

Curriculum Vitae

Prof. (Dr.) Angsuman Sarkar

Short CV



Dr. Angsuman Sarkar is presently serving as a Professor of Electronics and Communication Engineering in Kalyani Government Engineering College, West Bengal. He had earlier served in Jalpaiguri Government Engineering College & Kalyani Government Engineering College as Lecturer, Assistant Professor & Associate Professor of ECE department for more than 20 years. He received the M.Tech degree in VLSI & Microelectronics from Jadavpur University. He completed his Ph.D from Jadavpur University in 2013. His current research interest span around study of short channel effects of sub 100nm MOSFETs and nano device modeling. He is a Senior Member of IEEE, Life Member of Indian Society for Technical Education (ISTE), Associate Life Member of Institution of Engineers (IE) India and currently serving as the Chairman of IEEE Electron Device Society, Kolkata Chapter. He has authored 6 books, many contributed book chapters, 86 journal papers in international refereed journals and 51 research papers in national and international conferences. He is a member of board of editors of various journals. He is reviewer of various international journals. He is currently supervising 6 Ph.D. scholars and has already guided 5 students successfully as principal supervisor. He has delivered invited talk/tutorial speech/expert talk in various International Conference /technical programs. He has organized IEEE international conferences and several workshops/seminars.

Personal Profile

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|------------------------------|---|
| <i>Name</i> | Angsuman Sarkar |
| <i>Father's Name</i> | Late Tuhin Kumar Sarkar |
| <i>Nationality</i> | Indian |
| <i>Present position</i> | Professor in Dept. of Electronics & Communication Engineering, Kalyani Government Engineering College, Kalyani, West Bengal |
| <i>E-mail</i> | angsumansarkar@ieee.org , angsuman.sarkar@kgec.edu.in |
| <i>Blood Group</i> | B+ve |
| <i>Phone</i> | +91 33 25821309 (Office) |
| <i>Web Page (Personal)</i> | https://sites.google.com/site/angsumansarkar/ |
| <i>Institutional Website</i> | https://kgec.edu.in/department?name=ece |
| <i>Office Address</i> | Dept. of Electronics & Communication Engg., Kalyani Government Engineering College, Kalyani, Nadia, West Bengal-741235, India |
| <i>Orcid Id</i> | 0000-0002-8709-7532 |
| <i>Scopus Id</i> | 26423254800 |

Experience in Academia and Industry

| <i>Name of the Post</i> | <i>Institute/Office</i> | <i>From</i> | <i>To</i> | <i>Type</i> |
|---|--|-------------|------------|-------------|
| Professor in ECE Department | Kalyani Govt. Engg. College | 2017 | Continuing | Academic |
| Associate Professor in ECE Department | Kalyani Govt. Engg. College | 2014 | 2017 | Academic |
| Assistant Professor in ECE Department | Kalyani Govt. Engg. College | 2010 | 2014 | Academic |
| Assistant Professor (formerly Lecturer) in ECE Department | Jalpaiguri Govt. Engg. College | 2001 | 2010 | Academic |
| Software Engineer | Medha Computing Pvt. Ltd., Bangalore | 1999 | 2001 | Industry |
| Total Experience | 22 Years + (Total Academic Experience of 20+ years and 2 years of Industry Experience) | | | |

Administrative Experience and Involvement with Academic Bodies

- Member of Ph.D. Committee of Electronics & Communication Engineering Department of Maulana Abul Kalam Azad, University of Technology (MAKAUT), West Bengal from 2018 to till date
- Member of the Board of Studies (BoS) of ECE Department of Guru Nanak Institute of Technology (GNIT), Sodepur from 2017
- Member of Departmental Academic Committee for P.G. Studies for the Electronics & Communication Engg. of RCC Institute of Information Technology from the academic semester Jan 2017
- Member of the Board of Studies (BoS) of ECE of Narula Institute of Technology, Kolkata
- Board of Studies as External Expert from Academic Institution in JIS College of Engineering, Kalyani
- Member of the IQAC cell of the Meghnad Saha Inst. of Technology, Kolkata
- Coordinator from Collaborators of International Conference on computing, Analytics & networks (ICAN 2020) an Indo-Taiwan Joint International Conference between National Chung Cheng University, Taiwan and Chitkara University, India
- Core Committee member for NAAC accreditation of Kalyani Govt. Engg. College (from 2019-till date)
- Member of the Technical Committee to evaluate the technical issue related to purchase of the college from 2018 to till date
- In-charge of physical reporting and admission In-charge of allotted students for all admission for the academic session 2017-18
- Acted as a convener of the Research Assessment Committee of the College (from 2015 –till date)
- Committee member for Faculty & Staff affairs and welfare (College Level) from 2014- till date
- Member of the committee for Students' Affairs and Welfare (College Level) from 2014- till date
- Acted as a Hon. Chairman of IEEE EDS Kolkata Chapter for 2018-2019
- Acted as a Hon. Secretary of IEEE EDS Kolkata Chapter for 2016-18
- Executive Committee member of IEEE EDS Kolkata Chapter from 2013 to till date
- Founder and Branch Counselor of IEEE student branch chapter at Kalyani Govt. Engg. College.
- Founder and Branch Counselor of IEEE EDS student branch chapter at Kalyani Govt. Engg. College.
- Head of the Department, ECE, Jalpaiguri Govt. Engg. College from 2004-2005

Subjects of Interest

- Solid State Devices
- Analog/Digital Communication
- VLSI & Microelectronics Technology
- Digital Signal Processing

Research Area

- Nano Electronics
- MOS Device Physics & Scaling of MOSFET
- CMOS Technology
- Novel device structures to prevent short-channel effects

Research Guidance

Ph.D. Awarded:

| <i>Sl No.</i> | <i>Name of the Candidate</i> | <i>Title of the thesis</i> | <i>Name of the Co/Joint Supervisor</i> | <i>Institute</i> | <i>Date of Award</i> |
|---------------|---|---|--|---------------------|----------------------|
| 1 | Kalyan Biswas(Asst. Prof., MCKV Inst. of Engineering, Howrah) | Study and Design Of Emerging Nanoscale MOSFETs | Prof. C.K. Sarkar, ETCE Dept., Jadavpur University | Jadavpur University | 07-06-2019 |
| 2 | Avik Chakraborty (Faculty, ECE Dept., Jalpaiguri Govt. Engg. College) | Studies on Nanoscale Field Effect Devices for Ultra Low Power Mixed Signal Applications | | MAKAUT, WB | 27-08-2019 |
| 3 | Surajit Bari (Asst. Prof., Narula Inst. of Technology , Kolkata) | Modelling and Simulation Study of Nano-Scale MOSFETs For Low-Power VLSI Circuit Applications | Prof. Debashis De (CSE Dept., MAKAUT) | MAKAUT, WB | 20-06-2020 |
| 4 | Biswajit Baral (Associate Prof. & HOD, ECE, Silicon Inst. of Technology, Bhubneshwar, Odisha) | Performance Investigation of Advanced Nanoscale Devices: An Analytical Modeling and Simulation study | Prof. Debashis De (CSE Dept., MAKAUT) | MAKAUT, WB | 20-06-2020 |
| 5 | Sudhansu Mohan Biswal(Associate Prof., EIE, Silicon Inst. of Technology, Bhubneshwar, Odisha) | A Study on Linearity and Radio Frequency Performance Analysis of Nanoscale Devices | Prof. Debashis De (CSE Dept., MAKAUT) | MAKAUT, WB | 04-07-2020 |
| 6 | Swati Sinha (Department of Biotechnology, MAKAUT, WB) | Study of interaction properties of synthetic oligonucleotides with carbon nanotubes and their impacts on Caenorhabditis elegans | Dr. Jaya Bandopadhaya (Dept. of Biotechnology, MAKAUT) | MAKAUT, WB | 04-06-2021 |

Ph.D. Submitted:

| <i>Sl No.</i> | <i>Name of the Candidate</i> | <i>Title of the thesis</i> | <i>Name of the Co/Joint Supervisor</i> | <i>Institute</i> | <i>Date of Submission</i> |
|---------------|------------------------------|----------------------------|--|------------------|---------------------------|
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Ph.D. Under Supervision (Ongoing):

Seven (7) scholars.

M. Tech. Thesis Supervised

- | | |
|-------------------------------------|---------------------------------|
| 1. Sri Alope K. Das (2011) | 11. Sri Tauseef Ahmed (2015) |
| 2. Smt. Priyanka Chakraborty (2012) | 12. Smt. Kakali Sarkar (2016) |
| 3. Sri Rohan Dutta (2012) | 13. Sri Debabrata Roy (2016) |
| 4. Sri Joydeep Kushari (2012) | 14. Sri Arnab Das (2017) |
| 5. Sri Bappaditya Patra (2013) | 15. Smt. Anjana Chowdhury(2017) |
| 6. Sri Swarnava Kar (2013) | 16. Sri Hemanta Goswami(2018) |
| 7. Sri Rohit Jana (2014) | 17. Smt. Sanjukta Mirdha (2019) |
| 8. Sri Soumen Paul (2014) | 18. Smt. Chandrani Dokal (2019) |
| 9. Sri Arobinda Pal (2014) | 19. Smt. Ranita Halder (2020) |
| 10. Sri Sayantan Mondal (2015) | 20. Smt. Supriya Das (2020) |
| | 21. Smt. Nirmala Sharma (2021) |

Membership of Professional Bodies

| <i>Membership Type</i> | <i>Name of the Professional Body/Society</i> | <i>Membership No.</i> |
|-------------------------|--|-----------------------|
| Senior Member | IEEE, USA | 90381731 |
| Fellow Member | IE (Institution of Engineers), India | F-1281042 |
| Life-Member | ISTE (Indian Society of Technical Education) | LM 66068 |
| Life-member (corporate) | The Institution of Electronics & Telecommunication Engineering (IETE), India | M 237755 |
| Member | International Association of Engineers (IAENG), IAENG Society of Electrical Engineering society, IAENG Society of Information System Engineering society | 242768 |

Accomplishments

- Acted as a [Chairman](#) of IEEE EDS Kolkata Chapter for 2018-19
- Acted as a [Secretary](#) of IEEE EDS Kolkata Chapter for 2016-17
- [Executive Committee member](#) of IEEE EDS Kolkata Chapter for the years 2013 to till date (Continuing)
- Executive Committee member of IEEE Calcutta section for the years 2018-19
- Elevated as a [Senior member, IEEE](#) (SM'15) on 7th February, 2015 in SM Panel Meeting held in New Orleans, LA, USA
- Main author of one article that is listed in the most Cited Microelectronics Journal Articles The most cited articles published since 2012, extracted from Scopus.
- “Effect of gate engineering in double-gate MOSFETs for analog/RF applications” published in Microelectronics Journal of Elsevier, Volume 43, Issue 11, November 2012, Pages 873-882 is considered as “Most Cited Microelectronics Journal Articles” published since 2011, as extracted from Scopus.
- Based on the reference value of the outstanding achievements, Marquis Who’s Who® has selected the biographical profile for inclusion in the new Who’s Who in the World® 2016 (33rd Edition).
- [Founder](#) and Branch Counselor of IEEE student branch chapter at Kalyani Govt. Engg. College.
- [Founder](#) and Branch Counselor of IEEE EDS student branch chapter at Kalyani Govt. Engg. College.
- [Outstanding reviewer Award](#) of Journal of Computational Science awarded August 2017 to ANGSUMAN SARKAR in recognition of the contributions made to the quality of the journal.
- [Outstanding reviewer Award](#) of Applied Surface Science awarded January,2018 to ANGSUMAN SARKAR in recognition of the contributions made to the quality of the journal.
- Elsevier Recognized reviewer Award from 2015
- [Recognized reviewer](#) of AEUE – INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS awarded January,2018 to ANGSUMAN SARKAR in recognition of the review made to the quality of the journal.
- The book written by Dr. A. Sarkar entitled “Low power VLSI design: fundamentals” written by Sarkar, Angsuman is listed in the syllabus/ course of
 - a. Degree in [Master’s in Telecommunications Engineering](#) with Subject matter as Electronic Systems in the Department of [Communications Engineering](#) with Area of [ELECTRONICS](#) in the [School of Engineering of Elche](#) in [Year 1 of Master’s in Telecommunications Engineering](#) of [Miguel Hernández University of Elche, Spain](#).
- The book written by Dr. A. Sarkar entitled “VLSI Design & EDA Tools” book is currently considered as a text/reference book in the syllabus of
 1. [Shivaji University, Maharashtra, India](#)
 2. [Rajasthan Technical University, Rajasthan, India](#)
 3. [Assam Science and Technology University, Assam, India](#)
 4. [SHRI RAMDEOBABA COLLEGE OF ENGINEERING & MANAGEMENT, an autonomous College of Rashtrasant Tukadoji Maharaj Nagpur University Katol Road, Nagpur, Maharashtra.](#)
 5. [Heritage Institute of Technology, Kolkata, West Bengal, India for M. Tech. \(subject: VLSI Technology\) in Applied Electronics and Instrumentation Engineering \(AEIE\)](#)
 6. [Jalpaiguri Government Engineering College, Jalpaiguri, West Bengal, India for B.Tech \(Subject:VLSI Circuit & Systems \) in Electronics & Communication Engineering](#)
 7. [MAKAUT, WB for CMOS VLSI Design \(6th Semester , B. Tech for ECE\)](#)
- The book written by Dr. A. Sarkar entitled “Solid State, Microelectronic and Optoelectronic Devices” book is [currently considered as a text/reference book in the syllabus of Bharathidasan University, Tiruchirappalli as a text book in M.Sc. ELECTRONICS course for the subjects](#)
 - a. [Design of Analog Circuits](#)

- b. [Optoelectronics](#)
- Member of the IQAC cell of the Meghnad Saha Inst. of Technology, Kolkata
- Recognized [Reviewer of IJNM, willey in 2017](#) and 2018
- Dr. Angsuman Sarkar started his activities as a volunteer in IEEE Calcutta Section, which laid foundation to establishing the IEEE Student branch chapter and IEEE EDS Student Branch Chapter in Kalyani Govt. Engg. College in 2014. As the founder Chair, he initiated member activities and gave Leadership in enhancing IEEE members. This also led to one-day seminar program entitled “[Nanoelectronics and Wireless communication](#)” which was held in Kalyani Govt. Engg. College in 2014. He is giving efforts to enrich the IEEE EDS activities in more effective and professional ways.

Editorial Responsibility

1. Volume Editor of the [Proceedings of the 4th International conference on 2021 Devices for Integrated Circuit \(DevIC 2021\) held on 19-20 May, 2021, Kalyani, Nadia, India in online mode available in IEEE XPLore. Organized by IEEE KGEC Student Branch Chapter In association with Department of ECE, Kalyani Government Engineering College Technically co-sponsored by IEEE EDS Kolkata Chapter](#), Date Added to IEEE Xplore: 21 June 2021
2. Guest Editor of a Focus Issue on “[Modeling and Simulation of Advanced Nanoscale Devices](#)” in Micro and Nano Systems (A total of 9 articles from extended version of DevIC 2019) Cite as Angsuman Sarkar, “Modeling and Simulation of Advanced Nanoscale Devices”, Micro and Nanosystems (2020) 12: 144. <https://doi.org/10.2174/187640291203201026090857>
3. Guest Editor of a Focus Issue on “[Modelling of Quantum Mechanical Effects in Nanoscale Devices](#)” with C K Sarkar and Debasis De in Physica Scripta (A total of 2 articles from extended version of DevIC 2019)
4. Guest Editor in a Special Issue: [International Journal of Nano and Biomaterials](#), 2020 Vol.9 No.1/2, [Special Issue on: Impact of Nanotechnology on Devices for Integrated Circuits](#) Guest Editors: Dr. Angsuman Sarkar and Asst. Prof. Arpan Deyasi (A total of 5 articles from extended version of DevIC 2019 and outside)
5. Guest Editor of a special issue in “[International Journal of Nanoparticles](#)”, 2020 Vol.12 No.3, on: [Advanced Nanoscale Devices/Mems/Nems for Application in Microsystems](#) with Dr. J.K. Mandal (A total of 4 articles from DevIC 2019)
6. Guest Editor of a Topical Collection: Engineering – [Analytical Modelling of Advanced Nanoscale Devices in Springer Nature Applied Sciences](#) (SNAS) (7 articles already published from extended version of DevIC 2019 and outside)
7. Guest Editor of a special issue in NanoMaterials & Energy (NME) with selected version of papers from DevIC 2019 (A total of 4 papers from DevIC 2019)
8. [Special Thematic Issue for Nanoscience & Nanotechnology-Asia \(Vol. 10, No. 4\) on “Advanced Nanoscaled MOSFETs”with Guest Editor: Dr. Angsuman Sarkar](#) (A total of 12 Extended version of papers from EDKCON 2018)
9. Special Thematic Issue for Micro and Nanosystems on “Modeling and Simulation of Advanced Nanoscale Devices” (A total of 9 Extended version of papers from DevIC 2019)
10. Guest Editor of the Special Issue entitled “More than Moore Microsystems” on the extended version of papers from EDKCON 2018 by JK Mandal, A Sarkar – 2019 – Springer in journal, Microsystem Technologies, first online on 15 April, 2019 (A total of 17 extended version of papers from EDKCON 2018)
11. A total of 13 papers in [Sensor letter\(Volume 17, Number 6, June 2019\)](#) +[Advanced Science, Engineering and Medicine](#) (Volume 11, Number 12 (December 2019)) with Dr. Debasish De from extended version of papers from Edkcon 2018
12. Volume Editor of the [Proceedings of the 3rd International Conference on “2019 Devices for Integrated Circuit \(DevIC\)” acronym as “DevIC 2019”](#) held on March 23-24, 2019 at Kalyani Government Engineering College, Kalyani, organized by IEEE KGEC Student Branch Chapter in association with Department of ECE, KGEC and technically co-sponsored by IEEE EDS Kolkata Chapter, Date Added to IEEE Xplore: 01 August, 2019
13. [Editorial Message from general Chair & Editor of 2 3rd International Conference on “2019 Devices for Integrated Circuit \(DevIC\)” acronym as “DevIC 2019” published in IEEE Xplore](#)
14. Volume Editor of the Proceedings of the 2nd international conference on “[2018 IEEE Electron Device Kolkata Conference \(EDKCON\)](#)” “24-25 November, 2018, Kolkata, West Bengal, India Place: The Pride Hotel, Kolkata Organized by IEEE EDS Kolkata Chapter, Date Added to IEEE Xplore: 25 July , 2019
15. [Editorial Message from general Co-chair of General Chair & Jt. Editor of 2018 IEEE Electron Device Kolkata Conference \(EDKCON\) published in IEEE Xplore](#)
16. [Guest Editor of the Special Issue on the extended version of papers from 2nd International Conference Devices for Integrated Circuits \(DevIC-2017\) by JK Mandal, A Sarkar – 2019 – Springer in journal, Microsystem Technologies, first online on 15 April, 2019](#) (A total of 15 extended version of papers from DevIC 2017)
17. [Special Issue on: Recent Advances in Nano-Electronic Devices and Technology](#) by Guest Editors: Dr. Angsuman Sarkar and Dr. Manash Chanda in [International Journal of Nanoparticles](#), 2020 Vol.12 No.1/2 (A total of 12 extended version of papers from EDKCON 2018)

18. [Guest editor of a special issue in Journal of Active and Paasive Electronic Devices \(JAPED\), Published by Old City Publishing, UK, Publication date: November 2017 in Volume 13, Issue 2-3](#) (A total of 11 articles)
19. Guest editor of a Special Issue on “[MEMS and More than Moore Microsystems](#)” with Prof. C. K. Sarkar in [Journal of Micromechanics and Microengineering published by IOP publishing, UK](#) (A total of 6 extended version of papers from EDKCON 2018)
20. [Guest editor of a special issue in International Journal of High Speed Electronics and Systems, Publication date: 2017/12 in Volume 26, Issue 04, Pages 1702003](#) (A total of 4 papers)
21. Guest editor of Special Issue with Dr. Sandip Nandi on: “[Nanotechnology and High-Speed Electronic Systems](#)” in [International Journal of Nanoparticles](#)
22. 2019 Vol.11 No.2(A total of 7 extended version of papers from DevIC 2017)(A total of 7 extended version of papers from DevIC 2017)
23. Guest editor of Special Issue on: “[Nanotechnology Based Devices and Nanostructures](#)” with Dr. Swapnadip De in [International Journal of Nanoparticles](#) 2018 Vol.10 No.1/2 (A total of 11 extended version of papers from DevIC 2017)
24. Guest Editor of a Special Issue on: DevIC 2017 Nanotechnology and High-Speed Electronic Systems, in [International Journal of Nanoparticles](#),
25. Volume Editor of the [Proceedings of the 2nd international conference on 2017 Devices for Integrated Circuit \(DevIC\) 23-24 March, 2017, Kalyani, Nadia, India available in IEEE XPLore, Organized by IEEE KGEC Student Branch Chapter In association with Department of ECE, Kalyani Government Engineering College Technically co-sponsored by IEEE EDS Kolkata Chapter, Date Added to IEEE Xplore: 19 October 2017](#)
26. Editorial [Message from general chair of General Chair & Editor 2nd international conference on 2017 Devices for Integrated Circuit \(DevIC\)](#) published in IEEE Xplore

Official Editorial Board Member (of International Journals)

| <i>Sl. No.</i> | <i>Name of the journal</i> | <i>Publisher</i> |
|----------------|---|---|
| 1 | International Journal of Recent Trends in Electronics and Communication | A D Publication, India |
| 2 | International Journal Of Technology And Applied Engineering | Pinnacle educational trust, India |
| 3 | Progress of Electrical and Electronic Engineering | WHIOCE PUBLISHING PTE. LTD |
| 4 | Advances in Materials | Science Publishing Group 1 Rockefeller Plaza, 10 th and 11 th Floors, New York, NY 10020 U.S.A. |
| 5 | International Journal of VLSI Design and Technology | Journals Pub, New Delhi, India |
| 6 | Journal of Semiconductor Devices and Application(JoSDC) | STM Publication, India |
| 7 | Computer and Information System Management: An International Journal ” (ISSN 1782-5326) | Published by the FSSH Scholarly Journals City University of New York, Eugenio María de Hostos Community College 500 Grand Concourse Bronx New York 10451 718-518-4444 |
| 8 | International Journal of Design and Test (JEDT), published by AIRCC) | AIRCC Publishing Corporation, India |
| 9 | Journal of Computer and Information Science | Ristas, Miami, USA |
| 11 | Technical Magazine of IEEE EDS Kolkata Chapter | IEEE EDS Kolkata Chapter, Kolkata, India |
| 12 | SOP Transactions on applied physics (2014) | Scientific Online Publishing, 5668 E. 61 st street Commerce, CA 90040, USA |
| 13 | Editorial Board member/ Advisory Editor member for Springer Plus (Springer Nature Journal of Applied Sciences) | Springer Science+Business Media. |
| 14 | Advisor/Editorial Board Member of Science Solve for Scientific Research Publiahing | ScienceSolve Suite # AP771 Rastenfeld 151 Rastenfeld, 3532 Austria |
| 15 | Journal of Microprocessor Engineering and applications (JoMEA) | STM Publication, India |
| 16 | Scientific, Technical Committee & Editorial Review Board on Nanoscience and Nanoengineering | World Academy of Science, Engineering and Technology (WASET), PO Box 982, Riverside, Connetticut, CT 06878, USA |
| 17 | International Scientific Committee and Editorial Review Board member on Molecular Engineering | World Academy of Science, Engineering and Technology (WASET), PO Box 982, Riverside, Connetticut, CT 06878, USA |
| 18 | Reason- A Technical Journal | Kalyani Govt. Engg. College, Kalyani |

Organisation Capability

Main Organizer as a General Chair, General Co-Chair or Technical Program Chair

| Sl. No. | Name of the event | Place | Date |
|-------------|---|---|--|
| 2021 | | | |
| 8 | General Chair, Technical Program Committee Chair & Editor of 4 th IEEE International Conference on “2021 Devices for Integrated Circuit (DevIC)” acronym as “ DevIC 2021 ”, organized by IEEE KGEC Student Branch Chapter in association with Department of ECE, KGEC. Proceedings available in IEEE Xplore | Kalyani Government Engineering College, Kalyani | May 19-20, 2021 |
| 2020 | | | |
| 7 | General Co-Chair of IEEE Int. Conference on VLSI-DCS 2020 Conference, held in Kolkata organized by IEEE MSIT SBC | Meghnad Saha Institute of Technology, Kolkata | July 18 th -19 th , 2020 |
| 2019 | | | |
| 6 | General Chair, Technical Program Committee Chair & Editor of 3 rd IEEE International Conference on “2019 Devices for Integrated Circuit (DevIC)” acronym as “ DevIC 2019 ”, organized by IEEE KGEC Student Branch Chapter in association with Department of ECE, KGEC and technically co-sponsored by IEEE EDS Kolkata Chapter. Proceedings available in IEEE Xplore | Kalyani Government Engineering College, Kalyani | March 23-24, 2019 |
| 2018 | | | |
| 5 | General Co-Chair, Technical Program Committee Chair & Editor of 1 st IEEE International conference on “International conference on 2018 IEEE Electron Device Kolkata Conference (EDKCON) ” organized by Organized by IEEE EDS Kolkata Chapter. Proceeding Available in IEEE Xplore | Pride Hotel, Kolkata | November 24-25, 2018 |
| 2017 | | | |
| 4 | General Chair, Technical Program Committee Chair, Publication Chair & Editor of 2 nd international conference “2017 Devices for Integrated Circuit (DevIC 2017)”, organized by IEEE KGEC Student Branch Chapter in association with Department of ECE, KGEC, technically co-sponsored by IEEE EDS Kolkata Chapter. Proceedings available in IEEE Xplore | BCKV Lake Hall, Kalyani | March 23-24, 2017 |
| 2016 | | | |
| 3 | Technical Program Chair of VLSI DCS 2016 (1 st International Conference on VLSI Device circuit and systems) Organized jointly by IEEE MSIT Student Branch, IEEE MSIT EDS Student Branch Chapter, IEEE EDS Kolkata Chapter and the Department of ECE, MSIT | Meghnad Saha Institute of Technology, Kolkata | October 19-20, 2016 |
| 2 | Technical Program Chair of 1 st International Conference on “Nano computing and Nano bio technology (NanoBioCon 2016)” organized by MAKAUT, WB and technically co-sponsored by IEEE EDS Kolkata Chapter, funded by TEQIP-II | Science City Auditorium, Kolkata, West Bengal | October 3-5, 2016 |
| 1 | General Chair, Publication Chair and Technical Program Chair of 1 st international conference “Devices for Integarted Circuits (DevIC 2016)” organized by IEEE KGEC Student Branch Chapter in association with IEEE EDS Kolkata Chapter and Department of ECE, KGEC. | Kalyani Government Engineering College | March 29-30, 2016 |

As a member of the organizing/Technical Programme committee of the following national/international conferences/ workshops/seminars/mini colloquiums

| Sl. No. | Name of the event | Place | Date |
|-------------|---|---|---|
| 2021 | | | |
| 36 | Program Committee Member of International Conference/IETE Zonal Seminar/Student Convention on “ Application of IoT in Pandemic Situation (IoTPS 2021) ” | IETE Kolkata Centre, Salt Lake; Online Mode | 19-20 August, 2021 |
| 35 | Technical Program Committee Member of ICIAS 2021 | Guru Nanak Institute of Technology, Kolkata | 2-3 April, 2021 |
| 34 | International Advisory Committee member of Virtual International Conference on Innovative Research in Renewable Energy Technologies (IRRET-2021) | IMPS College, Malda, West Bengal, India | 25 th -27 th February, 2021 |

| | | | |
|-------------|--|---|----------------------------------|
| 33 | Technical Program Committee Member of 1 st International Conference on Micro/Nanoelectronics Devices, Circuits and Systems (MNDCS-2021) | National Institute of Technology Silchar, Assam, India | 30-31 Jan 2021 |
| 2020 | | | |
| 32 | Program committee member of COMSYS-2020 : International Conference on Frontiers in Computing and Systems 2020 | Jalpaiguri Government Engineering College Jalpaiguri, India | January 13-15, 2020 |
| 31 | Advisory committee member and Coordinator from Collaborators of ICAN 2020 an Indo-Taiwan Int. Conf. | Chitkara University, Chandigarh | February 14-15, 2020 |
| 2019 | | | |
| 30 | Advisor of Int. SEMINAR CUM RESEARCH COLLOQUIUM ON MEMS based Sensors and Smart Nanostructured Devices (MSSND 2019) | Jadavpur University, Kolkata | Dec. 27, 2019 |
| 29 | Technical Program Committee member of GLOBAL AI CONGRESS 2019 (GAIC 2019) | IEM, Kolkata | 12-14 September, 2019 |
| 28 | Technical program Committee member of AICTE sponsored International Conference on Recent Trends in IoT and Blockchain (ICRTIB-2019) Organized by: Department of Computer Science & Engineering | GIET University, Gunupur-765022, India | 19 – 20 October, 2019 |
| 27 | Technical Program Committee member of ICCDN 2019 : International Conference in Communication, Devices and Networking Electronics and Communication Engg. Dept, Sikkim Manipal Institute of Technology Majitar, Rangpo, East Sikkim-737136, India | Sikkim Manipal Institute of Technology Majitar, Rangpo, East Sikkim-737136, India | December 9-10, 2019 |
| 2018 | | | |
| 26 | Technical Program Committee member of 52 nd ANNUAL CONVENTION OF COMPUTER SOCIETY OF INDIA(CSI 2017) | Science City Kolkata | 19-21 January, 2018 |
| 25 | International Program Committee Member and Reviewer of 1 st International Conference On Microelectronic Devices And Technologies, (MICDAT '2018) | Barcelona, Castelldefels, Spain | 20-22 JUNE 2018 |
| 24 | Editorial Advisory Committee member of 2ND International Conference on Micro-Electronics and Telecommunication Engineering , Technical-sponsors by – IEEE UP Section | SRM University Delhi NCR Campus Ghaziabad, U.P India | 20 & 21, September, 2018 |
| 23 | TPC member of the IEMIS2018 : International Conference on Emerging Technologies in Data Mining and Information Security | University of Engineering & Management University, Kolkata | February 23-25, 2018 |
| 22 | International Technical Programme Committee Member of the First International Conference on Computational Intelligence, Communications, and Business Analytics (CICBA-2018) | Kalyani Government Engineering College (KGEC), in Kalyani, West Bengal, India | July 27-28, 2018 |
| 21 | TPC member of 4 th Annual International Workshop on Materials Science and Engineering [IWMSE2018] | Xi'an, China | May 18-20, 2018 |
| 20 | Tutorials and Publication Chair of Fifteenth International Conference on Wireless and Optical Communications Networks WOCN2018 | RCC Institute of Information Technology Kolkata | 3-4 FEB 2018 |
| 2017 | | | |
| 19 | Technical Program Committee Member of the INTERNATIONAL CONFERENCE ON Communication Devices and Networking (ICCDN 2017) | Sikkim Manipal Institute of Technology, Sikkim | 3-4 th June, 2017 |
| 18 | Technical Program Co-Chair of CALCON 2017 : 2017 IEEE CALCUTTA CONFERENCE (A Triennial Event of IEEE Kolkata Section) | Kolkata The Lalit Great Eastern | December 2-3, 2017 |
| 17 | Technical Program Committee Member of the First International Conference on Computational Intelligence, Communications, and Business Analytics (CICBA-2017) | Calcutta Business School | March 24-25, 2017 |
| 16 | Technical Program Committee Member of the International Conference on Communication, devices and computing (ICCDC-2017) | Haldia Inst. of Technology, Haldia, West Bengal | November 2-3, 2017 |
| 2016 | | | |
| 15 | Editorial Advisory Committee member of " International Conference on Micro-Electronics and Telecommunication Engineering " | SRM university, Delhi NCR Campus, Ghaziabad, U.P. | 22- 23, September, 2016 |
| 14 | Organizing Chair of CCSN 2016 : IEEE-EDS Kolkata Chapter Sponsored 5 th International Conference on Computing, Communication and Sensor | Kolkata, India | 24-25 th of December, |

| | | | |
|-------------|--|--|---------------------------------|
| | Network | | 2016 |
| 13 | Technical Committee member of 1 st International Conference on “on Computational Science and Engineering” ICCSE 2016 held in RCC Inst. of information Technology (RCCIIT) funded by TEQIP II | CII-Suresh Neotia Centre of Excellence for Leadership, Salt Lake City Centre. | 4-6 October 2016 |
| 12 | Program Chair of Micro2016 , TEQIP-II Sponsored 3 rd International Conference on Microelectronics, Circuits and Systems Organized by MAKAUT (former WBUT), Kolkata In Association with: International Association of Science, Technology and Management | Science City Auditorium, Kolkata, India. | 9-10 th July, 2016 |
| 2015 | | | |
| 11 | As a coordinator, branch counselor and patron of One-day Workshop on “Retrospect and prospects of Radio science and Microelectronics” jointly organized by IEEE EDS SB, KGEC Dept. of ECE with patronage from IEEE, Kolkata Section | Kalyani Government Engineering College, India | 08 August, 2015 |
| 10 | As a coordinator, branch counselor and patron of Two-day Workshop on “VLSI and Nanoelectronics” jointly organized by IEEE EDS SB, KGEC Dept. of ECE with patronage from IEEE, Kolkata Section | Kalyani Government Engineering College, India | 24-25 August, 2015 |
| 9 | Acted as a Organizing Chair in IEEE(EDS) Kolkata Chapter Sponsored 4 th International Conference on Computing, Communication and Sensor Network (CCSN-2015), on 24-25 th Dec.,2015 jointly organized by Forum of CCSN in association with: International Association of Science, Technology and Management | Vivada Cruise Ship, Kolkata (on 24 th Dec.) and in Science city, Kolkata (on 25 th Dec.) | 24-25 December, 2015 |
| 8 | Acted as a member of national advisory committee for organizing National Conference Frontline Research in Computer, Communication and Device 2015 (FRCCD 2015) | RCC Institute of Technology, Kolkata | 29 th December, 2015 |
| 7 | Organization Committee member of 1 st International Conference On Emerging Trends in Computer Science and Information Technology “ETCSIT-2015” | Kalyani Government Engineering College, India | 5-7 January, 2015 |
| 2014 | | | |
| 6 | Chief Coordinator of the event of the Inauguration of IEEE Student Branch at Kalyani Government Engineering College and EDS Student Branch Chapter Formation and one-day workshop on “Nano Electronics and Wireless Communication” | Kalyani Government Engineering College, Kalyani, India | 14 th November, 2014 |
| 5 | Workshop Coordinator of two-week ISTE workshop on “Signals & Systems” at Kalyani Government Engineering College jointly organized with IIT Kharagpur | Kalyani Government Engineering College | 2-12 January, 2014 |
| 4 | Organizing Committee member of IEEE EDS Bhubaneswar Kolkata Mini-Colloquium on “Advanced Electron Devices and Circuits | KIIT Bhubaneswar, India | December 3-4, 2014 |
| 2013 | | | |
| 3 | Organizing Committee member of Two-week AICTE sponsored Faculty Development Programme on “Embedded system and its application in real life problem” | Kalyani Government Engineering College | 21 Oct to 01 Nov, 2013 |
| 2 | Two-week ISTE workshop on “Analog Electronics” conducted by IIT Kharagpur | Kalyani Government Engineering College, India | 4-14 June, 2013 |
| 2009 | | | |
| 1 | Organizing Committee member of National Conference on “Recent Development in applied mathematical science and engineering | Jalpaiguri Govt. Engg. College, Jalpaiguri, West Bengal, India | 20-22 February, 2009 |

Invited Lecture Talk as Speaker

| <i>Sl No.</i> | <i>Title of the Lecture talk</i> | <i>Name of the Programme</i> | <i>Place</i> | <i>Date</i> |
|---------------|--|---|---|-------------------------------|
| 2021 | | | | |
| 22 | Keynote address entitled “Quantum Biosensors for IOT Applications: Opportunities, Trends and Challenges” | Eastern Zonal Seminar and Innovation Meet entitled “Application of IoT in Pandemic Situation (IoTPS 2021)” held during 19-20 th August 2021 organized by Institution of Electronics & Telecommunication Engineers (IETE), Kolkata Centre | Online platform organized by IETE, Kolkata Centre | 19 th August, 2021 |

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|-------------|--|---|---|---------------------------------|
| 21 | Keynote address entitled "Quantum Biosensing: Opportunities, Trends and Challenges" | AICTE Sponsored 6 day Short Term Training Programme (STTP) on " Quantum Computing and Applications " | Online mode organized by MAKAUT, West Bengal | 24-July-2021 |
| 20 | Invited Expert Talk entitled "Tunnel FET: Opportunities, Trends and Challenges" | FDP on "Recent Trends in Semiconductor Devices, VLSI Circuits and Nano Technology RTSDVCNT-2021 " | Online mode organized by Department of ECE, Narula Inst. of Technology, Kolkata | 12-July, 2021 |
| 19 | Invited Lecture Talk on "Tunnel FET: Opportunities and challenges" | Netaji Subhas Engg. College, Kolkata | Online mode organized by Netaji Subhas Engg. College, Kolkata | 4 March, 2021 |
| 2020 | | | | |
| 18 | Keynote Lecture talk on "Tunnel FET: Opportunities, Trends and Challenges" | 4 th International conference on Communication, Devices and Networking (ICCDN-2020) | Online mode organized by Electronics & Communication Engineering Department, Sikkim Manipal Inst. of Technology, Rangpo, Sikkim | 20 December, 2020 |
| 17 | Lecture Talk on "Tunnel FET: Opportunities, Trends and Challenges" | Faculty Development Programme (FDP) on " FDP on Electronic Devices, Image Processing and machine Learning " during 11 th August to 15 th August 2020 | Online Digital Platform – MyPerfectice Whiteboard, organized by Guru Nanak Institute of Technology, Kolkata | 14 th August, 2020 |
| 16 | Invited lecture talk on "RF/analog performances of Staggered heterojunction TFETs" | University of Engineering & Management (UEM) Kolkata | Organized by The Departments of Electronics & Communication Engg. Of University of Engineering & Management (UEM) Kolkata, Kolkata in Online mode (Google Meet) | 24 th July, 2020 |
| 2019 | | | | |
| 15 | Invited lecture talk on "Nanoscale Field Effect Transistors for ultra low-power mixed signal applications" | TEQIP-III Sponsored Four day Workshop " NES-2019 " Organized by The Department of Electronics & Communication Engg. Of Silicon Inst. of Technology, Bhubneshwar, Odisha | Silicon Inst. of Technology, Bhubneshwar, Odisha | 30 th December, 2019 |
| 14 | Invited lecture talk on "Benefits of IEEE Membership" | "IEEE EDS Outreach Program" Organized by The Departments of Electronics & Communication Engg. Of Dream Institute of Technology, Thakurpukur, Kolkata | Dream Institute of Technology, Thakurpukur, Kolkata | 17 th August, 2019 |
| 13 | Invited lecture talk on "Introduction to Electronics Engineering" | Organized by The Departments of Electronics & Communication Engg. Of Brainware University, Barasat, Kolkata | Brainware University, Barasat, Kolkata | 1 st August, 2019 |
| 2018 | | | | |
| 12 | Invited lecture talk on "RF/analog performances of Staggered heterojunction TFETs" | EDS Outreach program organized by IEEE ED Kolkata Chapter to develop the professional identity in IEEE's designated fields of interest in technology and engineering among the students and faculty members | Acharya Prafulla Chandra College, Sajirhat, New Barrackpore | 17 December, 2018 |
| 11 | Invited lecture talk on "RF/analog" | " Two days National Workshop on Recent Trends in VLSI Devices & Circuits (RTVDC- | Silicon Institute of Technology, Silicon | 24 th Feb, 2018 |

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|-------------|--|---|---|-------------------------------|
| | performances of Staggered heterojunction TFETs” | 2018 ” on 23 rd & 24 th February 2018 Organized by The Departments of Electronics & Communication Engg. And Applied Electronics & Instrumentation Engg. In association with IEEE EDS Bhubaneswar-Kolkata Chapter & IEEE ED KGEC SB Chapter | Hills, Patia, Bhubaneswar, Odisha | |
| 10 | Invited lecture talk on “Emerging Nanoscale Devices” | “Emerging Trends in Electronic Devices and Computational Techniques “ (EDCT 2018) Technically co-sponsored by IEEE Kolkata section and organized by Guru Nanak Institute of Technology, Sodepur, West Bengal | Guru Nanak Institute of Technology, Sodepur, West Bengal | 9 th March, 2018 |
| 2017 | | | | |
| 9 | Invited lecture talk on “Benefits of IEEE Membership” | IEEE Membership Awareness Program along with the some highlights of some engineering topics to motivate the students in the research field organized by Techno India Batanagar IEEE Student Branch (STB64618) | Techno India Batanagar, Kolkata | 9 th August, 2017 |
| 2016 | | | | |
| 8 | Invited lecture talk on “RF/analog performances of Staggered heterojunction TFETs” | 1 st International Conference on VLSI Device, Circuit & System Jointly Organized by IEEE MSIT Student Branch, IEEE MSIT EDS Student Branch Chapter, IEEE EDS Kolkata Chapter, IEEE SSCS Kolkata Chapter In Association with the Dept. of ECE, MSIT Technically Co-sponsored by IEEE Kolkata Section on October 19 th -20 th , 2016 | Meghnad Saha Inst. of Technology Auditorium, Kolkata, India | 19 th October 2016 |
| 7 | Invited Lecture Talk on “Recent advances in scaling of nanoscale devices” | Inaugural session in the three-day Students Workshop on “Device, Circuit and Microwave Engineering” [financially sponsored by TEQIP-II] held on 3 rd August to 5 th August 2016 at RCC Institute of Information Technology, Kolkata | RCC Institute of Information Technology, Kolkata | 3 rd Auguts, 2016 |
| 6 | Invited Lecture Talk on “Fundamentals of Semiconductors: Materials and Physics” | Workshop On “ Fundamentals of Electronics & Communication Systems ” from 18 th -22 th July, 2016 Organized By TEQIP, Department of Electronics and Communication Engineering, Narula Institute of Technology, Kolkata, India | Narula Institute of Technology, Kolkata, India | 20 th July, 2016 |
| 5 | Invited Lecture Talk on “Advanced CMOS devices” | One Day IEEE Seminar On “ RF/analog performance of CMOS Devices ” in Two Days’ National Seminar On Recent Advances on Semiconductor and Solar Technology (RASST-2016) held in Mallabhum Institute of Technology Bishnupur, Bankura, W.B., India on 6-7 th May, 2016 | Mallabhum Institute of Technology Bishnupur, Bankura, W.B. | 06 May, 2016 |
| 2015 | | | | |
| 4 | Invited Lecture Talk on “Advanced CMOS devices” | One Day IEEE Seminar On “ Advanced CMOS Technology ” Organized By DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING & ELECTRICAL ENGINEERING, Bengal Institute of Technology and Management (BITM), Bolpur | BITM, Bolpur, Santiniketan, India | 4 th October, 2015 |
| 3 | Invited Lecture Talk on “Scaling of nanoscale CMOS technology for mixed-signal SoC design: Opportunities and challenges” | Workshop On “ Microelectronics & VLSI Design using Advanced Simulation Tools ” from 29 th June-10 th July Organized By Department of Electronics and Communication Engineering, Narula Institute of Technology, Kolkata, India | Narula Institute of Technology, Kolkata, India | 10 th July, 2015 |
| 2014 | | | | |
| 2 | Invited Lecture Talk on “Simulation Study Of Short-Channel Effects In Sub-100nm | Faculty Development Programme on “ Advances In Microelectronics ,VLSI Design and Optoelectronics Devices with Mixed Signal Analysis ” Organized By Department of | Narula Institute of Technology, Kolkata | 13 January, 2014 |

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|---|---|---|---|--------------------------------------|
| | MOSFETs” | Electronics and Communication Engineering, Narula Institute of Technology, Kolkata, India on 13-25 th January, 2014 | | |
| 1 | Invited Lecture Talk on “Short Channel Effects in Sub-micron MOSFETs: Their Remedies” | IEEE (EDS) sponsored National Workshop On Advanced NANO Device and its Applications (NWANDA-2014) Organized by IEEE (EDS Kolkata Chapter) & Department of Electronics & Telecommunication Engg. & Applied Electronics & Instrumentation Engg. Of Silicon Institute of Technology, Bhubaneswar, Odisha, India | Silicon Institute of Technology, Silicon Hills, Patia, Bhubaneswar, Odisha, India | 18 th January, 2014 |

Session Chair/Judge/Jury

| <i>Sl No.</i> | <i>Role</i> | <i>Name of the Programme</i> | <i>Name of the Track</i> | <i>Place</i> | <i>Date</i> |
|---------------|------------------|--|--|---|--------------------------------|
| 2021 | | | | | |
| 21 | Session Chair | IEEE International Conference on Communication, Information and Computing Technology (ICCICT-2021) organized by Sardar Patel Institute of Technology, Mumbai | IoT, VLSI and Embedded System | Online mode | 27 June, 2021 |
| 2020 | | | | | |
| 20 | Session Chair | Int. Conference ICCIC 2020 (International Conference on Contemporary Issues in Computing – ICCIC) held on 25- 26 July 2020 organized by the international organizing committee of ICCIC and is technical co- sponsored by The Electro Inventor and Gargi Memorial Institute of Technology, Baruiapur | Electron Devices and Antenna at 12:00 – 02:00 PM | Virtual Mode (Online) organized by the international organizing committee of ICCIC | 25 July, 2020 |
| 19 | Session Chair | International Conference “ IEEE VLSI DCS 2020 ” organized by IEEE EDS MSIT Student Branch Chapter on 18 th -19 th July, 2020 | TRACK -10 entitled “Devices for Low Voltage Application” at: 1.00 PM-3.00 PM | Virtual mode organized by Meghnad Saha Inst. of Tech. Student Branch Chapter | 19 th July, 2020 |
| 18 | Session Judge | International Conference/Zonal Seminar/Students’ Convention hosted by Institution of Electronics and Telecommunication Engineers, Kolkata Centre on the theme: “IOT in present Wireless Revolution (IOTWR-2020)” | Technical session II: IoT based Applications at 10 AM | Online mode | 27 th June 2020 |
| 17 | Session Chair | ICAN 2020 an Indo-Taiwan Int. Conf. held in Chitkara University, Chandigarh on (February 14-15, 2020) | Track 4 - Networks and Communication ” | Chitkara University, Chandigarh, Punjab | 15 February, 2020 |
| 2019 | | | | | |
| 16 | Session Judge | ELECTROFUSION organized by Department of Electronics & Communication Engineering, GNIT, Sodepur | Judge for the judgment of the demonstrated projects to decide the winners | GNIT, Sodepur | 23 September, 2019 |
| 2018 | | | | | |
| 15 | Session Chair | Acted as a session chair in 1st International Conference on "Emerging Trends in Electronic Devices and Computational Techniques " (EDCT 2018) organized by Guru Nanak Institute of | Track 1: "Microwave and Antenna", at 2:00 pm | Guru Nanak Institute of Technology, Sodepur, | 9 March, 2018 |

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|-------------|---------------|---|--|---|-----------------------|
| | | Technology, Sodepur, and Technically co-sponsored by IEEE Kolkata section | | West Bengal | |
| 14 | Jury | Science Fair on in Techno India Batanagar College | For the judgment of the demonstrated projects to decide the winners | Techno India Batanagar College | 23 February , 2018 |
| 2017 | | | | | |
| 13 | Session Chair | International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTECH 2017) on 28th & 29th April, 2017 organized by Electronics and Communication Engineering Department of IEM, Kolkata | session in "Signal & Image Processing" | Science City, Kolkata | 29th April, 2017 |
| 2016 | | | | | |
| 12 | Session Chair | 1st International Conference on VLSI Device, Circuit & System Jointly Organized by IEEE MSIT Student Branch, IEEE EDS Kolkata Chapter, IEEE SSCS Kolkata Chapter In Association with the Dept. of ECE, MSIT Technically Co-sponsored by IEEE Kolkata Section on October 19th-20th, 2016 | Technical-session in "Advanced MOSFETs" | MSIT Auditorium, Kolkata, India | 19 October 2016 |
| 11 | Session Chair | 1st International Conference on Computational Science and Engineering (ICCSE 2016) funded by TEQIP-II on 4-6 October, 2016 organized by Dept. of ECE and CA of RCCIIT, Kolkata | Technical-session on "Heterojunction Devices and Circuits" | CII-Suresh Neotia Centre of Excellence for Leadership, Salt Lake, Kolkata | 5 October 2016 |
| 10 | Session Chair | 1st International Conference on Nanocomputing and nanobiotechnology (NanoBioCon 2016) ", held on 3-5 October, 2016 organized by MAKAUT, WBUT, funded by TEQIP-II, WBUT | Technical-session on "Devices and Circuits" | Science City, Kolkata | 5 October 2016 |
| 9 | Session Chair | National Conference on Advanced Computation in Electronics & Remote Sensing, 2016 (NCACERS-16) " funded by TEQIP-II, held in 19th to 20th August, 2016 | Technical-session on Devices and Circuits | Narula Institute of Technology, Agarpara | 20 August 2016 |
| 8 | Session Chair | 3rd International Conference on Microelectronics, Circuits and Systems, Micro-2016 , organized by MAKAUT (formerly WBUT) in association with IASTM, on 09th -10th July, 2016 | Technical-session-II (Wireless Comm. and sensor networks) | Science city Auditorium, Kolkata, West Bengal, India | 10 July, 2016 |
| 7 | Session Judge | 3rd International Conference on Microelectronics, Circuits and Systems, Micro-2016 , organized by MAKAUT (formerly WBUT) in association with IASTM, on 09th -10th July, 2016 | Technical-session-III,V and VII | Science city Auditorium, Kolkata, West Bengal, India | 09th -10th July, 2016 |
| 2015 | | | | | |
| 6 | Session Chair | National Conference Frontline Research in Computer, Communication and Device 2015 (FRCCD 2015) | Track III (Antenna and Wave Propagation) and Track IV (Device and Photonics) | RCC Institute of Technology, Kolkata | 29th December, 2015 |
| 5 | Session chair | 4th International Conference on Computing, Communication and Sensor Network (CCSN-2015) technically co-sponsored by IEEE(EDS) Kolkata Chapter | Track V (Devices & Circuits) | Vivada Cruise Ship, Kolkata | 24 December, 2015 |
| 4 | Session chair | 2nd International Conference on 'Microelectronics, Circuits and Systems (Micro 2015)' from 11th -12th July, 2015 | Technical-session-3 | Hotel Peerless Inn, Kolkata, | 11 July, 2015 |
| 3 | Session | 2nd International Conference on | Technical- | Hotel Peerless | 11 July, |

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|---|---------------|--|---|--------------------------------------|--------------------|
| | Judge | 'Microelectronics, Circuits and Systems (Micro 2015)' from 11th -12th July, 2015 | seesion-6 | Inn, Kolkata, | 2015 |
| 2 | Session chair | Int. Conf. on Computer, Communication, Control and Information Technology, C3IT-2015 during 7th-8th February, 2015 | Track in "Device Technology" | Academy of Technology, , West Bengal | 8 February, 2015 |
| 1 | Expert Jury | Event on "Ethical Hacking" sponsored by IE(I), student Chapter of ECE Dept. | To evaluate the technical oral presentation | RCC Institute of Technology, Kolkata | 15 September, 2015 |

Review Activities

Book Review

- CRC Press, USA
- Willey Publications, USA
- Oxford University Press

Journal Review ([Publons public profile](#) of Prof. Angsuman Sarkar)

- **IEEE & IET**
 - IEEE Electron Device Letter , IEEE
 - IEEE Transactions on Nanotechnology, IEEE
 - IEEE Transactions on Electron Devices, IEEE
 - IEEE Sensors
 - Micro & Nano Letters by IET
 - Electronics letters by IET
 - IET Nanotechnology
- **Springer**
 - Journal of Computational Electronics
 - Applied Physics A Materials science and processing
 - Micro System Technologies
 - Journal Applied Physics A
 - Silicon
 - Journal of Materials Science: Materials in Electronics
 - SN Applied Sciences
 - Optical and Quantum Electronics
- **Elsevier**
 - Superlattices & Microstructures (SM)
 - Microelectronics Journal (MEJ)
 - Microelectronics Reliability
 - Solid State Electronics
 - Sensors & Actuators: A. Physical
 - Journal of Computational Science
 - International Journal of Electronics and Communications
 - Computers & Electrical Engineering
 - Ain Shams Engineering Journal
 - Solid State Electronics Letters
 - Applied Surface Science
- **Taylor & Francis**
 - International Journal of Electronics (IJE)
 - International Journal of Electronics Letters
- **IOP**
 - Physica Scripta
 - Journal of Micromechanics and Microengineering
 - Engineering Research Express

- Semiconductor Science & Technology
- **Wiley**
 - International Journal of Numerical Modelling: Electronic Networks, Devices and Fields by Wiley
- **American Institute of Physics (AIP)**
 - Journal of Applied Physics (JAP)
- **Bentham Science Publishers**
 - Nanoscience & Nanotechnology-Asia
 - Micro and Nano Systems
- **Inderscience Publishers**
 - International Journal of Nanoparticles
 - International Journal of Nano and Biomaterials
- **World Scientific Publishers**
 - International Journal of High Speed Electronics and Systems
 - International Journal of Quantum Information
- **Others**
 - Journal of Passive and Active Electronic Devices by Old City publications, UK
 - IETE Technical Review
 - Facta Universitatis, Series: Electronics and Energetics
 - Nanomaterials and Energy by ICE Publications
 - Journal of Nanoelectronics and Optoelectronics, by ASP publishers
 - International Journal of Physical Sciences by Academic journals
 - SOP Transactions on applied physics by Scientific Online Publishing, CA, USA
 - Journal of Electrical Engineering & Electronic Technology SciTechnol, OMICS, Journals, USA
 - Journal of Electrical and Electronics Engineering Research by Academic journals, India
 - Journal of Microprocessor Engineering and applications (JoMEA) by STM Publication, India
 - Journal of Semiconductor Devices and Application(JoSED) by STM Publication, India
 - WSEAS Transaction on Electronics, WSEAS, USA
 - WSEAS Transaction on Circuits and Systems, WSEAS, USA
 - WSEAS Transactions on Signal Processing, WSEAS, USA
 - Journal of Semiconductors, China
 - Journal of Optoelectronics and Advanced Materials , Romania
 - Journal of Sensor Research Technology, STM journals, India
 - Journal of nano Research, Transtech publishings, Switzerland
- **Reviewer of Conferences (Selected)**
 - Students' Conference on Engineering and Systems, SCES-2014, IEEE conference record number: 33522
 - ICECS 2013 IEEE International Conference of Electronics, Circuits & Systems, Abu Dhabi, UAE, December 9-12 2013
 - Calcon 2014 National Conference on Electrical, Electronics, and Computer Engineering (A Triennial Event of IEEE Kolkata Section)
 - 1st International Conference On Emerging Trends in Computer Science and Information Technology “ETCSIT-2015” in Kalyani Government Engineering College during 5-7th January, 2014
 - International conference on Computer, Communication, Control and Information Technology, C3IT-2015, during 7th-8th February, 2015 in Academy of Technology, Hoogly, West Bengal, India
 - International Conference on Microelectronics, Computing and Communication (MicroCom 2016) @ NIT Durgapur, West Bengal a TEQIP-II sponsored event which is technically co-sponsored by IEEE Kharagpur section.
 - 9th International Conference on Circuits, Systems, Signal and Telecommunications, WSEAS
 - Micro2015, 2nd International Conference on 'Microelectronics, Circuits and Systems, 11th -12th July, 2015 in Kolkata, India.
 - National Level Conference on “Frontline Research in Computer, Communication and Device” (FRCCD-2015) December 29-30, 2015 Organized by Department of Electronics and Communication Engineering, RCC Institute of Information Technology
 - 4th International Conference on Electronics, Communications and Networks (CECNet 2014), Beijing, China, 12-15 Dec, 2014

- The International Conference on Computational Advancement in Communication Circuits and Systems (ICCACCS 2014) held during 30th October to 1st November 2014 at Narula Institute of Technology, Agarpara, Kolkata, India.
- Micro2016, 3rd International Conference on 'Microelectronics, Circuits and Systems, 09th -10th July, 2016 in Kolkata, India.
- Second International Conference on Computational Intelligence, Communications, and Business Analytics (CICBA-2018)
- First International Conference on Microelectronic Devices and Technologies (MicDAT '2018) in Barcelona, Spain
- GLOBAL AI CONGRESS 2019 (GAIC 2019) in IEM, Kolkata
- The International Conference on Data Sciences, Security and Applications (ICDSSA, 2019)

Publication Summary

- Books- **6**
- Book Chapter-**10**
- Journals - **86**
- Conference -**51**
- Citations- **736** , h-index: **15**, i10-index:**20** (Source: <http://scholar.google.co.in/citations?user=Ofu4cWkAAAAJ&hl=en>)

Books Published

| Sl. No. | Title | List of Authors | Publisher | Date of Publication | ISBN NO./ Edition/No. of Pages/ Price |
|---------|---|---|--|---------------------|---|
| 1 | Low Power VLSI Design Fundamentals | Angsuman Sarkar, Swapnadip De, Manash Chanda, Chandan KumarSarkar | DE GRUYTER OLDENBOURG, Germany | August 2016 | 978-3-11-045529-8, Edition: 1st No. of Pages:310 Price: 129,95 € / \$182.00 / £97.99* |
| 2 | Solid State, Microelectronic and Optoelectronic Devices | Angsuman Sarkar and Chandan Kumar Sarkar | University Press (India) Pvt. Ltd., Hyderabad, India, Distributed by Orient BlackSwan Pvt. Ltd. | January 1, 2012 | 978-81-7371-770-3 Edition: 1st No. of Pages: 664 Price: 410 (INR) |
| 3 | VLSI design and EDA tools | Dr. Angsuman Sarkar; Dr. Swapnadip De; Dr. Chandan Kumar Sarkar; | Scitech Publications (India) Pvt. Ltd. Chennai, India | January 1, 2014 | 978 81 8371 497 6 Edition: 2nd No. of Pages:905 Price: 650 (INR) |
| 4 | VLSI Design and EDA Tools | Angsuman Sarkar; Swapnadip De; C K Sarkar | Scitech Publications (India) Pvt Ltd., Chennai, India | January 1, 2011 | 978 81 8371 452 5, Edition: 1st No. of Pages:1430, Price: 750 (INR) |
| 5 | Subthreshold Modeling of Submicron MOSFETs Short Channel Mosfets: Conventional and Dual Material Gate (DMG) | Angsuman Sarkar | LAMBERT Academic Publishing, GmbH & Co. KG, Address: Dudweiler Landstraße 99, 66123 Saarbrücken, Germany | October 7, 2011 | 978-3-8465-2209-7 Edition: 1st No. of Pages:104 Price: 49.00€ |
| 6 | Subthreshold Surface Potential Model for Short- | Dr. Angsuman Sarkar | LAMBERT Academic Publishing, GmbH | February 27, 2014 | 978-3659126093 Edition: 1st No. of Pages:84 Price: 35.50€ |

Contributed Book Chapter Authored

| Sl. No | Title of the Book | Chapter Name | Authors | Publisher | Editor In Chief | Date of Publication | ISBN No. | Price | URL |
|--------|---|--|--|---|--|---------------------|---|-----------|----------------------|
| 10 | Emerging Trends in Terahertz Engineering and System Technologies Devices, Materials, Imaging, Data Acquisition and Processing | Performance Estimation of Defected Ternary Photonic Crystal-Based Bandpass Filter Beyond 100 THz for All-Optical Circuit | Arpan Deyasi Angsuman Sarkar | Springer, Singapore | Arindam Biswas, Amit Banerjee, Aritra Acharyya, Hiroshi Inokawa | March, 2021 | Print ISBN9 78-981-15-9765-7 | 96.2 9 € | Link |
| 9 | Advanced Materials for Future Terahertz Devices, Circuits and Systems | Analysis of Optical Performance of Dual-Order RAMAN Amplifier Beyond 100 THz Spectrum | Rajarshi Dhar, Arpan Deyasi, Angsuman Sarkar | Springer Singapore | Dr. Aritra Acharyya, Prof. Dr. Palash Das | March, 2021 | Print ISBN: 978-981-334-488-4 Electronic ISBN: 978-981-334-489-1 | | Link |
| 8 | Computational Intelligence in Digital Pedagogy | Authentic Pedagogy: A Project-Oriented Teaching-Learning Method Based on Critical Thinking | Arpan Deyasi, Swapan Bhattacharya, Pampa Debnath, Angsuman Sarkar | Springer, Singapore | Arpan Deyasi et al. | November 20, 2020 | 978-981-15-8743-6 | 149, 99 € | Link |
| 7 | Emerging Trends in Terahertz Solid-State Physics and Devices | THz Bandpass Filter Design Using Metamaterial-Based Defected 1D Photonic Crystal Structure | Arpan Deyasi, Angsuman Sarkar | Springer, Singapore | Biswas A., Banerjee A., Acharyya A., Inokawa H., Roy J. | March 21, 2020 | 978-981-15-3234-4 | 96\$ | Link |
| 6 | Methodologies and Application Issues of Contemporary Computing Framework | Investigation of the Effect of Barrier Layer Engineering on DC and RF Performance of Gate-Recessed AlGaIn/GaN HEMT | Shubham Mondal, Sritoma Paul, Angsuman Sarkar | Springer Nature Singapore Pte Ltd. 2018 | Mandal, J.K., Mukhopadhyay, S., Dutta, P., Dasgupta, K. | 22 September 2018 | 978-981-13-2344-7 | EUR 93.08 | Link |
| 5 | Nanotechnology Synthesis to Applications | Nanoscience with Graphene | Dr. Angsuman Sarkar | CRC Press | Sunipa Roy, Chandan Kumar Ghosh, Chandan Kumar Sarkar | January 1, 2018 | 978113 803273 6 | £125 .00 | Link |
| 4 | Nanotechnology Synthesis to | Electrical transport in Nanostructure | Dr. Angsuman Sarkar | CRC Press | Sunipa Roy, Chandan | January 1, 2018 | 978113 803273 6 | £125 .00 | Link |

| | Applications | | | | Kumar Ghosh, Chandan Kumar Sarkar | | | | |
|---|---|---|------------------------------|---------------------------------------|--|------------------|-------------------|------------|----------------------|
| 3 | Computational Science and Engineering: Proceedings of the International Conference on Computational Science and Engineering | Analytical modeling and sensitivity analysis of dielectric-modulated junctionless gate all around gate stack—FET as biosensor | A. Chakraborty, A. Sarkar | CRC Press | Arpan Deyasi | 19 December 2016 | 978-1-138-02983-5 | 150\$ | Link |
| 2 | Intelligent computing, Communication and Devices Advances in Intelligent Systems and Computing Volume 308, 2015, pp 479-486 | An Analytical Surface Potential Model of Surrounding Gate Tunnel FET | Soumen Paul, Angsuman Sarkar | Springer, Singapore | Jain, Lakhmi C., Patnaik, Srikanta, Ichalkaranje, Nikhil | August 26, 2014 | 978-81-322-2011- | EUR 213.99 | Link |
| 1 | TCAD Simulation for VLSI MOSFET | Device Simulation Using SILVACO ATLAS Tool | Dr. Angsuman Sarkar | CRC Press, Taylor & Francis Group, UK | C.K.Sarkar | May 16, 2013 | 978-1-46-651265-8 | 99\$ | Link |

Journals Published

2021

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Workshop/Refresher Courses Undertaken

- 1) Content generation Programme of Edusat in WBUT, Kolkata conducted by ISRO, WBUT and NITTTR on 19-23 Auguts,2008
- 2) The Pedagogy & Teaching Methodology Training Programme with duration of two-week conducted by the Center of Personal Transformation in Jalpaiguri Govt. Engg. College from 28 July-3rd Aug, 2008 and 22-28 Aug, 2008
- 3) AICTE sponsored two-week Faculty development programme on "soft computing approach in cryptography" from 17-28 Jun, 2013 in Kalyani Government Engineering College
- 4) Workshop on Efficient Generation and Utilization of Energy organized Jadavpur university and Jalpaiguri Government Engineering College on 22-23 March 2007

- 5) Short-term Course on "DSP Tools a& Practice" conducted by G.S.Sanyal School of Telecommunications, IIT , Kharagpur on June 06-11, 2005
- 6) Workshop on "Mechatronics" organized by Jalpaiguri Government Engineering College on 16-21 April, 2008
- 7) Summer School on "Techniques for design, fabrication and computation of integrated circuits" in the institute of radio physics and electronics, university of calcutta during 23rd may-13th june, 2012
- 8) Complimentary seminar on Matlab and simulink for engineering education on 24th Aug-2010 and 21-Dec-2011
- 9) AICTE sponsored two-week Faculty development programme on "organization of decision tools using soft computing & matlab" from 30-28 Jan, 2012-10th February, 2012 in Kalyani Government Engineering College
- 10) short-term course on "Application of neural network, fuzzy logic & genetic algorithm in engineering" in jalpaiguri govt. engg. college during 4-8th august, 2008
- 11) Two-week ISTE workshop on "Database Management System" conducted by IIT Bombay from 21st-31st may, 2013
- 12) One-week Coordinator workshop on "signals & Systems" conducted by IIT Kharagpur from 30th Sep-4th October, 2013
- 13) Faculty Development Programme on "Smart Grid: Adoption in India" conducted by Tata Consultancy Services on 20th Dec, 2013
- 14) AICTE Sponsored Two Weeks Winter School on Soft Computing Approaches in Pattern Recognition, Image Processing and Matlab on 8th January to 20th January 2015

References

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