

RESEARCH REPORT

April 2018 - March 2019



Research Tree

Concept note:

The symbol of a tree has been used to denote research as the driving force for dynamic growth and transformational development. The interconnected branches represent the collaborative nature of all the disciplines, nurturing NU's mission of scholarly excellence.



Annual Research Report (2018-19)

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- | | |
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Message from the Vice President

Over the years, Nirma University has made a distinct reputation for itself due to its constant efforts to stay relevant in the changing times and upgrade its curriculum and pedagogy. The University is constantly evolving as a well-known university on the international map. All this is possible due to the fact that Nirma University is constantly reinventing itself. Self-audit is the hallmark behind our success.

Even after almost two decades, care is taken at Nirma University to not become complacent. Over the years, the University has started admitting students through the Common Entrance Test conducted at national level by institutes of repute, including IITs and IIMs. This adds an extra edge to the existing student community and increases the competition, albeit in a healthy manner. In return, it adds value to the research environment of the respective institutes.

Every care is taken to provide the learners the best of facility, both in terms of infrastructure as well as academics. The University has already added new infrastructural facilities in the past one year, which will grow further by year 2020.

As we sit back and collate our research activities for the year 2018-19 and present them before our stakeholders, it gives me immense pleasure to congratulate our faculty members and the students who have worked so hard, day in and day out. I consider this as just a beginning. And we have miles to go to serve the humanity at large.

K. K. Patel
Vice President,
Nirma University

Message from the Director General

Dear Reader

Greetings!

Humankind is increasingly depending on research and innovation to solve its problems and to make progress. Nations the world over are earmarking greater outlay for research and innovation. We are today better, safer and healthier due to the impact of scientific endeavours. Universities are essentially knowledge enterprise. They are indeed the prime movers of research and innovation. They have best minds, interdisciplinary settings and appropriate culture to boost scientific inquiry and product development. They are best suited to translate science into technology and technology into commerce.

The Nirma University, Ahmedabad is committed to creating a better society through education and research & innovation. We encourage research at all levels: undergraduate, postgraduate and doctoral. Our faculty are actively engaged in research and knowledge generation. The pace of research activities at the University is accelerating.

Good research is interdisciplinary and collaborative. Hence, we encourage our various institutions to work with one another. In addition, the University collaborates with a host of national and international research organisations. This is reflected amply in our articles and publications.

Doctoral education is the fulcrum of the effective research and innovation process. We at the Nirma University are continuously strengthening doctoral education in all institutions by providing more doctoral scholarships and contingency grants. Doctoral students are given richer exposure through seminars, conferences, workshops and special events.

This is our fourth Annual Research Report. We have made several modifications to improve its presentation. I hope the Report will work as a bridge between us and our various stakeholders and patrons.

Best regards

Anup K Singh, PhD

Preface

Directorate of Research and Innovation (DRI) feels proud in publishing the 4th in row “Annual Research Report” providing brief account of research related activities for the information of all the Stakeholders of Nirma University.

Nirma University has laid a great emphasis on enhancing research and innovation spirit in all its faculty members and students at various levels. It is believed that outcome of quality research carried out at the University plays an important role in the development of nation. In the fast changing world, it has become necessary for faculty members of the University to keep pace with latest developments and propose effective solutions for new challenges emerging in their areas of expertise. At Nirma University, research has also become integral part of the teaching-learning process. Being well aware about their responsibilities as University teachers, faculty members of various constituent institutes of the University remain constantly engaged on some research assignments apart from their daily teaching-learning and other related activities. The University also provides seed funds in the form of minor and major research projects to promote research activities and support faculty members in their research. Giving importance to intellectual property, the University provides technical and financial support to its faculty members for filing patents also. Nirma University has identified Bank of Thrust Areas and based on which the faculty members work on diverse research areas mainly focusing on challenging societal problems based on the community needs. In order to strengthen research collaboration with Canadian Universities, this year the University has become member of Shastri Indo-Canadian Institute (SICI). The University has also entered in an MOU with ITER International Fusion Energy Organisation which will provide an opportunity to explore international, scientific and multicultural environment.

The DRI at Nirma University works as facilitator and catalyst for research related activities at the University. Several research training programmes, research orientation programmes, funding opportunity awareness sessions, and other research related seminars are regularly organised by the DRI. The present Research Report is a humble effort of the DRI to share the information related to research activities those have been carried out at all the constituent institutes of the University during April 01, 2018 to March 31, 2019. A very useful summary

as well as detailed report of research activities carried out, and outcome produced in the form of Ph.D. degrees awarded, research publications, book publications, patents, etc., are reported as evidence of active research. Several faculty members are also recognized for their notable research outcomes and are awarded by various agencies. With the quest of raising the benchmark for the quality research, in this report, only the noteworthy research outcomes have been included. Making effective use of Information and Communication Technology (ICT), the data for the Research Report were compiled through the tool developed in house.

During the financial year 2018-19, a total of eleven major research projects worth ₹ 3,01,48,810/= and four minor research projects worth ₹ 13,46,000/= are completed, which were funded by external agencies. Currently, twenty two externally funded major research projects worth ₹ 4,89,33,800/= and five externally funded minor research projects worth ₹ 22,75,000/= are ongoing. Moreover, this year a total of eight externally funded major research projects worth ₹ 6,29,68,274/= and seven minor research projects of ₹ 11,31,500/= were sanctioned.

To further strengthen research pipeline, Nirma University also provides support for research and this year, its first major research project worth ₹ 27,00,000/= is successfully completed. Moreover, twenty one minor research projects funded by Nirma University worth ₹ 18,33,000/= are also successfully completed this year. Furthermore, one major research project worth ₹ 28,92,400/= and one minor project worth ₹ 60,000/= is currently ongoing funded by Nirma University. In addition to this, the University has sanctioned this year one major research project worth ₹ 29,90,700/= and eleven minor research projects worth ₹ 12,80,000/=.

Faculty members of Institute of Technology were already working on several major projects funded by Indian Space Research Organisation (ISRO), now to add, a major research project funded by Defence Research & Development Organisation (DRDO) is also undertaken by the faculty members. It is noteworthy that the University has focus of research not only in Technology, Science and Pharmacy domains, but constituent institutes of the University have also started focusing on research in the domain of social science. As a result of that, Institute of Management of the University has received two major research projects funded by Indian Council of Social Science Research (ICSSR). Moreover, ICSSR was the lead sponsor of the 22nd Nirma International Conference on Management (NICOM) organised by Institute of Management during January 17-19, 2019.

This year also, especially for the publications, only the quality papers published in Scopus / Web of Science / ABDC / EBSCO indexed journals are considered, and a list of 158 such papers is included in the Report. In addition to the journals, total 18 books, 60 book chapters and 42 research papers in conference proceedings were published. Two patents are published and two new patents are filed during the year 2018-19. Total forty one doctoral students have received their degrees during this year. Apart from these, twenty five faculty members received research awards in different categories and ten faculty members got financial assistance to attend international conferences / workshops. Several research conferences, seminars, and workshops on emerging trends being organised by the constituent institutes in diverse areas. Alongwith this, more than 150 research talks and invited lectures of eminent speakers, have arranged by all the constituent institutes to enhance the research awareness and upgrade the knowledge.

We are thankful to all the funding agencies for providing funds for research, and the Management of Nirma University also for being supportive for research drive. We sincerely thank the University Management, the Vice President, and the Director General, for their valuable guidance at different stages in the journey of DRI and publishing this report. Support extended by the Executive Registrar also deserves special mention here. We express our sense of gratitude to all the esteemed members of the Editorial Board and entire team of DRI for their critical inputs to further improve the quality of the Report. Our special thanks to Prof. Sangita Shroff, Head – Department of Design for helping in getting the creative design of the front page. Thanks to Prof. Tanaya Vyas– Department of Design who designed the wonderful coverpage of the Report and provided the concept note. Finally, we thank all the Heads of the Institutes and Faculty Members of the University, who have put their untiring efforts to reach to a new milestone in this never ending but ecstatic journey of research.

Prof. (Dr.) P. N. Tekwani

Director

Directorate of Research and Innovation (DRI) – Nirma University

Chairman – Editorial Board

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University Research Statistics at a Glance



Nirma University Research Statistics at a Glance

April 01, 2018 - March 31, 2019

Major Research Projects		Total
Completed Major Research Projects	Projects Completed	12
	Total Grant	₹ 3,28,48,810/=
Ongoing Major Research Projects	Projects Ongoing	23
	Total Grant	₹ 5,18,26,200/=
Sanctioned Major Research Projects	Projects Sanctioned	09
	Total Grant	₹ 6,59,58,974/=
Minor Research Projects		
Completed Minor Research Projects	Projects Completed	25
	Total Grant	₹ 31,79,000/=
Ongoing Minor Research Projects	Projects Ongoing	06
	Total Grant	₹ 23,35,000/=
Sanctioned Minor Research Projects	Projects Sanctioned	18
	Total Grant	₹ 24,11,500/=
Research Publications		
Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals		158
Books Published		18
Book Chapters Published		60
Papers in Conference Proceedings		42
Patents		
Patents Published		02
Patents Filed		02
Cases Published / Copyrights Received		
Cases		03
Copyrights		02
Doctoral Research		
Ph.D. Degree Awarded		41
Current Ph.D. Students		312
Current Ph.D. Guides		175
Research Awards		
Research Awards Received by the Faculty Members		25
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Research Report of Institute of Technology



Institute of Technology Research Statistics at a Glance

April 01, 2018 - March 31, 2019

Major Research Projects		Total
Completed Major Research Projects	Projects Completed	06
	Total Grant	₹ 1,31,48,000 /=
Ongoing Major Research Projects	Projects Ongoing	12
	Total Grant	₹ 2,49,15,000 /=
Sanctioned Major Research Projects	Projects Sanctioned	02
	Total Grant	₹ 61,19,574/=
Minor Research Projects		
Completed Minor Research Projects	Projects Completed	16
	Total Grant	₹ 19,08,000 /=
Ongoing Minor Research Projects	Projects Ongoing	01
	Total Grant	₹ 7,50,000 /=
Sanctioned Minor Research Projects	Projects Sanctioned	07
	Total Grant	₹ 7,51,000/=
Research Publications		
Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals		62
Books Published		05
Book Chapters Published		07
Papers in Conference Proceedings		42
Patents		
Patents Published		01
Patents Filed		02
Doctoral Research		
Ph.D. Degree Awarded		17
Current Ph.D. Students		123
Current Ph.D. Guides		58
Research Awards		
Research Awards Received by the Faculty Members		11
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Conferences / Seminars / Research Talks		
Seminars / Workshops / Training Programmes Organised by the Institute		17
Research Talks Organised by the Institute		53

Research Projects

Major Research Projects

Completed Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Affordable PD Doped Perovskite Based Catalytic Converter for Abating Automotive Emission	Prof. Femina Patel, Prof. Sanjay Patel, Prof. Niraj Shah	Nirma University	27,00,000/=
2.	Design, Fabrication and Testing of a Corrugated Horn Antenna for Millimeter Wave Plasma Diagnostics	Prof. Dhaval Pujara	Board of Research in Nuclear Sciences (BRNS)	20,92,000/=
3.	Oceanic Pollution and other Ocean Phenomenon Monitoring using Feature Extraction from Multi-Polarized SAR Data	Prof. Tanish Zaveri, Prof. Pooja Shah	ISRO-RESPOND	18,26,000/=
4.	Algorithm for Water Pollutant Identification due to Sewage and Industry Disposals for South Karnataka Coast, Mangalore Region	Prof. Tanish Zaveri, Prof. Pooja Shah	ISRO-RESPOND	17,00,000/=
5.	Calibration and Validation of RISAT-1 SAR Sensor	Prof. Parul Patel	ISRO-RESPOND	37,60,000/=
6.	Design and Development of Spatio-Temporal Data Mining Techniques and Software Framework for Earth Observation Data	Prof. Sanjay Garg	Indian Space Research Organisation (ISRO)	10,70,000/=
Total Grant				1,31,48,000 /=

Ongoing Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Study and Development of Domain Adaptive Classification Algorithms for Advanced Earth Observation and Annotation System	Prof. Tanish Zaveri, Prof. Priyank Thakkar, Prof. Pooja Shah	ISRO-RESPOND	17,90,000/=
2.	Identification of Material and Distress for Road Network of Ahmedabad City using L and S Band Airborne SAR	Prof. Hemang Dalwadi, Prof. Parul Patel	ISRO-RESPOND	19,56,000/=

3.	Development of Low Cost Methodology for Surveying and Mapping with IRNSS	Prof. Parul Patel, Prof. Hemang Dalwadi	ISRO-RESPOND	17,05,000/=
4.	Identification of Existing Road Material, Condition and Potential Parking Area of Ahmedabad City using AVIRIS Data and Updation Plan of Undeveloped Road	Prof. Parul Patel, Prof. Hemang Dalwadi	ISRO-RESPOND	17,00,000/=
5.	Identification of Perched Water Table Areas in Irrigated Tracts and Seepage through Irrigation Canal Using Air-Borne SAR Data	Prof. Parul Patel	ISRO-RESPOND	20,67,000/=
6.	Using Deep Learning to Understand and Predict the Dynamics of Tokamak Discharges	Prof. Priyanka Sharma, Prof. Swati Jain	Board of Research in Nuclear Sciences (BRNS)	26,00,000/=
7.	Mining Crop Cover, Crop Type and Crop Stages From L & S Band SAR	Prof. Madhuri Bhavsar, Prof. Zunnun Narmawala, Prof. Swati Jain	ISRO-RESPOND	14,28,000/=
8.	Design Against Radiation Effects ASIC Standard Cell Library for VLSI Circuits	Prof. Niranjan Devashrayee, Prof. Nagendra Gajjar	Defence Research and Development Organisation (DRDO)	37,72,000/=
9.	SAR Polarimetry for Detecting Ocean Surface Targets	Prof. Alka Mahajan, Prof. Madhuri Bhavsar, Prof. Payal Prajapati	ISRO-RESPOND	18,52,000/=
10.	Development of Comprehensive Technique for Soil Moisture Estimation Using L & S Band Airborne Polarimetric SAR Data	Prof. Sanjay Garg, Prof. Priyank Thakkar, Prof. Vijay Ukani	ISRO-RESPOND	21,80,000/=
11.	Spectral Discrimination and Separability Analysis of Crops and Weeds Using Deep Learning Techniques	Prof. Tarjni Vyas	Indian Space Research Organisation (ISRO)	17,40,000/=
12.	Trajectory Planning for Robotic Arm for Automatic Damage Detection and Recognition of First Wall Tile Images in Tokamak Using Image Processing and Machine Learning	Prof. Swati Jain, Prof. Priyanka Sharma	Board of Research in Nuclear Sciences (BRNS)	21,25,000/=
Total Grant				2,49,15,000/=

Sanctioned Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Optimizing Parallelisation of Legacy Code on Appropriate HPC Platform	Prof. Madhuri Bhavsar, Prof. Gaurang Raval, Prof. Monika Shah	Board of Research in Nuclear Sciences (BRNS)	12,23,000/=
2.	Development of Integrated Wastewater Treatment Systems Using Alternative Innovative Approaches of Microbial Fuel Cells, Magnetic Nanoparticles and Vermicomposting with Water Hyacinth for Secondary Sludge Management	Prof. Chetna Chauhan, Prof. Nasreen Munshi, Prof. Manisha Shah This project is of interdisciplinary nature and combined with Institute of Science, Nirma University and Veer Narmad South Gujarat University	Gujarat State Biotechnology Mission (GSBTM)	48,96,574/=
Total Grant				61,19,574/=

Minor Research Projects

Completed Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	3-D Laser Triangulation based Object Height Measurement	Prof. Harsh Kapadia	Nirma University	1,00,000/=
2.	Prototype of Femto Satellite Using Embedded Processors for Internet of Space	Prof. Ami Shukla, Prof. Nagendra Gajjar, Prof. Niranjan Devashrayee	Nirma University	99,000/=
3.	Evaluation of Effect of Induced Shear in Blending of Powders on Mechanical Properties of Aluminium Based Metal Matrix Composites	Prof. Arvind Sankhla	Nirma University	50,000/=
4.	Development of Navigation Algorithm for Autonomous Mobile Robot	Prof. Vishal Vaidya, Prof. Ankit Sharma	Nirma University	1,00,000/=
5.	Synthesis, Characterization and Application of Polymer in Organic Solar Cell	Prof. Neha Patni	Nirma University	1,00,000/=

6.	Experimental Investigation on Behaviour of Structural System under Lateral Load	Prof. Utsav Koshti, Prof. Sharad Purohit	Nirma University	1,00,000/=
7.	Design of Walking Mechanism for a Bipedal Robot	Prof. Jatin Dave, Prof. Mihir Chauhan, Prof. Reena Trivedi	Nirma University	1,00,000/=
8.	Application of Acoustic Based Techniques for Detection of Machinery Faults	Prof. Dhaval Patel, Prof. Vipul Bhojawala, Prof. Kaushik Patel	Nirma University	1,00,000/=
9.	Experimental Investigations on Artificially Roughened Solar Air Heater	Prof. Sanjay Jain, Prof. Vikas Lakhera	Nirma University	1,00,000/=
10.	Tribology with Biodiesel: an Experimental Study to Identify Tribo-Corrosion Behaviour of Different Bio-Diesel	Prof. Absar Lakdawala, Prof. Tejas Raval	Nirma University	1,00,000/=
11.	Automation of Fertilization for Small Scale Farms	Prof. Vijay Savani, Prof. Akash Mecwan, Prof. Piyush Bhatasana	Nirma University	79,000/=
12.	Evaluation of Effect of Induced Shear in Blending of Powders on Mechanical Properties of Aluminium Based Metal Matrix Composite	Prof. Kaushik Patel, Prof. Arvind Sankhla	Nirma University	50,000/=
13.	Experimental Investigation on Residual Stress Developed During Friction Stir Welding	Prof. Nilesh Ghetiya	Nirma University	1,00,000/=
14.	Synthesis and Characterization of Magnetorheological Fluids Using Magnetorheometer	Prof. Hiren Prajapati, Prof. Mitesh Panchal	Nirma University	1,00,000/=
15.	Development of Low Cost Technique for Cu-Extraction from E-waste	Prof. Amita Chaudhary	Nirma University	1,00,000/=
16.	Experimental Investigations on Ultrasonic Single Point Incremental Forming (USPIF)	Prof. Bharat Modi, Prof. Ashish Gohil, Prof. Kaushik Patel	Gujarat Council on Science and Technology	5,30,000/=
Total Grant				19,08,000 /=

Ongoing Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Reduction of E-Factor in Dyes and Pigment Industries	Prof. Parin Shah	The Green Environment Services Co-op. Soc. Ltd., Vatva, Ahmedabad	7,50,000/=
Total Grant				7,50,000 /=-

Sanctioned Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Enhancement of a Downdraft Gasifier Performance with Lignite Feedstock	Prof. Darshit Upadhyay	Nirma University	1,00,000/=
2.	Experimental Investigations on Effects of Sediment Erosion on Pump as Turbine	Prof. Roshan Tandel, Prof. Sanjay Jain	Nirma University	1,00,000/=
3.	Design and Development of Multi Branch Heat Pipe and its Charging Set-Up	Prof. Anand Bhatt	Nirma University	1,00,000/=
4.	Synthesis of Rare Earth Doped Magnetic Nano Materials for Microwave Shielding	Prof. Chetna Chauhan, Prof. Tanuj Gupta	Nirma University	1,00,000/=
5.	Synthesis and Characterization of Manetically Hard/Soft-Srm/Ni Errite Nano Composites	Prof. Chetna Chauhan, Prof. Tanuj Gupta	UGC – DAE Indore	45,000/=
6.	Design and Fabrication of Permanent Magnet Motor for Electric Vehicle	Prof. Amit Patel. Prof. Tejas Panchal	Duke Plasto Technique Pvt. Ltd.	80,000/=
7.	Development of Split AC Test Rig Working on Inverter Technology and Charged with Environment Friendly Refrigerant R – 32 as a Laboratory Equipment for Engineering Students	Prof. Balkrushna Shah	ASHRAE (American Society of Heating Refrigerating and Air Conditioning Engineers)	2,26,000/=
Total Grant				7,51,000/=

Research Publications

Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals

1. Kumari, A et al. "Multimedia Big Data Computing and Internet of Things Applications: A Taxonomy and Process Model." *Journal of Network and Computer Applications* 124 (2018): 169–195.
2. Shah, D B et al. "Experimental Investigation on Spring-Back Deformation during Autoclave Curing of Parabolic Antenna Reflectors." *Composites Part A: Applied Science and Manufacturing* 115 (2018): 134–146.
3. Gajjar, S et al. "Low Energy Fuzzy Based Unequal Clustering Multihop Architecture for Wireless Sensor Networks." *Proceedings of the National Academy of Sciences India Section A - Physical Sciences* 88.4 (2018): 539–556.
4. Gadhavi, L J, and M D Bhavsar. "Prediction Based Efficient Resource Provisioning and its Impact on QOS Parameters in the Cloud Environment." *International Journal of Electrical and Computer Engineering* 8.6 (2018): 5359–5370.
5. Dhare, V H, and U S Mehta. "Multiple Missing Cell Defect Modelling for QCA Devices." *Journal of Electronic Testing: Theory and Applications (JETTA)* 34.6 (2018): 623–641.
6. Patel, R, S Patel, and M Joshipura. "Thermodynamic Analysis and Heat Integration for Hydrogen Production from Bio-Butanol for SOFC Application: Steam Reforming vs. Autothermal Reforming." *Energy Sources, Part A: Recovery, Utilization and Environmental Effects* 40.21 (2018): 2590–2598.
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14. Gupta, A K, and B A Modi. "Selection of Sustainable Technology for VOC Abatement in an Industry: An Integrated AHP–QFD Approach." *Journal of the Institution of Engineers (India): Series A* 99.3 (2018): 565–578.
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16. Patel, P V, S D Raiyani, and P J Shah. "Torsional Strengthening of RC Beams Using Stainless Steel Wire Mesh-Experimental and Numerical Study." *Structural Engineering and Mechanics* 67.4 (2018): 391–401.
17. Sharma, G et al. "Non-Linear LS-SVM with RBF-Kernel-Based Approach for AGC of Multi-Area Energy Systems." *IET Generation, Transmission and Distribution* 12.14 (2018): 3510–3517.
18. Tiwari, A K, U V Dave, and S Bansal. "Rheological Behaviour of Concrete with Some Supplementary Cementitious Material." *Indian Concrete Journal* 92.8 (2018): 11–18.
19. Panwar, A et al. "Frequency Stabilization of Hydro–hydro Power System Using Hybrid Bacteria Foraging PSO with UPFC and HAE." *Electric Power Systems Research* 161 (2018): 74–85.
20. Patel, C I et al. "Human Action Recognition Using Fusion of Features for Unconstrained Video Sequences." *Computers and Electrical Engineering* 70 (2018): 284–301.
21. Gandhi, P P, and N M Devashrayee. "A Novel Low Offset Low Power CMOS Dynamic Comparator." *Analog Integrated Circuits and Signal Processing* 96.1 (2018): 147–158.
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38. Gupta, M K, D S Sharma, and V J Lakhera. "Bubble-Induced Noise and Vibration in Cylindrical Shell Filled with Liquid Nitrogen." *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science* 232.5 (2018): 804–814.
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Books Published

Sr. No.	Name of the Faculty	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Pavan Khetrpal	Power System Operation and Control	Technical Publication, Pune	978-93-33214-60-5	2018
2.	Pavan Khetrpal	Power Generation and Economics	Technical Publication, Pune	978-93-33217-54-5	2018
3.	Richa Mishra, Ratna Rao	A Text Book of English & Communication Skills	Macmillan Publishers, India Pvt. Ltd., Chennai	938-88-2694-9	2019
4.	Mittal M, Sudeep Tanwar, Agarwal B, Goyal L	Energy Conservation for IoT Devices: Concepts, Paradigms and Solutions	Springer Nature Singapore Pvt. Ltd., Singapore	978-981-13-7399-2	2019
5.	Priyank Thakkar, Krunal Varma, Vijay Ukani, Sapan Mankad, Sudeep Tanwar	Information and Communication Technology for Intelligent Systems (ICTIS 2018) - Volume 2	Springer, Singapore	978-981-13-1747-7	2019

Book Chapters Published

Sr. No.	Name of the Faculty	Name of the Book Chapter	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Sandeep Hideshkumar Malhotra, Kinjal Solanki, Hemant Goklani	Compressed Sensing and Applications by using Dictionaries in Image Processing	Introduction of Computational and Applied Mathematics	Research India Publication	978-93-87374-35-5	2018
2.	Sandeep Malhotra, Rootvish Mehta	Solution of Stiff Differential Equations & Dynamical Systems using Neural Network Methods	Introduction of Computational and Applied Mathematics	Research India Publication	978-93-87374-35-5	2018
3.	Swami Saran, Hasan Rangwala, S Mukerjee	Seismic Analysis and Design of Retaining Walls and Shallow Foundations	Advances in Indian Earthquake Engineering and Seismology	Springer	978-33-19768-54-0	2018
4.	Priyanka Sharma, Swati Jain, Vaibhav Jain, Sutapa Ranjan	A Proposed Method for Disruption Classification in Tokamak using Convolutional Neural Network	Towards Extensible and Adaptable Methods in Computing	Springer	978-98-11323-48-5	2018
5.	Preksha Pareek	A Comparative Study of Machine Learning Techniques for Emotion Recognition	Emerging Research in Computing, Information, Communication and Applications	Springer	978-98-1136-00-1	2018
6.	Anand S. Patel	Improvement in Inter-Departmental Services Using Kaizen Philosophy at Educational Institute: A Case Study	VUCA Challenges: Sustainability Through Quality	American Society for Quality India Pvt. Ltd.	978-81-93021-64-4	2019

7.	Bhattacharya Pronaya, Sudeep Tanwar, Rushabh Shah, Akhilesh Ladha	Mobile Edge Computing Enabled Blockchain Framework- A Survey	Lecture Notes in Electrical Engineering	Springer Berlin heidelberg	1876- 1100	2019
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Papers in Conference Proceedings

Sr. No.	Name of the Faculty	Paper Title and Proceedings	Name of Publishing House	ISBN	Year of Publication
1.	Madhuri Bhavsar, Riddhi Thakkar, Rinni Trivedi	Experimenting with Energy Efficient VM Migration in LAAS Cloud: Moving Towards Green Cloud	Springer	1867-8211	2018
2.	Pankaj Sawarkar, Akhilesh Nimje, Praful Kumbhare	Parallel Connections of Super Capacitors for Maximum Energy Transferring to Load in Minimum Time	Springer	978-98-11085-32-1	2018
3.	Neha Patni, Pooja Shah	Automation of Process Evaluation of Saccharification of Wheat Starch Followed by Fermentation of Glucose to Prepare Bioethanol Using Digital Image Processing	Springer	978-98-11317-46-0	2018
4.	Vipul Chudasama, Vanita Chaudhrani, Pranjalee Acharya	Energy Aware Computing Resource Allocation Using PSO in Cloud	Springer	978-98-11317-46-0	2018
5.	Vijay Ukani, Priyank Thakkar, Vishal Parikh	A Range-Based Adaptive and Collaborative Localization for Wireless Sensor Networks	Springer	978-33-19636-45-0	2018

6.	Usha Patel, Rohan Pillai	Hardware Implementation of Public Key Cryptography for Small-Scale Devices	Springer	2367-3370	2018
7.	Dipak Adhyaru, Ravi Gandhi	Simplified Takagi- Sugeno Fuzzy Regulator Design for Stabilizing Control of Electromagnetic Levitation System	Springer	978-98- 11319-66-2	2018
8.	Md Rihan Maaze, Prince Adani, Vidit Shah, Maulik Prajapati, Vasu Patel, Snehil Mehta	Seismic Analysis of Stepback and Setback- Stepback Buildings Parul University International Conference on Engineering and Technology	Mc - Graw Hill India	978-93- 87572-66-9	2018
9.	Hiral Thakar, Aditya Bakarania, Deep Dobaria, Poojan Mahadevia	Behaviour of Precast Portal Frame Subjected to Lateral Loading: An Experimental Study International Conference On Advances in Concrete, Structural & Geotechnical Engineering	Bloomsbury	978-93- 87572-66-9	2018
10.	Dhruvil Daftary, Chirag Raval	Controller Design for Buck Boost Converter Using State Space Analysis Conference on Smart Innovation, Systems and Technologies	Springer	2190-3018	2019
11.	Namrata Patel, Parita Oza, Smita Agrawal	Homomorphic Cryptography and its Applications in Various Domains	Springer	2367-3370	2019
12.	Sapan Mankad	On the Performance of Cepstral Features for Voice-Based Gender Recognition	Springer	978-98- 11317-47-7	2019
13.	Harsh Kapadia, Jignesh Patel, Paresh Patel, Ripal Patel, Yash Shah	An Improved Image Pre-Processing Method for Concrete Crack Detection	Springer	2212- 9391/978- 3-030- 00664-8	2019

14.	Priyank Thakkar, Krunal Varma, Vijay Ukani, Sapan Mankad, Sudeep Tanwar	Combining User-Based and Item-Based Collaborative Filtering Using Machine Learning	Springer	978-98-11317-47-7	2019
15.	Usha Patel, Riddhi Sarsavadia	A Survey on Intelligent Face Recognition System	Springer	2212-9413	2019
16.	Nagendra Gajjar, Bhavesh Jaiswal	Deep Neural Network Compression Via Knowledge Distillation for Embedded Vision Applications	Springer	978-98-11363-47-4	2019
17.	Alka Mahajan, Bharat Modi, Parul Patel	Technology Drivers: Engine for Growth, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
18.	Dhaval Shah, Shashikant Joshi, Kaushik Patel	Effect of Laser Engraving on L-Shaped CFRP Components During Curing Process, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
19.	Sunil Raiyani, Paresh Patel	Effect of Temperature on the Tensile Strength of Stainless Steel Wire Mesh and Fiber Reinforced Polymers, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
20.	Anand Patel, Kaushik Patel, Mayur Makhesana	Modelling and Analysis of Surface Roughness in a Turning Operation using Minimum Quantity Solid Lubrication, Proceedings of the 6 th	CRC Press	978-11-38560-42-0	2018

		Nirma University International Conference on Engineering			
21.	Deep Modi, Paresh Patel, Digesh Joshi	Study of Shear Lag Effect in Hybrid Structural System for High Rise Building, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11- 38560-42-0	2018
22.	Chirag Swamy, Bimalkumar, Mawandiya	Effect of Surface Roughness on Working of Electromagnets, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11- 38560-42-0	2018
23.	Arth Patel, Rutvik Sheth	Development of design aid for non-rectangular reinforced concrete column- C shape, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11- 38560-42-0	2018
24.	Tejas Joshi, Urmil Dave	Evaluation of Mechanical Properties and Light Transmission of Light Transmitting Concrete, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11- 38560-42-0	2018
25.	Parul Patel, Gautam Dadhich, M H Kaluberne	Farm Level Land Suitability Assessment for Wheat and Mustard Crops Using Geomatics: A Case Study of Badipur Village of Patan District, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11- 38560-42-0	2018

26.	Jahanvi Suthar, Stuti Patel	Seismic Performance Evaluation of RC Frame Using Incremental Dynamic Analysis, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
27.	V J Vekaria, P H Prajapati, M S Pandya, Mihir Chauhan, Akash Mecwan, D K Kothari	Design of Involute Can and Follower Mechanism for Frisbee Throwing Mechanism, , Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
28.	Mihir Chauhan, Mohit Sharma	Trajectory Planning for a four Legged Robot, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
29.	Paresh Patel, Kushal Parikh, Sharadkumar Purohit	Parametric Study of Multi Storey Building Incorporating Buckling Restrained Braces, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
30.	Sharadkumar Purohit, Jenil Popat, Tushar H. Bhoraniya, S A Sharma	Experimental Investigation of Reinforced Concrete Infill Frames Under Pseudo-Dynamic Loading, , Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
31.	Sharadkumar Purohit, D K Parekh	Development of Fragility Curves for Reinforced Concrete Buildings, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018

32.	Sonal Thakkar, Praharsit Joshi	Parametric Study of Geopolymer Concrete with fly Ash and Bottom Ash Activated with Potassium Activators, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
33.	Dhaval Patel, Vipul Bhojawala, Kaushik Patel	Identification of Faulty Condition of Rolling Element Bearing with Outer Race Defect Using Time and Frequency Domain Parameters of Vibration Signature, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
34.	Dhaval Patel, Vipul Bhojawala, Kaushik Patel	Identification of Faulty Condition of Rolling Element Bearing with Inner Race Defect Using Time and Frequency Domain Parameters of Vibration Signature, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
35.	Sanjay Jain, Sujal Dave, Shivam Shukla	Design and Analysis of Centrifugal Compressor, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
36.	Pushpendra Kumar, Sanjay Jain	Numerical Investigations on High Voltage Circuit Breaker, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018

37.	Vineet Kothari	Experimental Study of Seismic Response of Different Structural Systems, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
38.	E K Taneja, Tejas Joshi Urmil Dave	Evaluation of Mechanical Properties and Light Transmission of Light-Transmitting Concrete, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
39.	A A Jadeja, Urmil Dave	Investigation on Mechanical Properties of Crushed Sand Concrete, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
40.	Ritu Anjaria, Urmil Dave	Comparative Study of Compressive Strength and Durability Properties of Binary, Ternary and Quaternary Mortar, Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
41.	F. Belforti, P. Azarsa, Rishi Gupta, Urmil Dave	Effect of Freeze-Thaw on K-Based Geopolymer Concrete (GPC) and Portland Cement Concrete (PCC), Proceedings of the 6 th Nirma University International Conference on Engineering	CRC Press	978-11-38560-42-0	2018
42.	Harsh Kapadia, Ripal Patel, Yash Shah, J. B. Patel, P. V. Patel	An Improved Image Pre-Processing Method for Concrete Crack Detection, Proceedings of the International Conference on ISMAC in Computational	Springer	2212-9391	2019

		Vision and Bio-Engineering			
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Patents Published

Sr. No.	Name of the Inventors	Title of the Patent	Year	Status
1.	Prof. Sandeep Chaudhary, Prof. Salma Banu Luhar, Prof. Urmil Dave, Prof. Ismail Luhar	Fly Ash Based Geopolymer Concrete Incorporating Rubber TyreFibres as Partial Replacement of Natural Sand Thereof Useful for Construction and Infrastructure Industries	2018	Published

Patents Filed

Sr. No.	Name of the Inventors	Title of the Patent	Year	Status
1.	Prof. Sandeep Chaudhary, Prof. Salma BanuLuhar, Prof. Urmil Dave, Prof. Ismail Luhar	Fly Ash Based Geopolymer Concrete Incorporating Rubber TyreFibres as Partial Replacement of Natural Sand Thereof Useful for Construction and Infrastructure Industries	2018	Filed
2.	Prof. Mihir Chauhan, Prof. Kunal Ghosh, Prof. Bhaumik Patel, Prof. Abhijitsinh Thakor	An Improved Antimine Vehicle with Vertical Blast Ventilation•	2018	Filed

Ph.D. Awarded

Sr. No.	Name of the Student	Name of the Guide / Supervisor	Title of Thesis
1.	Vanzara Rakeshkumar D.	Dr. Haresh Bhatt, Dr. Priyanka Sharma	Performance Enhancement Proxy for Heterogeneous Networks
2.	Sharma Sandip Praladbhai	Dr. J. P. Ruparelia	A Comparative Study to Analyse Efficacy of O3, O3/UV, O3/UV/PS for the Degradation of Reactive Dyes in Wastewater
3.	GehaniAartiKishor	Dr. Dhaval Pujara	Investigations on Optimization of Antenna Parameters using the Adaptive Neuro-Fuzzy Inference System (ANFIS)

4.	Shah Hardik Satishchandra	Dr. J. P. Ruparelia	Studies on Feasibility of Some Water Quality Trading Aspects with End-of-pipe Treatment Augments: Towards Enhancement of Environmental Performance in Firms and CETPs
5.	Trivedi Dishang Dinkarra	Dr. S. C. Vora	Kalman Filter Based Novel Centralized Dynamic State Estimation for Multi-Machine Power System Incorporating DFIGs
6.	Shah Manisha Tusharbhai	Dr. P. N. Tekwani	Investigations on Generalization of Current Error Space Phasor Based Pulse Width Modulation Controller for Multi-Level Front-End Converters
7.	Shah Dhaval Gopalchandra	Dr. D. K. Kothari	Investigation of Free Space Optical Link Performance with Wavelength Diversity under Different Turbulence Conditions
8.	Manoj Kumar Gupta	Dr. D. S. Sharma, Dr. V. J. Lakhera	Bubble-Induced Vibration in Liquid Nitrogen Cryopump
9.	Pardiwala Julie Minoo	Dr. S. S. Patel	Studies in Spinel Catalysts for Photocatalytic Degradation of RB21 Dye in Wastewater
10.	Savani Vijay Gopalbhai	Dr. N. M. Devashrayee	Design of a Low Voltage, Low Power and High Speed CMOS Comparator
11.	Mecwan Akash Isudas	Dr. N. M. Devashrayee	Design of High Performance Low Noise Amplifier
12.	Joshi Digesh Dilipkumar	Dr. P. V. Patel	Study the Behaviour of Precast Connections under Progressive Collapse Scenario
13.	Dineshkumar Jethalal Prajapati	Dr. Sanjay Garg	Multilevel Association Rule Mining in Distributed Environment
14.	Ankit Sharma	Dr. D. M. Adhyaru, Dr. TanishZaveri	Handwritten Gujarati Character Recognition using Machine Learning Approach
15.	Gandhi PriyeshkumarPratapbhai	Dr. N. M. Devashrayee	Analysis and Design of High Speed Low Offset Power Efficient Dynamic CMOS Comparator in 180 nm Technology
16.	Joshi Rashmi Shankardatt	Dr. Suryakant Gupta	Diagnostics of Electrostatics Discharges and Postulations for ARC Mitigation Techniques on Satellite Solar Panels
17.	Dhare Vaishali Hiteshkumar	Dr. Usha Mehta	Novel Defect Modeling and Development of ATPG for Combinational QCA Circuits

Research Awards

Research Awards Received by the Faculty Members

Sr. No.	Name of the Faculty Awardee	Recognition / Honor / Award	Name of the Organization / Event	Award Category
1.	Prof. Sharadkumar Purohit	National Award for Best M.Tech. Thesis in Civil Engineering	Indian Society for Technical Education (ISTE)	First Prize
2.	Prof. Darshit Upadhyay	ISTE-GSFC National Award for Guided Best M.Tech. Thesis in Mechanical Engineering	Indian Society for Technical Education (ISTE)	First Prize
3.	Prof. Darshit Upadhyay	Best Paper Award	International Society for Energy, Environment and Sustainability	First Prize
4.	Prof. Neha Patni	Best Paper Award	Poornima Group of Colleges	Second Prize
5.	Prof. Hiral Thakar	Best Paper Award	Amity University	Trophy
6.	Prof. Alka Shah	Best Paper Award	Amity School of Engineering and Technology, Amity University, Noida, New Delhi	Memento
7.	Prof. Anant Patel	Best Paper Award	Hydro-2018 International Conference Held at NIT, Patna	Memento
8.	Prof. Madhuri Bhavsar	International Conference on Knowledge Discovering in Science and Technology	Jayawantrao Sawant College of Engineering, Pune	Consolation
9.	Prof. Sudeep Tanwar	Best Paper Award	IEEE-GLOBECOM-2018 Conference by IEEE ComSoC, Abu Dhabi, UAE	Memento
10.	Prof. Pronaya Bhattacharya	Best Paper Award	Department of Computer Science and Engineering, Central University of Jammu	Memento
11.	Prof. Sudeep Tanwar	Best Paper Award	International Conference on Recent Innovations in Computing, Central University of Jammu, J & K	Memento

Travel Grants Received by the Faculty Members

Sr. No.	Name of the Faculty Member	Purpose of the Visit	Name of the Funding Agency	Name of the Country
1.	Prof. Saurin Parikh	To Present Paper and Attend an International Conference	Nirma University	United Kingdom
2.	Prof. Ankur Pandya	To Present Paper and Attend an International Conference	ICTP (Italy) and Nirma University	Italy
3.	Prof. Mayurkumar Makhesana	To Present Paper and Attend an International Conference	Council for Scientific and Industrial Research (CSIR)	USA
4.	Prof. Sandip Modi	To Present Paper and Attend an International Conference	Nirma University	USA
5.	Prof. Mayurkumar Makhesana	To Present Paper and Attend an International Conference	Nirma University	USA
6.	Prof. Sapan Mankad	To Present Paper and Attend an International Conference	Nirma University	South Korea
7.	Prof. Sudeep Tanwar	To Present Paper and Attend an International Conference	Council for Scientific and Industrial Research (CSIR)	Abu Dhabi, UAE
8.	Prof. Balkrushna Shah	To Attend ASHRAE Winter Conference 2019 and to Receive 2018 Student Branch Advisor of the Year Award	Nirma University	USA

Seminars / Workshops / Training Programmes Organised by the Institute

Workshop on, “Application of Soft Computing in Electrical Engineering”

One-day workshop on “Applications of Soft Computing in Electrical Engineering” was organised by the School of Engineering, Institute of Technology in collaboration with the Centre for Continuing Education on March 16, 2019.

The workshop was divided into three sessions. A detail introduction of soft computing techniques was covered by Dr. Kuntal Bhattacharjee in the first session. Second session was conducted by Prof. Shanker D. Godwal on how to develop objective functions and constraints for soft computing techniques. The third session was conducted by Prof. A. B. Panwar on Development of coding on soft computing techniques.

Workshop on, “Emerging Research Topics in Engineering”

The IEEE Gujarat Section in collaboration with Nirma University organised a two-day workshop on “Emerging Research Topics in Engineering (ERTE)”, during February 02-03, 2019, on the theme Artificial Intelligence and Deep Learning. Eminent experts from academia and industry such as IBM Research Lab, IIScBangalore, University of Hyderabad, Rygbee Inc., DAIICT were invited to share their knowledge with the audience on the topics of Artificial Intelligence, Machine Learning, and Deep Learning. ERTE was sponsored and supported by Rygbee Inc. and GUJCOST (DST). The workshop was coordinated by Dr. Manisha Shah, Asst. Prof., Electrical Engineering.

Around 100 delegates from various engineering colleges of state and industry professionals attended the workshop. A Ph.D. forum was kept on second day of the workshop to represent their work in the form of oral presentation and seek suggestions from the eminent panellist from academia and industries as well as from the participants of ERTE 2019 working in that domain.

National Colloquium on, “Advancements in Seismic Design of Masonry Structures”

The Civil Engineering Department organised a National Colloquium on “Advancements in Seismic Design of Masonry Structures” during January 30-31, 2019. Prof. Daniel Abrams, Emeritus Professor, Civil Engineering Department, University of Illinois at Urbana-Champaign, U.S.A, and Fulbright Specialist, USIEF, New Delhi delivered an expert lecture and a laboratory session during the Colloquium. Prof. K.S. Jagadish, Former Professor, Indian Institute of Science Bangalore & Eminent researcher in the field of Masonry Structure also delivered an expert lecture in the colloquium. Prof Svetlana Brezev, Adjunct Professor, University of British Columbia, Canada & Visiting Professor, Civil Engineering Department, IIT Gandhinagar and Prof. Hemant Kaushik, Professor, IIT Guwahati delivered technical lectures.

Fulbright Specialist Programme

The Civil Engineering Department hosted Fulbright specialist, Prof. Daniel Abrams, Emeritus Professor of Structural Engineering, University of Illinois at Urbana-Champaign, USA under Fulbright Specialist Programme by USIEF, New Delhi during January 17 to February 08, 2019. Major highlights of academic activities carried out under Fulbright Specialist Programme are summarized as follows.

- Prof. Daniel Abrams conducted a special course on “Experimental Techniques in Earthquake Engineering” for M.Tech Civil Engineering (CASAD) students as well as faculty members of the Civil Engineering Department.
- Prof. Daniel interacted with B. Tech. (Civil Engineering), Semester – IV and Semester-VI students and discussed about Professional requirements of an Engineer, Role of an Engineer and Career Options in Civil Engineering.
- One to one interaction with Research Scholar (Ph. D.) enrolled with the Civil Engineering Department has been carried out by the Fulbright Specialist.
- Prof. Daniel Abrams delivered two Expert Sessions during National Colloquium on “Advancement in Seismic Design of Masonry Structures” held during January 30-31, 2019. One Laboratory session was also conducted by him.

Prof. Daniel visited the “Heavy Structures Laboratory (HSL)” of the Department. He had discussions with Prof. Paresh Patel and Prof. Sharadkumar Purohit about capabilities and further improvements in the existing experimental facilities.

Technical Paper Writing Workshop

Institute of Technology conducted a two-day workshop on 'Technical Paper Writing Clinic' during October 04-05, 2018. It was attended by 47 PhD students from various departments of Institute of Technology, Nirma University. Dr. Dhaval Pujara, Director Research and Innovation, Nirma University; Dr. Rochish Thaokar, IIT Bombay; Dr. S. Bandyopadhyay, IIT Bombay; and Dr. Sharad Dalai, Director, Institute of Science, Nirma University conducted the sessions on various aspects of Technical Paper Writing. There were hands-on sessions with primary focus on writing the journal paper in the workshop.

Thesis Writing Workshop for the Post-Graduate Students of School of Engineering

A two-day workshop was organised by School of Engineering, Institute of Technology on "Thesis Writing Clinic" during March 15-16, 2019. The workshop was attended by 92 Postgraduate students from Electrical, Mechanical, Civil and Chemical Engineering Department. The primary objective of the workshop was to improve the technical writing skills of the students specifically for thesis and represent their findings in an effective manner. Prof. Sameer Dalvee, Associate Professor, IIT Gandhinagar; Prof. Dhaval Pujara, Director Research & Innovation, Nirma University; Dr. Alphonsa Joseph, Scientist IPR; Prof. Vijay Ukani, Associate Professor, Institute of Technology, Nirma University delivered expert talks.

Workshop on, "Simulations of Wireless Communication Systems using OCTAVE"

The workshop held under the auspices of CCE, Nirma University was conducted by Dr. Y. N. Trivedi, Professor in Electronics and Communication, Institute of Technology – Nirma University during January 19 - 20, 2019. The objectives of the workshop were to understand various wireless communication systems in the presence of wireless fading channels and to develop a unified structure of simulation codes for getting BER performance for different wireless systems.

Two-Day Workshop on, "IoT and Fog Computing"

Two-day workshop on "Internet of Things and Fog Computing" was organised by Electronics & Communication Engineering Department, under the aegis of Centre for Continuing Education, Nirma University during August 28 - 29, 2018.

The programme conducted by Dr. Sachin Gajjar, Associate Professor and Dr. N.P. Gajjar, Professor of Electronics and Communication Engineering Department, Institute of Technology, Nirma University attended by around 40 participants.

One-Day Workshop on, "Testing and Verification of VLSI Circuits"

Training programme for the faculty members, students and research scholars on the "Testing and Verification of VLSI Design" was conducted by Electronics & Communication Engineering Department, Institute of Technology under Center of Continuing Education, Nirma University on October 02-03, 2018. A total of sixty-five participants took part in the workshop.

Two Day Workshop on, “Back End VLSI Design”

Two-day workshop on “Back End VLSI Design” was organised by Centre for Continuing Education, Nirma University during April 06-07, 2018. Fifteen participants took benefit of the workshop.

Two-Day Workshop on, ‘Mitsubishi Robot Training Kit’

The Instrumentation and Control Engineering Department conducted a two-day workshop on ‘Mitsubishi Robot training kit’ during May 07-08, 2018. There were hands-on sessions with primary focus on Robot programming and its techniques.

Two-Day Workshop on, ‘Introduction to SCADA’

The Instrumentation and Control Engineering Department conducted a two-day workshop on ‘Introduction to “SCADA’ during December 11-12, 2018. The workshop was attended by the UG students and the faculty members of Instrumentation and Control Engineering Department.

Short Term Training Programmes (STTP)

The India Society for Technical Education (ISTE) approved Short Term Training Programmes under the aegis of the Centre for Quality Assurance and Academic Development (CQAAD) were organised during June-July 2018. Following are the details of the programmes organised by different departments.

Sr. No.	Name of the Department	Title of the Training Programme	Duration	Details of the Programme
1.	Civil Engineering	Current Trends in Sustainable Infrastructure Development	June 02-15, 2018	The content of training programme was focused on learning different aspects of Sustainable Infrastructure Developments such as green materials, green field infrastructure development, solid & liquid waste management, E-waste management, use of construction demolition waste, rain water harvesting, role of civil engineers to achieve UNDB sustainable goals, various rating systems such as LEED, IGBC, GRIHA etc.
2.	Electrical Engineering	Hands-on-Experience in Advanced Laboratory Practices in Electrical Engineering	June 25 to July 07, 2018	STTP comprised of laboratory sessions during which the participants worked towards development of assigned new experiments. In order to strengthen the knowledge required for development of laboratory practices in different areas of Electrical Engineering, lecture sessions of experts from IITs, industries, research organizations and reputed academic

				<p>institutions were scheduled. Total 14 new experiments were developed during the STTP, which are added in the curriculum of various subjects of U.G. & P.G. programmes of Electrical Engineering. Also, visits to following industries helped the participants to familiarize with industrial practices of experimentations conducted in different areas of Electrical Engineering:</p> <ul style="list-style-type: none"> ▪ Electronics and Quality Development Centre (EQDC), Gandhinagar ▪ ABB Power Technology Experience Center , Vadodara ▪ Electrical Research and Development Association (ERDA), Vadodara
3.	Mechanical Engineering	Advances in Thermal and Fluid Science	June 18-30, 2018	<p>The objective of the STTP was to get updated with the ongoing research activities in the field of thermal and fluid science including methods to improve effectiveness of thermo-fluid systems, apply various aspects of thermal and fluid science to solve live industrial problems, appreciate the use of various available software in the field of fluid science and new developments/research in thermal engineering. A total of 29 faculty members participated in the programme and experts from IIT and other leading institutions delivered talks.</p>
4.	Computer Science and Engineering	Models on Computation, Verification, and Validation	June 25 to July 07, 2018	<p>Topics for STTP included Computational Complexity Theory, Software Verification and Validation, Modelling Languages, Performance Modelling, Cognitive Modelling, Security Modelling, Model-based Reinforcement Learning. Experts from leading institutions and industries like IITs, ISRO, etc were called to deliver sessions.</p>
5.	Instrumentation and Control Engineering Department	STTP on Wheels	June 02 -16, 2018	<p>It was novel approach of arranging faculty development programme. Where teaching learning happened at more than 10 industry sites by visiting industries in the domain of Control and Automation.</p>

Research Talks Organised by the Institute

It is a regular practice at the Institute of Technology to arrange research related expert talks by eminent personalities from Industry and Academia. Following are the details of some of the talks/lectures organised by the departments under Institute of Technology.

School of Engineering

1. 'Aerodynamic Shape Optimazation' and 'Aerodynamic of cricket ball and badminton shuttle cock' by Dr. Sanjay Mittal, Professor, Department of Aerospace Engg., Coordinator, National Wind Tunnel Facility, IIT, Kanpur on June 19, 2018.
2. 'Analysis of Rarified Gas Flow' by Dr. Amit Agrawal, Professor, Department of Mechanical Engineering, IIT, Bombay on June 20, 2018.
3. 'Fuel Cell Technology' by Dr. Atul Bhargav, Asso. Prof. IIT, Gandhinagar on June 21, 2018.
4. 'Investigation on CAN Combustor' by Dr. R.D. Shah, Associate Professor, SVNIT, Surat on June 21, 2018.
5. 'Bio-Diesel as an Alternative Fuel for IC Engine' Dr. Purnanand Bhale, Associate Professor, Sardar Vallabhbhai National Institute of Technology, Surat on June 21, 2018.
6. 'Lattice-Boltzmann Method for Analysis of Flow Over an Array of Square Cylinders' by Dr. Chandrashekhar Sewatkar, HoD, College of Engineering, Pune on June 26, 2018.
7. 'Use of Thermo-Fluid Science in Modeling Rural Technologies' by Dr. A.W. Date, IIT Bombay June 26, 2018.
8. 'Heat Transfer Analysis of Flow in Converging-Diverging Micro Channel' Dr. Vijay Duryodhan, Assistant Professor, IIT, Bhilai on June 28, 2018.
9. 'Experimental Analysis of Blood Flow in Micro Channel' by Dr. Siddhartha Tripathi, Assistant Professor, BITS, Goa on June 28, 2018.
10. 'Concept of Stress and Stress Transformation in 2-D & 3-D' by Prof. Y. M. Desai, Professor, Department of Civil Engineering, Indian Institute of Technology Bombay, Powai on August 08, 2018.
11. 'Big Data Analytics in Structural Health Monitoring: An Overview' by Prof. Sudheer Kumar Barai, Professor, Department of Civil Engineering, Indian Institute of Technology Kharagpur on September 07, 2018.
12. 'Geotechnical Aspects of Foundation Engineering' by Prof. C. H. Solanki, Professor, Applied Mechanics Department, Sardar Vallabhbhai National Institute of Technology, Surat on September 26, 2018.
13. 'Opportunities in Water Resource Engineering for Civil Engineers' by Prof. J. N. Patel, Professor, Civil Engineering Department, Sardar Vallabhbhai National Institute of Technology, Surat on January 03, 2019.
14. 'Introduction to Enhanced Oil Recovery and Current Research Trend' by Dr. Japan Trivedi, Associate Professor at the University of Alberta, Canada on January 11, 2019.
15. 'Cement Concrete, Global Climate Change & Sustainability' by Dr. Rakesh Kumar, Principal Scientist and Head, Rigid Pavement Division, Central Power Research Institute, New Delhi on January 25, 2019.
16. 'Highway Construction' by Prof. B. L. Swami, Professor, Malaviya National Institute of Technology, Jaipur on January 25, 2019.

17. 'Design of Ductile Reinforced Masonry Buildings' by Prof. Daniel Abrams, Emeritus Professor, University of Illinois at Urbana-Champaign, USA and a Fullbright Specialist under USIEF-New Delhi on January, 30, 2019.
18. 'Seismic Design and Detailing of Confined Masonry Buildings' by Prof. Svetlana Brezev, Adjunct Professor, University of British Columbia, Canada and Visiting Professor, Civil Engineering Department, Indian Institute of Technology (IIT), Gandhinagar on January 30, 2019.
19. 'Enhancing Flexibility and Displacement Capacity of Reinforced Masonry Shear Walls' by Prof. Daniel Abrams, Emeritus Professor, University of Illinois at Urbana-Champaign, USA and a Fullbright Specialist on January 31, 2019.
20. 'Material Properties of Masonry in India' by Prof. Hemanth Kaushik, Professor, Civil Engineering Department, Indian Institute of Technology (IIT), Guwahati on January 31, 2019.
21. 'Containment Reinforcement for Earthquake Resistant Masonry' by Prof. K. S. Jagdish, Retired Professor, Civil Engineering Department, Indian Institute of Science (IISc), Bangalore on January 31, 2019.
22. 'Seismic Retrofit of Masonry Buildings' by Prof. Svetlana Brezev, Adjunct Professor, University of British Columbia, Canada and Visiting Professor, Civil Engineering Department, Indian Institute of Technology (IIT), Gandhinagar on January 31, 2019.
23. 'Research Opportunities for Undergraduate students' by Dr. Paul Chiarot, Department of Mechanical Engineering, State University of New York at Binghamton, Binghamton, NY on February 07, 2019.
24. 'Energy and Efficiency for the 21st Century' by Dr. Paul Chiarot, Department of Mechanical Engineering, State University of New York at Binghamton, Binghamton, NY on February 07, 2019.
25. 'CFD to Material Science' by Dr. Marcello Lappa Department of Mechanical and Aerospace Engineering, University of Strathclyde, Glasgow, UK on February 25, 2019.
26. 'Advances in Renewable Energy Harvesting & Waste Heat Recovery System' by Dr. HussamJouhara, Professor, Department of Mechanical and Aerospace Engineering, Brunel University London, UK, on February 26, 2019.
27. 'Green Concrete Reinforced using Fibers Recovered from Waste acrylic' by Prof. Rishi Gupta, Associate Professor, Civil Engineering Department, University of Victoria, British Columbia, Canada on March 01, 2019.
28. 'Research Opportunities in the planning of Supply Chains of Fresh Produce' by Dr. Rene Villalobos, Arizona State University, USA on March 05, 2019.
29. 'Cleanroom and HVAC System Design and Fundamentals' under ASHRAE Chapter by Dr. Wei Sun, Distinguished Lecturer, ASHRAE, USA on March 07, 2019.

School of Technology

1. 'Introduction to PLC and SCADA' by Mr. Rohit Singh, Proprietor and Alumni of Nirma University, Viscon Automation, Ahmedabad on April 03, 2018.
2. 'RF Mixer Design' by Dr. Sanjiv Gupta, Professor, DAIICT, Gandhinagar on April 11, 2018.
3. 'Industry Automation' by Mr. Milind Gokhale, Mitsubishi Electric India Pvt. Ltd., Pune, on June 26, 2018.
4. 'Industrial Networking' by Mr. K. D. Shah, Mamata Machinery, Vatava, on June 28, 2018.
5. 'Machine Automation' by Mr. Rahil Dave, Procon Control, Ahmedabad on June 28, 2018.
6. 'Technology for smart cities' by Mr. Madhukant Patel Reve Automation, Gandhinagar on July 06, 2018.

7. 'IOT protocols and Architecture' by Mr. Sohil Patel, Oizom Instruments, Ahmedabad on July 06, 2018.
8. 'Machine Vision based automation' by Mr. Jigar Mori, Technosmarthyam, Ahmedabad on July 07, 2018.
9. 'Opportunity for Information Systems and Network Security in the Newly Opened Defence Sector' by Ravin Vyas, Director and Function Head, Avbodh Knowledge Foundation Limited on September 04, 2018.
10. 'Power plant Automation' by Mr. Kanu C. Patel, Consultant for Power Plant Water System, on September 10, 2018.
11. 'Data Compression Technology' by Dr. RagunadhBhatter, Course Director- SATCOM & GNSS Space Applications Centre, ISRO September 29, 2018.
12. '3-D reconstruction Algorithms and Research at BVB College Hubli' by Dr. Uma Mudenagudi, Dean Research and Development, KLETech University Hubballi and Professor, Department of Electronics and Communication at BVB College of Engineering and Technology, Hubli on November 27, 2018.
13. 'Signal Processing and Machine Learning for Audio Applications' by Dr. Preeti Rao, Professor, Electrical Engineering Department, IIT, Mumbai on December 21, 2018.
14. 'Software Testing' by Ms. Swapna and Mr. Gaurav Ghelani, TCS-Gandhinagar on January 23, 2019.
15. 'Microstrip Lines for RF Circuit Design' by Dr. Shailendra Singh, Sr. Scientist, ISRO, Ahmedabad on February 06, 2019.
16. 'IoT and Advancements' by Sombabu, Sr. Engineer eInfochips on February 20, 2019.
17. 'Modern Communication from Analog to 5G and Beyond' by Prof. Sarat Kumar Patra, Director, IIIT, Vadodara on March 01, 2019.
18. 'Latest Trends in Electronics Engineering at Siemens' by Mr. Dhaval Dhamsaniya, Manger, Control Systems, Siemens Limited, Baroda on March 02, 2019.
19. 'IoT in Real World' by Shri Sharmil Dave, Head of IoT& Software Engineering, ArasTu System on March 03, 2019.
20. Lecture Series on, 'Antennas, Terrestrial and Satellite Radio Wave Communications' by Dr. Jorge Teniente-Vallinas, Public University of Navarra, Spain during March 04-08, 2019.
21. Lecture Series on, 'Deep Learning' by Dr Xingquan Zhu, Full Professor, Florida Atlantic University, USA during March 05-09, 2019.
22. 'Test/Behavior Driven Software Development' by Mr. Sapan Parikh, Site Director- Product Development eClinical Works on March 14, 2019
23. 'Healthcare Systems and Data Science' by Dr. Mohammad T. Khasawneh, Professor, Binghamton University, USA on March 18, 2019.
24. 'Cognitive Radio' by Dr. Vijay Kumar Chakka, Professor, Shiv Nadar University, Greater Noida on July 21, 2018.

Research Report of Institute of Management



Institute of Management Research Statistics at a Glance

April 01, 2018 - March 31, 2019

Major Research Projects		Total
Ongoing Major Research Projects	Projects Ongoing	01
	Total Grant	₹ 6,00,000 /=
Sanctioned Major Research Projects	Projects Sanctioned	03
	Total Grant	₹ 1,02,00,000/=
Minor Research Projects		
Completed Minor Research Projects	Projects Completed	02
	Total Grant	₹ 90,000/=
Ongoing Minor Research Projects	Projects Ongoing	02
	Total Grant	₹ 4,80,000/=
Sanctioned Minor Research Projects	Projects Sanctioned	01
	Total Grant	₹ 4,50,000/=
Research Publications		
Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals		21
Books Published		05
Book Chapters Published		39
Cases Pulished		
Cases		03
Doctoral Research		
Ph.D. Degree Awarded		01
Current Ph.D. Students		56
Current Ph.D. Guides		17
Research Awards		
Research Awards Received by the Faculty Members		05
Conferences / Seminars / Research Talks		
International / National Conferences Organised by the Institute		02
Seminars / Workshops / Training Programmes Organised by the Institute		01
Research Talks Organised by the Institute		01

Research Projects

Major Research Projects

Ongoing Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Preparation of District Human Development Report of Devbhumi Dwarka District	Prof. Nikunj Patel, Prof. M. Mallikarjun	Gujarat Social Infrastructure Development Society	6,00,000/=
Total Grant				6,00,000/=

Sanctioned Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Rainbow (Realizing Aspirations, Interests & Brilliance of Young Women in Indian Universities)	Prof. Nina Muncherji, Prof. Amola Bhatt	Erasmus	71,00,000/=
2.	Adoption & Effectiveness of Digital Health Services in India: a Study of Gujarat	Prof. Jayesh Aagja, Prof. Samik Shome	Indian Council of Social Science Research (ICSSR)	20,00,000/=
3.	Research Ambience and Research Productivity: A Study of Higher Institutions in Indi, South Africa & USA	Prof. Rajesh Jain, Prof. Udai Paliwal	Indian Council of Social Science Research (ICSSR)	11,00,000/=
Total Grant				1,02,00,000/=

Minor Research Projects

Completed Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Techno-Managerial Implications of Mobile Technology Adoption in Emergency Medical Services	Prof. Subrat Sahu	Nirma University	40,000/=
2.	Investors Behaviour towards Mutual Fund Investing with Reference to Investors in Gujarat	Prof. Parag Rijwani, Prof. Jayesh Aagja	Nirma University	50,000/=
Total Grant				90,000/=

Ongoing Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Marcomm Practices of Retail Stores	Prof. Sapna Parashar, Prof. Sanjay Jain	Nirma University	60,000/=
2.	Effectiveness and Efficiencies of MGNREGA in five Districts of Central Gujarat and its Impact on Quality of Life	Prof. Samik Shome	Indian Council of Social Science Research (ICSSR)	4,20,000/=
Total Grant				4,80,000/=

Sanctioned Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Assessing the Impact of Microfinance Services on Empowerment of Female Living in Rural Areas of North Gujarat	Prof. Riteshkumar Patel	Indian Council of Social Science Research (ICSSR)	4,50,000/=
Total Grant				4,50,000/=

Research Publications

Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals

1. Jhaveri, C A. "API Based Reward Model to Improve Regularity and Efficiency in Management Institutes." Prabandhan: Indian Journal of Management 11.12 (2018): 22–34.
2. Roy, N C, and S Shome. "Attrition of Agents in Indian Life Insurance Companies." Current Science 115.5 (2018): 851–859.
3. Patel, R, M Patel, and N Patel. "Impact of Microfinance on Women Empowerment: A Study of Rural Gujarat." Indian Journal of Finance 12.8 (2018): 22–35.
4. Kaur, R, and S SPingle. "Employer Branding in the Indian Armed Forces Context: A Comparative Study of Potential Defence Applicants and Defence Employees." Vision 22.2 (2018): 199–210.
5. Kaur, R, and R Shah. "Collective Intelligence: Scale Development and Validation." Journal of Human Behavior in the Social Environment 28.5 (2018): 535–547.
6. Sinha, A, B Varkkey, and P Dave. "Project Nirman: The Way Ahead." South Asian Journal of Business and Management Cases 7.1 (2018): 53–67.

7. Mishra, R, A K Pundir, and L Ganapathy. "Empirical Assessment of Factors Influencing Potential of Manufacturing Flexibility in Organization." *Business Process Management Journal* 24.1 (2018): 158–182.
8. Tyagi, P, and H Shah. "Impact of Structural Empowerment on Organisational Performance: 'Empowerment – HR' Interface." *International Journal of Intelligent Enterprise* 5.4 (2018): 365–384.
9. Goyal, S S. "A Study on Some Important Aspects of Working Capital Management in Selected Indian industries1." *Finance India* 32.1 (2018): 215–225.
10. Singh, N, and D K Srivastava. "Factors Affecting Students' Preferences to Study Abroad Programs: A Case of Indian Business School Students." *Journal of Teaching in International Business* 29.2 (2018): 96–112.
11. Mishra, R. "Configuration of Volume Flexibility in Indian Manufacturing Firms: Evidence from Case Studies." *International Journal of Quality and Reliability Management* 35.1 (2018): 232–265.
12. Padmanabhan, P A. "Do Demerger Announcements Impact Shareholders Wealth? An Empirical Analysis Using Event Study." *Vision* 22.1 (2018): 22–31.
13. Barot, H, and P V Chhaniwal. "The Journey of Unicorn Uber from San Francisco to International Disruption." *Asian Journal of Management Cases* 15.1 (2018): 82–91.
14. Patel, R, M Patel, and N Patel. "Impact of Microfinance on Poor Women: Lessons from North Gujarat." *Prabandhan: Indian Journal of Management* 11.2 (2018): 14–29.
15. Shah, T R. "Conceptualising the Framework for Effectiveness of Customer Value Co-Creation in Service Innovation." *International Journal of Services and Operations Management* 31.1 (2018): 121–136.
16. Guha, P. "Application of Multivariate-Rank-Based Techniques in Clustering of Big Data." *Vikalpa* 43.4 (2018): 179–190.
17. Patel, R. "Pre & Post-Merger Financial Performance: An Indian Perspective." *Journal of Central Banking Theory and Practice* 7.3 (2018): 181–200.
18. Jain, S K, and R K Jain. "Review of FDA Warning Letters to Pharmaceuticals: Cause and Effect Analysis." *Research Journal of Pharmacy and Technology* 11.7 (2018): 3219–3226.
19. Joshi, Nisarg, and Jay Desai. "Models for Prediction of Industrial Insolvency of Manufacturing Companies in India." *Asian Journal of Finance & Accounting* 10.2 (2018): 30-63.
20. Sarkar, Shulgana, and Sameer Pingle. "CSR Governance Addressing Social Issues: A Critical Review." *South Asian Journal of Management* 25.1 (2018): 1-28.
21. Jotwani, Dhiren. "Financial Development and Economic Growth: Governance of Financial Institutions." *International Journal of Business Ethics in Developing Economies* 7.2 (2018).

Books Published

Sr. No.	Name of the Faculty	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Samik Shome, Dipak Ranjan, Parag Rijwani, Deepak Danak	Business, Economy and Environment: The New Normal	Himalaya Publishing House Pvt. Ltd.	978-93-5299-653-7	2019
2.	Parag Rijwani, Shamik Shome, Deepak Danak	Business, Economy and Environment: Corporate Perspectives	Himalaya Publishing House Pvt. Ltd.	978-93-5299-654-4	2019
3.	Rajeshkumar Jain, Himanshu Trivedi	VUCA Challenges: Sustainability through Quality	ASQ South Asia	978-81-93021-64-4	2019
4.	Nityesh Bhatt, Ritesh Patel	Research Frontiers in Human Resource Management and Marketing Management'	Excel India Publishers, New Delhi	978-93-86724-69-4	2018
5.	Nityesh Bhatt, Ritesh Patel	Research Frontiers in Finance and General Management	Excel India Publishers, New Delhi	978-93-86724-70-0	2018

Book Chapters Published

Sr. No.	Name of the Faculty	Name of the Book Chapter	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Balakrishnan Unny, Gaurav Mishra	Building the Link Between Project Managers Personality, Risk Perception and the Success of Information Technology Projects	Business Transformation through Functional Strategies	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-22-5	2018
2.	Amola Bhatt, Purav Acharya	Entrepreneurship Education - is it Effective?	Transformation through Strategic and Technological Interventions	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-21-8	2018
3.	Niyati Dave, Amola Bhatt, Shahir Bhatt	Understanding Peer to Peer Lending	Business Transformation through Functional Strategies	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-22-5	2018

4.	Poturaju Nareshkumar Nageshwararao, Sahil Shah	Societal and Organisational Transformation via Prompt Espousal of Bit Coins for Digital Payments	Transformation through Strategic and Technological Interventions	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-21-8	2018
5.	Poturaju Nareshkumar Nageshwararao, Poturaju Vandana, Patel Nikunj	Factors Affecting Individual Investor Stock Trading Strategy in Indian Cash and Futures Market	Business Transformation through Functional Strategies	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-22-5	2018
6.	Brijesh Kumar Viradiya, Mahesh K. C., Satya Swarup Dwibedi, Urvesh Kumar Savaliya	A Statistical Model for Predicting Bitcoin Market Prize	Transformations through Strategic and Technological Interventions	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-21-8	2018
7.	Samik Shome, Dipak Ranjan, Urmi Khatri	Pre and Post Demonetization Impact on India Stock Market: A Statistical Analysis	Business Transformation through Functional Strategies	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-22-5	2018
8.	Samik Shome, Dipak Ranjan, Harshita Singh, Anirudh Shrivastava	Impact on Consumer Purchase Intensity During Festive Offers by E-Commerce Firms in India	Business Transformation through Functional Strategies	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-22-5	2018
9.	Sameer Pingle	Does Strategy Matter in Municipal Organizations? A Study of Nagpur Municipal Corporation	Transformation through Strategic and Technological Interventions	Mc-Graw Hill Education (India) Pvt. Ltd.	978-93-87572-21-8	2018

10.	Gaurav Mishra, Balakrishnan Unny, Nityesh Bhatt, Akshaya Kumar	Internet of Things (IoT) Deployment in Wearable Healthcare: A Sociotechno Evaluation	Handbook of E-Business Security	Auerbach Publicatio n	978-04- 29887- 08-6	2018
11.	Balakrishnan Unny, Gaurav Mishra, Nityesh Bhatt, AkshayaKumar	Strategies for Improving Cyber Resilience of Data-Intensive Business Information Systems	Handbook of E-Business Security	Auerbach Publicatio n	978-04- 29887- 08-6	2018
12.	Gaurav Mishra, Balakrishnan Unny, Nityesh Bhatt	Internet of Things (IoT) Deployment in Wearable Healthcare: A Socio-Techno Evaluation	Handbook of E-Business Security	Auerbach Publicatio n	978-11- 38571- 30-3	2019
13.	MeetaMunshi	Persuading Behavioral Change towards Open Defecation Free India	Business Ecosystem: Interplay of Key Dimensions	Himalaya Publishing House Pvt. Ltd.	978-93- 5273- 835-9	2018
14.	Monali Chatterjee, Aakruti Shah	Integrated Reporting - Lessons from Early Adopters	Business Economy and Environment	Himalaya Publishing House Pvt. Ltd.	978-93- 52996- 53-7	2018
15.	Samik Shome, Dipak Ranjan, Pooja Goel, Piali Halder	Commuter Willingness towards using Organised Ride-Hailing Services: A Case Study of India	Business, Economy and Environment: the New Normal	Himalaya Publishing House Pvt. Ltd.	978-93- 52996- 53-7	2019
16.	Bhoomi Mehta	Analyzing Financial Performance of Microfinance Institutions in Gujarat in Current Environment	Business, Economy and Environment: Corporate Perspectives	Himalaya Publishing House Pvt. Ltd.	978-93- 52996- 54-4	2019

17.	Indu Rao, Pooja Thakker	Developing Entrepreneurial Leadership for Sustainable Entrepreneurial Ecosystem	Business, Economy, and Environment: the New Normal	Himalaya Publishing	978-93-52996-53-7	2019
18.	Kaushik. Amrutlal Patel, Tejas Shah	Identifying Factors Impacting Deal Proneness	Business, Economy and Environment: Corporate Perspectives	Himalaya Publishing House Pvt. Ltd.	978-93-52996-54-4	2019
19.	Balakrishnan Unny, Gaurav Mishra, Diljeetkaur Makhija	Next Engineering: the Road Ahead?	Business, Economy and Environment: the New Normal	Himalaya Publishing House Pvt. Ltd.	978-93-52996-53-7	2019
20.	Nishant Agrawal, Rajesh Jain	Technology Advancement: an Application of Text Mining	A Compendium of Ideas & Perspectives on Sustainable Development Goals	B.K. School of Professional and Management Studies, Gujarat University	978-93-86644-50-3	2019
21.	Rajesh Jain, Himanshu Trivedi	Meeting VUCA Challenges	VUCA Challenges: Sustainability through Quality	ASQ South Asia	978-81-93021-64-4	2019
22.	Jitendra Nenavani, Rajesh Jain	Sustainable Supply Chain in the World of VUCA	VUCA Challenges: Sustainability through Quality	ASQ South Asia	978-81-93021-64-4	2019
23.	Rajesh Jain, Himanshu Trivedi	No Better Times!	VUCA Challenges: Sustainability through Quality	ASQ South Asia	978-81-93021-64-4	2019
24.	Balakrishnan Unny, Ganesan Kannabiran	Exploring the Impact of Risk Management on Project Performance - Offshored Projects	Research Frontiers in Financial Management and General Management	Excel India Publishers	978-93-86724-70-0	2018

25.	Anurodh Khanuja, Rajesh Jain	A Study of E-Commerce and SMEs Performance: an Empirical Evidence	Research Frontiers in Finance and General Management	Excel Publishers	978-93-867247-00	2018
26.	Indu Rao, Poonam Jha	A Green HRM Approach to Organizational Sustainability	Research Frontiers in Human Resource Management and Marketing Management	Excel India Publishers	978-93-86724-69-4	2018
27.	Sapna Parashar	A Review of Perception Based Factors Influencing the Acceptance of Electronic and Mobile Banking in Developing Economies	Marketing, Strategy, HRM and Information Management	Excel India Publishers	978-93-87572-22-5	2019
28.	Balakrishnan Unny	Improving Transparency in Government Initiatives Using Block Chain-Enablers and Challenges	Research Frontiers in Marketing, Strategy, HRM and Information Management	Excel India Publishers	978-93-88237-63-5	2019
29.	Indu Rao, Pragya Thakur	Deming Principles: Implications for HR Practices and Innovation in SMES	Research Frontiers in Marketing, HRM and Information Management	Excel India Publishers	987-93-88237-63-5	2019
30.	Indu Rao, Pooja Thakker	Entrepreneurial Leadership and Innovation Ecosystem	Research Frontiers in Marketing, HRM and Information Management	Excel India Publishers	987-93-88237-63-5	2019
31.	Dhiren Jotwani	Governance, Financial Development and Economic Growth	Governance in Indian Financial Services Sector: Reforms and Remedies	L Ordine Nuovo Publications	978-93-86782-40-3	2018

32.	Mahesh K. C., Pravida Raja A. C	Statistical Modelling of Amount of Rainfall in Gujarat	Proceedings of International Conference on Innovative Practices in Business	Billberry Studio	978-81- 93767- 32-0	2018
33.	Mahesh K. C.	Directional Data Analysis	Advances in Analytics and Applications	Springer	978- 981-13- 1207-6	2018
34.	Soni Nirmal Chandrakant	Case Study: A Family Enterprise Looking for Grey Pastures in Green Business of Solid Waste Management	Thrive A Handbook of Family Business Case Studies	Bloomsbu ry India	978-93- 87146- 16-7	2018
35.	Balakrishnan Unny, Kannabiran, Ganesan	Impact of Risk Management on the Relationship Between Planning, Control and Project Performance in off shored is Projects	Project Management in the Emerging World of Disruption	PMI Organizati on Centre Pvt. Ltd.	978-81- 92623- 99-3	2019
36.	Deepak Danak	Measurement of Value Creation: Future Directions for Research	Business, Economy and Environment: Corporate Perspectives	Himalaya Publishing House Pvt. Ltd.	978-93- 5299- 654-4	2019
37.	Mahesh K C	Statistical Modelling of Amount of Rainfall in Gujarat	Proceedings of International Conference on Innovative Practices in Business	Billberry Studio	978-81- 937673 -2-0	2018
38.	Mahesh K. C.	A Statistical Model For Predicting Bitcoin Market price	Transformatio ns Through Strategic and Technological Interventiones	McGraw Hill Education (India) Pvt. Ltd.	978-93- 87572- 21-8	2018
39.	Mahesh K. C.	Directional Data Analysis	Advances in Analytics and Applications	Springer	978- 981-13- 1207-6	2018

Cases Published

Sr. No.	Name of Author	Title of Case	Year
1.	Prof. Ritesh Patel	Nipponply: Analyzing the Feasibility of Geographical Expansion	2018
2.	Prof. Sameer Pingle	The Gupta's Dilemma of Freshman Attrition	2018
3.	Prof. Nirmal Soni	Cost Behaviour During Increased Competition in a Period : A Case Study	2019

Ph.D. Awarded

Sr. No.	Name of the Student	Name of the Guide / Supervisor	Title of Thesis
1.	P. A. Padmanabhan	Dr. M. Mallikarjun	A Study of Corporate Restructuring in India with Special Focus on Demergers

Research Awards

Research Awards Received by the Faculty Members

Sr. No.	Name of the Faculty Awardee	Recognition / Honor / Award	Name of the Organization / Event	Award Category
1.	Prof. Sameer Pingle	Best Paper Award	Academy of Human Resources Development, Ahmedabad	First Prize
2.	Prof. Samik Shome, Prof. Dipak Ranjan	Best Paper Award	Entrepreneurship Development Institute of India, Gandhinagar	First Prize
3.	Prof. Sunita Guru	Best Paper Award	B.K. Institute of Management, Gujarat University	Third Prize
4.	Prof. Nityesh Bhatt	Startup and ICT Awards for the Best Innovative use of E-Governance	Global Knowledge Research Foundation at Goa (During Second International Research Symposium on Computing and Network Sustainability 2018)	Memento
5.	Prof. Nityesh Bhatt, Prof. Punit Saurabh	Best Paper Award	International Conference on Emerging Trends in Business Management Organised by Pune Institute of Business Management, Pune	Citation

Conferences Organised by the Institute

Nirma International Conference on Management – NICOM 2019

The 22nd Nirma International Conference on Management (NICOM) was organised by Institute of Management, Nirma University during January 17-19, 2019. The central theme of the conference was “*Business, Economy and Environment: The New Normal*”. Indian Council of Social Science Research (ICSSR) was the lead sponsor of NICOM 2019 followed by Indian Oil Corporation Limited and Erhardt (India) Pvt. Ltd.

A pre-conference workshop was conducted in collaboration with Competition Commission of India on the theme of ‘*Competition Law & Business Management*’.

Shri Sunil R. Parekh, Senior Strategy Advisor, ZydusCadila Healthcare Group and Founding Curator, World Economic Forum was the chief guest of the inaugural session held on January 17, 2019. Padma Shri Dr. Karsanbhai K. Patel, President, Nirma University was also present on this occasion.

In total, 179 abstracts and 106 full papers were received from India and abroad. Among these, two volumes of books were published containing selected 61 papers. NICOM 2019 also tied up with Management Decision journal, published by Emerald Publish House, indexed in Scopus, Web of Science, and ABDC list (B Category), recognised by UGC, for a special issue to be published after the conference. The conference saw total registrations of 157 delegates, 114 papers presentations by the participants in 16 track sessions, organised over the period of three days.

The Chief Guest for the valedictory session was Mr. DilipChenoy, Secretary General, Federation of Indian Chambers of Commerce and Industry (FICCI), New Delhi. Dr. Samir Shah, Associate Clinical Professor, Drexel University, USA was the Guest of Honor.

ANVESH – 14th Doctoral Research Conference

Anvesh-2018 - The 14th Doctoral Research Conference was organised by the Institute of Management, Nirma University on 6th and 7th April, 2018. The chief guest of the Inaugural ceremony was Dr.D.M. Pestonjee, Ex-Professor (IIM-A). Two books “Research Frontiers in Finance and General Management” and “Research Frontiers in Human Resource Management and Marketing Management”, Publish by Excel India Publishers were released during the session.

ANVESH received 88 abstracts from all over the country and 52 research papers. During two days, 8 parallel track sessions were organised, where researchers presented their research papers. Themes covered for the same were in the areas of human resource, marketing, operations, finance, entrepreneurship and information Management. There were two expert sessions, “Theory of Management Research” and “Do’s and Dont’s of Management Research” delivered respectively by Dr. Deepak Shrivastava and Dr. A.C. Brahmhatt.

The second day of conference started with the research clinics, where researchers discussed about the research problems with experts in the given area. The conference concluded with the valedictory address by Dr. R.J. Mody, Former Director, Sardar Patel Institute of Economic & Social Research, Ahmedabad.

Dr. Rajen Gupta Ex-Professor, Organizational Behaviour, at Management Development Institute, Gurgaon also conducted the workshop on “Philosophy and Paradigms of Creating Knowledge” and “Overview of Qualitative Research.”

Seminars / Workshops / Training Programmes organised by the Institute

Paper Writing Clinic

A two-day Paper Writing Clinic was organised for the PhD students of the institute on October 05-06, 2018 on the theme '*Do's and Don'ts of Publishing in High Quality Publications*'. It was conducted by Dr.Varsha Jain, Professor in IMC area and Co-Chairperson of FPM at MICA, Ahmedabad.

On November 27, 2018, second Paper Writing Clinic for PhD students was conducted by Prof. Arvind Sahay from IIM Ahmedabad on the theme '*Quality of Research and Publications*'.

Research Talks Organised by the Institute

A Value-Added Session titled Contemporary Issues in Energy Management (including Renewable energy, Smart Grid, Block Chain etc) was scheduled on 29-March, 2019. Resource Person was Professor Amit Garg, Public Systems Group & Chairperson - Doctoral Programme, IIM-Ahmedabad.

Research Report of Institute of Pharmacy



Institute of Pharmacy Research Statistics at a Glance

April 01, 2018 - March 31, 2019

Major Research Projects		Total
Completed Major Research Projects	Projects Completed	02
	Total Grant	₹ 45,60,810/=
Ongoing Major Research Projects	Projects Ongoing	06
	Total Grant	₹ 2,13,06,700/=
Sanctioned Major Research Projects	Projects Sanctioned	01
	Total Grant	₹ 3,50,00,000/=
Minor Research Projects		
Completed Minor Research Projects	Projects Completed	05
	Total Grant	₹ 9,45,000/=
Ongoing Minor Research Projects	Projects Ongoing	03
	Total Grant	₹ 11,05,000/=
Sanctioned Minor Research Projects	Projects Sanctioned	06
	Total Grant	₹ 7,80,000/=
Research Publications		
Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals		41
Books Published		03
Book Chapters Published		06
Patents		
Patents Published		01
Doctoral Research		
Ph.D. Degree Awarded		18
Current Ph.D. Students		69
Current Ph.D. Guides		24
Research Awards		
Research Awards Received by the Faculty Members		06
Faculty Members who Received Financial Support from External Funding Agencies and Nirma University for Attending International Conferences		02
Conferences / Seminars / Research Talks		
International / National Conferences Organised by the Institute		01
Seminars / Workshops / Training Programmes Organised by the Institute		09
Research Talks Organised by the Institute		33

Research Projects

Major Research Projects

Completed Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Exploring the Effect of Histone Deacetylases (HDAC) in Cancer-Cachexia and their Downstream Targets	Prof. Bhoomika Patel	Science and Engineering Research Board, (SERB-DST), New Delhi	27,00,000/=
2.	Epidemiology of Anemia in Pre-School Triabl Children with Reference to its Etiology and Pathophysiology	Prof. Shital Panchal, Prof. Charmy Kothari, Prof. Sarat Kumar Dalai	Indian Council of Medical Reseach, New Delhi	18,60,810/=
Total Grant				45,60,810 /=

Ongoing Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Formulation Development and Evaluation of Nanoparticulate System for Targeted Delivery of Anticancer Agents	Prof. Mayur Patel, Prof. Bhoomika Patel	Nirma University	28,92,400/=
2.	Evaluation of DNA Polymerase Inhibitors for the Treatment of Alzheimers Disease	Prof. Jigna Shah, Prof. Hardik Bhatt	Gujarat State Biotechnology Mission, (GSBTM)	20,80,000/=
3.	Evaluation of Radio Protective Potential of Medicinally Important Indian Bamboo Plants in Cancer	Prof. Priti Mehta, Prof. Sonal Bakshi Prof. Snehal Patel	Ministry of Ayush, Govt. of India, New Delhi	42,00,000/=
4.	Glutathione Appended Polymeric Nanoconstructs of Asiatic Acid for Efficacious Neuroprotection Against Alzheimer Diseases	Prof. Niyati Acharya	Department of Bio Technology (DBT), New Delhi	45,56,000/=
5.	Fund for Infrastructure Development	Prof. Manjunath Ghate	Fund for Improvement of Science & Technology Infrastructure, DST, New Delhi	55,00,000/=

6.	Exploring Non-Equilibrium Atmospheric Plasma for Effective Sterilization Including Biological Safety Aspects	Prof. Shital Butani, Prof. Priti Mehta, Prof. Snehal Patel	Board of Research in Nuclear Sciences (BRNS)	20,78,300/=
Total Grant				2,13,06,700/=

Sanctioned Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	National Facility for Analytical Characterization and Biological Evaluation of Biosimilars (Under DPRP)	Prof. Priti Mehta, Prof. Sarat Dalai, Prof. Sriram Sheshadri, Prof. Mayur Patel, Prof. Bhoomika Patel, Prof. Vivek Vyas	Department of Science & Technology, New Delhi	3,50,00,000/=
Total Grant				3,50,00,000/=

Minor Research Projects

Completed Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Solubility Enhancement of BCS Class II Drug using Self Emulsifying Drug Delivery System	Prof. Mohit Shah	NirmaUniversity	90,000/=
2.	Solubility Enhancement of Lead Candidates as Anti-Diabetic Agents	Prof. Bhoomika Patel, Prof. Nrupesh Patel	NirmaUniversity	1,00,000/=
3.	Synthesis of Co-Crystal of Acyclovir for Improvement of Physicochemical Parameters.	Dr. Jignasa Savjani	Nirma University	85,000/=
4.	Evaluation of Chemoprotective Potential of Active Constituent of L. Usitatissimum in Colon Cancer Associated with Diabetes Mellitus	Prof. Bhoomika Patel, Prof. Shraddha Bhadada	Gujarat Council on Science and Technology (GUJCOST)	2,80,000/=
5.	Investigation of the Role of Tephrosia Purpurea in Cardiovascular Complications in Rats	Prof. Bhoomika Patel	Gujarat Council on Science and Technology (GUJCOST)	3,90,000/=
Total Grant				9,45,000/=

Ongoing Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Design and Synthesis of Novel Pteridine Derivatives as Aurora Kinase Inhibitors for the Treatment of Cancer	Prof. Hardik Bhatt, Prof. Vivek Vyas	Gujarat Council on Science and Technology (GUJCOST)	2,70,000/=
2.	Screening and Characterization of Anticancer Bioactive Principle from the Indigenous Plants of Dang Forest	Prof. Priti Mehta, Prof. Charmy Kothari, Prof. Dipal Gandhi	Gujarat Council on Science and Technology (GUJCOST)	3,00,000/=
3.	Evaluation of Effect of Butea Monosperma in Neurodegenerative Disorders	Prof. Shital Panchal, Prof. Jigna Shah	Gujarat Council on Science and Technology (GUJCOST)	5,35,000/=
Total Grant				11,05,000/=

Sanctioned Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Design, synthesis of poly(ADP-ribose)polymerase (PARPI) inhibitors for the treatment of cancer	Dr. Bhumika Patel	Nirma University	2,00,000/=
2.	Design, synthesis and pharmacological evaluation of novel benzimidazole derivatives as C-Met kinase inhibitors	Ms. Palak Parikh	Nirma University	2,00,000/=
3.	Pharmacological evaluation of antiurolithiatic activity of roots of Grewia Flavescens	Dr. Niyati Acharya	Nirma University	95,000/=
4.	Formulation development & evaluation of theranostic nanocarriers for brain tumor targeting	Dr. Jigar Shah	Nirma University	90,000/=
5.	Pharmacological evaluation of anti-diabetic agents in diabetes associated depression: Molecular link and clinical implications	Dr. Snehal Patel	Nirma University	95,000/=
6.	Physicochemical property improvement of poorly water soluble anti-infective drugs	Dr. Jignasa Savjani	Nirma University	1,00,000/=
Total Grant				7,80,000/=

Research Publications

Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals

1. C Pansara, WY Chan, A Parikh, DJ Trott, T Mehta, R Mishra, S Garg. "Formulation Optimization of Chitosan-Stabilized Silver Nanoparticles Using In Vitro Antimicrobial Assay". *Journal of pharmaceutical sciences* 108 (2) (2019): 1007-1016.
2. Chokshi, N V, H N Khatri, and M M Patel. "Formulation, Optimization, and Characterization of Rifampicin-Loaded Solid Lipid Nanoparticles for the Treatment of Tuberculosis." *Drug Development and Industrial Pharmacy* 44.12 (2018): 1975–1989.
3. Jha, A B, S S Panchal, and A Shah. "Ellagic Acid: Insights into Its Neuroprotective and Cognitive Enhancement Effects in Sporadic Alzheimer's Disease." *Pharmacology Biochemistry and Behavior* 175 (2018): 33–46.
4. Variya, B C et al. "Suppression of Abdominal Fat and Anti-Hyperlipidemic Potential of *Emblica Officinalis*: Upregulation of PPARs and Identification of Active Moiety." *Biomedicine and Pharmacotherapy* 108 (2018): 1274–1281.
5. Barai, P et al. "Neuroprotective Effects of *Bergenia Ciliata* on NMDA Induced Injury in SH-SY5Y Cells and Attenuation of Cognitive Deficits in Scopolamine Induced Amnesia in Rats." *Biomedicine and Pharmacotherapy* 108 (2018): 374–390.
6. Rawal, T, S Patel, and S Butani. "Chitosan Nanoparticles as a Promising Approach for Pulmonary Delivery of Bedaquiline." *European Journal of Pharmaceutical Sciences* 124 (2018): 273–287.
7. Rajput, A P, and S B Butani. "Fabrication of an Ion-Sensitive in Situ Gel Loaded with Nanostructured Lipid Carrier for Nose to Brain Delivery of Donepezil." *Asian Journal of Pharmaceutics* 12.4 (2018): 293–302.
8. Bakrania, A K, B C Variya, and S S Patel. "Insights from Diversified Anti-Angiogenic Models: Role of β -Interferon Inducer DEAE-Dextran." *Pharmacological Reports* 70.3 (2018): 549–557.
9. Barai, P et al. "*Bergenia Ciliata* Ameliorates Streptozotocin-Induced Spatial Memory Deficits through Dual Cholinesterase Inhibition and Attenuation of Oxidative Stress in Rats." *Biomedicine and Pharmacotherapy* 102 (2018): 966–980.
10. Prajapati, P B, D R Bhayani, and P J Mehta. "Accelerated Stability Testing of Levosimendan: Isolation and Characterization of Degradation Impurities Utilizing Preparative HPLC, LC–MS, NMR, and IR." *Journal of Liquid Chromatography and Related Technologies* 41.9 (2018): 498–507.
11. Borse, S P et al. "Potential Synergistic Effects of Quercetin with Other Phytoconstituents of *Costus Pictus* (Insulin Plant) Extract in the Control of Hyperglycemia and Prevention of NSAID-Induced Gastroenteropathy in Diabetic Rats." *Food and Chemical Toxicology* 120 (2018): 448–461.
12. Shah, S, B Patel, and J K Savjani. "Pharmacophore Mapping Based Virtual Screening, Molecular Docking and ADMET Studies of ROCK II Inhibitors." *Multiple Sclerosis and Related Disorders* 21 (2018): 35–41.

13. Shah, H R, and J K Savjani. "Recent Updates for Designing CCR5 Antagonists as Anti-Retroviral Agents." *European Journal of Medicinal Chemistry* 147 (2018): 115–129.
14. Patel, M N, and C S Kothari. "Review on Implementation of Multivariate Approach for Forced Degradation Study and Impurity Profiling with Regulatory Considerations." *Chromatographia* 81.1 (2018): 105–125.
15. Prajapati, K J, and C S Kothari. "Impurity Profile of Bronchodilators Used in Asthma: A Critical Review." *Current Drug Discovery Technologies* 15.4 (2018): 272–304.
16. Raval, N et al. "Fabrication of Peptide-Linked Albumin Nanoconstructs for Receptor-Mediated Delivery of Asiatic Acid to the Brain as a Preventive Measure in Cognitive Impairment: Optimization, in-Vitro and in-Vivo Evaluation." *Artificial cells, nanomedicine, and biotechnology* (2018): 1-15.
17. Sinhmar, G K et al. "Surface Engineered Lipid Nanoparticle-Mediated Site-Specific Drug Delivery System for the Treatment of Inflammatory Bowel Disease." *Artificial Cells, Nanomedicine and Biotechnology* 46 (sup2) (2018): 565–578.
18. Nair, A B et al. "Development and Evaluation of Palonosetron Loaded Mucoadhesive Buccal Films." *Journal of Drug Delivery Science and Technology* 47 (2018): 351–358.
19. Sagar, S R et al. "Thiazolyl-Thiadiazines as Beta Site Amyloid Precursor Protein Cleaving Enzyme-1 (BACE-1) Inhibitors and Anti-Inflammatory Agents: Multitarget-Directed Ligands for the Efficient Management of Alzheimer's Disease." *ACS Chemical Neuroscience* 9.7 (2018): 1663–1679.
20. Dhal, C et al. "QbD Assisted RP-HPLC Method for Identification of Terazosin in Bulk Drug and Pharmaceutical Sample." *Indian Drugs* 55.3 (2018): 19–26.
21. Ingawale, D K, and S S Patel. "Hecogenin Exhibits Anti-Arthritic Activity in Rats through Suppression of pro-Inflammatory Cytokines in Complete Freund's Adjuvant-Induced Arthritis." *Immunopharmacology and Immunotoxicology* 40.1 (2018): 59–71.
22. Panchal, S S et al. "Effect of γ -Oryzanol on Hyperlipidemia and Thrombus Formation in Mice Treated with Poloxamer-407." *Polish Annals of Medicine* 25.2 (2018): 184–189.
23. Dhas, N L et al. "Polymeric Immunonanoparticles Mediated Cancer Therapy: Versatile Nanocarriers for Cell-Specific Cargo Delivery." *Critical Reviews in Therapeutic Drug Carrier Systems* 35.1 (2018): 1–64.
24. Bakrania, A K et al. "DEAE-Dextran Coated Paclitaxel Nanoparticles Act as Multifunctional Nano System for Intranuclear Delivery to Triple Negative Breast Cancer through VEGF and NOTCH1 Inhibition." *European Journal of Pharmaceutics and Biopharmaceutics* 122 (2018): 37–48.
25. Majumder, J et al. "Hearing Threshold Status and Risk Estimate of Hearing Impairment among Administrative Workforce." *Indian Journal of Occupational and Environmental Medicine* 22.1 (2018): 11–16.
26. Patel, H M et al. "Synthesis, Molecular Docking and Biological Evaluation of Mannich Products Based on Thiophene Nucleus Using Ionic Liquid." *Letters in Drug Design and Discovery* 16.2 (2018): 119–126.

27. Rabadiya, S et al. "Magnesium Valproate Ameliorates Type 1 Diabetes and Cardiomyopathy in Diabetic Rats through Estrogen Receptors." *Biomedicine and Pharmacotherapy* 97 (2018): 919–927.
28. Mohankrishnan, A et al. "Lack of TNF- α Signalling through p55 Makes the Mice More Susceptible to Acute Infection but Does Not Alter State of Latency and Reactivation of HSV-1." *Virus Research* 244 (2018): 1–5.
29. Patel, Bhoomika M. "Sodium butyrate controls cardiac hypertrophy in experimental models of rats." *Cardiovascular toxicology* 18.1 (2018): 1-8.
30. Patel, B et al. "L. Donovanii XPRT: Molecular Characterization and Evaluation of Inhibitors." *Biochimica et Biophysica Acta - Proteins and Proteomics* 1866.3 (2018): 426–441.
31. Patel, V, O P Sharma, and T Mehta. "Nanocrystal: A Novel Approach to Overcome Skin Barriers for Improved Topical Drug Delivery." *Expert Opinion on Drug Delivery* 15.4 (2018): 351–368.
32. Baksi, R et al. "In Vitro and in Vivo Anticancer Efficacy Potential of Quercetin Loaded Polymeric Nanoparticles." *Biomedicine and Pharmacotherapy* 106 (2018): 1513–1526.
33. Rajput, A et al. "In Situ Nanostructured Hydrogel of Resveratrol for Brain Targeting: In Vitro-in Vivo Characterization." *Drug Delivery and Translational Research* 8.5 (2018): 1460–1470.
34. Patel, M M, and B M Patel. "Repurposing of Sodium Valproate in Colon Cancer Associated with Diabetes Mellitus: Role of HDAC Inhibition." *European Journal of Pharmaceutical Sciences* 121 (2018): 188–199.
35. Sinhmar, G K et al. "Process, Optimization, and Characterization of Budesonide-Loaded Nanostructured Lipid Carriers for the Treatment of Inflammatory Bowel Disease." *Drug Development and Industrial Pharmacy* 44.7 (2018): 1078–1089.
36. Rawal, H, and B M Patel. "Opioids in Cardiovascular Disease: Therapeutic Options." *Journal of Cardiovascular Pharmacology and Therapeutics* 23.4 (2018): 279–291.
37. Kumria, R et al. "Formulation and Evaluation of Chitosan-Based Buccal Bioadhesive Films of Zolmitriptan." *Journal of Pharmaceutical Innovation* 13.2 (2018): 133–143.
38. Desai, P R et al. "Simultaneous Quantification of Related Substances of Ezetimibe and Simvastatin in Combined Dosage Form Using a Novel Stability-Indicating Liquid Chromatographic Method." *Acta Chromatographica* 30.2 (2018): 85–94.
39. Crider, A et al. "Complement Component 3a Receptor Deficiency Attenuates Chronic Stress-Induced Monocyte Infiltration and Depressive-like Behavior." *Brain, Behavior, and Immunity* 70 (2018): 246–256.
40. Hiral, S, Anroop, B N, Jigar, S, Praful B and Bandar EA. "proniosomal gel for transdermal delivery of lornoxicam: optimization using factorial design and in vivo evaluation in rats". *DARU journal of pharmaceutical sciences* (2019), 27; 59-70.
41. J Mehetre, K Vimal, T Mehta, M Gohel, N Surti "Rationalized Approach for Formulation and Optimization of Ebastine Microemulsion Using Design Expert for Solubility Enhancement" *Journal of Drug Delivery and Therapeutics* 9 (3-s), 386-397. (2019)

Books Published

Sr. No.	Name of the Faculty	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Ramesh Goyal, R.K. Parikh, Mayur Patel	A Text-Book of Hospital Pharmacy	B. S. Shah Prakashan, Ahmedabad	81-8416-008-9	2018
2.	Tejal Mehta, Swapan Kumar, Momin Munira	Pharmaceutical Quality Management & Drug Delivery Systems	Career Publications, New Delhi	978-93-82322-71-9	2018
3.	Snehal Patel, Deepa Ingawale	Text Book of Human Anatomy and Physiology-I	Nirav Prakashan, Ahmedabad	978-93-86565-73-0	2018

Book Chapters Published

Sr. No.	Name of the Faculty	Name of the Book Chapter	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Jigar Shah, Nareshkumar	Delivery of Biomolecules to the Central Nervous System Using a Polysaccharide Nanocomposite	Polysaccharide based Nanobiocarrier in Drug Delivery	CRC Press, Taylor & Francis Group	978-11-38481-11-4	2018
2.	Tejal Mehta, Aliasgar Shahiwala, Munira Momin	Parenteral Drug Delivery Systems	In-Vitro and In-Vivo Tools in Drug Delivery Research for Optimum Clinical Outcomes	CRC Press	978-13-51368-72-8	2018
3.	Tejal Mehta, Viral Patel, Om Prakash Sharma	Receptor-Targeted Prodrug Approach for Retina and Posterior Segment Disease	Drug Delivery for the Retina and Posterior Segment Disease	Springer, Cham	978-31-9958-07-1	2018

4.	Tejal Mehta, Munira Momin	Intravitreal Injection Drug Delivery for Retina and Posterior Segment Disease: Challenges and the Future Ahead	Drug Delivery for the Retina and Posterior Segment Disease	Springer, Cham	978-33-19958-07-1	2018
5.	Charmy Kothari, Shital, Manan Shah, Rajvi Patel	Introductory Chapter: Pharmacovigilance	Pharmacovigilance	Intechopen Access	978-17-89857-60-3	2019
6.	Tejal Mehta, Neha Shah, Khushali Parekh, Dhas Namdev, Jayvadan Patel	Surface-Modified PLGA Nanoparticles for Targeted Drug Delivery to Neurons	Surface of Modification of Nanoparticles for Targeted Drug Delivery	Springer - Nature	978-30-30061-15-9	2019

Patents Published

Sr. No.	Name of the Inventors	Title of the Patent	Year	Status
1.	Prof. Mayur Patel, Prof. Bhoomika Patel, Prof. Pooja Patel, Prof. Nimitt Chokshi	A Formulation for Treatment of Inflammatory Bowel Disease	2018	Published

Ph.D. Awarded

Sr. No.	Name of the Student	Name of the Guide / Supervisor	Title of Thesis
1.	Patel Nrupesh R.	Dr. Anuradha Gajjar	Analytical Method Development, Validation and Degradation Studies of Dosage Forms of Montelukast and Desloratadine
2.	Tripathi Nagja V.	Dr. Sanjeev Acharya	Development, Optimization and Evaluation of a Polyherbal Formulation for Anti-Diabetic Activity
3.	Ketan Tulsidas Savjani	Dr. Anuradha Gajjar	Development and Characterization of Formulations of Poorly Soluble Drug Candidates

4.	Patel Jagruti Jaydevbhai	Dr. Niyati Acharya	Phytochemical and Pharmacological Evaluation of Clerodendrum Serratum Roots with Special Reference to Asthma
5.	Khan MD Yaseen MD Yunus	Dr. Vimal Kumar	Phytopharmacological Evaluation of ACE Inhibitors from Medicinal Plants of Ayurveda
6.	Sarvesh Sharma	Dr. Vimal Kumar	Co-encapsulated Liposome of Artemisinin Analogue and Curcumin for Cytotoxic Potential
7.	Pithadia Anand Bharatkumar	Dr. Shital Panchal	Effects of Potassium Channel Openers in Various Experimental Models of Ischemic Stroke and Related Disorders
8.	Pravin Balasaheb Ranjana Nalawade	Dr. Anuradha Gajjar	Design, Development and Characterization of Formulations of Selected Carotenoids with Improved Dissolution
9.	Nisha Hemantbhai Parikh	Dr. Charmy Kothari	Phytochemical and Pharmacological Investigation of Ocimum Basilicum Seed
10.	Ingawale Deepa Krushna	Dr. Snehal Patel	Pharmacological Evaluation of Combination of Plant Steroids and Low Dose Glucocorticoid for Treatment of Inflammatory Disorders in Experimental Animals
11.	Shelat Devang Yogeshbhai	Dr. Sanjeev Acharya	Development and Evaluation of Curcumin Peptide Concoction for Improving Brain Delivery And In-vivo Efficacy in Dementia Model
12.	Shah Neha Surendra	Dr. Tejal Mehta	Formulation Development and Characterization of Multiparticulate System for Oral Fixed Dose Combination Therapy
13.	Modi Anuj Pramodkumar	Dr. Vimal Kumar	Investigation on Hepatoprotective Activity of Some Medicinal Plants
14.	Borisha Ankitkumar Chandrakantbhai	Dr. Hardik Bhatt	Design & Synthesis of Novel Pteridine Derivatives as Aurora Kinase Inhibitors for the Treatment of Cancer
15.	Devendra Pratap Singh	Dr. Manish Nivsarkar	Development of novel Drug Delivery Systems for the Management of NSAID-induced Gastroenteropathy: A Quality by Design (QbD) Approach
16.	Pawar Neha Dilip	Dr. Shital Panchal	Pythopharmacological Evaluation of Nyctanthes arbor-tristis Calyx with Special reference to metabolic disorder and cancer

17.	Prutha Nayan Patel	Dr. Priti Mehta	Microwave-Assisted Degradation Studies of Pharmaceuticals
18.	Chauhan Navneet Singh	Dr. Anuradha Gajjar	Computational Studies and Design of Novel Molecules as Potential Glycogen Synthase Kinase Inhibitors

Research Awards

Research Awards Received by the Faculty Members

Sr. No.	Name of the Faculty Awardee	Recognition / Honor / Award	Name of the Organization / Event	Award Category
1.	Prof. Manjunath Ghate	Best M. Pharm. Thesis Award	Rajanibhai Foundation and Troikkaa Pharmaceuticals Supported by the DST	Certificate
2.	Prof. Manjunath Ghate	IPERS Principal of the Year 2018	Association of Pharmacy Teachers of India	Certificate and Citation
3.	Prof. Priti Mehta	APTI Women of the Year	Association of Pharmacy Teachers of India (APTI)	Certificate and Citation
4.	Prof. Mayur Patel	Best Research Paper	Association of Pharmacy Teachers of India (APTI)	First Prize
5.	Prof. Bhumika Patel	Best Assistant Professor for Overall Performance	Nirma University	Incentive
6.	Prof. Bhoomika M. Patel	Oral Presentation	23 rd Annual National Convention of Association of Pharmaceutical Teachers of India	First Prize

Travel Grants Received by the Faculty Members

Sr. No.	Name of the Faculty Member	Purpose of the Visit	Name of the Funding Agency	Name of the Country
1.	Prof. Charmy Kothari	To Present Paper and Attend an International Conference	Science and Engineering Research Board, DST, New Delhi	Canada
2.	Prof. Jignasa Savjani	To Present Paper and Attend an International Conference	Science and Engineering Research Board, DST, New Delhi	USA

Conferences Organised by the Institute

3rd National Conference of Institute of Pharmacy –NCIP 2019

The 3rd National Conference of Institute of Pharmacy, NCIP 2019 was organised on the theme “Integrating Natural and Modern Medicines in Drug Discovery and Development” during January 24-25, 2019. The conference was inaugurated by Dr. G. N. Singh, Secretary-cum-Scientific Director, Indian Pharmacopoeia Commission, Ministry of Health & Family Welfare, Govt. of India and the Guest of Honor Dr. Gopal Kundu, Director, National Centre for Cell Science, Pune.

The conference was supported financially by DBT, DST-SERB, GUJCOST and DRDO and other sponsoring agencies. More than 250 researchers, students and faculties participated in the conference.

Prof. N. R. Sheth, Vice Chancellor, Gujarat Technological University, Ahmedabad was the Chief Guest and Dr. Anamik Shah, Vice Chancellor, Gujarat Vidyapith, Ahmedabad was the Guest of Honour for the valedictory programme.

Seminars / Workshops / Training Programmes Organised by the Institute

Short Term Training Programme on “Innovations and New Techniques for the Treatment of Cancer, Diabetes & Neurodegenerative Diseases”

The ISTE approved Interdisciplinary STTP on, “Innovations and New Techniques for the Treatment of Cancer, Diabetes & Neurodegenerative Diseases” was organised during June 30, 2018 to July 13, 2018. Dr. Anil Kumar Mishra, Additional Director, INMAS, DRDO, New Delhi was the chief guest of inaugural function.

Eminent speakers and distinguished scientists from various research centres and academic institutions of pharmaceutical field delivered comprehensive talks related to recent research and developments in treatment of cancer, diabetes and neurodegenerative disorders.

Visits to various research centres and laboratories, like Gene Explore Diagnostic & Research Centre, Supratech Laboratory, FRIGE House, Gujarat University Resource Facility, Ahmedabad and GBRC Centre, Gandhinagar was arranged for all participants for practical understanding of latest sophisticated instruments, equipments and techniques.

Continuing Education Programme

The Institute organised PCI sponsored Continuing Education Programme for Pharmacy Teachers on “Teaching Learning Processes and Innovative Pedagogical Tools in Pharmaceutical Sciences” during September 24-26, 2018. Prof. Navin Sheth, Vice Chancellor, Gujarat Technological University was the Chief Guest in the Inaugural Programme.

National Seminar on, “Recent Advances in Drug Discovery”

The Department of Pharmaceutical Chemistry, Institute of Pharmacy organised GUJCOST sponsored 5th National Seminar on “Recent Advances in Drug Discovery” on September 28, 2018. Dr. Rajender Reddy Leleti, Head, Route Scouting and New Technology, Piramal Enterprises Limited, Ahmedabad was the chief guest in the Inaugural Programme. The seminar constituted of five plenary lectures by distinguished experts from Industry and Academia. Around eighty delegates from various Pharmacy and Science colleges attended the seminar and presented their research/review work through oral and poster presentations on the theme of drug design and discovery.

Workshop on “Computer aided Drug Design Software”

A workshop on the "Computer Aided Drug Design Software" was conducted by Department of Pharmaceutical Chemistry, Institute of Pharmacy under Center of Continuing Education, Nirma University on 16th February, 2019. The main objective of the workshop was to provide conceptual insight as well as demonstration of important software used for computer aided drug design (CADD). The workshop got very good response and total 33 participants attended the workshop. The sessions were conducted by internal faculties; Dr. Jignasa Savjani, Dr. Vivek Vyas, Dr. Bhumika D. Patel and Ms. Palak K. Parikh while software demonstration and hands on training on some CADD tools were given by research scholars; Mr. Piyush Gediya and Ms. Keerti Vishwkarma. The workshop has provided a good opportunity to the delegates to learn about the various CADD approaches using computational tools.

Hands on Training Programme on, “Formulation Development and Characterization of Nano-Drug Delivery Systems”

Hands on training on formulation development and characterization of nano drug delivery systems was organised on September 29, 2018 by the Department of Pharmaceutics, Institute of Pharmacy, Nirma University under the banner of Centre for Continuing Education. The programme was inaugurated by Dr. P G. Shrotriya, CEO, Elite Consultancy Services as chief guest followed by his key note address. Dr. Manju Mishra, faculty, NIPER, Ahmedabad and Dr. Tejal Mehta, Professor and Head-Pharmaceutics delivered expert talks. The poster competition was also organised followed by demonstration of various equipments like high speed homogenizer, high pressure homogenizer and particle size analyzer. Around 75 students and faculty attended the event.

Research Paper Writing Clinic

Scientific Writing Clinic was organised by Institute of Pharmacy on December 20-21, 2018 under the banner of IQAC-I to enlighten and disseminate researchers and faculty about importance and ways of effective scientific writing. A total of 60 participants from Institute of Pharmacy and Institute of Science, Nirma University participated in the event. Lectures and hands-on sessions were taken by Dr. Anupama Ramkumar (Arkus Research Clinical Solution, Ahmedabad), Dr. Harish Padh (Ex. Vice Chancellor SPU), Prof. Bhaswat Chakraborty (Emeritus Professor Institute of Pharmacy, Nirma University) and Prof. J. P. N. Mishra (Dean, School of Life Sciences, Central University of Gujarat, Gandhinagar).

Hands on Training for Sophisticated Instruments

A workshop entitled “Hands on Training for Sophisticated Instruments” for the Undergraduate, Postgraduate and Ph.D. students of Pharmacy, Chemical Engineering and Science background was organised by Department of Pharmaceutical Analysis, Institute of Pharmacy on December 28, 2018 under the aegis of Centre of Continuing Education, Nirma University. The training programme provided basic understanding, operation and hands on training of sophisticated instruments like High Performance Liquid Chromatograph (HPLC), Gas Chromatograph (GC), High Performance Thin Layer Chromatography (HPTLC), Fourier Transform Infrared Spectrophotometer (FT-IR) and Spectrofluorimeter. The workshop was attended by a total of 38 participants.

Workshop on, “Neuropharmacological Evaluation of Drugs: Application of Stereotaxic Surgery and Behavioral Assessment”

The Department of Pharmacognosy, Institute of Pharmacy organised a workshop on “Neuropharmacological Evaluation of Drugs: Application of Stereotaxic Surgery and Behavioral Assessment” under the aegis of Centre for Continuing Education, Nirma University. Dr. Vinod Tiwari, IIT BHU, distinguished speaker in the workshop, delivered a lecture on Stereotaxic surgery. Prof. Rakesh Raval, Head, Dept. of Life Sciences, Gujarat University was also one of the invited guest in the inaugural programme. Dr. Niyati Acharya, Head, Dept. of Pharmacognosy delivered a talk on “Experimental screening models for Alzheimer’s disease.” Demonstrations on stereotaxic surgery and behavioural assessment methods for rodents were also given.

National Workshop on, “Demonstration & Training on Pharmaceutical Equipment and Software”

A National Workshop on “Demonstration & Training on Pharmaceutical Equipment and Software” was organised during March 28-30, 2019 for third and fourth year B.Pharm. students across various institutions in India. The workshop was organised to develop technical skill of B.Pharm. students and to prepare them to face current challenges of the industry. During the workshop, demonstration of various equipment like SFC, HPLC, FT-IR, HPTLC, Texture Analyzer, HPH, ELISA Plate reader, MPLC, Microwave Synthesizer etc was given. Along with that demonstration of software, like design expert, gold suit and eCTD was given which are widely used in pharmaceutical industry.

Research Talks Organised by the Institute

It is a regular practice at the Institute of Pharmacy to arrange research related expert talks by eminent personalities from Industry and Academia. The institute ensures that the faculty members and students stay abreast with the changing trends. Following are the details of some of the talks/lectures organised by the departments under Institute of Pharmacy:

Lecture Series by Prof. Sunil S. Jambhekar

Prof Sunil S Jambhekar from LECOM-Bradenton, School of Pharmacy, FL, USA visited Institute of Pharmacy, Nirma University during February 11-15, 2019. He delivered a series of lectures on biopharmaceutics and pharmacokinetics, nonlinear kinetics, and modified release dosage form.

Prof Jambhekar guided the students for in vitro-in vivo correlation and Pharmacokinetic and pharmacodynamics related problems. He also discussed the research project related problems of MPharm and PhD students. He also guided students for Indo - US exchange program for internship, post-doctoral fellowship opportunities and Full Bright fellowship schemes of USA. The brainstorming session with faculty for research and teaching policy, advancement in teaching and trends in US education system was also organised.

Lecture Series by Prof. Marco Lolli

Prof. Marco Lolli, Aggregate Professor in Medicinal Chemistry at University of Turin, Torino, Italy and CEO, Beenext s.r.l. visited Institute of Pharmacy, Nirma University from February 25 to March 04, 2019. As a Visiting Professor, Prof. Lolli delivered a series of lectures on Scaffold hopping in drug discovery targeting hDHODH to B.Pharm, M.Pharm, and Ph.D. students. He covered systematic approaches to drug design and synthesis. The case studies and problem-solving were also given to the M. Pharm and Ph.D. students. Prof. Lolli

also interacted personally with M. Pharm and Ph.D. students and did brainstorming for their research related problems. He delivered lectures on Innovative Teaching methodologies for faculty members and Ph.D. students. Prof. Lolli also delivered a Public Lecture on "Malaria: An Historical Perspective".

Lecture Series by Dr. Sanjib Bhattacharya

Dr. Sanjib Bhattacharya, Professor, SouthWest University, Chongqing, China delivered a public lecture entitled "Evaluating the Nanoscale Biomimetic at the Interface of Chemistry and Biology" on February 21, 2019. He talked about the various studies which were carried out in his laboratory. The studies were pertaining to neurodegenerative diseases and cancer in which they have developed novel molecules and have been able to achieve better efficacy in animal models of the diseases.

Expert and Alumni Lectures

The following list provides information of the guest lectures organised during the last few months:

1. 'Basics of Carbonyl Chemistry' by Dr. Bipin Pandey, Director, Director at Center of Excellence, Saurashtra University, Rajkot on April 04, 2018.
2. 'Standardization of Herbal Drugs: an Industrial Perspective' by Dr. Chaitanya Bhatt, Director, YDIK Nature Care Products Pvt. Ltd., Ahmedabad on April 12, 2018.
3. 'Pharmacovigilance- Beyond Reporting ADRs' by Dr. Anupama Ramkumar, Arkus Clinical Trial Support Solutions, Ahmedabad on April 18, 2018.
4. 'Pharmaceutical Regulatory Scenario- A view point of FDCA', by Dr. V. R. Shah, Deputy Director, FDCA, Gujarat on April 20, 2018.
5. 'Mass Spectrometry and Hyphenated Techniques and Chromatography- Basics and Applications' by Dr. Prinesh Patel, Mass Spectrometry Specialist, Waters India Pvt. Ltd., Ahmedabad on April 21, 2018.
6. 'Importance of Ayurveda in Healthcare System' by Dr. Prerak Shah, Founder, AYULINK, Ahmedabad on April 25, 2018.
7. 'Regulations for Dietary Supplements in EU and USA' by Dr. Ramesh Pennamareddy, AGM- Regulatory affairs, Amneal Pharmaceuticals, Ahmedabad on April 26, 2018.
8. 'NIR Spectroscopy for PAT' by Dr. Padma Rajagopalan, Director, Apra Analytics, Bangalore on April 27, 2018.
9. 'Converting Research into Intellectual Property' by Mr. Mohsin Arabiani, Manager, Amneal Pharmaceuticals, Ahmedabad on May 04, 2018.
10. 'European Regulatory Submission Procedure' by Ms. Dipa Mehta, Ex Senior Research Scientist, Intas Pharmaceuticals Ltd, Ahmedabad on September 04, 2018.
11. 'Interpretation of Regression Analysis in Factorial Design' by Dr. Mukesh Gohel, Research Director, Anand Pharmacy College, Anand on August 30, 2018.
12. 'Analytical Tools used for Bio Similar Therapeutics' by Dr. Sanjeev Kumar, Zydus Cadila Healthcare Pvt Ltd., Ahmedabad on September 01, 2018.
13. 'Tools and Technologies used in eCTD' by Mr. Rohit Jain, Regulatory Consultant, Sarjen Systems Pvt. Ltd., Ahmedabad on September 18, 2018.
14. 'Regulatory Requirement for eCTD' by Ms. Riddhi Doshi, Regulatory Consultant, Sarjen Systems Pvt. Ltd., Ahmedabad on September 18, 2018.
15. 'Research Methodology' by Dr. Rashmi Kumbar, Assistant Professor, School of Library and Information Science, Central University of Gujarat, Gandhinagar on October 06, 2018.
16. 'Pharmacovigilance and Safety Variation' by Mr Bhavesh Kakadiya, Manager, Regulatory Affairs and Quality Assurance, Accord Healthcare Limited, Ahmedabad on October 20, 2018.

17. 'Product Life Cycle Management for US Market' by Mr Bhaumik Modi, Manager, Regulatory Affairs, Cadila Health Care Ltd., Moraiya, Ahmedabad on October 23, 2018.
18. 'Overview of System Software for Statistical Data Analysis' by Shri M. M. Shankar, Technical Expert, System Software, Bangalore on November 20, 2018.
19. Mesoporous Nanoparticles as Drug Delivery Systems&Pharmacy Career opportunities in Australia' by Dr. Aamir Popat, Faculty of Pharmacy, University of Queensland, Australia on January 08, 2019.
20. 'Entrepreneurship Opportunities in the Field of Pharmaceutical Science' by Dr Arpit Patwari, Co-Founder and Partner Pharm ACE Research Laboratory, Ahmedabad on January 17, 2019.
21. 'Career Options for Pharmacy students in USA' by Mr. Shishir Upadhyaya, Senior International Advisor, Admission Office, MCPHS University, Boston on January 18, 2019.
22. 'Clinical Research in USA' by Dr. Jitendra Patel, Former Associate, Director of Clinical Science Astrazeneca Pharmaceuticals Company, USA on February 04, 2019.
23. 'Post Stoke Hypertension: Beneficial or Harmful' by Mr. Pratik Thakkar, Ph.D. Scholar, Department of Physiology, Faculty of Medical and Health Science, University of Auckland, Auckland on February 21, 2019.
24. 'Research and Developments in Biosurfactants and the Introduction of Synthetic Biology to Improve Microbial Processes' by Dr. Pattanathu Rahman, Senior Lecturer, Institute of Biological and Biomedical Sciences, United Kingdom on February 22, 2019.
25. 'Industry Relevant Research in Academia: Reality or Dream?' by Prof. Arvind K. Bansal, Professor and Head, Department of Pharmaceutics, NIPER, Mohali on March 16, 2019.
26. 'Peripheral Nocicepters: An Attractive Target for the Treatment of Neuropathic Pain' by Dr. Vinod TiwariAssistant Professor, Department of Pharmaceutical Engineering and Technology, IIT-BHU on March 25, 2019.

Talks Delivered by the Alumni:

1. 'What Next After B.Pharm.?' by Mr Keval P. Trivedi, Director - PharmaNext Academy, Gandhinagar on October 06, 2018.
2. 'Solid State Characterization of Pharmaceuticals - An Overview' by Mr Harsh Shah, Ph.D. Scholar, Arnold & Marie Schwartz College of Pharmacy and Health Sciences, Long Island University, Brooklyn, New York on November 02, 2018.
3. 'How to Become Successful Pharmacist in Canada?' by Mr. Rahil Jani, Registered Pharmacist, Canada on January 01, 2019.
4. 'Formulation and Evaluation of Pharmaceutical Aerosols' by Dr. Radhika Pandya, Assistant Professor, L. M. College of Pharmacy, Ahmedabad on February 19, 2019.

Research Report of Institute of Science



Institute of Science Research Statistics at a Glance

April 01, 2018 - March 31, 2019

Major Research Projects		Total
Completed Major Research Projects	Projects Completed	04
	Total Grant	₹ 1,51,40,000/=
Ongoing Major Research Projects	Projects Ongoing	02
	Total Grant	₹ 31,87,000/=
Sanctioned Major Research Projects	Projects Sanctioned	04
	Total Grant	₹ 1,95,35,974 /=
Minor Research Projects		
Completed Minor Research Projects	Projects Completed	01
	Total Grant	₹ 1,46,000/=
Sanctioned Minor Research Projects	Projects Sanctioned	01
	Total Grant	₹ 1,10,500/=
Research Publications		
Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals		32
Book Chapters Published		03
Doctoral Research		
Ph.D. Degree Awarded		05
Current Ph.D. Students		49
Current Ph.D. Guides		72
Conferences / Seminars / Research Talks		
Seminars / Workshops / Refresher Courses Organised by the Institute		01
Research Talks Organised by the Institute		19

Research Projects

Major Research Projects

Completed Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Role of Synaptogenic Adhesion Molecules (SAMS) in Insulin Secretion: Effect of Diabetes and Hypoglycaemia	Dr. Amee Nair	Science and Engineering Research Board (SERB), DST	29,40,000/=
2.	Development of Chimeric IL - 15 to Improve its Bioavailability and Efficacy	Prof. Sarat Dalai	Department of Bio Technology (DBT), New Delhi	35,00,000/=
3.	Infectious Status of Plasmodia Modulating the Innate Response in Determining the Fate of Liver-Stage Specific CD8+ T Cells that Ensure Long-Lived Protection Against Malaria	Prof. Sarat Dalai	Fund for Improvement of Science & Technology Infrastructure (FIST), DST, New Delhi	52,00,000/=
4.	Regulation of MHC-II Expression: Immunity to Malaria	Prof. Sarat Dalai	Science and Engineering Research Board (SERB), DST	35,00,000/=
Total Grant				1,51,40,000 /=

Ongoing Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Elucidating the Role of Short Chain Fatty Acids (SCFAS) and its Receptors in High Sugar Diet Induced type II Diabetes	Dr. Sriram Seshadri	Gujarat State Biotechnology Mission (GSBTM)	22,52,000/=
2.	Investigation of the Regulatory role of mir-712 in Inflammation Induced Skeletal Muscle Insulin Resistance	Dr. Sriram Seshadri	Science and Engineering Research Board (SERB), DST	9,35,000/=
Total Grant				31,87,000 /=

Sanctioned Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Microbial Fuel Cell : An Approach for Waste Water Treatment with Generation of Green Electricity	Prof. Nasreen Munshi, Prof. Manisha Shah	Nirma University	29,90,700/=
2.	Investigating the Role of CRC in Regulation of PQQ GDH Involved in MPS Phenotype of Acinetobacter SP and its Repression	Prof. Shalini Rajkumar	Science and Engineering Research Board (SERB), DST, New Delhi	38,73,000/=
3.	Development of Integrated Waste Water Treatment Systems Using Alternative Innovative Approaches of Microbial Fuel Cells, Magnetic Nanoparticles and Vermicomposting with Water Hyacinth for Secondary Sludge Management	Prof. Nasreen Munshi, Prof. Chetna Chauhan, Prof. Manisha Shah This project is of interdisciplinary nature and combined with Institute of Science, Nirma University and Veer Narmad South Gujarat University	Gujarat State Biotechnology Mission (GSBTM)	48,96,574/=
4.	Engineered Bioremediation Approaches for Onsite Treatment of Soil Contaminated with Crude Oil	Dr. Nasreen Munshi, Prof. Shalini Rajkumar	Department of Biotechnology	77,75,700/=
Total Grant				1,95,35,974 /=

Minor Research Projects

Completed Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Demographic Survey of Major Cities of Gujarat for Creation of Diabetic MAP	Dr. Ameer Nair	Gujarat Council on Science and Technology (GUJCOST)	1,46,000/=
Total Grant				1,46,000/=

Sanctioned Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Biocompatibility of Two Experimental Scaffolds for Regenerative Endodontics	Dr. Amee Nair	Noori Eye Hospital, Porbandar	1,10,500/=
Total Grant				1,10,500/=

Research Publications

Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals

1. Joshi, G, G Ravi, and S Mukherjee. "A New Linear Plasma Device for the Study of Plasma Waves in the Electron Magnetohydrodynamics Regime." *Pramana - Journal of Physics* 90.6 (2018): 79.
2. Zala, D B et al. "Leptospira in the Different Ecological Niches of the Tribal Union Territory of India." *Journal of Infection in Developing Countries* 12.10 (2018): 849–854.
3. Patel, P, K Parmar, and M Das. "Inhibition of Insulin Amyloid Fibrillation by Morin Hydrate." *International Journal of Biological Macromolecules* 108 (2018): 225–239.
4. Zala, D B et al. "Leptospirosis in the Union Territory of Dadra & Nagar Haveli, India." *Indian Journal of Public Health Research and Development* 9.2 (2018): 84–89.
5. Patidar, M, N Yadav, and S K Dalai. "Designing of Suitable Linkers for the Chimeric Proteins to Achieve the Desired Flexibility and Extended Conformation." *International Journal of Computational Biology and Drug Design* 11.3 (2018): 236–254.
6. Patidar, M, N Yadav, and S K Dalai. "Influence of Length and Amino Acid Composition on Dimer Formation of Immunoglobulin Based Chimera." *Current Pharmaceutical Design* 24.11 (2018): 1211–1223.
7. Moonka, R, and S Mukherjee. "Trips Flexibilities and India's Plant Variety Protection Regime: The Way Forward." *BRICS Law Journal* 5.1 (2018): 117–139.
8. Pandya, A, and P K Jha. "Magnetotransport Study on Iron Doped Novel 2d Nanoribbons via Electron- Acoustical Phonon Interactions." *International Journal of Nanoscience* 17.6 (2018): 1850010(1-7)
9. Bung, N et al. "2-[2-(4-(trifluoromethyl)phenylamino)thiazol-4-yl]acetic acid (Activator-3) is a potent activator of AMPK." *Scientific Reports* 8.1 (2018): 9599.
10. Bhurani, V et al. "Developing Effective Vaccines: Cues from Natural Infection." *International Reviews of Immunology* 37.5 (2018): 249–265.
11. Joshi, M et al. "Identification of Small Molecule Activators for ErbB 4 Receptor to Enhance Oligodendrocyte Regeneration by in Silico Approach." *Computational Toxicology* 8 (2018): 13–20.

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13. Bhargava, A et al. "Pre-Clinical Validation of Mito-Targeted Nano-Engineered Flavonoids Isolated from *SelaginellaBryopteris* (Sanjeevani) as a Novel Cancer Prevention Strategy." *Anti-Cancer Agents in Medicinal Chemistry* 18.13 (2018): 1860–1874.
14. Maheshwari, N et al. "Synthesis and Biological Evaluation of Some N-(3-(1H-Tetrazol-5-Yl) Phenyl)acetamide Derivatives as Novel Non-Carboxylic PTP1B Inhibitors Designed through Bioisosteric Modulation." *Bioorganic Chemistry* 80 (2018): 145–150.
15. Sur, K, R Dave, and P Chauhan. "Spatio - Temporal Changes in NDVI and Rainfall over Western Rajasthan and Gujarat Region of India." *Journal of Agrometeorology* 20.3 (2018): 189–195.
16. Tyagi, R K et al. "Humanized Mice Are Instrumental to the Study of *Plasmodium Falciparum* Infection." *Frontiers in immunology* 9 (2018): 2550.
17. Patel, N et al. "The Molecular Targets of Swertiamarin and Its Derivatives Confer Anti-Diabetic and Anti-Hyperlipidemic Effects." *Current Drug Targets* 19.16 (2018): 1958–1967.
18. Prajapati, B et al. "Divergent Outcomes of Gut Microbiota Alteration upon Use of Spectrum Antibiotics in High Sugar Diet-Induced Diabetes in Rats." *RSC Advances* 8.46 (2018): 26201–26211.
19. Patel, Pooja, et al. "Anti-infective potential of a quorum modulatory polyherbal extract (Panchvalkal) against certain pathogenic bacteria." *Journal of Ayurveda and Integrative Medicine* (2018).
20. Parmar, R et al. "Infectious Sporozoites of *Plasmodium Berghei* Effectively Activate Liver CD8 α + Dendritic Cells." *Frontiers in Immunology* 9.FEB (2018): 192.
21. Thakur, K et al. "Cationic-Bilayered Nanoemulsion of Fusidic Acid: An Investigation on Eradication of Methicillin-Resistant *Staphylococcus Aureus* 33591 Infection in Burn Wound." *Nanomedicine* 13.8 (2018): 825–847.
22. Pandya, S R et al. "In Vitro DNA Binding, Antioxidant, Antimicrobial and Anticancer Assessment of Amino Acid Functionalized Magnetic Nanoparticles." *Applied Surface Science* 451 (2018): 1–19.
23. Radhakrishna, Uppala, et al. "Newborn blood DNA epigenetic variations and signaling pathway genes associated with Tetralogy of Fallot (TOF)." *PloS one* 13.9 (2018): e0203893.
24. Garg, N K et al. "Lipid–polymer Hybrid Nanocarrier-Mediated Cancer Therapeutics: Current Status and Future Directions." *Drug Discovery Today* 23.9 (2018): 1610–1621.
25. Saiyed, N et al. "Young Mothers and Higher Incidence of Maternal Meiosis-I Non-Disjunction: Interplay of Environmental Exposure and Genetic Alterations during Hap Phase in Trisomy 21." *Reproductive Toxicology* 79 (2018): 1–7.

26. Patel, P et al. "Inhibition of Amyloid Fibril Formation of Lysozyme by Ascorbic Acid and a Probable Mechanism of Action." *International Journal of Biological Macromolecules* 114 (2018): 666–678.
27. Joshi, C et al. "Frequency-Dependent Response of *Chromobacterium Violaceum* to Sonic Stimulation and Altered Gene Expression Associated with Enhanced Violacein Production at 300 Hz." *Current Science* 115.1 (2018): 83–90.
28. Sarkar, A et al. "Development of Method for Active Alignment of Multiple Time Delay and Integration Detectors in the Optically Butted Focal Plane Assembly of High-Resolution Spaceborne Imaging Systems." *Journal of Applied Remote Sensing* 12.3 (2018): 034003.
29. Rawal, T et al. "Chitosan Nanoparticles of Gamma-Oryzanol: Formulation, Optimization, and In Vivo Evaluation of Anti-Hyperlipidemic Activity." *AAPS PharmSciTech* 19.4 (2018): 1894–1907.
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31. Verma K, Srivastava VK and Datta S (2018) Rab GTPases take centre stage in understanding *Entamoeba histolytica* biology, Small GTPases, DOI: 10.1080/21541248.2018.1528840
32. Kunwar, Fulesh, Rebecca Pabst, and Sonal Bakshi. "Intrauterine growth restriction associated with paternal isodisomy of chromosome 5: a clinical report and literature survey." *The Journal of Maternal-Fetal & Neonatal Medicine* (2018): 1-3.

Book Chapters Published

Sr. No.	Name of the Faculty	Name of the Book Chapter	Name of the Book	Name of Publishing House	ISB N	Year of Publication
1.	Sarat Kumar Dalai, Vishakha Bhurani	Therapeutic Potentials of IL-10 Vs IL-12	Immunotherapy	Intechopen	0192303X	2018
2.	Shalini Rajkumar, Bhagya Iyer	Rhizobia	Reference Module in Life Sciences	Elsevier UK	978-01-28096-33-8	2018
3.	Nasreen Munshi, Anwesha Mukherjee, Rushika Patel	Propellants of Microbial Fuel Cells	Progress and Recent Trends in Microbial Fuel Cells	Elsevier Amsterdam	978-04-44640-17-8	2018

Ph.D. Awarded

Sr. No.	Name of the Student	Name of the Guide / Supervisor	Title of Thesis
1.	Patel Palak Narendrabhai	Dr. Mili Das	Biophysical and in Silico Studies on Inhibition of Protein Aggregation by Small Molecules
2.	Mohit Kumar	Dr. A. S. Rajawat	Mangrove Cover Dynamics and Community Zonation in Gulf of Kachchh - A Study based on Synergistic use of Optical and Microwave Satellite Data
3.	Manoj Patidar	Prof. Sarat Dalai	Development of a Chimeric IL-15 to augment T-cell Response and Memory
4.	Hardikkumar Bipinchandra Patel	Prof. Sarat Dalai	Dynamics of Radiation Attenuated Sporozoites Induced Liver-stage Specific CD8+ Memory T Cells following Infectious Sporozoite Challenge that ensue long-lived Protection Against Plasmodium Berghei Infection
5.	Fulesh Kunwar	Dr. Sonal Bakshi	Human Congenital Disorders: A study of underlying genetic changes, manifestation & mechanism

Seminars / Workshops / Training Programmes Organised by the Institute

Workshop on 'CRISPR / Cas9 in Genome Editing'

The seminar series on CRISPR/Cas9 in Genome Editing was organised by Institute of Science in association with Centre for Continuing Education, Nirma University, Ahmedabad, March 02, 2019. A total of sixty five participants from different parts of Gujarat attended the seminar along with five external speakers from research institutes.

The entire series was divided into two sessions. The first session was conducted by Dr. Arindam Chakraborty, Product Specialist, Thermo Fisher, Mumbai; Dr. Bhasker Bhadra, Assistant Vice President, R&D Reliance Industries, Mumbai; and Dr. Nisheeth Agarwal, Associate Professor, Translational Health Science and Technology Institute, Faridabad.

Speakers in the second session included Prof M K Reddy, Group Leader International Centre for Genetic Engineering and Biotechnology, New Delhi; and Dr. Murali Dharan Bashyam, Head of Molecular Oncology, Centre for DNA Fingerprinting and Diagnostics, Hyderabad.

Research Talks Organised by the Institute

Public Lectures Organised by the Institute

1. 'Chemical Communication in Biology: the Emergence of Chemical Ecology' by Prof. Padmnabhan Balaram, Padmashree and Padma Bhushan Awardee, former director of Indian Institute of Science, Bangalore delivered a public lecture on the occasion of the 14th Foundation Day of Institute of Science, Nirma University on September 06, 2018.
2. 'Precision Medicine: Making and Breaking Avtar Networks' by Dr. Vrushank Dave, MS Ph.D., University of South Florida on March 14, 2019.
3. 'Resolving Complexities of Disease Diagnosis and Therapy in Complex Disease: A Genomic and Epigenomic Perspective' by Dr. Moinak Banerjee, President of Indian Society of Human Genetics, RGCB, Thiruvananthapuram on March 28, 2019.

Lecture Series Organised by the Institute

A week long lecture series on, 'Cancer Biology' was organised by the Institute with the support of visiting expert Dr. Vrushank Dave, Associate Professor, Department of Pathology & Cell Biology, University of South Florida. The faculty members and students of the Institutes of Science and Pharmacy attended the lectures. Some of the key lectures include:

1. 'Role of Oncogenes in Driving Cancer' on March 12, 2019.
2. 'Role of Tumor Suppressor Genes in Cancer: Removing the Brakes' on March 13, 2019.
3. 'Cell Signalling & Pathobiology of Cancer' on March 15, 2019.
4. 'Modelling Cancer to study its Pathogenesis and Treatment' on March 16, 2019.

Expert Lectures Organised by the Institute

Institute of Science arranges research related expert talks by eminent personalities from Industry and Academia on regular bases. This encourages faculty members and students to learn about research work being carried out at different places. Following are the details of some of the talks/lectures organised by the institute.

1. 'Missing Pieces of an Ancient Puzzle: Elucidation of Multiple Protein Trafficking Pathways to the Apicoplast of Plasmodium Falciparum' by Dr. Rahul Chaudhari Post Doctoral Fellow-TIFR, Mumbai on April 04, 2018.
2. 'Nirma Volun Teaching Movement' by Mr. Ravin Vyas, Avbodh Knowledge foundation Limited, Ahmedabd on April 04, 2018.
3. 'Youth Sensitizing and Awareness Programme as ISR- Individual Social Responsibility' by Ms. Manisha Pathak, Life Coach and Motivational Speaker, Community Outreach Leader (VOSAP) on July 02, 2018.
4. 'Overview of Vaccines and Bird Eyeview of Serum Institute of India Pvt. Ltd.' by Dr. Suresh Jadhav, Executive Director, Serum Institute of India, Pune on July 02, 2018.
5. 'Opportunities of Bioincubation by Dr. Aditi Kumar, Bioincubator IIT Kanpur on July 03, 2018.
6. 'Government support for Innovative Research Incubation and Commercialization' by Dr. Anand Bhadalkar, Joint Director, Business Development, GSBTM on July 03, 2018.
7. 'Trends in Cancer Therapy: A Journey from Chemotherapy to Immunotherapy' by Dr. Gaurishankar Sa, Professor of Molecular Medicine, Bose Institute, Kolkata on July 04, 2018.

8. 'Tuberculosis: An Ancient Disease with Modern Outlook' by Prof. Gobardhan Das, Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi on August 30, 2018.
9. 'Role of Amyloid Fibers in Biofilms of Pathogenic Microbes' by Dr. Neha Jain, AIIMS, New Delhi on August 31, 2018.
10. 'Chemical Communication in Biology: The Emergence of Chemical Ecology' by Prof. Padmanabhan Balaram on September 6, 2018.
11. 'Microbially Enhanced Oil Recovery' by Dr. Rakesh Kumar, Vij Advisor, ONGC, on November 01, 2018.
12. 'Immune Regulation in Cerebral Malaria' by Dr. Arindham Bhattacharyya, Immunology Lab, Dept. of Zoology, Calcutta University on February 18, 2019.

Research Report of Institute of Law



Institute of Law Research Statistics at a Glance

April 01, 2018 - March 31, 2019

Minor Research Projects		
Completed Minor Research Projects	Projects Completed	01
	Total Grant	₹ 90,000/=
Research Publications		
Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals		02
Books Published		02
Book Chapters Published		02
Copyrights Received		
Copyrights		02
Doctoral Research		
Current Ph.D. Students		10
Current Ph.D. Guides		03
Conferences / Seminars / Research Talks		
International / National Conferences Organised by the Institute		03
Seminars / Workshops / Refresher Courses Organised by the Institute		14
Research Talks Organised by the Institute		26

Research Projects

Minor Research Projects

Completed Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Mapping the Politico-Legal Dilemmas Associated with Climate Change Refugees	Prof. Rejitha Nair	Nirma University	90,000/=
Total Grant				90,000/=

Research Publications

Research Papers in Scopus / Web of Science / ABDC / EBSCO Listed Journals

1. Basheer, S. "Trumping Trips: Indian Patent Proficiency and the Evolution of an Evergreening Enigma." Oxford University Commonwealth Law Journal 18.1 (2018): 16–45.
2. Parikh, M. "The Evolution of the Compensatory Afforestation Fund Act: A Critique." Environmental Policy and Law 48.3–4 (2018): 216–219.

Books Published

Sr. No.	Name of the Faculty	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Rejitha Nair, Sakshi Mathur, Adimesh Lochan	Conference Proceedings Sixth National Students Conference on International Humanitarian Laws and Refugee Laws	Institute of Law, Nirma University	978-81-93121-85-6	2018
2.	Amit Kashyap	Corporate Insolvency Law and Bankruptcy Reforms in the Global Economy	IGI Global, USA	152-25-55412	2019

Book Chapters Published

Sr. No.	Name of the Faculty	Name of the Book Chapter	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Amit Kashyap	Women Empowerment in Boardroom : A New Mandate for Companies in India	Interrogating Women Empowerment the Global Experience	Satyam Law International	978-93-87839-06-9	2018
2.	Neeraj Kumar Gupta, Pratibha Tandon	Eco – Tax on Energy Resources : A Critical Appraisal with Special Reference to India	Energy Law and Policy	Oxford University Press	019-94-8297-7	2018

Copyrights Received

Sr. No.	Name of the Inventors	Title of the Copyright	Year	Status
1.	Prof. Virendra Singh	Plecemeal Culture	2018	Copyright Office, Department of Industrial Policy&Promotion, Ministry of Commerce and Industry, Government of India has acknowledged and registered a copyright
2.	Prof. Virendra Singh	Falsified Historia Socio-Culture	2018	Copyright Office, Department of Industrial Policy&Promotion, Ministry of Commerce and Industry, Government of India has acknowledged and registered a copyright

Conferences Organised by the Institute

International Conference Artificial Intelligence-ICAI 2019

The one event which deserves special mention is '**International Conference on Artificial Intelligence and its Implications**'. The Conference was held on March, 15 and 16, 2019 in collaboration with the Advanced Centre on Research, Development and Training in Cyber Law & Forensics, National Law School of India University (NLSIU) Bengaluru, Cyril Amarchand Mangaldas, Privy Legal Service LLP, Centre for Internet and Society- Access to Knowledge, Infinity Law- Tech Educational Services (ILTES), Jus Dicere, Saarthi AI, Lex Warrier and EBC. The Conference was graced by former Justice of Supreme Court Shri B N Srikrishna as the chief guest besides other eminent speakers like Dr Steven Robinson, Former Special Advisor, Office of the Secretary, US Department of Education, Prof William Fox, Former Dean and Professor of Law, Catholic University of America, Mr Bhagyesh Jha, Officer on special duty, Communication and Public Relations, Chief Minister's office, Gujarat, Dr Pawan Duggal, Founder & chairman of the International Commission on Cyber Security Law and the President of Cyberlaws.net., Dr Satyam Priyadarshy, Tech Fellow and chief data scientist of Haliburton, USA etc., Dr Hari Krishna Maram, Chairman and Founder CEO of Imperial College, Bengaluru. Dr. Karsanbhai K. Patel, President, Nirma University and several other dignitaries of Governing Council of Nirma University. The Conference drew excellent response from practitioners, professionals, technocrats, academics and above all student community. It is heartening to say that Mr. Justice B. N. Srikrishna on the said occasion inaugurated a research centre on Law and Artificial Intelligence which could cater to the needs of the researchers.

International Seminar on Transnational Litigation - ISTL-2019

Nirma Institute of Law also organised an 'International Seminar on Transnational Litigation' on March 23 and 24, 2019. Shri Dushyant Dave, Senior Advocate, Supreme Court of India graced the occasion as the Chief Guest besides other eminent speakers like Dr. Stephen G, Associate Dean, Penn State Law, Pennsylvania State University, USA was the Guest of Honor. Prof William Fox, Dean and Professor of Law, Columbus School of Law, The Catholic University of America, Washington, USA and Dr. Manoj Kumar, D Litt., Founder and Managing Partner, Hammurabi and Mr. Solomon were the Keynote Speakers. Mr Hiren K Patel, Managing Director, Nirma Limited presided over the inaugural session.

National Conference on International Humanitarian and Refugee Law - NCIHR- 2018

Centre for Human Rights Law, Institute of Law, Nirma University organised the 7th edition of its annual flagship event – National Students' Conference on International Humanitarian and Refugees Law in association with the International Committee of Red Cross and the United Nations High Commissioner of Refugees on 08 August, 2018. This Conference was more a student oriented programme to inculcate interest towards International Humanitarian Law which is fast emerging. NCIHR also intended to inculcate empathy for humanitarian causes in the students. The conference was graced by Dr. Manoj Kumar, Director, Indian Law Institute and Prof. Nagendra Singh, Professor Emeritus; Maharshi Law School was the Guest of Honor.

Seminars / workshops / Training Programmes Organised by the Institute

Institute of Law with the active support of the Institute of Centre for Quality Assurance and Academic Development (CQAAD), Nirma University arranged a two week workshop cum faculty Refresher programme commencing from June 25,2018 to July 7,2018 on 'Art and Science of Thinking and Research : Augmenting Interdisciplinary Approach in ICT Era'. The workshop was intended primarily to promote research culture and dissemination of research related tools, methods etc. to the participant researchers. Eminent scholars, practitioners, technocrats, ICT experts and researchers of prestigious institutions such as Jawaharlal Nehru University, Tata Institute of Social Sciences, Gujarat Institute of Development Studies, MS University Baroda, Indian Law Institute, Delhi, IP University, Delhi were invited to participate in the deliberations and impart inputs to the participants. Nationally acclaimed speakers like Prof. GS Bajpai, Prof. Afzal Wani, Prof. Vidyut Joshi, Prof. Tara Nair, Prof. Madhusudan Bandi, Prof. ArunPratap, Prof. Ramadhar Singh, Prof. Lajwanti Chatani, Prof. Vijay Raghavan, Prof. Suman Mitra, Prof. Bhaswat Chakaborty, Prof. Lalita Narayanan interacted with the participants and gave invaluable inputs of research to the participants. It heartening to share that Constituent Institutes on campus such as Institute of Technology, Institute of Pharmacy also provided expertise and resource persons in various aspects of interdisciplinary aspects of developments in research process. Prof. Dhawal Pujara, Prof. Urmil Dave, Prof. Santosh Vora handled sessions on research output presentation techniques, Nirma University Research Policy and use of SCOPUS respectively. Participants took the inputs given by experts and developed various research proposal component.

Centre for Alternative Disputes Redressal (ADR), Institute of Law, Nirma University organised a three day workshop from September 15 to 17, 2018 on 'International Commercial Arbitration: Contemporary Issues'. The workshop was attended by distinguished speakers like Prof William F Fox, Former Dean and Professor of Law, Columbus School of Law, USA, Prof Thomas E Carbonneau, Professor of Law, Penn State Law, USA; Dr Jyotsna Yagnik, Clinical Professor of Law, ILNU, Mr. TejasKaria, Partner and Head, Arbitration at Shardul Amarchand Mangaldas, Mr. Hiroo Advani, Managing Partner, Advani & Co, Mr. Ylli Dautaj, Assistant Prof ILNU.

List of the Workshops

1. Workshop on Skill Lab for the Faculty Members at Institute of Law, Nirma University(ILNU), September 25 - 26, 2018
2. Workshop on Legal Awareness: : October 22, 2018
3. Workshop on Business Development for Lawyers: October 22 - 23,2018
4. Workshop on Advocacy: October 31 - November 1, 2018
5. Workshop on Problem Based Learning : November 14, 2018
6. Workshop on Legal Writing: : October 27 - 28, 2018
7. Workshop on Films and Appreciative Learning : February 1, 2019 to February 6, 2019
8. Workshop on Culture of Consent and Rejection : February 5, 2019
9. Workshop on Legal Empowerment for Women's Rights: March 30 - 31, 2019.
10. Workshop on Police Law and Security Administration in India : February 23, 2019
11. Workshop on Self-defense Techniques : March 27,2019
12. Regional Workshop on Biological Diversity Laws in India : March 29 - 30, 2019

Research Talks Organised by the Institute

Research Talks:

1. 'Deconstructing Criminal Law - Recent Developments' by Dr B.B. Pande, Visiting Professor, University of Cardiff, Wales, UK along with other speakers like Dr. N K Chakraborty, Director KIIT, Dr Anurag Deep, Associate Professor, Indian Law Institute on February 28 & 29, 2019 and March 01, 2019.
2. 'Agrarian Crisis in India: Challenges and Way Forward' by Mr Kiran Kumar Vissa, Farmers Rights Activist, Mr. Kapil Shah and Mr. Rohit Parakh on October 1, 2018.
3. 'Cyber Security and its Legal Implications' by Dr Priyanka Sharma Professor ITNU, Mr. Chintan Pathak Advocate on October 8 & 9, 2018.
4. 'GST Regime in India' by Hasmukh Adhia, Chancellor, Gujarat Central University on March 22-28, 2019.

Expert Lectures:

1. 'Law and Poverty' by Dr. Usha Ramanathan Advocate, Supreme Court of India on August 13, 2018.
2. 'LGBT Rights and PIL' by Mr. Gowthaman Ranganathan, Advocate, Supreme Court of India on October 05, 2018.
3. 'Freedom of Press in Democracy' Ms. Preeti Advocate, High Court of Gujarat, Ahmedabad on October 06, 2018.
4. 'Freedom of Press in Indian Democracy: A Distant Reality' Shri K.V. Vishwanathan, Senior Advocate, Supreme Court on October 19, 2018.
5. 'Indian Federalism : Contemporary Issues' by Dr. Rekha Saxena Associate Professor, Department of Political Science, University of Delhi on October 19, 2018.
6. 'Merger Control: Recent Trends and Development in Competition Laws, Mrs. Aparna Mehra, Partner, Shardul Amarchand Mangaldas on October 20, 2018.
7. 'GST: Policy, Procedures and Compliance' by Mr. V Sivasubramaniam, Executive Partner of Lashimikumara & Sridharan (LKS) on October 20, 2018.
8. 'Recent & New Commercial & Business Laws & Legislations' by Mr. Yakesh Anand, Managing Partner, Anand and Anand Associates on October 20, 2018.
9. 'An overview of Insolvency and Bankruptcy Code with special emphasis on Home Buyers Ordinance' by Ms. Radhika Gupta, Advocate, Delhi High Court on October 21, 2018.
10. 'Data Privacy Laws and Right to Privacy' by Mr. Arush Khanna, Advocate, Supreme Court on October 21, 2018.
11. 'Dissecting Contours of the Adhar Judgment' by Dr Usha Ramanathan, Advocate, Supreme Court of India on October 24, 2018.
12. 'Lawyering in London' by Prof Victoria Bui Uppasala University Sweden on November 15, 2018.
13. 'Business and Human Rights' by Mr. Trinanjan Radhakrishnan, Oxfam, November 21, 2018.
14. 'Building Worldclass Universities in India' by Professor C Rajkumar Vice-Chancellor of Jindal Global University January 01, 2019.
15. 'Interaction on Contemporary Corporate Law Issues' by Mr. Somasekhara Sundaresan on February 2, 2019.

16. 'Blockchain Technology and AI Application and Regulations' by Professor M K Bhandari Chief Executive Officer, ILTES on February 04, 2019.
17. 'Criminal Liability' by Professor Bhavani Prasad Panda, Former Vice Chancellor MNLU on February 5, 2019.
18. 'Environmental Law' by Professor Shekhar Hattangadi on February 6, 2019.
19. 'Criminology' by Professor N K Chakraborty Director KIIT Bhubaneswar on March 1, 2019.
20. 'E-Commerce Sustainability for Start-ups and Leveraging on Intellectual Property Rights' by Mr.Sandeep Sharma, Head Innovation and Continuing Education Centre, AuroUniversity, Surat on March 2, 2019.
21. 'Police Law and Security Administration' by Anurag Deep Associate Professor Indian Law Institute, New Delhi on March 2, 2019.
22. 'Role of Youth in Nation Building' Shri Jigarbhai Inamdar Senate & Syndicate MS University, Vadodara on March 28, 2019.

Research Report of Institute of Architecture & Planning



Institute of Architecture and Planning Research Statistics at a Glance

April 01, 2018 - March 31, 2019

Major Research Projects		Total
Ongoing Major Research Projects	Projects Ongoing	01
	Total Grant	₹ 10,92,500/=
Minor Research Projects		
Sanctioned Minor Research Projects	Projects Sanctioned	03
	Total Grant	₹ 3,20,000/=
Research Publications		
Books Published		03
Book Chapters Published		03
Doctoral Research		
Total Ph.D. Students		05
Total Ph.D. Guides		01
Research Awards		
Research Awards Received by the Faculty Members		03
Conferences / Seminars / Research Talks		
International / National Conferences Organised by the Institute		01
Seminars / Workshops / Refresher Courses Organised by the Institute		12
Research Talks Organised by the Institute		21

Research Projects

Major Research Projects

Ongoing Major Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Residential Building Energy Demand Reduction in India (Reside)	Prof. Utpal Sharma, Prof. Parag Mistry, Prof. Purvi Jadav	Fund for Improvement of Science & Technology Infrastructure, DST, New Delhi	10,92,500/=
Total Grant				10,92,500/=

Minor Research Projects

Sanctioned Minor Research Projects

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Baseline Assessment for Identifying the Green Quotient of the Campus	Prof. Shweta Suhane	Nirma University	1,00,000/=
2.	Impact of Industrialization Mining, Urbanisation on Biodiversity in Select Blocks of Gujarat	Prof. Pratima Singh	Gujarat Ecology Commission through Raman Development Consultant	1,05,000/=
3.	Affordable Housing a Comparative Analysis of Projects in Ahmedabad	Prof. Pratima Singh	Institute of Town Planners, India Regional Chapter Gujarat	1,15,000/=
Total Grant				3,20,000/=

Books Published

Sr. No.	Name of the Faculty	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Vibha Gajjar, Jitesh Mewada	The Crest of the Building	Charotar Publishing House Pvt. Ltd., Ahmedabad	978-93-85039-33-1	2018
2.	Krishna Yadav, Alok Kumar	Utkeern Kala keVividhAayaam	Luminous Books Center Varanasi India	978-81-93661-47-5	2018
3.	Dhaval Chauhan, Jitesh Mewada, Darshan Ajudia, Sujan Umaraniya	House from of Pondicherry	Flamingo Publication, Ahmedabad	978-93-90000-00-0	2018

Book Chapters Published

Sr. No.	Name of the Faculty	Name of the Book Chapter	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Krishna Yadav	LibrisAtkurtaiLi etuvai 100	LibrisAtkurta iLietuvai 100	Minister of Culture of the Republic of Lithuania	978-60-99598-17-8	2018
2.	Krishna Yadav	Exlibris	Xii MiedzynarodowyKonkurs Graficzny Na Gliwice Poland	MIEJSK BibliotekaPubl iczna w Gliwicach Poland	978-83-92313-29-8	2018
3.	Krishna Yadav	Village Insight Yoga	Xivth International Ex Libris Republic of Bulgaria	Ministry of Culture LyubenKarave lov” Regional Library - Ruse	978-61-97404-05-0	2018

Research Awards

Research Awards Received by the Faculty Members

Sr. No.	Name of the Faculty Awardee	Recognition / Honor / Award	Name of the Organization / Event	Award Category
1.	Prof. Utpal Sharma	Honorary Doctorate	Ecole Superieure Robert De Sorbon	Memento
2.	Prof. Utpal Sharma	Devang Mehta National Education Award	B-School Affair and Devang Mehta National Education	Citation
3.	Prof. Sneha Ramani	Prabhakar Bhagwat Student Award	Indian Society of Landscape Architects (ISoLA)	First Prize

Conferences Organised by the Institute

National Organization of Students of Planning (NOSPlan) Convention

NOSPlan is a platform for students, professionals and academicians of the country to share their thoughts and ideas about the planning profession and its practices. This year Institute of Architecture and Planning, Nirma University, Ahmedabad hosted the twentieth Annual NOSPlan Convention during December 24-26, 2018. The theme for this year was “Reflection of the City” and the convention was aptly named ‘Pratibimb’ signifying ‘Reflection’ with an aim of understanding the city fabric in its entirety.

The three-day convention was inaugurated by Padma Shri B. V. Doshi and Dr. Jagath Munashinghe, Chairman, Urban Development Authority, Sri Lanka. 500 students from various Planning colleges across India engaged in a series of formal and informal events, debates and discussions. Lectures by professionals and series of panel discussions were held by various renowned planners and professionals on, Future of planning education and Smart Cities, Real Estate and Urban Development.

Collaborative Design Workshop

The Institute organised collaborative design workshop during KALP, the cultural festival along with School of Architecture and Planning – BBDO, Lucknow.

Prof. Manashree Parekh and Prof. Falguni Goghari conducted a workshop for Interior Design students. The aim of this workshop was to encourage the students of interior design to think and design in coordination to the architectural intentions of the space. At the end of workshop, the designs were then reviewed, discussed and commented on, which developed into a rich learning session.

Prof. SnehaRamani and Prof. Parag Mistry conducted a workshop for students of first year (Bachelors of Architecture) on 'Understanding Space and Form' which focused on the co-relation between Space, Structure and Form.

Prof. SujanUmraniya and Prof. Dhaval Chauhan conducted a workshop for students of first year (Bachelors of Architecture) who were asked to build a subterranean hide-out house for 'Jaadu and his friends from Koi Mil Gaya Movie'. The parameters to create spaces, included stretch, pull, twist, extrude, add or subtract planes.

Training Programme on Indian Street Typology and Activities

Four french students of School of Marne-la-Vallée did this training under Prof. VibhaGajjar, Prof. Jitendra Menghani, Prof. Dhaval Chauhan and Prof. Aparna. They studied old area of Ahemdabad as part of Indian street typology and activities.

The students gathered this information over a period of three to four weeks. Faculty Members exchanged their ideas and opinions about their site issues from time to time. Students were encouraged to work on the following situations:

- A "pol" in the old city
- A market street: for example the cloth market at Dhalgharwad; or a metropolitan market along Law Garden
- The situation where a massive and modern new architecture has been built in the old city. (For example along Lal Darjawa or along Relief Road)
- An active Boulevard in the West part of the city: Ashram Road or along the future street car
- The outskirts of the city: for example around the Adalaj stepwell

Panel Discussions on the Subject of Planning

Panel discussion on 'Future of Planning Education' held on December 25, 2018 was chaired by Dr. Dinesh Mehta from CEPT University and the speakers were Dr. Ashok Kumar, SPA Delhi and Dr. Anil Roy, CEPT. Dr. Ashok Kumargave a presentation on 'Relevance of B Planning Programme', and Dr. Anil Roy presented his ideas on 'Gaps in Skill Set and Professional Requirement'. The panel members included Dr. Jagath Munashinge, Dr. ArtiPetkar, Sushri Ami Rawat and Prof. Utpal Sharma.

Another panel discussion on 'Smart Cities, Real Estate and Urban Development' held on December 26, 2018 was chaired by Dr. Amarjeet Singh, Gujarat RERA; and the speakers and panel members for discussion were Dr. Jagath Munashinge, Mr. Jaxay Shah and Prof. Utpal Sharma.

ITP Workshop in Baroda

A workshop on 'Development Control as a determinant of Urban Form' was organised on August 11, 2018 by ITPI-GRC and Nirma University, Ahmedabad to chart the current discourse and discuss burning issues through a few cases where DCR has been used to achieve a certain urban form catalysing betterment of the living environment.

First of these is Kolkata's Rajarhat area planning presented by Mr. Indraneel; second is the controlled development of Navi Mumbai by Mr. M. D. Lele and the third is urban redevelopment work for Mumbai presented by Mr. Amar Tendulkar.

Short Workshops

- Workshop on, 'Concrete' was organised on March 01, 2019.
- Workshop on, 'Cyanotype' by Mr. Chirag TulsibhaiMeghani on March 01, 2019.
- Workshop on, 'Warli Art' by Ms. Sohatrivedi on March 01, 2019.
- Workshop on, 'Belly Dancing' by Mr. Rhythm Vekariya on March 01, 2019.
- Workshop on, 'Theatre Workshop' by Mr. MihirBedekar on March 02, 2019.
- Workshop on, 'Terribly Tiny Tales' by Ms. Sanjana Singh on March 03, 2019.
- Workshop on, 'Book Binding' by Mr. SugureshSultanpur on August 08, 2018.
- Workshop on, 'Mask Making' by Mr. NikunjVakani on August 09, 2018.

Research Talks Organised by the Institute

1. 'Transportation System' by Mr. Amit Gupta, CGM, MEGA Ahmedabad April 13, 2018.
2. 'Impacts of Urbanization' by Prof. Subhrangshu Goswami, CEPT University on April 21, 2018.
3. 'Social science in Architecture & Planning' by Prof. Seema Khanwalkar on August 06, 2018.
4. 'Craft & Design in an Indian Context' by Ar. Jay Thakkar on August 08, 2018.
5. 'A Touch of History' by Dr. TejasNaik on August 09, 2018.
6. 'Five Years in Few Minutes' by Prof. Hamid on August 09, 2018.
7. 'Talk on Handwriting Analysis' by Mrs. Harsha Gala on August 10, 2018.
8. Foundation Day Talk and Interaction Session by Prof. Y. K. Alagh on August 10, 2018.
9. 'Redifining the Post-Modern Architecture through the Language of Historic and Contextual Derivations' by Ar. Yashwanth Mistry on August 10, 2018.
10. 'Radio Journalism' by RJ Janki, Red FM on August 30, 2018.
11. 'Towards Architecture of Goodness' by Ar. Shirish Beri, Kolhapur, Maharashtra on September 12, 2018.
12. 'Urban India – Issues and Innovations' by Prof. Chetan Vaidya, Formal Director, SPA Delhi on October 03, 2018.
13. 'UN Development Goals' by Dr. Dinesh Mehta on December 25, 2018.
14. 'Smart Cities, Real Estate and Urban Development' by Dr. Jagath Munashinge, Chairman, UDA, Sri Lanka on December 26, 2018.
15. 'Management of Cities in 2st Century' by Prof. Jim Chappell on January 16, 2019.
16. 'Deccan Islamic Architecture: 16th and 17th Centuries' by Prof. George Michell on February 14, 2019.
17. 'Nature, Culture, Architecture: The Sustainability Linkages' by Prof. R. Shankar, Design Chair, SAP Dehradun on March 01, 2019.
18. 'Greater Paris' by Ar. David Mangin, Principal Architect, SEURA on March 01, 2019.
19. 'Tyranny of Small Decisions' by Ar. ChitraVishvanath, Principal Architect, Biome on March 02, 2019.
20. 'Research in Architecture and Planning' by Prof. Remi Fernand, Professor, EVAT School of Architecture on March 02, 2019.
21. 'Sensitive Skins' by Elena Perez Guembe, Architect, Artist, Lecturer Professor en Rensselaer Polytechnic Institute, Greater New York City on April 26, 2019.

Research Report of Directorate of Research and Innovation



Directorate of Research and Innovation

Research Statistics at a Glance

April 01, 2018 - March 31, 2019

Major Research Projects		Total
Ongoing Major Research Projects	Projects Ongoing	01
	Total Grant	₹ 7,25,000/=

Research Projects

Major Research Projects

Ongoing Major Research Project

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Bone Metastatic Signature in Indian Breast Cancer Patients: A Transcriptome Based Study	Dr. Heena Dave	Department of Science & Technology Woman Scientist Scheme – A (WOS-A)	7,25,000/=
Total Grant				7,25,000 /=

Programmes Organised by the Directorate of Research and Innovation

Plasma & Fusion Research Committee (PFRC) Vision Meeting (April 26-28, 2018)

The Directorate of Research & Innovation (DRI), Nirma University and the Institute for Plasma Research (IPR) jointly organised a three-day meeting of the Project Investigators / Collaborators and the Experts in the field of Plasma, Fusion Science, Fusion Technology and Allied Areas. The meeting was organised at the Nirma University campus during April 26-28, 2018. It was a special event to commemorate ten years of National Fusion Programme and the Research and Development activities funded under the Board of Research in Fusion Science & Technology (BRFST). One of the ideas for the having such meeting is to percolate the information to the fraternity working in the Plasma domain and provide a platform to the likeminded, same skill group to discuss the issues and solutions.

The meeting was attended by 150 participants from Research Organizations, Industries, Government Organizations, Academic Institutions (including IITs, NITs and other reputed institutions) across different parts of India.

All the sessions in the meeting discussed the Research and Development work carried out by IPR in collaboration with academic institutions in the last ten years. Each day included a detailed panel discussion on the themes covered for the day. It also discussed the new areas of Research and Development that faculty members of academic institutions can take up in the coming years.

5th Research Orientation Programme (June 04 – 16, 2018)

The Directorate of Research and Innovation, Nirma University organised its 5th Research Orientation Programme during June 04-16, 2018. The programme aims to help the researchers undergo nuances and sharpen techniques for accomplishment of exploratory and result-oriented research. It also facilitates the researchers, from across all disciplines, in adopting a systematic methodology for their research.

The programme was inaugurated on June 04, 2018. Shri Virender Kumar, Director, Development and Educational Communication Unit (DECU), Indian Space Research Organization, Ahmedabad was the chief guest of the inaugural function. The function was graced by Dr. Anup Singh, Director General, Nirma University.

The inauguration function began with the welcome address by Dr. Dhaval Pujara, I/C Director, Directorate of Research and Innovation, Nirma University. Dr. Pujara briefed the

participants about the programme, the purpose and its structuring. The chief guest of the function Shri Virender Kumar in his inaugural address emphasized upon doing research that is fruitful for societal applications. Dr. Anup Singh in his address motivated the participants to involve themselves into active research.

The research orientation programme is divided in three phases. The first phase consists of lecture series by renowned academicians from IITs, IIMs, research organizations and funding agencies. There are sessions on introduction to research; developing paper, report, project proposal writing, presentation skills; avoiding plagiarism; ethics in research; intellectual property; patent drafting; ICT Tools for research; integrating teaching and research; finding funding agencies for research grants; creative thinking and research. In the second phase, the participants carry out different activities and assignments, based on their learnings of the first phase.

The orientation programme aims not only at delivering the content, but also helps participants to develop the thirst of inquiry and make them work towards achieving their research goals effectively. With this aim, in the third phase of the programme the participants worked with assigned mentors and come out with review paper or prepare a research project proposal.

Seminar on “Research Skill Development” (August 23, 30, 31, 2018)

In the present day, the world is facing a number of challenges in the engineering, health, environmental and other sectors. This has led to the need of inculcating research at undergraduate level of study. Nirma University being active in research understands the importance of research to be inculcated among the students right from their early days of studies. To channelize the energy and enthusiasm of undergraduate students, to develop their understanding and skills to carry out research, IEEE Student Branch, Nirma University and the Directorate of Research & Innovation cell, Nirma University organised a seminar on “Research Skill Development” for the undergraduate students of Nirma University. The seminar was attended by 160 students from the constituent Institutes of Nirma University.

There were talks on “Recipe of Becoming a Researcher” and “Art of Writing Research Papers and Report” by Dr. Dhaval Pujara during the seminar. The students were made aware of the traits of a good researcher, skills that they need to develop to become a good researcher and how they can develop a positive perception/attitude towards research during these talks. The students were also given guidelines to publish their research outcomes.

During the session on “ICT Tools for Research” by Dr. Santos Vora and Dr. Sachin Gajjar, the students were made aware of usage of Scopus, Mendely, Turnitin, Research Gate, and

other ICT tools for Research. The seminar was a memorable learning for the undergraduate students.

Poster Presentation by PhD Scholars (September 01, 2018 and September 15, 2018)

Nirma University continuously attempts to provide a conducive environment for the research and a platform to the researchers to interact and showcase their research outcomes. Science, Architecture and Law under Nirma University were organised on September 01, 2018. Total 50 posters were presented during the event. The second phase of Poster Presentation Event for Ph. D. scholars registered with Institutes of Technology and Management was organised on September 15, 2018. Total 60 posters from the fields of Engineering, Technology and Management were presented. The Director General, Directors of constituent Institutes of Nirma University, faculty members and many students interacted with the participating doctoral students. The event stimulated the ability of Ph.D. scholars to deliver a visual presentation of their research. It also provided them a platform to share their research ideas/outcomes and gave them an opportunity to network with fellow scholars of their interest. In the entire event was a memorable festival of learning and sharing for the Ph.D. scholars, faculty members and students of Institutes of Technology, Management, Pharmacy, Science, Architecture and Law.

Two-Day National Symposium on, ‘Innovations in Cancer Research: Translating “OMICS” to Therapeutics’ (September 14-15, 2018)

The Directorate of Research and Innovation, Nirma University organised a two-day National Symposium on, “Innovations in Cancer Research Targeting ‘OMICS’ to Therapeutics”, during September 14-15, 2018. The symposium was sponsored by the Science Engineering Research Board (SERB), Department of Science and Technology, Government of India and the Gujarat Council of Science & Technology (GUJCOST), Government of Gujarat. Approximately 130 participants including 35 faculty members /young researchers and 95 post-graduate /doctoral students attended the symposium. The participants were from The Gujarat Cancer & Research Institute, also from Indian Institute of technology, Gandhinagar, Gujarat University, Ahmedabad University, PERD Center, M.S. University, Supratech research laboratories and the several organizations within Gujarat and from our Institute of Science and Institute of Pharmacy, etc. During the symposium, nine nationally eminent and internationality recognized scientists delivered their talks and have also shared their valuable experiences and

knowledge. The areas like, Cancer Genomics, Cancer Proteomics, Cancer Transcriptomics, and Cancer stem cell, Cancer Immunology and Immunotherapy, Molecular Oncology, etc. are covered during the deliberations. In addition, there was a Panel Discussion Session on, “TARGETED THERAPIES IN CANCER” in which the current status of the targeted therapies and its implementation and future were discussed. There was a Poster Competition, in which fifty two posters were presented by the young researchers, doctoral students and the post-graduate students. During these two days, the participants got familiarized with the current concepts, technologies and clinical applicability of the knowledge in the area of oncology. In this symposium, the need of translational cancer research, identification of newer cancer therapeutics and implementation of personalized medicine were discussed at length.

INSPIRE Science Camp 2018 (December 03-07, 2018)

The INSPIRE Internship Science Camp-2018 was organised at the Nirma University campus during December 03-07, 2018. The Camp was attended by 122 students from about 35 different schools of the state of Gujarat. The eligible students studying in 11th standard had registered for this prestigious Camp. The Camp helped the students to get a better insight into the world of Science and Technology. Over a period of 5 days, the students interacted with eminent scientists and renowned academicians of various institutes. The students were introduced to informative, innovative and interesting topics of Physics, Chemistry, Biology, Robotics and Mathematics and were also explained how they are closely related to everyday life. Further, success stories of science and the scientists, joys of research and innovation across all streams of science and technology and career opportunities were covered during the theory and laboratory sessions of the camp. Lecture sessions in the field of science and technology, experimental sessions in the sophisticated laboratories of Nirma University, visit to Science City and scientific writing competition were part of the five day residential camp. Above all, each day of the camp started with yoga and meditation sessions which helped the students to achieve peace of mind, maintain increased energy level, improve their flexibility, and channelize their energies in the right direction for all their activities during the camp.

One-Day Seminar on, ‘Exploring Funding Opportunities to Enhance Research’ (February 16, 2019)

The Directorate of Research and Innovation (DRI), Nirma University, organised one-day Seminar on “Exploring Funding Opportunities to Enhance Research” on February 16, 2019. The main objective of the seminar was to provide information about the various funding opportunities available to the faculty members and researchers to boost their research

contributions. The seminar was attended by approximately seventy (70) participants. The representatives of the major project funding agencies like, DST, GUJCOST, DRDO, United States-India Educational Foundation (USIEF), British Council, ISRO-Respond, etc. delivered sessions and interacted with the participants. Dr. A. Mukhopadhyay, Former Head, R&D Infrastructure Division, Department of Science & Technology (DST), New Delhi was the chief guest of the Inaugural Function and Dr. Anup K. Singh, Director General, Nirma University was the president of the function. Dr. A. Mukhopadhyay delivered a talk on “R&D Options for Young Researchers”. Dr. Ryan Pereira, Regional Officer, United States-India Educational Foundation (USIEF), Mumbai briefed about the “Fulbright-Nehru and other Fulbright Fellowships for India Citizens”. Dr. Narottam Sahoo, Advisor and Member Secretary, GUJCOST, Gandhinagar shared information about the funding opportunities available to the faculty members through DST, Govt. of Gujarat. Dr. Parul Patel, Head-RESPOND and Research Coordination Division, Space Applications Centre (SAC-ISRO), Ahmedabad discussed about the research opportunities available from the ISRO to the academia. During the post lunch session, Dr. M. K. Pandey, Jt. Director, Extra Mural Research & Intellectual Property Right, Defence Research and Development Organization (DRDO), New Delhi delivered a thought provoking lecture on a topic - “Ways and Means to Collaborate with DRDO on Research”. Ms. Moumita Bhattacharya, Head, British Council, Ahmedabad, spoke about the scholarships available to the Indian students from the UK, the UKIERI and the Newton-Bhabha fund available to the faculty members.



NIRMA
UNIVERSITY

NAAC ACCREDITED 'A' GRADE

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