Solar Panels”* Patent No. 568891, granted on 21 July 2025, Application No: 202111035684, published on 2 June 2023
2. *Systematic Approach To Unlock The Full Potential Of Perovskite Solar Cell Technology Through Machine Learning*, Application No. 202341041297, date of filing 17/06/2023, published on 1/09/2023
3. *Low-Cost Instrument To Detect The Degradation of the Pharmaceutical Formulations Based Medicines*, Application No. 202111059361, published on 24 June 2022 (24/06/2022)
4. *“Low Cost Micro Crack Measuring Instrument For Detection Of Faults On Site In Solar Panels”* Application No: 202111035684, published on 2 June 2023

Award:

1. *Winner of the prestigious Integral University Best Innovator Award for the year 2025*. In addition to the trophy, received for a grant of Rs 50,000/- in support to research activities.
2. *Winner under Research Excellence in Teaching Faculty Regional Category*, The award was jointly presented by IEI, NMLC and FCRIT, Vashi on 16th September 2025 on the occasion of 58th Engineers day

3. ***Appreciation as a Great Leader***, Faculty Member, for contribution to the Technical Committee of Fiesta 2025 at Integral University, held from 18th to 20th February 2025.
4. ***Academic Leadership Award as Best Professor of the Year***, organized by kitesKraft Production LLP, registered under ministry of MSME and also ISO 9001 certified on 26 October 2024
5. ***Appreciation as Reviewer*** in International Journal of Applied Power Engineering, a *Scopus indexed Journal* on 5 January 2024, paper ID 21004.
6. ***Appreciation as Reviewer*** in International Journal of Applied Power Engineering, a *Scopus indexed Journal* on 5 January 2024, paper ID 21006.
7. ***Excellence in Reviewing*** by Asian Journal of Physics and Chemical Science 2022, 23 November 2022, Certificate No: SDI/HQ/PR/Cert/94010/DRT
8. ***Appreciation as Reviewer*** in International Conference in Smart Grid held in the Nişantaşı University, at İstanbul in Türkiye, June 27-29, 2022
9. ***Indo Asian – Best Researcher Award 2022*** in Renewable Energy & VLSI Design for the National Science Day & International Mother Language Day 2022, Conferred on February 28th, 2022 by Ratna Prasad Multidisciplinary Research & Educational Society, registered with Govt. of India NITI Aayog
10. ***International Teaching Excellence Award 2021*** in appreciation to the teaching and research excellence in Electronics & Communication Engineering conferred on 18th December 2021, by Executive council of Center for professional Advancement continuous Education Global Annual Education & Research Excellence Summit 2021., (Government)
11. ***Incredible Academician of India*** by RECORD OWNER Incredible Academicians and Researchers of INDIA 21 award held on 25 Sept.2021, No.25/9/2021/INDIA/RWIN21206
12. ***Excellence in Research*** by RECORD OWNER ,‘Global & Research Development Award-21’ on 30, June 2021
13. ***Recognition of Academic Excellence (Faculty-National)***, The Institution of Engineers (India), Belapur Local center and Fr. C. Rodrigues Institution of Technology, Vashi on 16 January 2021
14. ***Recognition of Research Excellence Ph.D.***, The Institution Of Engineers (India), Belapur Local Center and Fr. C. Rodrigues Institution of Technology, Vashi on 16 January 2021
15. ***Best Research Award 2020***, for The Contribution and Honourable Achievements In Innovative Research by International Research award on ***New Science Invention NESIN***

2020 on 18 November 2020, for published article: Oxidation: A Dominant Source For Reduced Efficiency Of Silicon Solar Photovoltaic Modules.
Identification Number: 9584

16. ***Excellence in Reviewing*** by Journal of Engineering Research and Report, 2020, August 2020, Certificate No: SDI/HQ/PR/Cert/61184/TAR
17. ***Appreciation for paper presentation*** title “Oxidation: A Dominant Source for Reduced Efficiency of Silicon Solar Photovoltaic Modules” in ICALMS 2K20 on 6-7 March 2020 held at CMR Technical Campus, Hyderabad, Talangana, India .
18. ***Honoured as Pride of India*** by International Publishing House, New Delhi on 12 September 2018.
19. ***Certificate of Appreciation as an Organizer***, Sponsorship Committee Chairperson & Technical Committee member in IEEE International Conference in “Computational and Characterization Techniques in Engineering and Science, CCTES-18, held on 14-15 September 2018 at Integral University, Lucknow.
20. ***Certificate of Appreciation*** for coordinating Summer UAV/ Drone Training organized by TechEagle in collaboration with Integral University from 18/06/2018 to 14/07/2018.
21. ***Certificate of Recognition as a Reviewer*** in the peer review process for GRD Journals 01/06/2018
22. ***Excellent Teaching in Higher Education*** for ARUNAI--International Women Research and Connect Award 2018 on 8 March 2018.
23. ***Best Faculty in Rural Institution***, ARUNAI- National Conference on Exploring Science and Technology for the Future Developments held on 25 November 2017
24. ***Best Paper Award***: Paper title “Efficient Address Generator for WiMAX Deinterleaver” in 4 National conference on Challenges & opportunities for Technical Innovation on 19th & 20th February 2016 held at Ambalika Institute of Management and Technology, Lucknow, U.P
25. ***Awarded “Recognition as a Convener”*** by Microbotrics Technologies Pvt. Ltd for outstanding performance and dedication in organizing “**A National workshop on Arm Controlled Robotics**” held from 11th to 13th February 2015 at Integral University, Lucknow, and making it a grand success.
26. ***“Rashtriya Gaurav Award”*** And Certificate of Excellence for Meritorious Services, Outstanding Performance and Remarkable Role by **Dr Bhisma Naraian Singh (Former Governor of Assam and Tamil Nadu)** at the Seminar on Global Participation of India’s Economic Development at **New Delhi on 24 May 2010.**

27. **Recognition as a Reviewer** in International Journal of Global Research Development Journals for Engineering in 2010

Resource Person:

1. ***A Novel Approach to determine the Degradation of SPV Module using Photoluminescence Imaging***, at Annual International Congress on Renewable Energy September 3-5, 2024, Oxford, United Kingdom
2. ***Modeling of Solar Cell Using MATLAB***, five week Skill Internship Program on Application of MATLAB in Engineering, from 25 September 2023 to 28 October 2023, organized by Department of ECE, Integral University, Lucknow
3. ***Solar PV System Sizing***, four weeks blended value added course **on Renewable Energy Technology & its Future Potential**, held during June 27, 2022 to July 20, 2022, organized by electronics and communication engineering, Integral University, Lucknow, U.P
4. ***Harvesting Solar Energy***” in the Two Weeks Professional Development Program **on Renewable Energy and it’s Future in India** held during November 10-23, 2021, as a Resource Person, jointly organized by the Department of Electronics & Communication Engineering, and the Department of Physics, Integral University, Lucknow.
5. ***Critical Role of Sensors in DRONE Innovation*** on 22nd June 2018 in TechEagle-Summer UAV Training & Internship 18 from 18th Jun to 14th July 2018

Research Publications

Book Chapters: 12 (10 published, 2 in process)

International Conference: 10 + 1 poster presentation

Indian Conference: 14

Book Chapter:

1. ***E-collaboration technologies with Generative AI tools***, , e-book Humans and Generative AI Tools for Collaborative, pp: 369-402, DOI: 10.4018/979-8-3693-8332-2.ch016, ISBN13: 9798369383322 , , **published in June 2025** , Publisher: IGI Global <https://www.igi-global.com/gateway/chapter/full-text-pdf/382777>

Chapter approved on 13th August 2024, published in May 2025 Publisher: IGI Global, Scopus Indexed,

2. ***Artificial Intelligence in Workplace: The Future of Learning and Developments***, e-book Gaming, Wellness, and Technology in the Bold Global Workforce, pp: -203-234, DOI: 10.4018/979-8-3373-5322-7.ch007 ISBN13: 9798337353227 chapter approved on 27

March 2024, **published in June 2025** Publisher: IGI Global, *Scopus Indexed*, DOI: 10.4018/979-8-3693-3338-9, **Link:**

<https://www.igi-global.com/gateway/chapter/full-text-pdf/383901>

<https://www.igi-global.com/viewtitle.aspx?TitleId=383901&isxn=9798337353227>

3. ***Emerging Technology: Present and Future Generation Leadership***, e-book: Impact of New Technology on Next-Generation Leadership, pp:1-28, ISBN13: 9798369319468 DOI: 0.4018/979-8-3693-1946-8.ch001, Chapter Approved 8 May 2024, **Published in June 2024**. Publisher: IGI Global,
<https://www.igi-global.com/gateway/chapter/full-text-pdf/348746>
Scopus Indexed
4. ***“Reshape the sustainable state-of-the-art development of smart cities”*** Convergence of IoT, Blockchain and Computational Intelligence in Smart Cities (Cibcisc-2023) (Accepted on 4 July 2022), DOI: 10.1201/9781003353034-4 E-ISBN 9781003353034 ISBN 9781032404240, pp 58-82, publisher: CRC Press, Taylor & Francis Group, U.K. book released date **3rd November 2023, Scopus indexed**
<https://www.taylorfrancis.com/chapters/edit/10.1201/9781003353034-4/reshape-sustainable-state-art-development-smart-cities-tarana-afrin-chandel?context=ubx&refId=b748d593-0873-45f6-a811-2b69c9977d8d>
5. ***“Green and Clean Energy: Current Global Scenario”*** for Book: Renewable Energy and AI for Sustainable Development, DOI: 10.1201/9781003369554-1, pp: 1-30, published by CRC Press, Taylor & Francis, UK, eBook ISBN: 9781003369554, Accepted on 13 September 2022, published on **17 July 2023, Scopus Indexed**,
<https://www.taylorfrancis.com/books/edit/10.1201/9781003369554/renewable-energy-ai-sustainable-development-sailesh-iyer-anand-nayyar-mohd-naved-fadi-al-turjman?refId=a13d7543-f9db-46c4-875b-f8b4752b6571&context=ubx>
6. ***“Green and Sustainable Infrastructure in India”*** for book Achieving the Sustainable Development Goals Through Infrastructure Development, accepted on 1st July, 2023 released date: October, 2023, pp 121-145, ISBN 9781032404240 Publisher: IGI Global, DOI: 10.4018/979-8-3693-0794-6.ch006, *Scopus Indexed*
<https://www.igi-global.com/chapter/green-and-sustainable-infrastructure-in-india/332336>
7. ***‘Hybrid Energy Storage System for Renewable Energy Integration and Application’*** chapter 11, book “Artificial Intelligence Applications in Battery Management Systems and Routing Problems in Electric Vehicles” (Accepted on 16 July 2022), on 31 March 2023, ISBN13: 9781668488164, pp: 174-198, DOI: 10.4018/978-1-6684-8816-4.ch011
<https://www.igi-global.com/gateway/chapter/full-text-pdf/318634>

<https://www.igi-global.com/book/techniques-renewable-source-integration-battery/316127>

8. **“Green Entrepreneurship and Sustainable Development”** for the Book, "International Perspectives on Value Creation and Sustainability through Social Entrepreneurship." Pp.173-208, Accepted on 24 December 2021 published on 5 September 2022 by published by IGI Global publisher, DOI: 10.4018/978-1-6684-4666-9.ch009, page 173-208, ISBN13: 9781668446669, *Scopus Indexed*,
<https://www.igi-global.com/gateway/chapter/full-text-pdf/309828>
9. **Performance Analysis of Rooftop Grid Connected Solar Photovoltaic System**, Book: Advanced Aspects of Engineering Research Vol. 13, DOI: 10.9734/bpi/aaer/v13/9364D, Print ISBN: 978-93-91215-48-4, eBook ISBN: 978-93-91215-49-1, published on 12 May 2021, Page 156-181, <https://stm.bookpi.org/AAER-V13/article/view/1173>
publisher: B.P International
<https://www.bookpi.org/bookstore/product/advanced-aspects-of-engineering-research-vol-13/>
UK: Book Publisher International, Third Floor, 207 Regent Street, London, W1B 3HH, UK, Fax: +44 20-3031-1429
10. **The Study of Solar Energy as Futuristic Energy Source in Emerging Trends In Non-Conventional Energy Resources**, e-book Emerging Trends in Non-Conventional Energy Resources, I.U.

International Journal:

1. Tarana Afrin Chandel, Shweta Dwivedi, Uma Prasad Pandey, M Usama Kidwai, **Smart Farming with Renewable Energy: Integrating IoT and AI for Climate-Resilient Agriculture**, International Journal of Science, Mathematics and Technology Learning ISSN: 2327-7971 (Print) ISSN: 2327-915X (Online) Volume 33 No. 1, 2025, pp: 1496-1508, IF: 1, DOI: <https://doi.org/10.5281/zenodo.15898048>,
<https://www.thelearner-ijsmatl-cgrn.org/cgrn/issue-details.php?pid=631>
2. Tarana Afrin Chandel , M Usama Kidwai, **IoT-Based Smart Cities with Intelligent Transportation Systems for a Sustainable Future**" International Journal of Science, Mathematics and Technology Learning (ISSN: 2327-7971 [Print], 2327-915X [Online]), Volume 33, Issue No. 1, 2025. <http://doi.org/10.18848/2327-7971/CGP>, Impact factor: 1. in 2024, pp 1124-1139, publisher Publisher: Common Ground Research Networks Scopus Indexed, <https://www.thelearner-ijsmatl-cgrn.org/cgrn/issue-details.php?pid=590>
3. Tarana Afrin Chandel, **A Novel Approach to Determine the Degradation of Solar Photovoltaic Modules using Photoluminescence Imaging**", Annual International

Congress on Renewable Energy held on September 3-5, 2024, ISSN 2620-2832, Oxford, United Kingdom, Scopus Indexed
<https://www.scribd.com/document/788492576/Proceeding-of-Annual-International-Congress-on-Renewable-Energy-3-5-Sep-2024>

4. Tarana Afrin Chandel, Asfa Almas, 5G New Radio (5G NR) Performance Optimization for industrial Application, International Journal of Research and Development in Applied Science and Engineering. ISSN: 2454-6844, Vol 24, issue1, Paper Submission : 25/06/2024, Publication date 5/07/2024,
<http://ijrdase.com/ijrdase/wp-content/uploads/2024/07/5G-New-Radio-5G-NR-Performance-Optimization-for-Industrial-Application-Tarana.pdf>
5. **Tarana Afrin Chandel**, M.Y Yasin, M A Mallick, ***Impact of parasitic resistance on modeling and performance of solar photovoltaic module***, IEEE Conference held on 17-19 March 2023 at Graphics Era Deemed University, Dehradun, pp.22-27, published in IEEE Explore, ISBN: 978-1-6654-7492-4, Impact Factor: 14.99, Scopus Indexed published date on IEEE explore:1May 2023, DOI: 10.1109/DICCT56244.2023.10110047, abstract url: <https://ieeexplore.ieee.org/document/10110047?denied=>
6. Ruby Khan, **Tarana Afrin Chandel**, ***A Qualitative Review of Artificial Intelligence Based MPPT Techniques***, International Journal for Science and Advance Research In Technology (IJSART) - Volume 9 Issue 2 – FEBRUARY 2023, pp 107-114, ISSN [ONLINE]: 2395-1052, <https://ijsart.com/Home/IssueDetail/59201>, publisher: Divyangkumar rahevar DOI: IJSARTV9I259201, Impact factor 7.88
7. Mohammad Haseeb Farooqui , **Tarana Afrin Chandel** , Md Yusuf Yasin, ***Modeling And Simulation of Solar Photovoltaic System Using MATLAB***, International Journal for Science and Advance Research in Technology <http://ijsart.com/Home/IssueDetail/40439> (IJSART) - Volume 6 Issue 9 – Publication Date: 12 SEPTEMBER 2020, ISSN [ONLINE]: 2395-1052, **impact factor: 7.88**, <http://ijsart.com/Home/IssueDetail/40439>, DOI: IJSARTV6I940439, pp:213-218, Paper ID: IJSARTV6I940439, publisher: Divyangkumar rahevar
8. Zoya Fatima, **Tarana Afrin Chandel**, M.Y Yasin, ***Design Modeling and Simulation of 150 Kw Solar Photovoltaic Systems: A Review***, International Journal of recent technology and Engineering, Volume-9 Issue-2, 30 July 2020, ISSN:2277-3878, pp, Scopus and UGC indexed journal, impact factor:0.675, h-index:2, accepted on 26 Jun 2020, DOI: accepted on 26 Jun 2020, DOI:10.35940/ijrte.F8753.079220, pp:703-706, **Impact factor: 0.675**, <https://ijsart.com/Home/IssueDetail/59201>
9. **Tarana Afrin Chandel**, M Y Yasin, M A.Mallick, ***Performance of Rooftop Grid Connected Solar Photovoltaic System***, International Journal of recent technology and Engineering (IJRTE), Volume-9 Issue-1, published on 30 May 2020 ISSN:2277-3878,

pp:1056-1062, impact factor: 0.56, Scopus and UGC indexed journal, , h-index:3, accepted on 29/03/2020, pp:1056-1062, DOI: 10.35940/ijrte.F9367.059120, **Impact factor: 0.675**, <https://www.ijrte.org/portfolio-item/f9367038620/>

10. **Tarana Afrin Chandel**, M A.Mallick, M Y Yasin, *Oxidation: A Dominant Source for Reduced Efficiency of Silicon Solar Photovoltaic Modules*, Material Today: Proceedings, Journal Elsevier, Volume/Issue 27/Part2, 2020 pp: 1092-1098, ISSN 2214-7853, Impact factor:1.46, Accepted on 26 February 2020, Published online on 23 June 2020, *indexed in Scopus, Thonson Reutor, WEB of Science*. Publisher: Elsevier Ltd, **Q2 journal**
<https://doi.org/10.1016/j.matpr.2020.01.473>,

URL:<https://www.sciencedirect.com/science/article/pii/S2214785320305782?via%3DiHub>, CiteScore: 1.09, Accepted 25 January 2020, Available online 26 February 2020, last update on : 23 Jun 2020

11. **Tarana Afrin Chandel**, M A.Mallick, M Y Yasin *Modeling and Simulation of Photovoltaic Cell using Single Diode Solar Cell and Double Diode Solar Cell Model*, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-10, August 2019, *Scopus and UGC indexed journal*, B-impact factor 0.546, h-index:3, DOI:10.35940/ijitee.J8863.0881019 URL:<https://www.ijitee.org/download/volume-8-issue-10/>, Accepted:13/07/2019, **Impact factor: 5.97** published:2/08/2019, pp:558-565, Impact Factor of IJITEE is 1.0 Scopus Indexed

12. Kavita Singh, **Tarana Afrin Chandel**, Mohd. Khursheed Siddiqui, Md. Arifuddin Mallick, *Effect of Bypass Diode under Partial Shading in SPV Module*, International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249-8958, Volume-8 Issue-5, June 2019, *Scopus and UGC indexed journal*, pp: 2215-2219 impact factor 5.970 h-index:3, URL: <http://www.ijeat.org/download/volume-8-issue-5/>, DOI:10.35940/ijeat.E7483068519 **impact factor: 5.97, Scopus Indexed**

13. Kavita Singh, **Tarana Afrin Chandel**, Saif Ahmad *Effect of Bypass Diode under Partial Shading in SPV Module: A Review*, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue-1, May 2019, *Scopus and UGC indexed journal*, journal, URL:<https://www.ijrte.org/download/volume-8-issue-1/>, DOI:10.35940/ijrte.F2818037619/19, h-index:3, **Impact factor: 0.0675, pp: 700-704, Scopus Indexed**

14. **Tarana Afrin Chandel**, M.Y Yasin, M A Mallick *Performance of Partially Shaded Solar Photovoltaic System*, International Journal of recent technology and Engineering, Volume 7, issue 6 ISSN:2277-3878, pp 1444-1449, *Scopus and UGC indexed journal*, h-index:2, published by Blue Eyes Intelligence Engineering and Sciences Publication,

MCN No: MCN IU/R&D/2019- MNC 000546, DOI:10.35940/ijrte.F2690037619, **Impact factor: 0.675, Scopus Indexed**
<https://www.ijrte.org/download/volume-7-issue-6/>

15. Jyotishma Bharti, **Tarana Afrin Chandel**, *Fault Tolerant Parallel Filter in Digital Communication Systems*, SSRG International Journal of Electronics and Communication Engineering (SSRG-IJECE) – Volume 4 Issue **9** – **September 2017**, doi 10.14445/23488549/IJECE-V4I9P101 ISSN: 2348 – 8549 impact factor 1.13 pp 1-3, h-index:2, Publisher. Seventh Sense Research Group abstract link: <https://www.internationaljournalssrg.org/IJECE/paper-details?Id=224>, Scopus Indexed
16. Jyotishma Bharti, **Tarana Afrin Chandel**, *Implementation of Fault tolerant FIR Filter for Digital Communication system*, GRD Journals- Global Research and Development Journal for Engineering | Volume 2, Issue 9, August 2017, ISSN: 2455-5703, **Impact Factor: 2.018, pp 5-11, h-index:3**, indexed in ICI, Publisher- GRD Journals, <https://journals.indexcopernicus.com/api/file/viewByFileId/158843>,
17. Kahkashan Ali, **Tarana Afrin Chandel**, *Minimization of Power for the Design of an Optimal Flip Flop*, SSRG International Journal of Electronics and Communication Engineering (SSRG-IJECE) Volume 4 Issue 7 – **July 2017**, pp 25-31 impact factor 1.13, ISSN No 2348 - 8549: DOI:10.14445/23488549/IJECE-V4I7P105, Scopus Indexed, link <https://www.internationaljournalssrg.org/IJECE/2017/Volume4-Issue7/IJECE-V4I7P105.pdf>
18. Sana Ur Rahman **Tarana Afrin Chandel**, *Schematic Design and Layout of Flipflop using CMOS Technology*, SSRG International Journal of Electronics and Communication Engineering (SSRG-IJECE) – Volume 4 Issue 7 – **July 2017**, pp 16-19 impact factor 1.13, ISSN No 2348 – 8549, publisher: Seventh Sense Research Group® (SSRG) DOI:10.14445/23488549/IJECE-V4I7P103, Scopus Indexed, link: <https://www.internationaljournalssrg.org/IJECE/2017/Volume4-Issue7/IJECE-V4I7P103.pdf>
19. Sana Ur Rahman, **Tarana Afrin Chandel**, *Schematic Design and Layout of Digital Circuits using CMOS Technology: A Literature Survey*, GRD Journals- Global Research and Development Journal for Engineering, ISSN: 2455-5703, Volume 2 | Issue 5 | April 2017, Manuscript: ID: GRDJEV02I050111, **Impact Factor: 1.0681, Page 123- 124, Publisher: GRD Journals, Accepted on 14/04/2017, indexed in ICI, Publisher- GRD Journals**, pp; 123-124, link <https://journals.indexcopernicus.com/api/file/viewByFileId/154853.pdf>
20. Faheem Hussain Wani, **Tarana Afrin Chandel**, *Efficient Implementation of Address generator for WiMax Deinterleaver with different Modulation scheme*, International Journal of Engineering Trends and Technology, ISSN: 2231-5381, vol 34, number 5, April

2016. , published by Seventh Sense Research Group, Impact Factor: 2.45 (https://ijettjournal.org/statistical-data), **Scopus Indexed**, DOI: 10.14445/22315381/IJETT-V34P274 , Researcher id: IJETT-V34P274 Impact factor: 2,45, pp 230-234 **scopus indexed**

21. Faheem Hussain Wani, Tarana Afrin Chandel *The Low Cost Remote Control for Electrical appliances using AT89S51*, International Journal of Computer Application, (0975 – 8887), Vol 138, No 1, March 2016. doi 10.5120/ijca201690877, pg 28-32, ThomsonReutor id H;3771 (2015) indexed journal, Journal Impact Factor (2016)= 0.821, <https://www.ijcaonline.org/archives/volume138/number1/24344-2016908677/>
22. Shipra Srivastava, Tarana Afrin Chandel, *Detection of Rapid Eye movement disorder with the help of shot time frequency applied on EEG signal*, International Advanced Research Journal in Science, Engineering and Technology Vol. 2, Issue 9, September 2015, ISSN (Online) 2393-8021, Impact factor **8.066**, doi: **10.17148/iarjset.2015.2904**, published by Tejass Publishers, paper is: **10.17148** index in crossref, pp 14-17
Link: <https://iarjset.com/upload/2015/september-15/IARJSET%204.pdf>
23. Mohammad Mohsin, Er. Tarana Afrin Chandel *“Metro Train prototype using ATmega-16 microcontroller*, International Journal of Advance Scientific Research and Technology (IJAST) September 2015 Impact Factor: **3.94**, Issue 5 volume 6, September-October 2015, ISSN 2249-9954, page: 47 - 50
24. Fahmida Khatoon, Tarana Afrin Chandel, *Design of Ring VCO using Nine Stages of Differential Amplifier*, IJRET: International Journal of Research in Engineering and Technology, eISSN: 2319-1163 | eISSN: **2321-7308**, Volume: 03 Special Issue: 10 | NCCOTII 2014 | Jun-2014, publication : BM Publishing, **Impact Factor: 8.226** by ISRA , ICV: 41.62 page : 120 – 123 manuscript number: IJRET20140322025, **DOI: DOI:10.15623/ijret.2014.0322025.**, publisher eSAT
25. Fahmida Khatoon, Tarana Afrin Chandel, *“Design of Low Power, High Speed Differential Amplifier Ring Voltage Controlled Oscillator in CMOS Technology”* International Journal of Innovative Technology and Exploring Engineering, Volume-3, Issue-12, May 2014, ISSN: 2278-3075, impact factor:0.198, publication34 Publication Pvt. Ltd. Doi=10.1.1.685.9285 pp:34-37, <https://www.ijitee.org/wp-content/uploads/papers/v3i12/L16500531214.pdf>
26. Sameer Gull Alie, Tarana Afrin Chandel, Jehangir Rashid dar *“Power and Delay Optimized Edge Triggered Flip-Flop for low power microcontrollers”* International Journal of Scientific and Research Publications, Volume 4, Issue 5, May 2014, impact factor 2.07, publication: IJSRP, page 1-6, doi: 10.13140/RG.2.2.29928.06406, manuscript no: 0514/ijsrp-p2942. ISSN 2250-3153 impact factor: 0.69 publisher IJSRP Inc, **indexed in Index Copernicus , abstract link <https://www.ijsrp.org/research-paper-0514.php?rp=P292640>**

27. **Tarana Afrin Chandel** “*Segregation of Accoustic Signal Using Wavelet Transform*” International Journal of Electronics and Communication Engineering and Technology (IJECET), volume 5, issue 4, pp 50-56, April 2014. Journal Impact Factor (2014): 7.2836 (Calculated by GISI)., publication: IAEME, ISSN 0976 – 6472 **Scopus index journal**, https://iaeme.com/Home/article_id/40120140504007, Article Id - 40120140504007
28. Suhail Ahmad Beg, **Tarana Afrin Chandel**, Ahsan Ul Haq Manzoor “Design of Inductively Degenerated 2.5 GHz LNA using 0.13 μ m Technology” International Journal of Engineering Sciences & Research Technology (IJESRT), volume 3, issue 4, pp 1908-1911, 2014 April 2014, IMPACT FACTOR: 0.786. doi: ijesrt/D42/14, accepted 21 March 2014 Thomson Router, ISSN: **indexed in UGC till 2019, ISSN: 2277-9655, ESCI indexed**
29. Lubna Naim, **Tarana A Chandel**, *Implementation of Modified Test Pattern Generator for BIST Application*” International Journal of Advances in Engineering & Technology (IJAET), Volume 7 Issue 1, pp. 135-142, March. 2014. Publication: IRA Publications, manuscript id : Paper Reference ID: IJAET0319383, impact factor 3.43, ISSN: 2231-1963, <https://www.ijaet.org/volume-7-issue-1.html>
30. Ahsan Ul Haq Manzoor, **Tarana A Chandel**, Suhail Beg “**A Highly Efficient Quatro 10T SRAM CELL with Soft Error Robustness and High Signal to Noise Margin**” International Journal of Emerging Technology and Advanced Engineering (IJETAE) , Volume 4, Issue 3, pp **603-608** March 2014. impact factor: **2.587**, doi=10.1.1.638.1327, ISSN 2250-2459 Publisher Licensed Under Creative Common
31. Jehangir Rashid Dar, **Tarana Afrin Chandel**, Sameer Gul Alie “*Novel Low-Power, Energy-Efficient Full Adder for Ultra Deep-Submicron Technology*” International Journal of Engineering Research & Technology (IJERT) Vol. 3 Issue 2, February – 2014. impact factor: 4.116, published by IJERT, page: 663- 666 ISSN: 2278-0181, Paper ID : IJERTV3IS20469, <https://www.ijert.org/research/novel-low-power-energy-efficient-full-adder-for-ultra-deep-submicron-technology-IJERTV3IS20469.pdf>
32. Lubna Naim, **Tarana A Chandel** “*Design of Low Transition Pseudo-Random Pattern Generator for BIST Applications*” in *International Journal of Computer Applications* 87(15):26-30, February 2014. Published by Foundation of Computer Science, New York, USA. Reference ID: pxc389392, vol 87 number 15 page 26 – 30, ISSN 0975 – 8887, DOI: 10.5120/15285-3924, Impact factor 3.12 link: <https://www.ijcaonline.org/archives/volume87/number15/15285-3924/>

Poster Presentation in International conference

Poster Presentation titled “*Performance Analysis of IMW Grid Connected Solar*”

Photovoltaic System using Image Analysis”at IEEE International Conference in Recent Advances in Engineering, Technology and Computer Science-2018 organized by Shepherd Institute of Engineering and Technology SHAUT, Allahabad during 6th to 8th February 2018

Paper Presentation in International Conference /Seminar / symposium

1. **A Novel Approach to determine the Degradation of Solar Photovoltaic Module using Photoluminescence Imaging** at the Annual International Congress on Renewable Energy Oxford, United Kingdom September 3-5, 2024
2. **Innovations in Renewable Energy for Sustainable Agriculture**, 4th Global Multi-Track Virtual Conference “STAR 2023” (Strategies, Applications, Techniques and Resources 2023), from October 08 – 14, 2023, organized by Human Resource Development Center (HRDC) & Internal Quality Assurance Cell (IQAC), Integral University, India in association with Centro Universitario Unifacvest, Brazil, South America & Special Minds, India
3. **Impact of Parasitic Resistance on Modelling and Performance of Solar Photovoltaic Module**, International Conference on Device Intelligence, Computing, and Communication Technologies (DICCT-2023) March 17-18, 2023, Graphic Era, deemed University, DEHRADUN
4. **Oxidation: A Dominant Process for Reduced Efficiency of Silicon Solar Modules** International Conference on Advanced light-weight materials and structures, ICALMS - 2k20 held on 6 - 7 march 2020 by CMR Campus, Hyderabad- 501401, and Telangana, India.
5. **Performance Analysis of Solar Photovoltaic Panel using Nanotechnology: A Review** with paper code:01-2018-378 in International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing(EECCMC) 2018 with catalog: “CFP10037-PFT: 978-1-5386-4303-7” organized by Priyadarshini Engineering College, Vellore District, Tamil Nadu, India, during 28 7 29 January 2018.
6. **Nehad Nazim and Tarana Afrin Chandel Nanotechnology for Smart Civil Engineering** in International Seminar on Present Scenario & Future Prospectives of Research in Engg & science held on 21 January, 2017 at Integral University Lucknow, India
7. **Solar Panel Rooftop in India** in International Seminar on Present Scenario & Future Prospectives of Research in Engg & science held on 21 January, 2017 at Integral University Lucknow, India
8. **Sewage treatment Coach for Indian Railways** in International Seminar on Present Scenario & Future Prospectives of Research in Engg & science held on 21 January, 2017 at

Integral University Lucknow, India

9. **Application Of Fuzzy Logic In The Field Of Electronic Circuit Design** in International Symposium on Computational and Characterization Techniques in Engineering and Science on 20th March 2017 at Integral University, Lucknow
10. **Design of Full Adder using Complementary Pass Transistor logic in** International Seminar on Modern Trends in Engineering and Science held on 03 August 2017
11. Participated in International Conference on **Wireless Communication and Sensor Network** held on 17 to 19 December 2006 at IIIT Allahabad.

National Conference

1. **The Study of Solar Energy as Futuristic Energy Sources** in National conference on Emerging Trends in Non-Conventional Energy Resources on 22 October 2016 held at Integral University Lucknow, India
2. **Infrared Polymer Solar Cell** in National conference on Emerging Trends in Non-Conventional Energy Resources on 22 October 2016 held at Integral University Lucknow, India
3. **Our Commitment to the Environment** in National conference on Emerging Trends in Non-Conventional Energy Resources on 22 October 2016 held at Integral University Lucknow, India
4. **Vertical Axis Wind Turbine Modelling and ANSYS its Analysis using ANSYS** in National conference on Emerging Trends in Non-Conventional Energy Resources on 22 October 2016 held at Integral University Lucknow, India
5. **“Efficient Address Generator for WiMAX Deinterleaver”** in 4 National conference on Challenges & opportunities for Technical Innovation on 19th & 20th February 2016 held at Ambalika Institute of Management and Technology, Lucknow, U.P
6. **“Metro Train Prototype using Atmega 16 Microcontroller”** in **National Conference on Challenges & Opportunities for Technological Innovation In India (COTII 2015)** held at Ambalika Institute of Management, Lucknow on 14th & 15th February 2015.
7. **“Arduino based obstacle avoidance robot”** in **National Conference (COTII 2015)** held at Ambalika Institute of Management, Lucknow on 14th February 2015.
8. **“Wireless power transmission to charge the batteries of the pacemaker”** in **National Conference (COTII 2014)** held at Ambalika Institute of Management, Lucknow on 14th February 2015.

9. **Fabrication Properties of Carbon Nanotubes and its Application**, National Conference On Nanoscience, Nanotechnology And Nano informatics Present And Future Perspective held on 14th to 15th March 2015
10. **Detection of cardiac disease through Acoustic Signal using Wavelet Transform in National Conference (COTII 2014)** held at Ambalika Institute of Management, Lucknow on 22nd February 2014.
11. **Design of Ring VCO using Nine Stages of Differential Amplifier in National Conference (COTII 2014)** held at Ambalika Institute of Management, Lucknow on 22nd February 2014.
12. **“Radio Defined by Software”** in National Conference in Electronics Technology at Goa Engg College, Farmagudi, Ponda Goa. On 16-17 April 2010.
13. **Artificial Neural Network”** in National conference in Emerging Technology at Integral University, Lucknow from 29-30 February 2008.
14. **Fuzzy Logic=Computing with word”** in National conference in Emerging Technology at Integral University, Lucknow from 29-30 February 2008

National Workshops:

1. National workshop on Emerging challenges of Cyber-crimes in India held at Jawaharlal Nehru University, New Delhi on 9th and 10th October, 2017.
2. National workshop on Entrepreneurship Option in the Field of Engineering & Pioneering Internet of Things organized by IEEE Integral University held on 25th January 2016
3. National workshop on Energy Conservation and Energy Audit from 26th to 27 February 2016 at Integral university, lucknow
4. Convener of the national workshop on **“Arm Controlled Robotics”** held from 11 Feb to 13 Feb 2015 at Integral University, Lucknow conducted by Microbotrics technologies pvt ltd.
5. Advance workshop on Matlab & Embedded System held on 31 March 2015, conducted by IQRA SOFTWARE TEHNOLOGIES PVT LTD, at Integral University
6. National workshop on Emerging Trends in Communication Engineering & Image Processing held on 17th October 2015

7. National workshop on Embedded System & Robotics held on 22nd September 2015 organized by department of ECE in collaboration with i3indya Groups of Company
8. 1st National Level workshop on **Intellectual Property System; India Today & Tomorrow** organized by Intellectual Property Rights management Cell (IPRMC), CCG&D, IU, Lucknow in collaboration with Intellectual Property Owners Association (IPOA), New Delhi on 10/01/2014.
9. Third National workshop on **Industrial Automation** organized by ECE Integral University, Lucknow, on 26 march 2014 collaborated with Unicon PLC Automation, Lucknow.
10. National workshop on Industrial Automation held on 22 to 23 February 2013 organized by Logical Automation in collaboration with Deptt. of ECE, Integral University
11. National Workshop on Research Methods in Managements held during 26 to 28 July 2011
12. Workshop on “**Language & Communication skill**” conducted by Converse School of Communication held from 16 to 19 June 2009.
13. Workshop on “**Embedded System Design based on Microcontroller**” at IET, Lucknow, on 28-29 February 2008.
14. Workshop on “**VLSI Design Tool**” at IET, Lucknow on 17-18 November 2007.

International Workshop:

1. Workshop on “**Adhoc and Sensor Network**” in 2nd International conference in WCSN at IIT Allahabad from 19 December 2006.

STC / FDP / PDP / Training:

1. Training Programme on “NEP Orientation and Sensitisation” being organised by Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College under the Malaviya Mission Teacher Training Programme, UGC in collaboration with Mody University of Science and Technology, Lakshmangarh, Dist. Sikar (Rajasthan) from 04-14 October, 2025. (upcoming days)
2. STTP on *Next Generation Communication Networks: Technologies, Trends, and Teaching Paradigms*, held from 18 to 23 August, 2025 organized by Malaviya Mission Teacher Training Centre (MMTTC) of Shri Mata Vaishno Devi University, Katra, J&K-182320

3. FDP on **Generative AI** held from 4 to 8 august 2025, organised by Brainovision Solution India Pvt Ltd in collaboration with AICTE and hosted by Integral University, Lucknow
4. FDP on “**ENERGY-EFFICIENT INFRASTRUCTURE AND IOT -INTEGRATED SUSTAINABLE SYSTEM**” organized by Faculty of Engineering and Innovation & Incubation Centre, Jahangirabad Educational Trust Group of Institutions from 28th July to 1st August 2025.
5. **Third Faculty induction program** with **Grade A** under (MMTTP) of University Grants Commission (UGC) held from 2nd – 30th June, 2025 organized by Malaviya Mission Teacher Training Centre (MMTTC) of Shri Mata Vaishno Devi University, Katra, J&K-182320, Ref.No. SMVDU/MMTTC/2025/1182 Dated:23-07-2025
6. FDP on “*Semiconductor Devices Circuits & Sensor: Applications & Research Perspective*” jointly organized by Electronics and ICT Academy, NIT Patna, IIITDM Jabalpur, MNIT Jaipur, IIT Kanpur and IIT Roorkee under the “Scheme of financial assistance for setting up of Electronics and ICT Academies(Phase-II)” by the Ministry of Electronics and Information Technology (MeitY), Government of India from 09th June, 2025 - 20th June, 2025. **Her performance was good based on online Assessment.**
7. FDP on Current Advancements in Electric and Hybrid Vehicle Technology: Opportunities and Challenges (CADEHVT-2025)" organized by the Amity School of Engineering and Technology, Lucknow from 26 may to 2nd June 2025
8. NITTR Chandigarh, AICTE Recognized Faculty Development Programme on Teaching ECE Lab subjects using free Simulators Conducted by Electronics and Communication Engineering Department from 03/03/2025 to 07/03/2025 (One Week) at Manav Rachna University, Faridabad, Haryana
9. Participated in one week FDP on AI, organized by Integral University in association with Brain vision Solution India Pvt Ltd in collaboration with All India Council for Technical Education from 17 to 21 February 2025
10. Participated in two week PDP in Advancement and Challenges in Emerging trends in Electrical and Electronics Engineering from September 02, to October 2, 2023 organized by Dept. of Electrical engineering and dept. of ECE under the aegis of HRDC, I.U, Lucknow
11. Participated and completed two-weeks **Professional Development Program on Relevance & Protection Of Intellectual Property Rights**, organized by Department of Chemistry, Integral University, Lucknow from 08.11.2021 to 22.11.2021

12. Participated in One Week National Webinar on **Industry4.0 and Internet of Things (IIoT)** in the duration from July 26, 2021 to July 30, 2021, conducted by the Department of Electronics & Communication Engineering, Integral University, Lucknow.
13. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "**Sensors fabrication and its applications in IIoT**" from 2021-07-02 to 2021-07-06 at Graphic Era (Deemed to be University).
14. STC on Learn to **Design your own Solar Home System**, and **certificate** has been awarded as a part of **Energy Literacy of the Energy Swaraj foundation** in Association with M. K. Enterprises on 30 June 2020.
15. STC on **Challenges and Opportunities in Engineering after COVID-19**, June 29 – July 03, 2020, ” organized by Department of Electrical Engineering, College of Technology & Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur held in on-line mode.
16. NFDPW on **Grid Integration of Hybrid Renewable Energy** organized held during 29, June to 1, July 2020 by Department of Electrical Engineering, Organizing Department, Dumka Engineering College, (An Unit of Techno India Group), Dumka: 814101, Jharkhand INDIA
17. Webinar series on **Smart Grid, Project Management, genetic Algorithm, Online Learning and Application of Engineering Practical Life**, organized by department of ECE, Integral University, Lucknow from 28 to 31 May 2020.
18. FDP on “**Recent Advances in Power Electronics Applications with MATLAB Simulations**” organized by Department of Electrical Engineering, NIT Patna under Electronics and ICT Academy, NIT Patna, held from **25–30 May, 2020** in online mode under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” by the Ministry of Electronics and Information Technology (MeitY), Government of India.
19. FDP on **Outcome base Education and Accreditation from 25- 29 May 2020**, organized by IILM College of Engineering and Technology.
20. Webinar "**CMOS Logic Design** For Electronics Engineers, Department of Electronics & Communication Engineering ,Chaibasa Engineering College, from May 20,2020 to May 22,2020.
21. FDP on **Moodle: Learning Management** system from 16 may to 20 may 2020, organized by Department of Computer Application in Association with spoken Tutorail Project, IIT Bombay (PMMMNMST)under the ageis of HRD, Integral University.
22. Participated in TEQIP Phase III sponsored five days National Faculty Development

Webinar Programme on “**Micro-Controller Based Embedded System Design**” through video conferencing on Zoom app hosted by Department of Electrical Engineering, Dumka Engineering College from May 04, 2020 to May 08, 2020.

23. FDP on **Advance in control and Its Application in Green Energy Technology**, jointly organized by Electronics and ICT Academy, NIT Patna, Deptt. of Electrical Engineering and HRDC Integral University by Ministry of Electronics and Information Technology, Govt of India from 27th September to 1st October 2019 at Integral University, Lucknow.
24. Participated in the AICTE Recognized Short Term Course on **Electric Vehicle Technology**, Conducted by NITTTR Chandigarh, Ministry of Human Resource Development Govt of India, Electrical Engineering Department from 26/08/2019 to 30/08/2019 (One Week) at HRDC, Integral University, Lucknow, UP.
25. **Gold Performer** in 8 weeks online (3-week equivalent) FDP on **Courseware Creation using Moodle for Outcome base Education** in the duration from 8th July to 5th September 2019, conducted by Department of ECE under the aegis of Human Resource Development Center (HRDC), Integral University, Lucknow.
26. Attended hands on training program on “**Public Finance Management System (PFMS)- EAT Module**,conducted by Integral University, Lucknow, on 21/12/2018.
27. NPTEL online STC from **IISC** in the subject Design of Photovoltaic System from July 2018 to October 2018 and awarded by an **ELITE TAG**.
28. Participated in (PMMMNMTT) training program on **Academic Leadership** from 14 August 2018 to 18 August 2018 at Integral University, Lucknow.
29. FDP ON **Xcel in Excel** organized by Department of Computer Science & Engg, I.U, lucknow from 22/05/2018 to 28/05/2018.
30. FDP on **SAKSHAM- IT Champion Training Program** organized Deptt. of ECE and Robotics Society in collaboration with Microsoft under the aegis of HRDC Integral University held on 22nd and 23rd March 2018.
31. FDP on **SAKSHAM- IT Champion Training Program** organized by Microsoft held on 27th to 28th December 2017 at AMU, Aligarh.
32. FDP on Faculty development Planning and management through ICT, conducted by Media Center from 13/3/18 to 16/3/18 at UIntegral University, Lucknow
33. NPTEL online STC from **IIT Bombay** in the subject **Microwave Integrated Circuit** and awarded by an **ELITE TAG**.

34. STC for training program on **Gender Equality in Academic Leadership** from 6th July to 12th July 2017 at Integral University, Lucknow.
35. STC on “**Climate Change and Disaster Management** through ITC organized by NIITR Chandigarh, from at Integral University, , Lucknow from 06/11/17 to 10/11/17 .
36. Certificate course on **Remote Sensing and Digital Image Analysis** from 21/8/17 to 15/09/17 organized by Indian Institute of Remote Sensing, ISRO, Department of space, Govt. of India.
37. STC on **Artificial Neural Network and Fuzzy Logic** organized by NIITR Chandigarh, from 24/4/2017 to 28/4/2017 at Integral University, Lucknow.
38. STC for Training Program on **Academic Leadership** from 17/3/2017 to 23/3/2017 at Integral University, Lucknow by HRD A.M.U.
39. FDP on **MATLAB** held from 1/2/2016 to 7/2/2016 at Integral University, Lucknow.
40. Project title Design of **USART using Verilog & Modelsim**, from 18 November to 17 December 2008, at VEDANT EDUCATION AND TRAINING.
41. Project title **Design and Implementation of Reconfiguration ALU** from 2012/2009 to 19/01/2010 in VLSI (VHDL), at VEDANT EDUCATION AND TRAINING

Editors in Journals

1. **Section Editor** in Journal of VLSI Design and its Advancement (e-ISSN:3048-6424)
<http://hbrppublication.com/OJS/index.php/JVDIA/about/editorialTeam>
2. **Editor** in Design Research and Applications: Embedded System (e-ISSN:2582-2993):
<http://hbrppublication.com/OJS/index.php/RAES/about/editorialTeam>
3. **Editor** in Recent Trends in Analog Design and Digital Devices (e-ISSN: 3048-7560)
<http://hbrppublication.com/OJS/index.php/RTADDD/about/editorialTeam>
4. **Section Editor** in Journal of Advancement in Communication System (e-ISSN: 3048-4758)
<http://hbrppublication.com/OJS/index.php/JACS/about/editorialTeam>

Reviewer:

1. **Reviewer** in *International Journal of Applied Management Sciences and Engineering (IJAMSE)* from

13 Sept 2024 IGI Scopus indexed Journal

2. **Reviewer** in *IGI Global publication*, USA, Scopus indexed, since June 2023.
3. **Reviewer** in *International Journal of Applied Power Engineering (IJAPE) Scopus indexed Journal*, since 2023
4. **Reviewer** in *International Conference in Smart Grid* held in the Nişantaşı University, at İstanbul in Türkiye, June 27-29, 2022.
5. **Reviewer** in *Applied Solar Energy* since 2021
6. **Reviewer** in *Journal of Engineering Research and Reports*
7. **Reviewer** in IJRER, indexed in **Web of Science and Scopus**, since 2020
8. **Section Editor** on the board of following Journals: since 2015
 - a. Section Editor in Journal of VLSI Design and its Advancement (e-ISSN:3048-6424)
<http://hbrppublication.com/OJS/index.php/JVDIA/about/editorialTeam>
 - b. Editor in Design Research and Applications: Embedded System (e-ISSN:2582-2993):
<http://hbrppublication.com/OJS/index.php/RAES/about/editorialTeam>
 - c. Recent Trends in Analog Design and Digital Devices (e-ISSN: 3048-7560)
<http://hbrppublication.com/OJS/index.php/RTADDD/about/editorialTeam>
 - d. Journal of Advancement in Communication System (e-ISSN: 3048-4758)
<http://hbrppublication.com/OJS/index.php/JACS/about/editorialTeam>
9. **Peer Reviewer** in *International Journal of Sustainable Development Research*, since 2021
10. **Reviewer** in *International Journal of Global Development and Multidisciplinary Study*
11. **Reviewer** in *Hindawi Publication Corporation*, since 2015, Scopus indexed.
12. **Reviewer** of *International Symposium on Computational and Characterization Techniques in Engineering and Science* held , on 20th March 2017 at Integral University, Lucknow, UP
13. **Member of Technical Program Committee** in *International Seminar on Modern Trends in Engineering and Science* held on 3rd August 2017 at integral university, Lucknow,U.P.
14. **Member of Technical Program Committee** in *Computational and Characterization Techniques in Engineering & Sciences (CCTES-17) International Symposium On*

Computational and Characterization Techniques in Engineering & Sciences (CCTES-17), MARCH 20, 2017, Organized by Departments of Electronics & Communication Engineering, Physics & Electrical Engineering Under the Aegis of Human Resource Development Centre (HRDC) Integral University, Lucknow.

15. **Reviewer** of *Second International Conference “On Advancement in Computer Engineering and Information Technology”* ACEIT-2018 to be held on 6th & 7th April 2018 (Reviewed 3 papers)

16. **Member of Technical Program Committee** in *Computational and Characterization Techniques in Engineering & Sciences (CCTES-18)* in IEEE conference organized by department of ECE to be held on September 14-15, 2018. (Reviewed 4 papers)

Chairmanship of Conference/Symposia / Industrial Training:

1. Organised four week Skill Internship Workshop on Application of IoT in Engineering Science and Management from 23 September – 19 October 2024, organized by Department of ECE, Integral University, Lucknow
2. Organised five week Skill Internship workshop on Application of MATLAB in Engineering, from 25 September 2023 to 28 October 2023, organized by Department of ECE, Integral University, Lucknow
3. Chair Technical Session in 2nd IEEE International Conference in Computational and Characterization Techniques in Engineering & Sciences (CCTES-24) held on 15 & 16 November 2024
4. Member of TPC and Reviewer in 2024, 6th International Conference on Computing and its Engineering Application, organised by Smt. Chandeben Mohanbhai Patel Institute of Computer Application, Changa, India during December 10-12, 2024
5. Member of organising committee (Sponsorship Chair) of International Conference Computational and Characterization Techniques in Engineering & Sciences, Integral University, Lucknow, India, December 12-13, 2022, <https://easychair.org/cfp/ic3tes>
6. Organized Value Added Course on ECV-21-01_ “Renewable Energy Technology & Its Future Potential” Conducted by Department of Electronics & Communication Engineering, Integral University from 27-06-2022 to 20-07-2022, Certificate Number: 63241ae7-df9c-4d77-9597-3e34c0a81803 Issue date: 16 September 2022
7. Chairperson of organizing committee (Sponsorship Committee) and member of Technical Committee in IEEE International Conference in Computational and Characterization

Techniques in Engineering & Sciences (CCTES-18) held on 14 and 15 September 2018.

8. Coordinated the summer UAV/ DRONE training 2018 conducted by TechEagle Innovation Pvt Ltd from 18 June to 14 July 2018
9. **President**, Robotics Society, Integral University

M.Tech Thesis

1. Waquar Alam, Enrolment No. 1800101824, Title VLSI Design, (in process)
2. Asfa Almas, Roll No. 2201311001, enrolment No. 2200103941, Title: ***5G New Radio Performance Optimization For Industrial Application***, 2024
3. **Ruby Khan**, Roll No: 2101311003, Enrol No: 1500101121, Title ***A Qualitative Review of Artificial Intelligence Based MPPT Techniques in PV Systems***, 2023
4. **Haseeb Farooqui**, Roll No: 1801311004, Enrol No: 1800102436, Title: ***Design Modelling and Simulation of Solar Photovoltaic System using MATLAB***, 2020
5. **Zoya Fatima**, Roll No: 1801311009, Enrol No:1400100457, Title: ***Design Modeling and Simulation of 150 KW Solar Photovoltaic System***, 2020
6. **Kavita Singh** Roll no: 1701116001, Enrol No: 1700102637, Title: ***Effect of Bypass Diode under Partial Shading in SPV Module***, 2019
7. **Jyotima Bharti**, Enrol No: 1500103171, Title: ***Efficient coding scheme for fault tolerant parallel filters***. Submission , 2018
8. **Kahkasha Ali**, Roll No: 1501311001, Enrol No: 1500101958, Title: ***Minimization of Power for the Design of Optimal Flip Flop***, 2017
9. **Sana Ur Rehman**, Roll No:1501311005, Enrol no: 1500100972, Title: ***Schematic Design and Layout of Digital Circuits Using CMOS Technology***, 2017
10. **Faheem Husain Wani**; Roll no: 1400131003; Enrol no: 400101784, Title: ***Efficient Implementation of Address Generator for WiMAX Deinterleaver with different modulation Scheme*** (2015-2016). 2016
11. **Sameer Gull Alie**; Roll No: 1200131022, Enrol no: **Title: *Power and Delay Optimize Edge Triggered Flip Flop for Low Power Microcontroller*** , 2014
12. **Suhail Ahmad Beg** Roll no: 1200131025 enrolment no:1200102438 Title: ***Design of Inductive Degenerate 2.5 GHz LNA using 0.13 μm Technology***, 2014

13. **Jahangir Rashid Dar**, Roll no: 1200131009, Enrolment No: 1200102513 Titles: **Novel Power, Energy- Efficient Full Adder for Ultra Deep-Submicron Technology** (2013-2014). Submitted on: 05/05/2014
14. **Ahsan Ul Haq Mansoor**; Enrol no: 1200102439, Roll no: 1200131002 Title: **A Highly Quantro 10 T SRAM CELL with Soft Error Robustness and High Signal to Noise Margin**, 2014
15. **Fahmida Khatoon**, Roll no: 12001310, Enrolment no: 0800 Title: **Design of Ring VCO Using Nine Stages of Differential Amplifier**, 2014
16. **Lubna Naim** Roll No: 1100131008 Enrol no: 1100102318, Title: **Design of Low Power Pseudo-Random Pattern Generation for BIST Application**, 2014
17. **Shabeer Ahmad Ganie** Enroll no: 1100102314, Roll no: 1100131016, Title: **Design and Delay Efficient Configurable Booth Multiplier For High Speed Application** Submitted on: 31/7/2013
18. **Sajad Ahmad Ganie** Enrol no: 1100102316, Roll no: 1100131013 Title: **FPGA Design of 4X4 Switch for Multiprocessor System on Chip (MPSoC) Using Round Robin Arbitration**. Submitted on: 31/7/2013
19. **Rajeev Saxena**, Enrol No: 1100102500 Roll No: 1100131012 Title: **Image Compression using Neural Network with Levenberg-Marquardt Algorithm**, 2013
20. **Avdesh Kumar Yadav**, Enrol No: 1100102312, Roll no: 1100131005, Title: **Digital Image Watermarking using Discrete Wavelet Transform**, 2013
21. **Sarita Srivastava** Roll No: 10001311010; Enrolment no: Title: **Design of IIR Filter using VHDL**; 2012
22. **Asjad Kamal**, Enrolment no: **1000101608** Roll no: **1000131008** Title: **Design of SDRAM controller using VHDL**, 2013
23. **Rajeev**, Roll no: 1000101600 Title: **Design and Implementation of Tuneable Universal Filter**, 2013

Life Membership

1. Membership of the International Association of Engineers (IAENG) M-533153 since 24 September 2025
2. Life member of The Institution of Electronics & Telecommunication Engineers (IETE)

M-507087 granted on 27/08/2025 and sealed at New Delhi on 09/09/2025

3. Member of AI-ML Innovation Entrepreneurs and Engineers Association (AMIEEE), Number is AMI/25/0132 on 22/06/2025
4. Member of **CPACE** (Center for Professional Advancement), M-21C-412.
5. Life member of **Solar Energy Society of India** since 17 March 2021
6. Life member of **Indian Society for Technical Education**; LM 97495 since 2014
7. Life member of **The Institution of Engineers** (India), M-157668-7, since 31 March 2017
8. President and Life member of **Robotic Society**, I.U, LM 015, since 2015
9. RT (Research Educational Talk International), M- 1592-22

WORK DONE BESIDES TEACHING AND RESEARCH WORK

Associate Professor (Jr.) Integral University, Lucknow, UP since August 2012.

1. **Course Coordinator**, (GIAN) Global Initiative of Academic Network, 2025
2. **Coordinator**, Research Management Consultancy Cell (RMCC), since 2024
3. **Placement Coordinator**, Department of ECE since 2018 till date.
4. **President Robotics Society**, Integral University since 2017 till date
5. **Head Examiner** for 1st year ECE (Odd Sem) & 2nd year ECE (Even Sem), 2023-24
6. **Convenor**, organizing five week skilled internship program on Application of MATLAB in Engineering from 25 September to 28 October 2023, organized by Department of ECE, I.U, Lucknow.
7. **Curricular designing & modification for B.Tech & M.Tech Courses**;
Robotics (EC251), Embedded C and Linux (EC216), Elective III Antenna Design and MIMO System (EC364), Elective-IV Semiconductor Fabrication Technology (EC368) and Elective VII Microelectronics Technology (EC450) all in in the session 2024-25.
Robotics (EC257) in the session 2023-24,
Basic Electronics (EC101) in the session 2022-23,
M.Tech; VLSI Design in session 2005-06
8. **Question Paper Setter** for subject Basic Electronics EC101 (Regular), Microwave Engg. EC319 for session 2022-23 (Even Semester)

9. **Head Examiner** for 1st yr ,ECE (Odd Semester) & 3rd Yr. ECE(Even Sem), 2022-23 Semester)
10. **Head Examiner** for II Yr. ,ECE, (Odd Sem), & 1st yr. (Even Sem) session 2021-22
11. **Question Paper Setter** for subject **RF and Microwave Engineering** EC319 (Regular), Basic Electronics EC101 (Regular) & **Basic Electronics EC101 (CP)**, Even Semester session 2021-22
12. **Question Paper Setter** for subject **Digital Electronics EC209 & Optical Communication EC401** for session 2021-22
13. **President**, Robotics Society, Integral University since April 2017.
14. **Coordinator** Summer UAV/DRONE Training 2018 conducted by TechEagle Innovations Pvt Ltd from 18 June 18 to 14 July 18 at Integral University, Lucknow.
15. **Organizer SAKSHAM-Faculty Empowerment Program in collaboration with Microsoft**, India on 22nd and 23rd April 2018 under the aegis of HRDC, Integral University, Lucknow
16. **Organized a guest lecture** on Memory System design on 26 September 2017, by Prof. Arun Kr Singh, Dean Academic, GITM, Lucknow Campus
17. **Organized Tech-Quiz and Essay Writing Competition** held on 31/10/2017 at Academic Block II, Integral University, Lucknow
18. **Organized Tech-Rangoli and Technical Poster presentation** held on 17/10/2017 at Academic Block II, Integral University, Lucknow
19. **Coordinated an educational tour** from Lucknow To Manali from 28th February to 4th march 2017
20. **Member** of *Design, Printing and Promotion committee in Fiesta 2017*
21. **Coordinator** of *Faculty Development Program on Matlab* held from 1st to 7th February 2016 at I.U, Lucknow organized by department of ECE under the aegis of Academic staff college I.U in collaboration from CETPA infotech Pvt Ltd, Lucknow
22. **Convener of the National Workshop** on *Arm Controlled Robotics* from 11 Feb to 13 Feb 2015 at Integral University, Lucknow conducted by Microbotrics technologies pvt ltd.
23. **Internal Examiner** for practical for subjects *Integrated Circuits, Electronics devices and circuits* in November 2014

24. **Coordinator** in Water Rocket Launcher and Air wizard show held on 16 March 2015, at Integral University, Lucknow
25. **Coordinator of Essay writing competition** in Fiesta from 12-13 Nov 2014 at Integral University, Lucknow.
26. **Internal Examiner** for practical for subjects Microprocessor and its Application and Digital Electronics in May 2014
27. **Managed the tour** of 100 students to Rajasthan of Education department, Integral university from 1 March 2014 to 8 March 2014
28. **Internal Examiner** for practical for subjects Integrated Circuits, Electronics devices and circuits in November 2013
29. **Appointed as Paper Setter** for subject *Microprocessor and Application* for Hanswahini Polytechnic in May 2013.
30. **Appointed as Paper Setter** for subject VLSI Design for M.Tech in the month of May 2012.
31. **Observer in end semester** exam in UPTEC (Sangam palace, civil line Allahabad) from 10 May 2012 to 28 May 2012.

Sr. Assistant Professor in Integral University, Lucknow, UP since July 2011.

1. **Coordinator of National board of Accreditation (NBA)**
2. **Observer** in end semester exam in UPTEC (Sangam Palace, civil line Allahabad) from 10th December 2011 to 27th December 2011
3. **Coordinator** of ECE department since 2010.
4. **Paper Setter** for subject **Nonoelectronics** for **MSC (NanoScience)** II semester in the month of May 2011.

Assistant Professor in Integral University, Lucknow, UP since February 2010.

1. **Paper Setter** for subject **Digital Electronics** for **B.Tech** IV semester & in the month of August 2010 & **Microelectronics** for **M.Tech** I semester in the month of May 2010.
2. **Paper Setter** for subject **Nano-electronics** for **MSC (Nano Science)** II semester in the month of May 2010.

3. Deliver lectures for **M Tech** (VLSI Design) since **2006**

Lecturer in Integral University, Lucknow, UP since July 2004

1. **Paper Setter** for subject **Digital Electronics** for BTech IV semester & subject **Microwave Engineering** for B.Tech VII semester in June 2009.
2. **Paper Setter** for subject **Fundamental of Digital Electronics** for **Hanswahini Polytechnique** in 2005
3. **Paper Setter** for subject **Basic Electronics** for B.Tech 2nd semester in the month of May 2005. Guided **30Btech projects** (awarded).
4. **External Practical Examiner** for the subject **Fundamental of Electronic Device** on 08/07/2006 in the institute Hanswahini Institute of Science and technology, Allahabad.
5. **Internal Practical Examiner** for the subjects **Electronics Devices and circuit, Microwave Engineering, VLSI Design and Digital Electronics, Microprocessor and its Application** for odd and even semester every year.
6. **Member of the Proctor board** of Integral University, Lucknow from 2004 to 2008
7. **Warden of Girls hostel** of Integral University, Lucknow 2004-2007; 2012-2014

Subjects taught in M. Tech ECS

1. Microelectronics Technology
2. VLSI Design
3. VLSI Devices and Circuits
4. ASIC Design and FPGA
5. Electronics Circuit and Simulation
6. Fault modulation
7. Heat Transfer (for M.Tech Solar photovoltaic)
8. Optics in Solar Application (for M.Tech Solar photovoltaic)

Subjects taught in B. Tech

1. VLSI design
2. Microwave Engineering
3. RF and Microwave Engineering

4. Integrated Circuits
5. Microelectronics Fabrication Technique
6. Microprocessor and its Application
7. Digital Electronics
8. Electronics Devices and Circuits
9. Basic Electronics

Subjects taught in MSc Nano-Science in 2008

1. Microelectronics in Nano Electronics

1) **Manager (QA & PPC) in M/S Pramode Telecom Pvt Ltd**

(Appointed as **Management Representative for ISO 9001:2000 on 27 June 2003**)
Responsibilities of Manager (Quality Assurance)

- 1) Contract review with CEO.
- 2) Final Inspection and testing.
- 3) To look after customer complaints along with CEO in-charge.
- 4) Supplier evaluation along with purchase in-charge.
- 5) Intimate to supplier in case of quality problem observed in raw material.
- 6) To ensure quality assurance in production, maintenance, inspection and testing area.
- 7) To implement all non- conformance and ensure corrective action is taken.
- 8) Control of inspection, measuring and test equipment.
- 9) TO obtain report from customer on his satisfaction level.
- 10) To ensure all instrument and machinery used are calibrated as per ISO norms.
- 11) Handel all the customer complaint, registered by marketing executive.
- 12) Generate MIR.
- 13) Conducted audit for ISO 9001:2000 in June 2004 and provided certification for M/S Pramode Telecom Pvt.
- 14) Conducted audit for ISO 9001:2000 in July 2003 and provided certification for M/S Pramode Telecom Pvt Ltd.

Responsibilities of Management Representative (ISO 9001:2000)

- 1) Ensuring the requirement of quality standard as stated with manual with organization.
- 2) Take care of all quality system documents.
- 3) Take care of training on quality system.
- 4) Report to MD and is responsible for executing the policy with organizational members.
- 5) Conduct internal audit periodically to check the adequacy of the quality system and its effective implementation.
- 6) Makes the audit plan, nominates the auditor.
- 7) Upraise the result of internal audit to the management.
- 8) Plan the management review as per agenda and keep the record of the same.
- 9) Report the performance of the quality system to the management for review, which will act as the basis for improvement.
- 10) Liaison with external certification bodies on behalf of the organization.
- 11) Ensure that the quality system is established, implemented and maintained in line with ISO 9001:2000 requirement.
- 12) MR shall ensure that only skilled and trained technical person shall perform process all the time.

Responsibilities of Manager (PPC)

- 1) To execute plan of production on daily, monthly and yearly process.
- 2) Appraise the purchase requisition of component and consumable item as per order received.
- 3) Advance verification of kits, lot-wise for production.
- 4) Listing of shortage of material.
- 5) To provide material to production for production activity.

Personal Details:

Husband's Name	: Mr. Akhlak Ahmad
Father's Name	: Late Mr. Hasnain Ata Peer Bakhsh
Category	: General
Nationality	: Indian

Tarana Afrin Chandel

Place: Lucknow (U.P)

Date: 15/07/2024