

Books published

1. Optimal Space Flight Navigation - An Analytical Approach, Ashish Tewari (AE), Birkhauser, Boston, U.S.A., 2019, ISBN: 9783030037888.
2. Adeno-associated Virus Vectors in Gene Therapy In Gene and Cell Therapy: Biology and Applications (eds), Jayandharan G. (BSBE), Springer, Singapore, 2018.
3. Gene and Cell Therapy- Biology and Applications, Jayandharan G. Rao (BSBE), Springer, Singapore, 2018.
4. Pollutants from Energy Sources, R. A. Agarwal, A. K. Agarwal, Tarun Gupta, N Sharma (CE), Springer, 2019.
5. Design of housing for faculty and staff: an overview, Kathpalia, Rajiv; Hoof, Sonke; Sudhir K. Jain, Shobhit Tayal, Palanthandalam-Madapusi, Harish, Greene, Marjorie and Kethineedi, Mouli (CE), 2018, ISBN: 978-81-934412-5-1.
6. Aqueous Phase Adsorption: Theory, Simulations and Experiments, Jayant K. Singh, Nishith Verma (CHE), Taylor & Francis/CRC Press, FL, USA.
7. Efficiency and Budget Balance in General Quasi-linear Domains, Swaprava Nath (CSE), journal Games and Economic Behavior.
8. Computational Intelligence: Theories, Applications and Future Directions-Volume I (ICCI-2017), Nishchal K. Verma, A. K. Ghosh (EE/AE), Springer, 2019, ISBN 978-981-13-1131-4.
9. Computational Intelligence: Theories, Applications and Future Directions-Volume II (ICCI-2017), Nishchal K. Verma, A. K. Ghosh (EE/AE), Springer, 2019, ISBN 978-981-13-1134-5.
10. Basic Electronics: Problems & Solutions, K. Vasudevan (EE), Ane Books Pvt. Ltd., New Delhi, 2018.
11. Analog Communications: Problems & Solutions, K. Vasudevan (EE), Ane Books Pvt. Ltd., New Delhi, 2018.
12. English for Engineers, N. P. Sudharshana, C. Savitha (HSS), New Delhi: Cambridge University Press, 2018, ISBN: 978-110-87-1644-4.
13. Revised Bridge Course: Teachers' Handbook, N. P. Sudharshana (HSS), Dept of Education, Govt of Madhya Pradesh, 2018a.
14. Revised Bridge Course: Students' Handbook, N. P. Sudharshana (HSS), Dept of Education, Govt of Madhya Pradesh, 2018b.
15. Human Adjustment Processes, Braj Bhushan, A. Bajpai (HSS), Ane Books Pvt. Ltd., New Delhi, 2018, ISBN-10: 9386761947, ISBN-13: 978-9386761941.
16. Faith and Social Movements: Religious Reform in Contemporary India, Anindita Chakrabarti (HSS), Cambridge University Press, 2018, ISBN: 978-1-107-16662-2.
17. Advances in Information Technology/Systems and manufacturing Systems, R. R. K. Sharma (IME), LAP LAMBERT Academic Publishing, Germany, 2018, ISBN-13: 978-613-87800-0; ISBN-10: 6139878004.
18. Relating organizational variables to functional areas of the firm, R. R. K. Sharma (IME), Lap Lambert Academic Publishing, Germany, 2018, ISBN: 978-613-897-3.
19. Relating personality, culture and information systems, innovation to strategy, R. R. K. Sharma (IME), Lap Lambert Academic Publishing, Germany, 2018, ISBN: 978-3-659-88509-9.
20. Articles in operations and supply chain management, R. R. K. Sharma (IME), Lap Lambert Academic Publishing, 2018, ISBN: 978-613-9-91751-8.
21. Research Topics in Organizational Variables: Strategy, Structure and Systems, R. R. K. Sharma (IME), Excel publishers New Delhi, 2018, ISBN: 9-789-388-237116.
22. Research Topics in Organizational Variables: Strategy, Structure and Systems: Part 2, R. R. K. Sharma (IME), Excel publishers New delhi, 2019, ISBN: 978-93-88237-41-3.
23. Regulatory Framework for Long-Term Demand Forecasting and Power Procurement Planning, Anoop Singh, ManvendraPratap, Abhishek Das, Piyush A. Sharma, Kamal K. Gupta (IME), Centre for Energy Regulation, 2018, ISBN 978-93-5321-969-7.
24. Modeling Transport Phenomena in Porous Media with Applications, Malay K Das, PP Mukherjee, K. Muralidhar (ME), Springer International Publishing, 2018, ISBN 978-3-319-69864-9.
25. Air Pollution and Control, Nikhil Sharma, Avinash K Agarwal, Peter Eastwood, Tarun Gupta, Akhilendra P Singh (ME), Springer, Singapore.
26. Coal and Biomass Gasification, Santanu De, Avinash K Agarwal, V S Moholkar, Thallada Bhaskar (ME), Springer, Singapore.
27. Physics of Buoyant Flows -From Instabilities to Turbulence, Mahendra Verma (PHY), World Scientific, Singapore.

Fellowships

1. Professor Arun K. Shukla (BSBE) has been selected for the Swarnajayanti Fellowship in Life Sciences by Department of Science and Technology, Govt. of India.
2. Professor Animangsu Ghatak (CHE) has been elected as Fellow of the Indian National Academy of Engineering, India.
3. Professor Nishith Verma (CHE) has been awarded the Fulbright-Nehru Academic and Professional Excellence Fellowship to conduct research and teaching at Stony Brook University at NY.
4. Professor J. K. Bera (CHM) has been awarded the J. C. Bose National Fellowship by Science and Engineering Research Board (SERB), a statutory body of DST, Government of India.
5. Professor Manas K. Ghorai (CHM) has been elected as a Fellow of the Indian Academy of Sciences (FASc), India.
6. Professor Debabrata Goswami (CHM) has been elected a Fellow of The Institute of Physics (IOP), UK.
7. Professor Manabendra Chandra (CHM) has been selected for Young Faculty Research Fellowship by MEITY, Govt. of India.
8. Professor Ashis K. Patra (CHM) has been selected for HRSMC Fellowship by Holland Research School of Molecular Chemistry, Netherlands.
9. Professor Madhav Ranganathan (CHM) has been selected for Tec21 Grant for visiting researcher to LIPhy, Grenoble, France
10. Professor Raju Kumar Gupta (CHE) has been selected for P. K. Kelkar Young Faculty Research Fellowship by IIT Kanpur.
11. Professor Yogesh Singh Chauhan (EE) has been selected for the Swarnajayanti Fellowship in Engineering Sciences by Department of Science and Technology, Govt. of India.
12. Professor Aditya K. Jagannatham (EE) with his students Mr. Suraj Srivastava and Ms. Saumya Dwivedi, Department of Electrical Engineering, have been selected for the Qualcomm Innovation Fellowship (QInF) 2018-2019.
13. Professor M Jaleel Akhtar (EE) has been selected for IETE fellowship by IETE, INDIA.
14. Professor Rajiv Sinha (ES) has been selected for COFUND Senior Research Fellowship by Durham University, UK.
15. Professor Santanu Misra (ES) has been selected for PK Kelkar Young Faculty Fellowship by IIT Kanpur.
16. Professor Subhas C. Misra (IME) Engineering, has been elected as a Fellow by the British Computer Society London.
17. Professor Subhas C. Misra (IME) Engineering, has been elected Fellow of the Institution of Electronics and Telecommunication Engineers, UK.
18. Professor Mohua Banerjee (Math) has been nominated as a Fellow of the International Rough Set Society (IRSS).
19. Professor Shalabh (Math) has been selected for fellowship from Indian Academy for Mathematical Modeling and Simulation (IAMMS).
20. Professor BVR Kumar (Math)) has been selected for FIAMMS fellowship by Indian Academy for Mathematical Modeling and Simulation (IAMMS)
21. Professor Avinash K. Agarwal (ME) has been admitted as Fellow of The Royal Society of Chemistry (FRSC).
22. Professor Avinash Agarwal (ME) has been elected as Fellow of the National Academy of Sciences, India (NASI).
23. Professor Anshu Gaur (MSE) has been selected for Visvesvaraya Young Faculty Research Fellowship, Digital India Corporation, MeitY, Govt. of India.

Awards and Honours

1. Professor Sathesh Mariappan, Department of Aerospace Engineering, has been selected for the INAE Young Engineer award, India.
2. Professor D. P. Mishra, Department of Aerospace Engineering, has been conferred the National Design Award in Mechanical Engineering-2018 for his outstanding contribution in the field of engineering design by the Institution of Engineers, India.
3. Professor D. P. Mishra, Department of Aerospace Engineering, has been chosen for the Excellence in Aerospace Award (2017) by The Aeronautical Society of India.
4. Professor Arun Shukla, Department of Biological Sciences and Bioengineering, has been chosen Rajib Goyal prize for young scientists.

5. Professor Arun Shukla, Department of Biological Sciences and Bioengineering, has been selected as one of the recipients of the National Bioscience Award of DBT, New Delhi.
6. Professor Arun Shukla, Department of Biological Sciences and Bioengineering, has been selected for the Professor Rita Mulherkar Lecture Award by the Indian Society of Cell Biology.
7. Professor Arun Shukla, Department of Biological Sciences and Bioengineering, has been selected for the Shakuntala Amir Chand Prize 2017 by the Indian Council of Medical Research (ICMR).
8. Professor Arun Shukla, Department of Biological Sciences and Bioengineering, has been selected for the Young Researcher Award of the Lady Tata Memorial Trust.
9. Professor Ashutosh Sharma, Department of Chemical Engineering, has been selected to receive a State University of New York Honorary Doctorate in Science.
10. Professor Raju Kumar Gupta, Department of Chemical Engineering, has been selected for the Young Scientist Award by the Council of Science and Technology, Uttar Pradesh.
11. Professor Sandeep Verma, Department of Chemistry, has been chosen for the Goyal prize.
12. Professor Debabrata Goswami, Department of Chemistry, has been honored by the International Society for Optics and Photonics (SPIE) as SPIE Fellow (2019).
13. *Inorganica Chimica Acta*, a prominent international journal of Inorganic Chemistry, has published a special issue in honor of Professor R. N. Mukherjee, Department of Chemistry, on the occasion of his 65th birthday.
14. Professor Debabrata Goswami, Department of Chemistry, has been awarded the 2018 ICO Galileo Galilei Award by the International Commission for Optics.
15. Professor J. N. Moorthy, Department of Chemistry, has been selected for the Silver Medal of the Chemical Research Society of India (CRSI).
16. Professor S. P. Rath, Department of Chemistry, has been selected for the C N R Rao National Prize in Chemical Sciences instituted by C N R Rao Educational Foundation and Chemical Research Society of India (CRSI) for promotion of Chemical Research.
17. Professor Vinod K. Singh, Department of Chemistry, has been awarded the Professor Subramania Ranganathan Memorial Medal (2018) of Indian National Science Academy.
18. Professor Salil Goel, Department of Civil Engineering, has been selected for the Young Geospatial Scientist 2018 award and the Rachapudi Kamakshi Memorial Gold Medal.
19. Professor Tarun Gupta, Department of Civil Engineering, has been selected for the INAE Innovator Entrepreneur Award 2018.
20. Professor Sachchida Nand Tripathi, Department of Civil Engineering, has been awarded 2018 UP Ratna Award, Government of Uttar Pradesh.
21. Professor Salil Goel, Department of Civil Engineering, has been selected for the Young Geospatial Scientist 2018 award and the Rachapudi Kamakshi Memorial Gold Medal.
22. Professor Nitin Saxena, Department of Computer Science and Engineering, has been awarded the S. S. Bhatnagar Prize (2018) in Mathematical Sciences. The award recognizes his outstanding work on the Polynomial Identity Testing Approach in the field of Complexity Theory.
23. Professor Mainak Chaudhuri, Department of Computer Science and Engineering, has been honored by Intel Corp Technology Excellence Award as an expression of Intel India's gratitude for his exemplary contribution, commendable collaboration, and purposeful engagement with Intel India.
24. Professor S. C. Srivastava, Department of Electrical Engineering, has received the Malaviya Award for Excellence in Power Systems 2018.
25. Professor Santanu Mishra, Department of Electrical Engineering, has received the 2018 Premium Award for best paper in IET Power Electronics.
26. Professor Yogesh Singh Chauhan, Department of Electrical Engineering, has been chosen for the CNR Rao Faculty Award.
27. Professor Ketan Rajawat, Department of Electrical Engineering, has been selected for INSA Medal for Young Scientist 2018.
28. Professor R. R. K. Sharma, Department of Industrial and Management Engineering, received the Quarterly Franklin Membership award (Membership ID#RA87720) given by Editorial Board of London Journals Press (UK) 2019 for impactful research contribution in management and industrial engineering. London Journals Press (UK) is an internationally acclaimed publication organization and an accreditation authority for research standards.
29. Professor Monica Katiyar, Department of Materials Science and Engineering, has been selected for this year's Metallurgist of the Year Award from the Ministry of Steels and Mines, Government of India.
30. Professor Tanmoy Maiti, Department of Materials Science and Engineering, has been awarded 2019 Early Career Scholars in Materials Science by Journal of Materials Research, MRS.

31. Professor Krishanu Biswas, Department of Materials Science and Engineering, has been selected by the Electron Microscopy Society of India (EMSI) for Excellence in Microscopy award 2018.
32. Professor Shalabh, Department of Mathematics and Statistics, has been selected for the Vigyan Ratna Award by the Council of Science and Technology, UP under the category of Science Awards.
33. Professor Somnath Jha, Department of Mathematics and Statistics and Dr. Ketan Rajawat, Department of Electrical Engineering, have been awarded the INSA Medal for Young Scientist 2018.
34. Professor K. Muralidhar, Department of Mechanical Engineering, has been recommended by ASTFE Honors and Awards Committee to become a Fellow of The American Society of Thermal and Fluids Engineers (ASTFE) in recognition of his outstanding contributions to the field of Thermal and Fluids Engineering.
35. Professor Gautam Biswas, Department of Mechanical Engineering, has conferred Honorary Doctorate by Aristotle University of Thessaloniki, Greece.
36. Professor P. Venkitanarayanan, Department of Mechanical Engineering, has been selected for the prestigious 2019 F. Zandman award of the Society of Experimental Mechanics based in CT-USA.
37. Professor Mahendra Verma, Department of Physics, received the Dr. A. P. J. Abdul Kalam Cray HPC award on 21st April 2018 at NIAS Bangalore.
38. Professor Amit Agarwal, Department of Physics, has been awarded the “IPA N. S. Satya Murthy Memorial Award in Physics-2016” of the Indian Physics Association.

Appointments

1. Professor Sandeep Verma, Department of Chemistry, has joined as Secretary, Science and Engineering Research Board, New Delhi (a statutory body of DST, Ministry of Science and Technology, Government of India).
2. Professor J.N. Moorthy, Department of Chemistry, has joined as the Director of IISER Trivandrum.
3. Professor Kantesh Balani, Department of Materials Science and Engineering, has been selected as the 2018 ASM-IIM Visiting Lecturer for giving talks in US and Canada under the banner of the American Society of Metals, International.

Editorship/Membership

1. Professor R. Sankararamkrishnan, Department of Biological Sciences and Bioengineering, has been invited to be in Editorial Board Member of Scientific Reports, a Nature Publishing Group.
2. Professor Jayandharan G. Rao, Department of Biological Sciences and Bioengineering, has been selected by the American Society of Gene and Cell Therapy to serve in their Physical Delivery, Therapeutics & Vector Development Committee for the term, May 2019 to May 2022.
3. Professor Jayandharan G. Rao, Department of Biological Sciences and Bioengineering, has been invited to be a part of the education and outreach committee of the International Society of Thrombosis and Hemostasis, USA for a second term [2018-2020].
4. Professor V. Shankar, Department of Chemical Engineering, has been invited to be in Journal of non-Newtonian Fluid Mechanics, Elsevier.
5. Professor Raju K. Gupta, Department of Chemical Engineering, has been invited to join the Editorial Board of Elsevier journal 'Solar Energy' as an Associate Editor. He will be mainly looking after Chemical Processes, Photocatalysis and Solar Environmental Applications.
6. Professor S. P. Rath, Department of Chemistry, has been invited to join the Editorial Board of the journal Chirality. Chirality publishes scientific work on the role of molecular asymmetry in both biologically active and non-biologically active molecules in respect to their pharmacological, biological, and chemical properties. It is published by Wiley, USA.
7. Professor Basker Sundararaju, Department of Chemistry, has been invited to serve as an associate editor of the Journal of Heterocyclic Chemistry (JHC). JHC is a peer- reviewed scientific journal summarizing progress in the field of heterocyclic chemistry. It is published by Wiley-Blackwell (United States).
8. Professor Basker Sundararaju, Department of Chemistry, has been invited to serve as an Early Career Advisory Board Member of ACS Catalysis, American Chemical Society.
9. Professor Sandeep Verma, Department of Chemistry, has been invited by ChemBioChem to serve on its Editorial Advisory Board.
10. Professor Jitendra K Bera (CHM) has been invited to join as an Associate Editor of Applied Organometallic Chemistry, AOC, Wiley Inter science.

11. Professor Debabrata Goswami, Department of Chemistry, has been invited to serve as an academic editor of the Journal 'PLOS ONE'.
12. Professor Sachchida Nand Tripathi, Department of Civil Engineering, has been appointed the Associate Editor (atmospheric sciences) of The Journal of Indian Geophysical Union.
13. Professor Nihar Ranjan Patra, Department of Civil Engineering, has been invited as a member of Editorial Board of Indian Geotechnical Journal (2019).
14. Professor Priyanka Ghosh, Department of Civil Engineering, has become the member of Editorial Review Board in International Journal of Geotechnical Earthquake Engineering (2018).
15. Professor Nischal Verma, Department of Electrical Engineering, has been included in Editorial Board as an Associate Editor of IEEE Transactions on Neural Networks and Learning Systems for the year 2019.
16. Professor Nischal Verma, Department of Electrical Engineering, has been appointed as an Associate Editor of IEEE Computational Intelligence Magazine for a fourth term.
17. Professor Nishchal Verma, Department of Electrical Engineering, has been included as one of the Guest Editors of IEEE Access for a Special Section on Advances in Prognostics and System Health Management.
18. Professor Ketan Rajawat, Department of Electrical Engineering, has been appointed as an Associate Editor of IEEE Communication Letters.
19. Professor M. Jaleel Akhtar, Department of Electrical Engineering, has been appointed as the Editor of IETE Technical Review, Taylor & Francis.
20. Professor Rajiv Sinha, Department of Earth Sciences, joins as a Member of Editorial Board of journal Earth Surface Processes & Landforms, Wiley Interscience.
21. Professor Arbind K Lal, Department of Mathematics & Statistics, joins as a Member of Editorial Board of journal Proceedings-Mathematical Sciences, Springer.
22. Professor K. Muralidhar, Department of Mechanical Engineering, joins as the Editor-in-Chief of Journal of Flow Visualization and Image Processing.
23. Professor Bishakh Bhattacharya, Department of Mechanical Engineering, joins the International Journal of Systems Science as an Associate Editor.
24. Professor Sameer Khandekar, Department of Mechanical Engineering, will guest editor a special issue of Microgravity Science and Technology entitled Heat pipe systems for thermal management in space.
25. Professor Kantesh Balani, Department of Materials Science & Engineering, joins as the Editor-in-Chief of the journal Nanomaterials and Energy, ICE Publication.
26. Professor Kallol Mondal, Department of Materials Science & Engineering, joins as the Editor of Scientific Reports, Nature Publishing Group.
27. Professor Sudeep Bhattacharjee, Department of Physics, has been invited to join the Editorial Board as a founding member of Plasma Research Express (PREX), a new journal of Institute of Physics (IOP), for a period till 31st December 2020.
28. Professor Amit Dutta, Department of Physics, has been invited to join as Member of Editorial Board of European Physical Journal B, Springer.

Student Awards (Undergraduate)

1. Mr. Indra Kanshana (AE) received the Best Student Presentation Award for his paper at FMFP-2018 held at IIT Bombay, Mumbai, India during December 10-12, 2018.
2. Mr. Sourav Sinha (AE) won the Vertical Flight Foundation Scholarship of the Vertical Flight Society, USA for 2019 in MS category.
3. Ms. Siddhi Singh (BSBE) received the Outstanding Poster Presentation Award in the 48th Annual Conference of Endocrine Society of India held in Bhubaneswar during November 15-18, 2018.
4. Ms. Krutika Kalkal (CE) received the Young Researcher Award for her presentation at the USMCA (New Technologies for Urban Safety of Megacities in Asia) 2018 International Conference held at the International Institute of Information Technology Hyderabad during December 12-14, 2018.
5. Mr. Anshul Yadav (CE) and Ms. Shubhangi Singh (CE) won the UNIGIS award for the Best Student Presentation at the Geospatial Capacity Building Session 2019 as a part of Geosmart India 2019 Conference held in New Delhi during February 11-13, 2019.
6. Mr. Sayash Kapoor (CSE) received the Best Technical Paper Award at ACM Conference on Fairness, Accountability and Transparency 2019 held during January 29–31, 2019.
7. Mr. Pawan Kumar Patel (CSE) won the Silver Medal in the category Information and Communication Technologies in the Computer Programming contest at the National Abilympics 2018 organized by the National Abilympics Association of India.

8. A team comprising of Mr. Tushar Gupta, Mr. Madhukant, Mr. Pratyush Varshney, and Mr. Nilesh Vasita (CSE) secured the Third Position in the Embedded Security Challenge Cyber Security Awareness Week 2018 organized at IIT Kanpur. All except Pratyush are in the BTech Programme. Pratyush is from the MSR programme.
9. Mr. Abhinay Natti (CSE) and Mr. Dheeraj Athrey Bammidi (CSE) secured the first position in the CSEDM Data Challenge held as part of the CSEDM Workshop (2nd Educational Data Mining in Computer Science Education Workshop) held at LAK 2019, Arizona State University, Tempe AZ, USA on March 5, 2019.
10. Mr. Arjun Gupta, Ms. Shreya Shree, Mr. Manish Chauhan and Ms. Ayushree Gupta (EcoS) won the National Round of 'RBI Policy Challenge 2019' held at the RBI Headquarters in Mumbai.
11. Mr. Vipul Bajaj (EE), Mr. Saumya Shah (EE), and Ms. Ishika Singh (CHE) won the Grand Prize at the national level competition Deloitte Techno Utsav 2.0. They were adjudged as the best team out of over 9,500 students from 52 campuses across India.
12. Mr. Vipul Bajaj (EE), Mr. Saumya Gaurang Shah (EE), and Ms. Ishika Singh (ChE) won the Grand Prize at the national level competition Deloitte Techno Utsav 2.0 being adjudged as the best team after competing with over 9,500 students from 52 campuses across India.
13. Mr. Pragya Shukla (MSP) and Ms. Shikha Awasthi, a Joint Doctoral student at the Institute bagged the Research Ratna Award in Surface Engineering Section at Research under Literal Access at Trichy, Tamil Nadu on February 26, 2019.
14. Mr. Kunjal Shah (PHY) had his publication selected as a Featured Article in the journal 'Physics of Fluids'.
15. Mr. Chitres Guria (PHY) was awarded First Position in the Oral Presentation (Physics) for his paper presented in the Research Conclave 2019 held at IIT Guwahati during March 14-17, 2019.
16. Team IGVC (Mr. Aalap Shah, Mr. Hemanth Bollamreddy, Mr. Harsh Sinha, Mr. Deep Parikh, Mr. Abhishek Yadav, Mr. Vaibhav Agarwal, and Mr. Vardhan Gupta) were awarded the NVIDIA GPU Grant award.
17. Team Daksh (Mr. Harsh Sinha, Mr. Aalap Shah, Mr. Hemanth Bollamreddy, Mr. Abhishek Yadav, Mr. Vaibhav Agarwal, Mr. Vardhan Gupta, Mr. Apurva Nandan, Mr. Aryan Choudhary, Mr. Faizan Siddiqui, Mr. Kishan Shukla, Mr. Nitik Jain, Mr. Shivam Kumar, and Mr. Tushar Singhal) scored multiple positions at IGVC (Intelligent Ground Vehicle Competition) held at Rochester, Michigan from June 7-10, 2019. The team competed with 36 other international teams.
18. Mr. Arpit Gupta, Mr. Parv Mor, and Mr. Hritvik Taneja (CSE) stood first in the "unlimited storage category" at the value prediction championship organized at the annual flagship conference of computer architecture, ISCA (International Symposium on Computer Architecture).

Student Awards (Postgraduate)

1. Mr. Anil Kumar Singh (PHY) received Flat Chem Elsevier Best Poster Award in the 8th edition of largest European conference and exhibition in Graphene and 2D Materials, Graphene-2018, held at Dresden during June 26-29, 2018.
2. Mr. Anjani Kumar Pandey (CHM) received the Best Poster Award in 23rd CRSI National Symposium in Chemistry (CRSI-NSC-23) held at IISER Bhopal during July 13-15, 2018.
3. Mr. Dibya Jyoti Sivananda (PHY) received the Best Poster Award, at the National Conference on Quantum Condensed Matter (Q-Mat 2018) which was held in IISER Mohali during July 25 - 27, 2018.
4. Mr. Aman Nikhil (BSBE) was awarded Springer Nature Best Oral Presentation certificate for his oral presentation at the International conference on Bio Materials, Bio Engineering and Bio Theranostics (BioMET2018) organized by Centre for Biomaterials Cellular and Molecular Theranostics at VIT, Velloreduring July 24-28, 2018.
5. Mr. Shubham Katiyar (ME) was awarded the Speaker of the Day Award in 5th International Conference on Computational Methods for Thermal Problems, (ThermaComp) 2018 held at the Indian Institute of Science Bangalore from July 9-11, 2018.
6. Ms. Anjali Dwivedi (ME) was awarded the "Ronald W. Lewis Award - Runner Up" in 5th International Conference on Computational Methods for Thermal Problems (ThermaComp) 2018 held at the Indian Institute of Science Bangalore from 9-11 July 2018.
7. Mr. Vinayak A Drave (IME) received the Best Creative Idea for Entrepreneurship award at the Summer Entrepreneurship Camp in Taiwan
8. Mr. Burra Gunasekhar (BSBE) received prestigious EMBO Short-term Fellowship to work on a collaborative research project at the University of Sussex, UK.
9. Mr. Priyank Rastogi (EE) received the Best Research Oriented Paper for the IETE- SK Mitra Memorial Award for his paper published in IETE Journal of Research March-April 2017 issue.

10. Mr. Anuj Kumar More (MTH-STATS) received the Best Student Paper Award for his paper presented at the International Joint Conference on Rough Sets (IJCRS 2018) held during August 20-24, 2018, at QuyNhon, Vietnam.
11. Dr. Saptarshi Ghosh (EE) was selected for the conferment of INAE Innovative Student Projects Award 2018 at Doctoral Level for his PhD thesis.
12. Dr. Abhijit Chandra Roy (CHE) was selected for the INAE Innovative Student Projects Award 2018 at the Doctoral Level for his PhD thesis.
13. Ms. Annwasha Dutta (PHY) had her research article published in the Proceedings of the National Academy of Sciences (PNAS).
14. Mr. Shashank Sharma (ME) received the Best Poster Award for his poster presented at COMSOL 2018, Bangalore.
15. Ms. Pradhi Rajeev (CE) and her team received the Poster Competition Award in the International Aerosol Conference (IAC), 2018 held in St. Louis, USA from September 2-7, 2018.
16. Ms. Kajal Chaudhary (MSP) received the Best Poster Award in OSI-ISO-2018 Conference held at IIT Kanpur during September 19 – 22, 2018.
17. Mr. SaifiIzhar (CE) was awarded the Outstanding Poster Presentation Award by the American Geophysical Union and Chinese Academy of Science at the AJM 2018 Xian, China.
18. Mr. Vipul Bhatia (BSBE) won the Best Poster Award with a cash prize at the UK-India Cancer Bioinformatics Workshop 2018 held at the Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Tata Memorial Centre, Mumbai during October 28-31, 2018.
19. Dr. Virender (BSBE) has been awarded the Sailife-NOST Best Thesis Award 2018 of the National Organic Symposium Trust.
20. Dr. Abhijit Mal (CHM) has been awarded the Sailife-NOST Best Thesis Award 2018 of the National Organic Symposium Trust.
21. Mr. Ambuj Kumar Gautam (ME) received the Excellent Paper Award for his paper at the 12th International Collaboration Symposium on Information, Production and System 2018, held in the IPS Waseda University, Japan.
22. Dr. Sarvesh K. Pandey (CHM) was selected for the "Best Thesis Award - 2019" in Chemical Sciences. The award was presented at the Indian Society of Chemists and Biologists (ISCB) 25th ISCB International Conference (ISCB-2019) held in Lucknow during January 12 – 14, 2019.
23. Mr. Akash Aggarwal (ME) received the Best Poster Award in the 7th International Conference on Solidification Science and Processing (ICSSP-2018) held in Thiruvananthapuram during November 19-22, 2018.
24. Ms. Nabodita Sinha (BSBE) won the Second Prize for Poster Presentation in Basic Nanosciences at the 3rd International Nanobiotech Conference 2018 at AIIMS New Delhi.
25. Ms. Suneeti Mishra (CE) won the First Prize in Poster Presentation at the "Conference of Indian Aerosol Science and Technology Association-2018" held at IIT Delhi during 26-28 November, 2018.
26. Mr. Abhishek Sharma (EE) was awarded the AP-RASC (URSI Asia-Pacific Radio Science Conference) 2019 Young Scientist Award instituted by the International Union of Radio Science (URSI) for his submission to the 2019 URSI Asia-Pacific Radio Science Conference (AP-RASC 2019), New Delhi March 09-15, 2019.
27. Dr. Debdeep Sarkar (EE) was awarded the AP-RASC-2019 (URSI Asia-Pacific Radio Science Conference AP-RASC-2109) Young Scientist Award instituted by the International Union of Radio Science (URSI) for his paper presented at 2019 URSI Asia-Pacific Radio Science Conference (AP-RASC 2019), New Delhi, March 09-15, 2019.
28. Dr. Suchita (PHY) was the co-recipient of the Best Thesis Award of the Indian Laser Association in 2018. She was awarded at the DAE-BRNS National Laser Symposium (NLS 27) held during December 3-6 at RRCAT, Indore.
29. Ms. Shweta Sharma (CHE) received the Best Poster Award at the Complex Fluids Symposium (CompFlu) 2018 held at IIT Roorkee.
30. Dr. Soumava Mukherjee (EE) received the Best Paper Award at IEEE-INAE Workshop on Electromagnetics 2018 (IIWE 2018) held from 6-8 December 2018 at Thiruvananthapuram.
31. Dr. Soumava Mukherjee (EE) was selected for the AP-RASC (Asia-Pacific Radio Science Conference) 2019 Young Scientist Award instituted by the International Union of Radio Science (URSI).
32. Ms. Alekha Tyagi (MSP) received the Best Presentation Award in the "International Conference of Soft Materials (ICSM) 2018", held at MNIT Jaipur during December 09-14, 2018.
33. Mr. Rajesh Kumar (PHY) received the Best Poster Award in the 14th International Conference on Fiber Optics and Photonics - PHOTONICS 2018 held at IIT Delhi during December 12-15, 2018.
34. Mr. Ajitesh Singh (CHM) received the Best Poster Award in the 14th International Conference on Fiber Optics and Photonics - PHOTONICS 2018 held at IIT Delhi during December 12-15, 2018.

35. Mohd. Ali Abbas Zaidi (BSBE) received the Best Poster Award at the Biennial Meeting of the Indian Society of Developmental Biologists 2018, organized at IIT Kanpur during December 11 - 15, 2018.
36. Ms. Kritika Gupta (CHM) received the Best Poster Award in 9th Asian Biological Inorganic Chemistry (AsBIC9) Conference held in Singapore.
37. Ms. Aditi Kumawat (CE) was awarded the Best Presenter Award at the Indian Geotechnical Conference (IGC-2018) held in Bengaluru during December 13-15, 2018.
38. Dr. Keerti Choudhary (CSE) was awarded the 2018 ACM India Doctoral Dissertation Award for her PhD thesis titled "Compact and Efficient fault tolerant structures for Directed Graphs".
39. Mr. Debapratim Dhara (EE) received the Dr. Sudhakar Rao Best Student Paper Award at the 2018 IEEE Indian Conference on Antenna and Propagation (InCAP-2018) held at Hyderabad on December 16 -19, 2018.
40. Ms. Gaurangi Gupta (EE) was awarded the "Dr Sudhakar Rao Best Female Student Paper Award" at the 2018 IEEE Indian Conference on Antenna and Propagation (InCAP-2018) held at Hyderabad on December 16 -19, 2018.
41. Mr. Prasannabalaji Sundaram (AE) had his research article selected as a Featured Article in the journal Physics of Fluids.
42. Mr. Ravi Shakya (AE) had his research article selected as Featured Article in the journal Physics of Fluids.
43. Mr. Eshan Ghosh (BSBE) was selected as a co-recipient of Dr. J Nagaraju Memorial Research Awards in Life Sciences-2018.
44. Ms. Arpita Haldar (PSE) received the Best Oral Presentation Award in the International Conference on Optoelectronic and Nano Materials for Advanced Technology, held in Kochi (Kerala) during January 3-5, 2019.
45. Mr. Nitish Kumar Gupta (PSE) received the Best Oral Presentation Award in the International Conference on Optoelectronic and Nano Materials for Advanced Technology, held in Kochi (Kerala) during January 3-5, 2019.
46. Mr. Arijeet Mitra (ES) received the 'Raman Charpak Fellowship, 2018' for research and training in CRPG-CRNS, Nancy, France.
47. Mr. Nidhish Raj (AE) won First Runner Up Prize for Best Student Project in Aero India 2019, Bangalore for a design that can be used for payload / medicine delivery, surveillance and Air Taxi etc.
48. Mr. Tathagata Bandyopadhyay (CE) received the Second Prize for Outstanding presentation at the National Environmental Conference 2019, organized by IIT Bombay.
49. Ms. Annwasha Dutta (PHY) was selected for the Best Young Investigator Presentation in the International Conference on Multiscale Simulation & Mathematical Modelling of Complex Biological Systems – MSMM 2019”, jointly organized by Jawaharlal Nehru University (JNU) and Rice University, USA, held at JNU Delhi during January 30-February 01, 2019.
50. Ms. Soumita Boral (ES) received the Augmenting Writing Skills for Articulating Research" (AWSAR) 2018 Award from DST for her story on nutrient dynamics of Ganga River.
51. Ms. Meenaxi Sharma (PHY) received the Augmenting Writing Skills for Articulating Research (AWSAR) 2018 Award from DST for her popular science story.
52. Mr. Arka Ghosh (BSBE) received the "Augmenting Writing Skills for Articulating Research" (AWSAR) 2018 Award from DST for his popular science story.
53. Ms. Ayesha Nanda (PHY) received the Best Poster Presentation Award for her poster at the International Conference on Photonics, Metamaterials and Plasmonics (PMP-2019) held at the Jaypee Institute of Information Technology (JIIT), Noida during February 14 - 16, 2019.
54. Ms. Sucharita Maji (HSS) received the Best Paper Award for her paper in the 2nd Indian Congress of Industrial and Organisational Psychology held at MS University, Baroda during February 23 - 24, 2019.
55. Mr. Vipul Bhatia (BSBE) bagged the Best Oral Roche Scholar-In-Training Award at the 38th Annual Convention of Indian Association for Cancer Research at PGIMER, Chandigarh held during March 1-3, 2019.
56. Ms. Sakshi Goel (BSBE) received the Second Best Poster Presentation Roche Scholar-In-Training Award at the 38th Annual Convention of Indian Association for Cancer Research at PGIMER, Chandigarh held during March 1-3, 2019.
57. Mr. Nishat Manzar (BSBE) received the Second Best Poster Presentation Roche Scholar-In-Training Award at the 38th Annual Convention of Indian Association for Cancer Research at PGIMER, Chandigarh held during March 1-3, 2019.
58. Mr. Bidhan Hazra (CHM) received the Best Poster Award for his presentation at the 16th Theoretical Chemistry Symposium (TCS 2019) organized at BITS Pilani, Pilani Campus, during February 13-16, 2019.
59. Mr. Banshi Das (CHM) received the 'Best Poster Award' for his presentation at the conference "Dynamics at the Interface of Chemistry and Biology" held at IISc Bangalore during February 18-20, 2019.
60. Ms. Nidhi Sorout (CHM) received the 'Best Poster Award' for her presentation at the conference "Dynamics at the Interface of Chemistry and Biology" held at IISc Bangalore during February 18-20, 2019.

61. TEAM NIRATYAYA (Ms. Shreyasi Som, Mr. Sai Sowmya Nagam, Mr. Atul Kumar Soni, Mr. Avinash Kumar, Mr. Rakesh Kumar Panda and Mr. Shivam Kumar Srivastva) (EE) won the Software Edition Smart India Hackathon (SIH) 2019 held at Kochi.
62. Mr. Abhinav Gupta (CHM) received PCCP (Physical Chemistry Chemical Physics) Best Poster Prize at the Workshop and Symposium on Advanced Simulation Methods: DFT, MD and Beyond (ASM-2019) held at Indian Institute of Technology Delhi, during March 6-9, 2019.
63. Ms. Nidhi Sorout (CHM) received PCCP (Physical Chemistry Chemical Physics) Best Poster Prize at the Workshop and Symposium on Advanced Simulation Methods: DFT, MD and Beyond (ASM-2019) held at Indian Institute of Technology Delhi, during March 6-9, 2019.
64. Ms. Deepika (CHM) received PCCP (Physical Chemistry Chemical Physics) Best Poster Prize at the Workshop and Symposium on Advanced Simulation Methods: DFT, MD and Beyond (ASM-2019) held at Indian Institute of Technology Delhi, during March 6-9, 2019.
65. Mr. Chirag Kumar (EE) received the Best Oral Presentation Award at the Research Conclave'19 held at IIT Guwahati from March 14-17, 2019.
66. Ms. Ruchi Tripathi (EE) received the Best Poster Presentation Award at the Research Conclave'19 held at IIT Guwahati from March 14-17, 2019.
67. Ms. Rima Bhattacharya (HSS) was selected for a Scholarship to participate in the 2019 session of the Institute for World Literature, an apex body for World Literature, at Harvard University, during July 1-25, 2019.
68. Mr. Rajorshi Ray (HSS) was selected to attend the 2019 Summer Doctoral Programme at the Oxford Internet Institute (OII).
69. Mr. Sumanta Ghosh (CSE) had a research article published in the Proceedings of the National Academy of Sciences (PNAS).
70. Ms. Tiasa Bal (HSS) received a Scholarship to attend the Six-week 2019 Session of School of Criticism and Theory (SCT) at Cornell University.
71. Mr. Parvraj Bharatesh Pachore (EE) stood as 1st Runner-up in 'Student Innovation Pavilion, GRIDTECH 2019', an event organized by POWERGRID with the support of Ministry of Power in New Delhi during April 3-5, 2019.
72. Ms. Poonam Sundriyal (ME) won a Symposium Grant Award in the Battery and Energy Technology Joint General Session in the ECS 235th Conference held recently in Dallas, Texas, USA during May 26-30, 2019.
73. Mr. Vinayak Drave (IME) has been invited to deliver talk on engineering education in India and Chair a session in upcoming 3rd European IEOM conference to be held on July 23 – 26, 2019 in Pilsen, Czech Republic.
74. Ms. Meha Mishra (HSS) has received a Travel Grant from Association of Symbolic Logic (ASL) to participate in the 12th Panhellenic Logic Symposium being held in Greece from June 26-30, 2019. She has also been invited as a guest researcher in the University of Konstanz and University of Hamburg.
75. Mr. Shubham Maurya (BSBE) has received a Travel Grant to deliver a Platform Presentation at the XXVII Congress of the International Society of Thrombosis and Haemostasis and 65th Annual Scientific and Standardization Committee (SSC) Meeting to be held in Melbourne, Australia from July 6 – 10, 2019.
76. Mr. Debasish Ghorui (HSS) won an all India merit award for excellence in art at a recent art workshop organized by the Tourism, Art, Culture, Sports and Youth Affairs Department, government of Jharkhand and sponsored by the Eastern Zonal Cultural Centre, Government of India.
77. Mr. Kawshik Ray (HSS) was selected for the ASLE Travel Award for 2019 biennial conference of ASLE (Association for the Study of Literature and Environment) to be held in UC Davis, California.
78. Ms. Kamini Singh (IME) was awarded DAAD scholarship for the Indo-German Centre for Sustainability (IGCS) Summer School on Smart Grids: Electricity Networks as the Backbone of a Carbon Neutral Society.
79. Ms. Arpita Gupta (HSS) has been awarded the David B. Feinsilver Award to travel and participate in the ISPS (International Society for Psychological and Social Approaches to Psychosis) 2019 Conference to be held in Rotterdam from August 28, 2019 – September 1, 2019.
80. Ms. Sangita Dey (MTH & STATS) won the Best Poster Award at the International Conference on Differential Equations and control problems: Modeling, Analysis and computations held during Jun 17-19, 2019 at IIT Mandi.

Major Projects Sanctioned

1. Strategic University Network to Revolutionise Indian Solar Energy (EPSRC)
2. Manipulation of Structure, Composition and Properties of CuO Ceramics and Thin Films to Achieve Near Room Temperature Multiferroism for Device Applications (SERB)
3. Combination of EGFR Targeting Aptamers and Chemotherapeutic Agent in a Single Stimuli-Responsive Drug Delivery System for Improved Treatment of Triple Negative Breast Cancer (DBT)
4. A Study of Time Effects on Behaviour of Pile-Raft Foundations (BRNS)
5. Virtual Lab Phase III (MHRD)
6. Mixed Explosives Biodegradation for Remediation of Contaminated Ground Water (UGC)
7. Thermal Infrared Technologies for Supporting Environmental Assessment and Decision Making in the Ganges Basin (STFC)
8. Targeting Nexus of Metabolic and Neurodegenerative Disorders: Application in Lafora Disease and Islet Amyloid Deposits (SERB)
9. Mix-Energy-Source Electric Vehicle Charging System Design (DST)
10. Elucidation of Active Site Dynamics, Function and Receptor Binding of Insulin at the Single Molecular Level (SERB)
11. Rural Technology Action Group (PSA)
12. Construction of a Combined Recoil Ion Momentum and Electron Energy Spectrometer to Study Collision Induced Excitation and Fragmentation of Molecules and Clusters (SERB)
13. Scientific Validation of Ayurvedic Formulation Medicines Recommended for Mitigation of Cancer Anorexia Cachexia Syndrome (CACS) in The Drosophila Tumour Model (SERB)
14. Fundamental Process Engineering to Minimize Re-Oxidation of Steel During Teeming via a Ladle Shroud Leading to Improved Castability and Cleanliness (MOS)
15. EIL-ENG/SUI/SIIC (EIL)
16. Improved Description of The Water Cycle in the Upper Ganga Catchment Using Isotopic, Geochemical Data and Model Simulations (MOES)
17. Theoretical Studies of Hydrogen Bond Fluctuation and Time Dependent Infrared and Terahertz Spectroscopy of Aqueous Solutions of Complex Molecular Solutes (SERB)
18. Wind Tunnel Model Design, Fabrication & Testing of Flying Wing Configuration (ADE)
19. HDFC Bank CSR (HDFC)
20. Double Sn² Cascade for Biomimetic Total Synthesis of Anti-Diabetic Natural Products Chlorobietol A-C and Callistrilones A, B (SERB)
21. Electric Field Controlled Spin Dynamics In Nanomagnets (DST)
22. Developing A Compact Graphene Based Hall Sensor for Monitoring Steel Structures Under Stress in Advanced Materials (DST)
23. Identification of the Molecular Mechanism (S) by which Bmp Signaling Regulates the Migration of Mouse Cortical Neurons (DBT)
24. Delhi Air Quality Experiment: A Paradigm Shift in Source Apportionment (CPCB)
25. ICME National Hub-TCS Grant Project (TCS)
26. Development and Demonstration of Fibre-Optic Sensor-Based System for Aircraft Loads and Usage Monitoring (SERB)
27. Development of Energy Harvesting Device with Giant Power Density (~10 MW/SCM) Using Thin Film Multiferroic Composites (SERB)
28. Preparation of Cost-Effective Transition Metal Oxides-Dispersed Graphitic Nanocomposite-Based Electrodes of A Microbial Fuel Cell for Simultaneous Bioelectricity Generation and Cod Reduction in Waste water (SERB)
29. Skin-Friction Drag Reduction Through Control of the Turbulent Boundary Layer on Axisymmetric Bodies (NRB)
30. Automated Synthesis of Hot Ion Plans for Large Scale Multi-Robot Systems from Complex Specifications (DRDO)
31. Sparc: Development of 3d Printable Bone And Nerve Guiding Drug Eluting Composite Implants for Vertebral/Spine Trauma in Infection/Tuberculosis and Cancer (MHRD)

32. SPARC: Vibration Absorption Using Metamaterial Based Composites (MHRD)
33. SPARC: Deployment of Low-Cost Multi-Rotor Mini-UAVS for Early Detection of Crop Diseases and Development of an Optimal System for Management of Farming Activities (MHRD)
34. SPARC: Machine Learning for Lattice Quantum Chromodynamics (MHRD)
35. Development of A Non-Invasive Drug Delivery System for the Treatment of Posterior Eye Diseases (DBT)
36. Direct 3D Bioprinting Strategies to Study Articular Cartilage Development and Regenerative Therapy for Osteoarthritis (DBT)
37. Structural Basis of Activation, Signalling and Regulation of the Human Complement Receptor, C5ar1: A GPCR Drug Target in Sepsis and Inflammation (DBT)
38. Towards Realization of Additive Manufacturing of Aerospace Structural Component in India (SERB)
39. Technology Demonstrator of An Infra-Red Camouflage Screen Based on Large Area Metamaterials (SERB)
40. Experimental and Theoretical Investigations of Complex Rheological Behaviors in Time Dependent (Aging) Soft Materials (SERB)
41. Design and Development of Textile Based Metamaterial Absorber for Radar Stealth (SERB)
42. Passive Stall Control of Turbo Machinery Blades Using Leading Edge Tubercles (SERB)
43. Development of Amorphous Metal Oxy-Nitride Semiconductors for TFTS (SERB)
44. Michael Initiated Ring Closing Reactions: Enantioselective Synthesis of Highly Substituted Spiro-Cyclopropanes (SERB)
45. Low Altitude Long Endurance (LALE) Unmanned Aerial System (UAS) for Surveillance, Reconnaissance and Asset Monitoring (GAIL)
46. Stability Analysis, Protection and Coordinated Control of Networked Microgrids (DST)
47. The Development of Very High Resolution CFS Model Based on Icosahedral Grid (IITM)
48. Continuous Monitoring of Sampreeti Setu (New Jubilee Bridge): Instrumentation, Design And Health Assessment (ER-IR)
49. Femtosecond Laser Approaches to Quantum Information and Computation Towards a Perfectly Secure Channel for Robust and Scalable Information Processing (MEITY)
50. Delhi Air Quality Experiment: A Paradigm Shift in Source Apportionment (IIT Kanpur Part) (CPCB)
51. Xact 625i Ambient Metals Monitoring Systems (CPCB)
52. Delhi Air Quality Experiment: A Paradigm Shift In Source Apportionment (CPCB)
53. Center of Excellence for Defence Corridor (UPEIDA)
54. Development of Solid-State Thermoelectric Power Generator for Electricity Generation from Waste Heat in Steel Plant (SERB)
55. Advanced Control and Protection of Intelligent Dc Microgrids (SERB)
56. Fabrication of New Generation of Self Resorbing Implants and Devices from Bioactive and Biodegradable Materials for Orthopaedic Applications (MHRD, ICMR, ORPL)
57. Addressable Peptide-Polymer-Electrospun Nanofibers for Cell Sorting Diagnostics and Delivery (MHRD)
58. Biodegradable Polymers For Packing Applications (MHRD)
59. Aircraft Engine Combustor Design for Improved Operability, Durability, Pattern Factor and Emissions (MHRD, GE)

Labs/ Facilities developed

1. Stem Cell Research Facility (SCRF) was established with Institute funding to accelerate research in tissue regeneration and artificial organoids at AIC. PI: Professor Sandeep Verma (CHM).
2. Drum composting facility created for biodegradable municipal solid waste management of IIT Kanpur campus from Institute funds. PI: Professor Abhas Singh (CE).
3. State of the art laboratories continue to be developed at the SCDT-National Centre for Flexible Electronics.

4. ICME National Hub. PI: Professor Amarendra K. Singh (MSE).

Software developed

1. Developed a physics based helicopter comprehensive analysis software called CARMA (AE).
2. A physics-based software for flight dynamic analysis of helicopters has been developed with blade model having full flap-lag-torsion degrees of freedom, unsteady aerodynamics and dynamic inflow. This software has been transferred to Aeronautical Development Establishment (ADE) for its application in Naval Rotary Unmanned Aerial Vehicle Project (NRUAV) (AE).
3. Tread Will: automated delivery of cognitive behavioral therapy for depression (BSBE).

Technologies developed

1. Fully autonomous rotary winged unmanned aerial vehicle (RUAV) of 10 kg class has been developed at IIT Kanpur and the onboard autopilot software developed for autonomous control and navigation to this class of RUAVs has been transferred to HAL RWR & DC Bangalore. PI: Professor Abhishek (AE).
2. General purpose multi-platform / vehicle autopilot NAAVIK (Navigation for Autonomous Aerial Vehicles by IIT Kanpur) for autonomous control and navigation of fixed and rotary wing UAVs (AE).
3. A new high efficiency helicopter design has been developed which employs a novel method for anti-torque balancing of helicopter by employing dissimilar coaxial rotors (AE).
4. Innovative internal combustion engine powered high endurance variable pitch quadrotor Unmanned Air Vehicle has been developed and demonstrated (AE).
5. Variable pitch quadrotor tailsitter UAV for payload delivery: a proof of concept prototype has been developed and flight tested, a proposal has been submitted to HAL RWR&DC Bangalore (AE).
6. A novel low cost high efficiency Vertical Axis Wind Turbine (VAWT) with dynamic blade pitching (resulting in low startup speed and high power coefficient) suitable for low wind areas have been developed and demonstrated (AE).
7. Developed and demonstrated the flight of world's first Remote Controlled Boomerang UAV called "Sudarshan", a patent has been filed on this design (AE).
8. Designed a prototype development of hand launched (10kg class) fixed wing UAV for Tata Advisory Systems Limited (TASL). PI: Professor A. K. Ghosh (AE).
9. Solar UAV fixed wing; the design has been taken over by VTOL Aviation.). PI: Professor A. K. Ghosh (AE).
10. Designed and developed as flight tested a scale model of ADA, Stealth aircraft (Ghatak). PI: Professor A. K. Ghosh (AE.)
11. Designed and developed code to analyse stability aspects of super cavitating projectile (under water) NSTL Vishakhapatnam (AE).
12. A non-invasive nanoparticle-based sustained release ocular drug delivery system for the treatment of anterior and/or posterior eye diseases. PI: Professor D.S. Katti (BSBE).
13. Smartphone-based field monitoring tool for hexavalent chromium detection in groundwater: Developed in collaboration with Industry partners as part of the ongoing IMPRINT project this is the first smartphone-based tool that can successfully measure hexavalent chromium in water. Both laboratory and field trials in contaminated waters have been successful and having resulted in real-time monitoring of contaminated sites near Kanpur. PI: Professor Abhas Singh (CE).

14. Decentralized water treatment unit for chromium(VI) removal from contaminated groundwater: As part of the ongoing IMPRINT project. PI: Professor Abhas Singh (CE).
15. An integrated off-line smart air sampler with user-centric design. PI: Professor Tarun Gupta (CE).
16. Synthesis of a physical eco-friendly mixture of carbon microfibers and nanofibers for simultaneous scavenging of chromium from soil and increasing nutrient uptake in plant as a biofertilizer. PI: Professor Nishith Verma (CHE).
17. Cell Separation Technology based on Explicit Cell Surface Markers – Indian Patent (together with Professor S Ganesh and Professor S Patil, and student co-workers). PI: Professor Sandeep Verma (CHM).
18. Tax stamp labels (FlexE).
19. Heater jackets (FlexE).
20. Conductive pens (FlexE).
21. Solar cells on paper (FlexE).
22. Pig iron as sacrificial anode and corrosion resistant coating. PI: Professor Kallol Mondal (MSE).