

Research Report



NIRMA
UNIVERSITY

NAAC ACCREDITED 'A' GRADE



April 01, 2016 to March 31, 2017



Annual Research Report (2016-17)

Nirma University
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Nirma University Research Report 2017

Message by the Vice President

Nirma University has been a pioneer educational nucleus with a promise of constant growth and utmost commitment. The University has formed a reputation as a centre of excellence in the domain of higher learning and has taken various steps to boost the research skills of the students and the faculty members.

The University has established itself as the facilitator of knowledge in various areas with constantly evolving educational methodology and global approach to the teaching learning techniques. It has advanced in academic environment and extends support to enable the researchers at the University to provide their best. The University encourages and enables all the potential researchers to undertake research projects which have the scope to affect larger group of people and offer their well-being.

The University has also been involved into collaborating as well as partnering with not only national but also international institutes in order to explore and expose greater possibilities of research activities. Our efforts are to make the local research strong enough to make its mark internationally and translate into a tangible reality.

As we review on the progress of the University through the Annual Research Report 2017, I would like to acknowledge the persistence and meticulousness of the researchers of the University who have made it attainable.

K. K. Patel

Vice President

Nirma University

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Message by the Director General

Dear Reader,

Greetings from Nirma University!

The traditional binary between education and research in Indian universities is dissipating fast. Although free standing research institutions are prospering, universities are increasing their footprint in the field of research and innovation. It is indeed salubrious for the growth and development of the country. Another significant trend is that universities are moving away from facile research to rigorous and high quality research. Full time doctoral programmes are being established and research culture is being strengthened.

Nirma University is increasingly making its presence felt in the domain of research and innovation through doctoral education and research programmes. Our research endeavours are characterised by four Ps: Ph.D. Programme, Projects, Papers and Patents. The doctoral programme at the University is becoming robust and impactful. Further, number of research projects and financial grants for the same are on increase. Quality of research papers is constantly improving. Finally, the culture of patenting innovation is gaining ground. Nonetheless, we as a University would like to improve and innovate on a continuous basis to contribute to the society.

The present Research Report is organised around the four Ps discussed earlier and it describes research outcomes institute wise. The report also includes the lists of books and book chapters written by the faculty members.

I hope the Report will help you in understanding our journey towards excellence in research and innovation.

Yours Sincerely,

Anup Kumar Singh, PhD

Director General

Nirma University

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Preface

It is my pleasure to share with you the research activities of the Nirma University and its constituent institutes for the financial year 2016-17. In fact, this year was very important to us as the University established a full-fledged Directorate of Research & Innovation (DRI) for promoting different research activities. Through the DRI, we would like to create new and vibrant connections within and across the breadth of our research and teaching. We also aim to provide an atmosphere that allows the research scholars to achieve high standards of work in creating socially beneficial products.

This annual Research Report serves as a compilation of the outcomes of various research activities including the research projects, publications, patent, research awards and many more. The Report is structured in such a way that it provides Institute wise information making it easier for the readers to trace the desired information.

Importantly, in the current issue, we have put more emphasis on presenting statistics and details related to the quality research outcomes. Due to this, there might be small numbers under some of the research activities. However, we believe that, this is a small step towards encouraging the researchers of the University to focus more on quality rather than quantity. It is important to note that for the data related to the research paper publications, this time, we have put two separate sections. One for all papers published in Scopus or Web of Science indexed journals and another section with all other papers published in the UGC listed journals. Apart from this, this year, we have added the data related to the travel grants received by the faculty members and the students to visit foreign countries for various research related assignments. The Report also includes the lists of Books and Book Chapters on Research Themes written by the faculty members.

Before summing up, I offer my sincerest appreciation to all the faculty members of the University and research scholars who helped us achieve the results outlined in this report. My sincere thanks are due to all the esteemed members of the Editorial Board for their valuable suggestions to further improve the quality of the Report.

At Nirma University, we have set our aims high and look forward to our journey ahead, setting new milestones en route.

Dr. Dhaval Pujara

Director (I/C),

Directorate of Research and Innovation – Nirma University

Chairman – Editorial Board

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Executive Summary

Research and innovation are the most important elements of the University education system. The reputation of a University is judged by the research outcomes and the innovations made by it. Research outcomes and generation of the intellectual property are given prime importance in the international University ranking frameworks. Also, the national statutory bodies and the accrediting agencies give higher weightage to the research activities being conducted at the University.

Considering the importance of research activities and their outcomes, Nirma University every year publishes its Research Report. The aim of the Research Report is to share the University research activities to the stake holders, industry and other agencies. This edition of the Report includes research activities carried out by the University and its constituent institutes for the duration of April 01, 2016 to March 31, 2017.

The Research Policy of the University intends to motivate researchers to produce high quality publications as well as to undertake socially relevant research projects. The current year witnessed an incessant flow of productivity resulting in seventeen (17) major ongoing research projects with external funding of ₹ 5,24,87,800/- in addition to 15 major research projects worth ₹3,10,06,780/- sanctioned during the year. At the same time, the University continued a scheme of funding for the major research projects. Under the said scheme, two (2) projects worth ₹ 55,92,400/-, are under the progress. During the year, six (6) major research projects were completed, worth ₹1,37,99,840/-. The faculty members are currently working on twenty six (26) minor research projects with external funding of ₹1,10,04,000/-. The University has funded twenty (20) minor research projects.

Apart from the regular research projects, the University is also producing research scholars through its various Doctoral Programmes. Currently, 355 doctoral students are pursuing their degree under 162 registered supervisors. During the current year, thirty two (32) scholars were awarded with Ph.D. degree.

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The University would like to have a special mention of four patents which were filed in the current year and two patents were published.

The Research Report is also a medium to highlight the details of publications by the faculty members. This throws light on the amount of new ideas and innovative activities that are carried out at the University. It is to be noted that, this year we have only included the research papers published in journals and magazines that maintain high standards of scrutiny. During the calendar year 2016, total 140 research papers were published in high quality journals listed in Scopus and Web of Science. Around 69 research papers were published in other UGC journals. Apart from these research papers, total 14 books, 37 book chapters and 5 cases were published by the University faculty.

It is noteworthy to add that, 15 esteemed faculty members and 10 students were honoured with different awards during the year. Total 14 faculty members received Travel Grant from the external funding agencies for attending International Conferences/Workshops/Seminars.

The University also keeps facilitating the constituent institutes to organise international / national conferences / seminars / workshops on important research themes. This year 7 international / national conferences and 14 seminars / workshops were organised.

All in all, it was a year that allowed all at the University to soar above the established limits and display the academic exuberance never seen before.



**University Research
Statistics at a Glance**

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University Research Statistics at a Glance

Major Research Projects		Total
Completed Major Research Projects Funded by the External Funding Agencies	Projects Completed	6
	Total Grant	₹ 1,37,99,840/=
Ongoing Major Ongoing Research Projects Funded by the External Funding Agencies	Projects Ongoing	17
	Total Grant	₹ 5,24,87,800/=
Sanctioned Major Research Projects Funded by the External Funding Agencies	Projects Sanctioned	15
	Total Grant	₹ 3,10,06,780/=
Sanctioned Major Research Projects Funded by Nirma University	Projects Sanctioned	2
	Total Grant	₹ 55,92,400/=
Minor Research Projects		
Completed Minor Research Projects Funded by the External Funding Agencies	Projects Completed	11
	Total Grant	₹ 58,50,519/=
Ongoing Minor Research Projects Funded by the External Funding Agencies	Projects Ongoing	26
	Total Grant	₹ 1,10,04,000/=
Sanctioned Minor Research Projects Funded by the External Funding Agencies	Projects Sanctioned	4
	Total Grant	₹ 27,00,000/=
Completed Minor Research Projects Funded by Nirma University	Projects Completed	20
	Total Grant	₹ 17,34,987/=
Ongoing Minor Research Projects Funded by Nirma University	Projects Ongoing	20
	Total Grant	₹ 17,91,240/=
Sanctioned Minor Research Projects Funded by Nirma University	Projects Sanctioned	5
	Total Grant	₹ 4,73,400/=
Research Publications		
Research Publications in UGC, Scopus and Web of Science Listed Journals during 2016		140
Research Publications in Other UGC Listed Journals during 2016		69
Cases Published		05
Books Published		14
Book Chapters Published		37
Patents		
Patents Published		02
Patents Filed		04
Doctoral Research		
Ph.D. Degree Awarded		32
Total Ph.D. Students		355
Total Ph.D. Guides		162
Research Awards		
Research Awards Received by the Faculty Members		15
Research Awards Received by the Students		10

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Faculty Members who Received Financial Support from External Funding Agencies and Nirma University for Attending International Conference	14
Conferences / Seminars	
International / National Conferences Organized by the Institute	07
Seminars / Workshops / Refresher Courses Organized by the Institute	14



**Institute of Technology
Research Statistics at a Glance**

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Institute of Technology - Research Statistics at a Glance

April 01, 2016 - March 31, 2017

Major Research Projects		Total
Completed Major Research Projects Funded by External Funding Agencies	Projects Completed	01
	Total Grant	₹ 21,36,000/=
Ongoing Major Ongoing Research Projects Funded by External Funding Agencies	Projects Ongoing	07
	Total Grant	₹ 1,60,48,000/=
Major Research Projects Funded by External Funding Agencies	Projects Sanctioned	06
	Total Grant	₹ 87,54,000/=
Sanctioned Major Research Projects Funded by Nirma University	Projects Sanctioned	01
	Total Grant	₹ 27,00,000/=
Minor Research Projects		
Completed Minor Research Projects Funded by External Funding Agencies	Projects Completed	02
	Total Grant	₹ 26,60,000/=
Ongoing Minor Research Projects Funded by External Funding Agencies	Projects Ongoing	12
	Total Grant	₹ 48,42,000/=
Sanctioned Minor Research Projects Funded by External Funding Agency	Projects Sanctioned	03
	Total Grant	₹ 26,00,000/=
Completed Minor Research Projects Funded by Nirma University	Projects Completed	11
	Total Grant	₹ 10,99,187/=
Ongoing Minor Research Projects Funded by Nirma University	Projects Ongoing	08
	Total Grant	₹ 9,58,000/=
Sanctioned Minor Research Projects Funded by Nirma University	Projects Sanctioned	02
	Total Grant	₹ 1,98,000/=
Research Publications		
Research Publications in UGC, Scopus and Web of Science Listed Journals during 2016		45
Research Publications in Other UGC Listed Journals during 2016		42
Books Published		03
Patents		
Patents Published		02
Patents Filed		03
Doctoral Research		
Ph.D. Degree Awarded		14
Total Ph.D. Students from Technology Discipline		125
Total Ph.D. Guides from Technology Discipline		46

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Research Awards	
Research Awards Received by the Faculty Members	08
Research Awards Received by the Students	03
Faculty Members who Received Financial Support from External Funding Agencies and Nirma University for Attending International Conference	06
Conferences / Seminars	
International / National Conferences Organized by the Institute	01
Seminars / Workshops / Refresher Courses Organized by the Institute	01

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Research Projects

Major Research Projects

Completed Major Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Radiation Harden by Design (RHBD) Standard Cell Library Development	Dr. N. M. Devashrayee, Dr. U. S. Mehta	ISRO - RESPOND	21,36,000/=
Total Grant				₹ 21,36,000/=

Ongoing Major Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Calibration and Validation of RISAT-1 SAR Sensor and RISAT-1 Derived Soil Moisture	Dr. P. R. Patel	ISRO	29,80,000/=
2.	Development of Passive Damping Surface Coating for Advanced Materials based Structural System using PZT (Piezo) Powder	Dr. S. P. Purohit, Dr. P. V. Patel	ISRO - RESPOND	12,71,000/=
3.	Application of Precast Products Made Using Bottom Ash and Fly Ash for Rural Pavements and Other Infrastructure in India -PI From University Of Victoria, Canada	Dr. U. V. Dave, Dr. Rishi Gupta	IC- IMPACTS	40,65,000/=
4.	Optimization of Corrugated Horn Antenna Using Adaptive Neuro-Fuzzy Inference System	Dr. D. A. Pujara, Dr. D. M. Adhyaru	ISRO - RESPOND	11,04,000/=
5.	Oceanic Pollution and Other Ocean Phenomenon Monitoring using Feature Extraction from Multi-Polarized SAR Data	Dr. T. H. Zaveri, Prof. Pooja Shah	ISRO - RESPOND	18,26,000/=
6.	Process Development for Minimization of Springback Deformation	Prof. S. J. Joshi, Dr. B. A. Modi, Dr. K. M. Patel	ISRO - RESPOND	14,52,000/=

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	and Enhancement of Profile Accuracy of CFRP Reflectors			
7.	Study the Behavior of Precast Beam-Column Junction Under Progressive Collapse Scenario – An Experimental and Analytical Investigations	Dr. P. V. Patel, Prof. Digesh Joshi	DST, SERB	20,50,000/=
8.	Understanding the Immersed Friction Stir Welding of Aluminium Alloys	Prof. N. D. Ghetiya, Dr. K. M. Patel, Dr. B. A. Modi	DST, SERB	13,00,000/=
Total Grant				₹ 1,60,48,000/=

Sanctioned Major Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Development of Low Cost Methodology for Surveying and Mapping with Navic	Dr. P. R. Patel, Prof. H. A. Dalwadi	ISRO	17,05,000/=
2.	Using Deep Learning to Understand and Predict the Dynamics of Tokamak Discharges	Dr. Priyanka Sharma	Board of Research in Fusion Science and Technology	26,00,000/=
3.	Design and Development of Scalable Data Mining Algorithms for Big Earth Data	Dr. Sanjay Garg	ISRO - RESPOND	10,70,000/=
4.	Spectral Discrimination and Separability Analysis of Crops and Weeds using Deep Learning Techniques	Dr. Vibha Patel	ISRO - RESPOND	10,00,000/=
5.	Design Fabrication and Testing of A Transition From Free Space Gaussian Beam to Fundamental D-Band Wave Guide	Dr. Dhaval Pujara	Board of Research in Fusion Science and Technology	23,79,000/=
Total Grant				₹ 87,54,000/=

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Ongoing Major Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Affordable Pd doped Perovskite based Catalytic Converter for Abating Automotive Emission	Dr. Femina Patel, Dr. Sanjay Patel, Prof. N K Shah	27,00,000/=
Total Grant			₹ 27,00,000/=

Minor Research Projects

Completed Minor Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Use of Marine Sand in Concrete Construction	Dr. U. V. Dave	Adani Infrastructure Limited	2,50,000/=
2.	Design and Development of Automated and Reliable Service Provisioning Cloud Architecture for Engineering Educational Domain	Dr. Madhuri Bhavsar, Prof. Lata Gadhvi	Gujarat Council on Science and Technology (GUJCOST)	3,00,000/=
3.	New Testing Methods at Design Level for Improvement in Performance of VLSI in Nanometre Region	Dr. U. S. Mehta, Prof. P. M. Bhatasana	Gujarat Council on Science and Technology (GUJCOST)	4,35,000/=
4.	Design of ADC for Biomedical Applications	Dr. N. M. Devashrayee, Dr. A. P. Naik	Gujarat Council on Science and Technology (GUJCOST)	4,50,000/=
5.	Low Temperature Synthesis and Characterization of Magnetic Nanoparticles	Dr. Chetna Chauhan	Gujarat Council on Science and Technology (GUJCOST)	4,95,000/=
6.	Process Development for Hydrogen Production through Solar Thermal Energy	Dr. R. K. Mewada, Dr. S. S. Patel	Gujarat Council on Science and	4,00,000/=

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			Technology (GUJCOST)	
7.	Determination and Predictions of Thermophysical Properties of Biodiesel and its Blends	Dr. M. H. Joshipura, Dr. A. P. Vyas	Gujarat Council on Science and Technology (GUJCOST)	3,30,000/=
Total Grant				₹ 26,60,000 /=

Ongoing Minor Research Projects Funded by External Funding Agencies

Sr. No.	Project Title	Project Investigator	Funding Agency	Grant (in ₹)
1.	Synthesis of Cross Linked Starch and Study its Application of in Taste Masking / Coating for Drug Delivery Application	Prof. Nimish Shah	Stabicoat Vitamins, Ahmedabad	71000/=
2.	Dynamic Characterization of Shock Table	Dr. S. P. Purohit, Dr. P. V. Patel	Gujarat Council on Science and Technology (GUJCOST)	7,40,000/=
3.	Establishment of Free Space Optical Communication Link for Real Time Audio Transmission	Prof. D. G. Shah, Dr. D. K. Kothari	Gujarat Council on Science and Technology (GUJCOST)	3,41,000/=
4.	Design of Low Noise, Low Power, Automatic Gain Controlled Amplifier for Biomedical Applications	Prof. D. J. Panchal, Prof. A I. Mecwan, Prof. V. G. Savani	Gujarat Council on Science and Technology (GUJCOST)	3,20,000/=
5.	Development of Microscopic Technique For Automatic Characterization of the Cell Organisation for Authentication of Few Indian Herbal Plants	Dr. T. H. Zaveri, Prof. B. D. Fataniya	Gujarat Council on Science and Technology (GUJCOST)	2,30,000/=

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6.	Precision Agriculture Support System using Wireless Sensor and Actuator Network	Dr. D. K. Kothari, Prof. S. H. Gajjar, Prof. M.A. Upadhyay	Gujarat Council on Science and Technology (GUJCOST)	4,50,000/=
7.	Design of A Hybrid System for Seamless Communication Across DVB-RCS and LTE Networks	Dr. Y. N. Trivedi, Dr. N. P. Gajjar	Gujarat Council on Science and Technology (GUJCOST)	3,00,000/=
8.	Spectrum Sensing Techniques in Cognitive Radio	Dr. Y. N. Trivedi, Prof. Hardik Joshi	Gujarat Council on Science and Technology (GUJCOST)	3,00,000/=
9.	Experimental Investigation of Life Cycle Analysis and Combustion Characteristic Of CI Engine Operating On Esterified Oil And Its Blends with Bio Additives (GUJCOST)	Dr. R. N. Patel, Prof. A. M. Lakdawala Prof. N. K. Shah	Gujarat Council on Science and Technology (GUJCOST)	8,10,000/=
10.	Experimental Investigation on Ultrasonic Single Point Incremental Forming	Dr. B.A. Modi, Prof. A.M. Gohil, Dr K. M. Patel	Gujarat Council on Science and Technology (GUJCOST)	5,30,000/=
11.	Reduction of E-Factor in Dyes and Pigment Industries (Environmental Pollution Control)	Dr. Parin Shah	Green Environment Services Co-op. Soc. Ltd. – CETP	7,50,000/=
Total Grant				₹ 48,42,000/=

Sanctioned Minor Research Projects Funded by External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
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1.	Development of Blind Hyper Spectral Unmixing (BSU) Algorithm for Water Pollutant Identification Due to Sewage and Industry Disposals for South Karnataka Coast, Manglore Region	Dr. T. H. Zaveri, Prof. Pooja Shah	ISRO – RESPOND	9,00,000/=
2.	Development of Reinforced Aerated Blocks with Innovative Composite Ingredients as Compression Members for Structural Applications with Stringent Design Specifications	Dr. U. V. Dave	ISRO - RESPOND	8,00,000/=
3.	Identification of Existing Road Material, Condition and Potential Parking Area of Ahmedabad City using AVIRIS Data and Updation Plan of Undeveloped Road	Dr. P. R. Patel, Dr. Tanish Zaveri	ISRO	9,00,000/=
Total Grant				₹ 26,00,000/=

Completed Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Design and Development of intelligent Infrastructure prototype Model for Monitoring Railway Track	Dr. Kamal Mehta	77,000/=
2.	Synthesis, Characterization and Application of Functionalised Macromolecule as Chemical Sensor	Prof. Neha Patni	1,00,000/=
3.	Synthesis of Spinel _s MFe _{2-x} B _x O ₄ (M = Ni, Cu, Zn) and MFe _{2-x} B _x O ₄ /TiO ₂ Nano-composite as Novel Photocatalysts for Degradation of Dyes	Dr. Femina Patel	1,00,000/=
4.	Fabrication, Characterization and Application of Electrodes for Electrochemical Waste Water Treatment	Prof. Priya Saxena	1,00,000/=
5.	Studies on Exploring Novel Excipients for Dmg Delivery in Oral Cavity	Prof. Nimish Shah, Dr. Dhaivat Parikh	1,80,000/=

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6.	Evaluation of Mechanical and Durability Properties on Fly ash and Rice Husk based Geo Polymer Concrete	Prof. S. P. Thakkar	72,187/=
7.	Design and Fabrication of Radial Flux Permanent Magnet Brushless DC Motor	Prof. A. N. Patel, Prof. T. H. Panchal	80,000/=
8.	Trend Analysis and Inclusion of HOTS in Engineering Education	Dr. Richa Mishra	1,00,000/=
9.	Test- Rig for Experimental Investigations of Bearing Faults in Rolling Bearings	Prof. V. M. Bhojawala, Prof. D. V. Patel, Prof. D. J. Shah	1,00,000/=
10.	Development of Experimental Set Up for Determination of Stiffness Properties of Fibre Reinforced Composite using Vibration Testing	Prof. S. J. Joshi, Prof. D. B. Shah	1,00,000/=
11.	Performance Evaluation of Solid Lubricants Mixed With SAE - 40 Oil Machining of EN- 31 Steel Material	Dr. K. M. Patel, Prof. M. A. Makhesana	90,000/=
Total Grant			₹ 10,99,187/=

Sanctioned Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Development of High Temperature Applications using Fresnel Lens as Solar collector	Dr. R. K. Mewada	1,00,000/=
2.	Fabrication, Characterization and Application of Polymer in Solar Cell	Prof. Neha Patni	1,00,000/=
3.	Microwave Assisted Oil Extraction from Algae	Dr. M. Jhansi L. Kishore	1,00,000/=
4.	Development of low cost technique to remove copper from e-waste	Prof. Amita Chaudhary	1,00,000/=
5.	Design and Investigation of Advanced Control Schemes For Quadruple Conical Tank System"	Prof. Alpesh Patel, Prof. J. B. Patel	1,00,000/=

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6.	Investigation on Application of Minimum Quantity Solid Lubrication in Machining Process	Prof. M. A. Makhesana, Dr. B. K. Mawandiya, Dr. K. M. Patel	60,000/=
7.	To Study Effect of Characterization Properties on Dimensional Control for Composite Product	Prof. D. B. Shah, Prof. S. J. Joshi	1,00,000/=
8.	Investigations on Producer Gas Quality for Fixed Bed Gasifier	Prof. D. S. Upadhyay, Prof. N. K. Shah, Dr. R. N. Patel	1,00,000/=
9.	Use of Pervious Concrete for Solving Problem Related to Water Clogging at Nirma University Campus	Prof. T. M. Joshi, Dr. U. V. Dave	1,00,000/=
10.	Simultaneous Localization and Mapping Using Autonomous Unmanned Aerial Vehicle	Dr. D. K. Kothari, Prof. D. J. Panchal	98,000/=
Total Grant			₹ 9,58,000/=

Research Publications

Research Papers in Scopus / Web of Science Listed Journals

1. Raisinghani, B. M., and S. Purohit “Influence of Parameters on Performance Evaluation of Designed RC Buildings: Seismic Hazard” International Journal of Structural Engineering 7.4 (2016): 378-397.
2. Modhvadia, R. et al. “Evaluation of Permeability of Pervious Concrete with Adding Fine Aggregate.” International Journal of Civil Engineering and Technology 7.6 (2016).
3. Shah, D. B., K. M. Patel, and R.D. Trivedi “Analyzing Hertzian Contact Stress Developed in a Double Row Spherical Roller Bearing and its Effect on Fatigue Life” Industrial Lubrication and Tribology 68.3 (2016): 361-368.
4. Makhesana, Mayurkumar Ashwinbhai, and Kaushik M. Patel. “Investigation to Study the Applicability of Solid Lubricants in Machining for Clean and Green Manufacturing” Industrial Lubrication and Tribology 68.5 (2016): 591–596.
5. Nimkar, S.C., and R. K. Mewada. “Effect of Catalyst Selectivity on Exergetic and Exergoeconomic Evaluation of Ethylene Oxide/ethylene Glycol Process.” International Journal of Exergy 21.2 (2016):157-185.
6. Shantaiya, S., K. Verma, and K.K. Mehta “Multiple Object Clustering Using FCM and K-Means Algorithms” International Journal of Computational Vision and Robotics 6.4 (2016): 331-343.
7. Patel, D. et al. “To Study the Properties of Concrete as a Replacement of Cement with the Marble Dust Powder” International Journal of Civil Engineering and Technology 7.4 (2016).

8. Dave, J. M., and D. S. Sharma. "Stresses and Moments in through-Thickness Functionally Graded Plate Weakened by Circular/elliptical Cut-Out" *International Journal of Mechanical Sciences* 105 (2016): 146-157.
9. Joshi, T., and U. Dave. "Evaluation of Strength, Permeability and Void Ratio of Pervious Concrete with Changing W/C Ratio and Aggregate Size" *International Journal of Civil Engineering and Technology* 7.4 (2016).
10. Upadhyay, M. A., and D. K. Kothari. "Efficiency–fairness Trade-off Approaches for Resource Allocation in Cooperative Wireless Network" Vol. 380. pp. 47-60, 2016.
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Research Publications in Other UGC Listed Journals during 2016

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3. Bodana, Krushnaraj, and Bimal Kumar Mawandiya. “An Application of Taguchi Parameter Design in Predicting and Optimizing the Machining Parameters for Face Milling Operation” Nirma University Journal of Engineering and Technology 5.1 (2016): 29-33.
4. Patel, Paresh V., Vishnu H. Jariwala, and Sharadkumar P. Purohit. “Torsional Strengthening of RC Beams Using GFRP Composites.” Journal of The Institution of Engineers (India): Series A 97.3 (2016): 313-322.
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9. Bhadauriya, Harshit, et al. "Development of a Non-linear Process Control Test Bench and Empirical Investigation of Control Performance." *International Journal of Advanced Technology and Engineering Exploration* 3.23 (2016): 170.
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17. Parikh, Vishal, et al. "Usability of Long Password in Web Application". *International Journal of Computer Science and Communication*. (2016): 154-158.
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19. Shukla, Deepika., et al. "Empirical Performance comparison of OODBMS over RDBMS" *International Journal of Computer Science and Communication*. (2016): 83-88.
20. Ashishdeep, Anitha, et al. "Software Process Models for Mobile Application Development: A Review" *International Journal of Computer Science and Communication*. (2016): 150-153.
21. Oza, Meet, and Rupal Kapdi. "Brain Tumor Disease Identification Using Random Forest Classifier." *International Journal of Computer Science and Communication*. 7.1 (2016): 202-204.
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23. Dakwala, Anuj, and Kruti Lavingia. "A Machine learning approach to improve the efficiency of Fake websites detection Techniques" *International journal of computer Science and Communication (IJCSC)* 7: 236-243.
24. Shah, Rutul, and Zunnun Narmawala. "Mobile Torrent: Peer-To-Peer File Sharing In Android Devices." *International Journal of Computer Science and Communication*. 7.2 (2016): 20-34

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27. Shah, D. G., and D. K. Kothari. "Implementation of FSO link for Full Duplex Short Range Communication" *Journal of Electronic Design Technology* 7.1(2016):20 – 27.
28. Dutta, Ankan, et al. "Enhancing the Performance of Audio Visual Speech Recognition Using Deep Learning Techniques." *International Journal of Computer Science and Communication* 7.2 (2016): 126-135.
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31. Malaram Kumhar, et al. "Ransomware: A Threat to Cyber Security/" *International Journal of Computer Science and Communication* 7.1 (2016): 224-227.
32. Bhatt, Divyesh, et al. "Various Approaches to Recognise Human Emotions." *International Journal of Computer Science and Communication* 7.1 (2016): 173-176.
33. Bhavsar, Madhuri, et al. "Model based robust Peak Detection algorithm of Radiation Pulse Shape using limited samples." *International Journal of Computer Science and Communication* 7.1 (2016): 11-18.
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37. Raval, Gaurang, and Forum Suthar "Securing Application Layer Protocol for IoT" *International Journal of Computer Science and Communication* 7.2 (2016): 42-48.
38. K, Ambica., "Riemann Problem in Non Ideal Gases." *Indian Journal of Pure and Applied Mathematics* 47.3 (2016): 501-521.
39. Rao, Ratna., "A Study of Ecofeminism in the Novel Mistress of Spice." *IOSR Journal of Humanities and social Sciences* 21.2 (2016): 46-49
40. Malhotra, Sandeep. "Computational Science of Vapor Liquid Two Phase Flow Inside Heat Exchange Tube." *International Journal of Computer Science & Engineering* 4.7 (2016): 148-153
41. Jayati Pandya, Amit N Patel, "Design and Analysis of Radial Flux Permanent Magnet Brushless DC Motor for Gearless Elevators" *International Journal of Control Theory and Applications*, ISSN: 0974-5572, Volume 9, No. 43, pp. 151-160, 2016.
42. Gauswamia, Vishal M., et al. "Simulation and Analysis of Stator Resistance Variation Compensation Technique for Direct Torque Controlled Induction Motor Drive." Volume 9, No. 43, pp. 151-160, 2016.

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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.	Akhilesh A. Nimje	Electrical Circuit Analysis and Synthesis	New Age International Publishers	978-93-86418-08-1	2017
2.	Sudeep Tanwar	Mobile Computing	Bhavya Publication, Delhi	978-93-83992-25-6	2017
3.	Madhuri Bhavsar	Semantic enabled cloud for compute intensive applications	Scholar Press	978-3-659-84189-7	2016

Patents Filed

Sr. No.	Name of the Inventors	Title of the Patent	Year	Status Filed / Published/ Granted
1.	Digesh Joshi, Paresh V. Patel, Alpesh I. Patel, Sharadkumar Purohit, and Harsh Khodidas Kapadia	Automated Synchronized Crack Monitoring System	2017	Published
2.	D. M. Adhyaru, Pallav Gandhi	Smart Modbus Based Device	2017	Published
3.	N. M. Devashrayee, Rajubhai K. Mewada, And Mamta Mainak Saiyad	Radiation Hardened Epoxy/Graphite Polymer Composite	2016	Filed
4.	Rajesh Patel, Sanjay Jain, Ankur Patel, Nihar Thakkar, Sanket Chaudhari, and Chirag Sonvane	Improvement In Performance of Pump Running In Turbine Mode By Provision Of Guide Vanes	2016	Filed
5.	Urmil Dave, Sonal Thakkar, Yash P. Khandol, Rishi Gupta, Yash P. Khandol, and Milan D. Patel	A Novel Composition for Alkali Activated Paver Blocks and a Process Thereof	2016	Filed

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Ph.D. Awarded

Sr. No.	Name of the Student	Name of the Guide / Supervisor	Title of Thesis
1.	Patel Vimal Ranchhodlal	Dr. R. N. Patel	Experimental Studies on Lignite Gasification Process
2.	Khairnar Vaishali Dinesh	Dr. K. Kotecha	Study of reliability issues for Communication Protocols in Vehicular Ad-hoc Networks
3.	Sachin Gajjar	Dr. K. S. Dasgupta	Cross layer Protocols and Architecture for Wireless Sensor Networks
4.	Nimkar Samir Chandrakant	Dr. Raju Mewada	Exergy Analysis of Nitric Acid, Ethylene Oxide/ Ethylene Glycol Processes and Methanol Reactor
5.	Jain Sanjay Kumar Virendra	Dr. R. N. Patel	Experimental and Numerical Investigations on Pump running in Turbine mode for Micro Hydropower Plants
6.	Shah Ankit Kiritkumar	Dr. D. M. Adhayaru	Model based Control of Hybrid Nonlinear Dynamical System
7.	Patel Niravkumar Pravinbhai	Dr. D. S. Sharma	Stress analysis and optimization of a Laminated Composite plate weakened by Discontinuity
8.	Patel Chirag Ishwarbhai	Dr. Sanjay Garg	Analysis and Development of Human Action Recognition Techniques for Video Sequences
9.	Patel Sanjay Prahladbhai	Dr. K. Kotecha	Enhancing Performance of pattern mining methods
10.	Upadhyay Manisha J.	Dr. D. K. Kothari	Development, Simulation and Analysis of Resource Allocation Techniques for Cooperative Wireless Network
11.	Ukani Vijaykumar Shantilal	Dr. Tanish Zaveri	BorderMon: An Energy Efficient Framework for Border Surveillance using Wireless Multimedia Sensor Networks

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12.	Nimish Rajnikant Shah	Dr. Raju Mewada and Dr. Tejal Mehta	Polymer Synthesis, Characterization and Exploring their Pharmaceutical Applications
13.	Nilesh Dhirajlal Ghetiya	Dr. K. M. Patel	Experimental Investigations into Immersed Friction Stir Welding of AA2014-T6
14.	Kedar Prasad Agrawal	Dr. Sanjay Garg	Clustering and Time Series Prediction for Spatio-Temporal Geographic Dataset

Research Awards

Research Awards Received by the Faculty Members

Sr. No.	Name of the Faculty Member	Recognition / Honor / Award	Reason for Recognition / Honor / Award	Name of the Organization
1.	Dr. Priyanka Sharma	First Prize in Poster Presentation	Poster Presentation	ACM-W India Celebration of Women in Computing – 2016
2.	Dr. Dhaval Pujara	US Fulbright-Nehru Fellowship	For attending International Education Seminar	US Fulbright-Nehru Commission
3.	Dr. Dhaval Pujara	Ranked Second Best Paper in the Microwave Technology Track	Best Paper	Indicon - 2016 International Conference organized by the IEEE India Council
4.	Prof. Narasimha Reddy Ravuru	First Prize	Paper Presentation	National conference on Inter and Intra Disciplinary Blend of Chemical Engineering, VNIT, Nagpur
5.	Prof. Neha Patni, Dr. Shibu Pillai	Best Poster Presentation	Poster Presentation	IIT, Gandhinagar
6.	Prof. Leena Bora, Dr. R K Mewada, Mr. Meet Shah, and Mr. Rushabh Patel	Best Paper	Best Paper	B K School of Management, Ahmedabad

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7.	Dr. Parin Shah	Best M.Tech. Thesis in Chemical Engg. (Energy System) - 2016	Guided Ms. Ashwini D. Karlekar (Energy System) – 2016	Indian Society for Technical Education - IPCL
8.	Dr. Madhuri Bhavsar	Best Paper Award	Best Paper	IEEE International Conference on Global Trends in signal processing, Information Computing and Communication

Research Awards Received by the Students

Sr. No.	Name of the Faculty Member	Recognition / Honor / Award	Reason for Recognition / Honor / Award	Name of the Organization
1.	Meet Shah, Rushabh Patel	Best Paper Award	Best Paper	B.K. School of Management, Ahmedabad
2	Ashwini D. Karlekar	ISTE-IPCL Best M.Tech. Thesis in Chemical Engg. - 2016	M. Tech. Thesis	Indian Society for Technical Education - IPCL
3	Harshit Bhadauriya	Best Paper Award	National Conference	National Conference on Process Automation and control (NCPAC 2016), Malviya National Institute of Technology, Jaipur

Travel Grant Received by the Faculty Members / Students

1. Dr. Dhaval Pujara, Professor, Department of Electronics & Communication Engineering, Institute of Technology received travel grant of ₹ 70,000/- from Department of Science & Technology (DST), New Delhi and ₹ 22,000/- from Nirma University to attend the 11th European Conference on Antennas and Propagation (EUCAP) at Paris, France. During the conference, he presented two papers titled, “Suppression of Mutual Coupling in Wideband Tree Shaped Fractal DRA Array for MIMO Applications” and “Design and Optimization of a 183 GHz Corrugated Horn for Humidity Sounder Using ANFIS”.
2. Dr. Usha Sandeep Mehta, Professor, Department of Electronics & Communication Engineering, Institute of Technology received travel grant of ₹ 28,432/- from Department of Science & Technology (DST), New Delhi to attend 2016 IEEE Region-10 Conference, TENCON at Singapore. During the conference, she presented a paper titled, “Photonic Sensor for railway track safety”.

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3. Dr. Mehul Naik, Associate Professor, Department of Electronics & Communication Engineering, Institute of Technology received travel grant of ₹ 29,491/- from Nirma University to attend 2016 IEEE Region-10 Conference, TENCON at Singapore. During the conference, he presented a paper titled, “Design and Simulation of X Band Microstrip Circulator”.
4. Prof. Vaishali Dhare, Assistant Professor, Department of Electronics & Communication Engineering, Institute of Technology received travel grant of ₹ 28, 819/- from Department of Science & Technology (DST), New Delhi to attend 2016 IEEE Region-10 Conference, TENCON at Singapore. During the conference, she presented a paper titled, “Development of Basic Fault Model and Corresponding ATPG for Single Input Missing Cell Deposition Defects in Majority Voter of QCA”.
5. Prof. Manisha T. Shah, Assistant Professor, Department of Electrical Engineering, Institute of Technology received travel grant of ₹ 60,856/- from Nirma University to attend IET 8th International Conference on Power Electronics Machine and Drive (PEMD), at Scotland, United Kingdom. During the conference, she presented a paper titled, “Generalized current control scheme for unity power factor two - level and three-level bi-directional front-end converters: an approach for multi-level front-end converters”.
6. Prof. Urmil V. Dave, Professor, Department of Civil Engineering, Institute of Technology received travel grants of INR 20,000/- from Centre for International Co-operation in Science (CICS) and of INR 30,000/- from Indian National Science Academy of to attend 9th International Concrete Conference 2016 on “Environment, Efficiency and Economic Challenges” held at University of Dundee, Scotland, UK from July 04-July 06, 2016. The conference was organized by the Concrete Technology Unit (CTU), Department of Civil Engineering, School of Science and Engineering, University of Dundee, Scotland, UK. During the conference, he presented two papers titled, “Evaluation of Properties of No-Aggregate Concrete by Incorporation of Fibres” by Chintan Gajera and Urmil Dave and “Enhancing Durability of Plain Cement Concrete by incorporating GGBS” by Bhautik Sojitra and Urmil Dave. Prof. U. V. Dave worked as the scientific and technical committee member for the conference. He also chaired a technical session on theme “Low Carbon Cements and Concrete” consisted of four technical presentations of 20 minute each on July 04, 2016.

Conferences / Seminars / Workshops

National Symposium Organized by the Institute

National Symposium on “Recent Advances and Future Trends in Chemical Technology (RAFTCT)-2016” was organised by the Chemical Engineering Department, Institute of Technology on September 24, 2016.

A key feature of the RAFTCT was a dedicated symposium for young researcher working in the recent research areas of chemical technology. Around 200 delegates participated from reputed Institutes of Bangalore, Delhi, Rajasthan, Meerut, Gujarat, etc. With close to 110 posters were presented and the abstracts of all posters were published. Abstract cum Souvenir booklet and

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e-proceedings were released. Eminent personalities like, Shri Prakash Jha, (Coordinator, Central University of Gujarat), and Shri Harshad Patel, Head, (CoE, Adani Port & SEZ Ltd.) delivered invited talks during the symposium. All the delegates and participants had a technically rich experience at the RAFTCT.

Seminar Organized by the Institute

The ISTE approved short term training programme titled, “Challenges and Innovative Solutions in Electrical Power System” was organized by the Department of Electrical Engineering, Institute of Technology under the auspices of the Academic Development & Research Cell, during June 20 – July 02, 2016. The programme focused on the issues in modern – deregulated power grid and deliberated on probable solutions. The experts ranged from Professors of IISc and IITs, practising researchers and industry experts delivered lectures during the programme. The participants were enlightened by the thought provoking discussion with Prof. D. Thukaram, Prof. L. Satish, Prof. Udaya Kumar from IISc, Bangalore, Prof. Trapti Jain from IIT, Indore and Prof. K. Ragavan from IIT, Gandhinagar. Participants had a chance to interact with Shri Anand Kumar, Chairman, GERC, Shri Uday Trivedi, Associate VP, Adani Power Ltd. and Dr. Manoj Mandlik, Senior R & D manager, Crompton and Greaves Ltd., Nashik. Professors from prominent institutes like L. D. College of Engineering, Govt. Engineering Colleges and SVNIT, etc were also among the experts who interacted with the participants. Field visit to Gandhinagar Thermal Power Plant gave clear picture of happening on the ground whereas simulations on PSCAD software helped visualizing critical issues. The continuous evaluation made everyone to think – collaborate and interact among themselves. On a good note, the programme was brought to successful completion for 21 enthusiastic participants in the domain of electrical power system.

Electronics & Communications Engineering department has conducted, Indian Society Technical Education (ISTE) approved, Short Term Training Programme on, “VLSI and Embedded System Design” Under the auspices of the Academic Development & Research Cell, Nirma University during June 20, 2016 to July, 02, 2016. The coordinators of this programme were Prof. Usha Mehta and Prof. Sachin Gajjar. Dr. Shantanu Chaudhari, Director, CERI, Pillani and other eminent speakers from Industry and academia have conducted the sessions for participants. More than 25 participants have actively participated in the programme.

Civil Engineering department has conducted, Indian Society Technical Education (ISTE) approved, Short Term Training Programme on, “Emerging Trends in Civil Engineering” Under the auspices of Academic Development & Research Cell, Nirma University during June 20, 2016 to July, 02, 2016. The coordinators of this programme were Dr.P.V.Patel, Head, Civil Engineering Department. Eminent speakers from Industry and academia were invited to deliver expert talk to participants. More than 15 participants have actively participated in the programme. Site visit was arranged to Kesarjan where low cost sustainable blocks are manufactured.

ISTE Approved Short Term Training Programme on, “Current Practices in Mechanical Design” 20th Jun – 2nd Jul 2016 Under the Auspices of Academic Development & Research Cell, Nirma

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University Organized by Mechanical Engineering Department, Institute of Technology, Nirma University. Total 16 faculty members were participated. The STTP was coordinated by Dr. S.J. Joshi and Dr. M.B. Panchal. All participants were undergone visit at ISRO and ATIRA during STTP.

Information and Technology department has conducted an ISTE approved STTP during 27/06/2017 to 07/07/2017 (10 days). Title of the program was “Research Avenues in Computational Intelligence & its Applications”. Eminent experts from various premier organizations like DAICT, ISI, Kolkata, IIT, Gandhinagar, Nanyang Technological University, Singapore were invited to deliver talk to participants. Dr. Ankit Thakkar was the coordinator of programme.



**Institute of Management
Research Statistics at a Glance**

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Institute of Management - Research Statistics at a Glance

April 01, 2016 - March 31, 2017

Minor Research Projects		Total
Ongoing Minor Research Projects Funded by the External Funding Agencies	Projects Ongoing	01
	Total Grant	₹ 6,00,000/=
Completed Minor Research Projects Completed Funded by Nirma University	Projects Completed	05
	Total Grant	₹ 1,85,800/=
Ongoing Minor Research Projects Funded by Nirma University	Projects Ongoing	06
	Total Grant	₹ 3,43,240/=
Research Publications		
Research Publications in UGC, Scopus and Web of Science Listed Journals during the calendar year 2016		02
Research Publications in Other UGC Listed Journals		09
Cases Published		05
Books Published		06
Book Chapters Published		33
Articles Published		09
Doctoral Research		
Ph.D. Degree Awarded		01
Total Ph.D. Students from Management Discipline		57
Total Ph.D. Guides from Management Discipline		18
Conferences / Seminars		
International / National Conferences Organized by the Institute		03
Seminars / Workshops / Refresher Courses Organized by the Institute		01

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Research Projects

Minor Research Projects

Ongoing Minor Research Projects Funded by External Funding Agencies

Sr.	Project Title	Project Investigator	Funding Agency	Grant (in ₹)
1.	Strengthening State Plans for human Development	Prof. M. Mallikarjun and Prof. Nikunj Patel	Gujarat Social Infrastructure Development Society	6,00,000/=
Total Grant				₹ 6,00,000/=

Completed Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Robust Methods for Income Distribution Models	Prof. Mahesh K.C., Prof. Dhiren Jotwani	21,000/=
2.	A Study of HR Practices and Issues in Gaglani Metal Industries in Ahmedabad	Prof. Reena Shah	17,800/=
3.	Needs and Barriers of Online Shopping – An Exploratory Study of Indian Shoppers	Dr. Ashwini Awasthi, Dr. Sunita Guru	34,000/=
4.	Employee Work Passion : Creating a Motivating Work Environment	Prof. Nina Muncherji	73,000/=
5.	Study of Devotees and Prasadalya Management at Shri Sai Baba Temple, Shirdi	Prof. Nityesh Bhatt	40,000/=
Total Grant			₹ 1,85,800/=

Ongoing Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Investor's Behaviors towards Mutual Fund Investing with reference to Investors in Gujarat	Prof. Parag Rijwani, Prof. Jayesh P. Aagja	30,000/=

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2.	Modeling Performance measurement of Service Organizations using Data Envelopment Analysis (DEA)	Dr. Chetan A. Jhaveri	1,00,000/=
3.	Succession Planning in Family Owned Businesses	Dr. Sameer Pingle, Dr. Jayesh Aagja	60,000/=
4.	Study on Efficiency of Stock Futures Market in India	Prof. Deepak Danak, Prof. Nikunj Patel	99,440/=
5.	Teaching Learning Entrepreneurship: An Impact Study	Dr. Shahir Bhatt, Prof. Amola Bhatt	21,000/=
6.	Negative Externalities Caused by Aesthetic Pollution (Environmental Economics)	Prof. Nirmal C. Soni, Prof. Naresh Poturaju	32,800/=
Total Grant			₹ 3,43,240/=

Research Publications

Research Papers in Scopus / Web of Science Listed Journals

1. Shah, H., and A. Singh. "Managing the IT Millennials - HR Imperatives and Interventions." *International Journal of Intelligent Enterprise* 3.3-4 (2016): 282-296.
2. Shah, Reena, and Ruchi Tewari. "Demystifying 'selfie': A Rampant Social Media Activity." *Behaviour & Information Technology* 35.10 (2016): 864-871.

Research Papers in Other UGC Listed Journals

1. Bhatt, Amola, and Shahir Bhatt. "FDI in e-Commerce Market place Model: Issues and Challenges" *South Asian Journal of Socio-Political Studies*. 17(2016): 78-81
2. Jotwani, Dhiren. "Ease of Doing Business in Selected Major Indian States: Does Bank Credit Lead to Productivity?" *Amity Journal of Management Research* (2016).
3. Chugan, Pawan K., and Upinder Dhar. "The Role of Human Resources in New Transfer Pricing Regime." *AIMS Journal of Management*. 2(2016):59-69
4. Shah, Reena. "Work-Life Balance: State Interventions in India" *Pacific Business Review International*. (2016)
5. Parashar, Sapna. "Multichannel Behaviour with Special Reference to Apparels" *ELK Asia Pacific Journal of Marketing and Retail Management*. 7(2016):21-31
6. Bhatt, Amola, and Shahir Bhatt. "Microfinancing with SEWA Bank: Bringing Women to the Mainstream Economy." *Amity Business Review*. 17.1 (2016).
7. Jain, Rajesh. "Early Estimation of Crop Sown Area by Integrating Multi-Source Data". *Journal of Geomatics*. 10(2016):80-88
8. Chugan, Pawan K., and Upinder Dhar. "The Role of Human Resources in New Transfer Pricing Regime" (2016). *AIMS Journal of Management*.2(2016):59-69

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9. Bhatt, Amola, and Shahir Bhatt. "Microfinance Institutions: Do they Empower Women? A Case Study of Light Microfinance Pvt. Ltd." NMIMS Management. 28(2016): 73-92

Books Published

Sr. No.	Name of the Faculty	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Rajesh K. Jain, Himanshu Trivedi	Lean Imperatives Lessons from Indian Organizations	American Society for Quality India Private limited, New Delhi	978-81- 930216-2-0	2016
2.	Sapna Parashar, Jayesh Aagja, Tripurasundari Joshi	Services in Emerging Markets	Excel India Publisher	978-93-86- 256-33-1	2017
3.	Tripurasindari Joshi, Jayesh Aagja, and Sapna Parashar	Consumer Behaviour & Contemporary Marketing Strategy	Excel India Publisher	978-93-86- 256-92-4	2017
4.	Ashwini Awasthi, Shahir Bhatt	Research Trends in Economics, Finance and Human Resource Management	Excel India Publisher	978-93- 8577-44-8	2017
5.	Ashwini Awasthi, Nikunj Patel	Research Trends in Marketing Management and General Management	Excel India Publisher	978-93- 85777-45-5	2017
6.	Indu Rao	Introduction to Organization Behaviour	McGraw Hill Education (India) Pvt. Ltd.		2017

Book Chapters Published

Sr. No.	Name of the Faculty	Title of the Chapter	Name of the Book	Name of Publishing House	Year of Publication
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1.	Thomas, Binu, Pawan K. Chugan and Deepak K. Srivastava	Pharmaceutical Research and Licensing Deals in India	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
2.	Panchal, Nilam, W.C.Singh, and P.K.Chugan	Formal Financial System and Accessibility by MSMEs: A Survey	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
3.	Mehta, Kathak and P. K.Chugan	Make in India: Opportunities in Technical Textiles Sector	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
4.	Rajak, Ram and Rajesh K. Jain	Toward Improved Crop Acreage Estimation Using Multi-Source Information	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
5.	Jhaveri, Chetan and Anurodhsingh Khanuja	Recent trends of OR Tools in Supply Chain Management: A Literature Review and Framework	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
6.	Mehta, Neha and Pawan Kumar Chugan	Developing High Performance Work System in Retail Outlet	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016

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7.	Soni, Nirmal	A Case Study of the Social Enterprise 'Life Skill Foundation' Imparting Self Employment Skills	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
8.	Chatterjee, Siddhartha and T.S Joshi	An Assessment Of TQM Driven Performance Appraisal Systems In Organisations	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
9.	Chatterjee, Monali	Improving Prospects of Employability through Soft Skills	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
10.	Singh, Ritika and Rajesh Kikani	Skill Requirement & Development in India: Need, Challenges And Strategies	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
11.	Kaur, Amandeep and Yogesh Doshit	A Multidimensional Poverty Standard of Living Conditions (MP-SLC) Assessment of Gujarat's Most Deprived Population	Macro and Micro Dynamics for Empowering Trade and Industry in Society	Excel India Publishers	2016
12.	Bhatt, Shahir and Amola Bhatt	Assessing E-service Quality Dimensions in Online Shopping	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016

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13.	Bhatt, Nityesh and Yogesh Mungra	Mobile Based Marketing: Tools and Applications	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
14.	Guru, Sunita	Perceived Risk: Analysis of Literature on Online Shopping Situations	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
15.	Makhija, Diljeet kaur and Pawan K. Chugan	RFID Based Library Management System: The Benefits and Challenges	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
16.	Patel, Chitral and Pawan K. Chugan	Green Marketing: A Study of Consumer Purchase Behaviour for Green Homes	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
17.	Chandrakant Soni, Nirmal and Pankti Dalal	Environmental Concern and Their Impact on International Trade	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
18.	Soni, Nirmal and Sudeep Modh	Scope of Bio-fibers in Textile Export from India	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
19.	Shah, Dipesh and Pawan K. Chugan	Key requirements for setting up a successful International Financial Services Centre (IFSC) in India	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
20.	Dave, Niyati and Dhanyu Arun	Understanding the Implicit: A View on Investment Criteria in Startups by Angels	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016

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21.	Jotwani, Dhiren	Bank Credit as a Measure of Ease of doing Business: A Study of Indian States	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
22.	Guru, Sunita	Big Billion Days	New Age Ecosystem for Empowering Trade, Industry and Society	Excel India Publishers	2016
23.	Bhatt, Amola, Sweety Shah and Shahir Bhatt	A Study of Personal Financial Planning Process and Socio-Economic Decision-making in Households	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
24.	Patel, Nikunj	An Investigation of Day-of-the-Week Effect	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
25.	Rajpurohit, Punita and Shantanu Mehta	Effect of the Macroeconomic Variables on Index Return: A Study With Respect To CNX 500	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
26.	Danak, Deepak	Impact of Research & Development Expenditure on Value Creation For Shareholders : A Study of Pharmaceutical Industry in India	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
27.	Soni, Nirmal and Shreya Biswas	Correlation of Firms Performance with Financial Ratios	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016

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28.	Jhaveri, Chetan and Pallav Gupta	Measuring Performance of Banks in India using Data Envelopment Analysis	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
29.	Rajpurohit, Punita and Deepak Danak	Value Relevance of Contingent Liabilities: A Study of Pharmaceutical Industry in India	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
30.	Rijwani, Parag	Are Multi-Cap Funds Worth the Risk?	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
31.	Poturaju, Naresh and Poturaju, Vandana N. Astahna, A K.	Comparative Analysis of Cash and Futures Market of India	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
32.	Mehta, Neha and Chugan, Pawan	Visual Merchandising as Tool for Creating Differentiation for Furniture Outlets: Perceptual Mapping	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016
33.	Chatterjee, Monali	Learning Objectives of Communication Instruction in Professional Education	Interdisciplinary Issues for Empowering Trade, Industry and Society	Excel India Publishers	2016

Cases Published

Sr. No.	Name of Author	Title of Case	Year
1.	Ritesh Jayantibhai Patel	Mojjo Tattoo Studio - A Budding business of an artist	2016
2.	Amola Bhatt and Shahir Bhatt	Women Empowerment in Rural Gujarat: A Case Study of Kaira Social Services Society	2016

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3.	Amola Bhatt and Shahir Bhatt	Microfinancing with SEWA Bank: Bringing Women to the Mainstream Economy	2016
4.	Amola Bhatt and Shahir Bhatt	Microfinance Institutions: Do they Empower Women? A Case Study on Light Microfinance Pvt Ltd.	2016
5.	Nirmal Chandrakant Soni	A case study on the Social Enterprise 'Life Skill Foundation' imparting self employment skills.	2016

Ph.D. Awarded

Sr. No.	Name of the Student	Name of the Guide	Title of Thesis
1.	D. Jegatheesa Pandian	Dr. Bindi Mehta	Energy Security for India: An Analysis of Issues and Challenges for Policy Development

Conferences / Seminars / Workshops

National Conference Organized by the Institute

6th Annual Conference on Quality Management

The Institute organized the subject conference jointly with American Society for Quality (ASQ) Local Member Community Ahmedabad on 26-27 November 2016. The theme of the conference is “Lean Imperatives: Lessons for Indian Organizations”. The conference was attended by more than 200 participants including approximately 80% from Industry and 20% from academia covering four states of India.

The Chief Guest Mr. Hans Bangert, Managing Director, Bosch Rexroth India; Guests of Honour Mr. Denis Devos, (Vice Chair, QMD, ASQ USA); Ms Stephanie Thompson, Chair Elect, Phoenix Section, ASQ USA, Dr. Anup Singh, Director General; Mr Ciby James, Director, ASQ India, among others inaugurated the Conference.

The Conference also witnessed the presentation of 36 live case studies by the senior executives from various organizations including ABB, Adani Port, APAR, BTPS, Dresser Rand, Ford, Gujarat Alkalies & Chemicals, Gulbrandsen, HDFC Bank, Hindustan Coca Cola, Hitachi Hi-Rel, L&T, Lupin, Polycab, Reliance, Rotex Automation, Solution Analysts, Sabarmati Gas, Tata Chemicals, TCS, Welspun, ZyduS, among others.

As the pre-conference activities, two special workshops have been scheduled on ISO 9001:2015 and on Minitab for Research by Mr. Denis Devos, Canada and Mr. Bimal K Kesh, Sr. Statistician and Training Manager, Qsutra-Minitab, Bangalore.

20th Nirma International Conference on Management (NICOM)

The 20th Nirma International Conference on Management (NICOM) was organized by Institute of Management, Nirma University during January 05-07, 2017. The central theme of the Conference was “Contemporary Marketing: Concept, Practice & Method” and had number of sub-themes. In total, 195 abstracts, and 120 full papers were received from India and abroad. The papers were sent for two rounds of blind review and thereafter, based on the feedback, selected papers were published in two books as Conference Proceedings with ISBN number by Excel India Publications, New Delhi.

The conference was inaugurated on January 05, 2017. The chief guest of the inaugural session Mr. M.G. Parmeswaran, Brand Strategist, Founder at Brand-Building.com and former CEO, FCB Ulka threw light on the role that emotional advertisements play in attracting consumers and discussed the changes that need to be brought forth in social and digital marketing under the ambit of contemporary marketing. The Guest of Honour for the occasion, Mr. Tarun Arora, COO and Director, Zydus Wellness Limited further emphasized upon the fact that consumers have become more expressive and demanding than ever before and thus consumers are no longer mere recipients but are also involved along with the marketer in brand creation and thus special emphasis on data analytics must be applied to successfully reach the target segment. The inaugural function was also graced by Padma Shri Dr. Karsanbhai K. Patel, President, Nirma University. In addition to the inauguration and valedictory sessions, there were three plenary sessions delivered by reputed national speakers.

Anvesh – Doctoral Research Conference

Institute of Management, Nirma University, Ahmedabad under the aegis of its Doctoral Programme in Management organized Doctoral Research Conference in Management in April 2016. The conference had 4 workshops, 12 track sessions with 49 presentations and 6 research clinics, over the two days. It had received 91 abstracts 41 full Papers which were accepted for publication after a blind review.

Dr. Arvind Sahay, Professor from IIM Ahmedabad delivered the inaugural address. He talked about the latest trends in consumer behavior, one of them being neuroscience. The track sessions and research clinics were in the area of Economics & Finance, Marketing Management, Human Resource Management & Organizational Behaviour, Operations Management and General Management. For research clinic six experts were invited. Dr. A.C. Brambhatt and Dr Vivek Suneja for Marketing area, Dr. R. J. Mody and Dr. Tara Nair for Finance & Economics area and Dr. D. M. Pestonjee and Dr. Dutta Roy for Organizational Behaviour & Human Resource Management area.

Apart from track sessions and research clinics, as a part of conference, four expert sessions were organized. Dr. Dutta Roy, Asst. Professor, Indian Statistical Institute – Kolkata delivered expert lecture on ‘Designing Questionnaire for Doctoral Research in Management.’ He discussed at length some pertinent issues related to questionnaire design.



**Institute of Pharmacy
Research Statistics at a Glance**

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Institute of Pharmacy - Research Statistics at a Glance

April 01, 2016 - March 31, 2017

Major Research Projects		Total
Completed Major Research Projects Funded by the External Funding Agencies	Projects Completed	01
	Total Grant	₹ 24,74,680/=
Ongoing Major Ongoing Research Projects Funded by the External Funding Agencies	Projects Ongoing	04
	Total Grant	₹ 1,61,56,800/=
Sanctioned Major Research Projects Funded by the External Funding Agencies	Projects Sanctioned	04
	Total Grant	₹ 97,44,780/=
Sanctioned Major Research Projects Funded by Nirma University	Projects Sanctioned	01
	Total Grant	₹ 28,92,400/=
Minor Research Projects		
Completed Minor Research Projects Funded by the External Funding Agencies	Projects Completed	08
	Total Grant	₹ 31,55,000/=
Ongoing Minor Research Projects Funded by the External Funding Agencies	Projects Ongoing	10
	Total Grant	₹ 44,17,000/=
Completed Minor Research Projects Funded by Nirma University	Projects Completed	04
	Total Grant	₹ 4,50,000/=
Ongoing Minor Research Projects Funded by Nirma University	Projects Ongoing	04
	Total Grant	₹ 2,90,000/=
Sanctioned Minor Research Projects Funded by Nirma University	Projects Sanctioned	03
	Total Grant	₹ 2,75,400/=
Research Publications		
Research Publications in UGC, Scopus and Web of Science Listed Journals during 2016		70
Research Publications in Other UGC Listed Journals during 2016		03
Books Published		01
Patents		
Patents Filed		01
Doctoral Research		
Ph.D. Degree Awarded		08
Total Ph.D. Students from Pharmacy Discipline		103
Total Ph.D. Guides from Pharmacy Discipline		22

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Research Awards	
Research Awards Received by the Faculty Members	03
Research Awards Received by the Students	07
Faculty Members who Received Financial Support from External Funding Agencies and Nirma University for Attending International Conference	02
Conferences / Seminars	
International / National Conferences Organized by the Institute	01
Seminars / Workshops / Refresher Courses Organized by the Institute	03

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Research Projects

Major Research Projects

Completed Major Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Isolation of bioactive compound from fruit juice of <i>Emblica officinalis</i> and investigation into the molecular mechanism of action.	Dr. Snehal Patel	Department of Science and Technology	24,74,680/=
Total Grant				₹ 24,74,680/=

Ongoing Major Research Projects Funded by the External Funding Agencies

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	Dr. Bhoomika Patel	Science & Engineering Research Board	27,00,000/=
2.	Glutathione Appended Polymer Nano constructs of Asiatic acid for efficacious Neuro protective agents	Dr. Niyati Acharya	Department of Biotechnology	45,56,800/=
3.	FIST Grant to Institute of Pharmacy, Nirma University	--	Department of Science and Technology	55,00,000/=
4.	Liquid Phase combinatorial synthesis of benzimidazole library for antitubercular activity	Dr. Manjunath Ghate	Department of Science and Technology	34,00,000/=
Total Grant				₹1,61,56,800/=

Sanctioned Major Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Evaluation of radio protective potential of	Dr. Priti Mehta	Ministry of Ayush,	42,12,250/=

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	medicinally important Indian bamboo plants in cancer		Government of India	
2.	Determination of specific absorption coefficient for the dominant macro algal species of Indian coastal water – A step towards developing biomarkers & community based chlorophyll and accessory pigments algorithm	Dr. Priti Mehta	Space Applications Centre, ISRO	15,90,000/=
3.	Evaluation of DNA Polymerase Inhibitors for Treatment of Alzheimer's Disease	Dr. Jigna Shah	Gujarat State Biotechnology Mission	20,81,920/=
4.	Epidemiology of anemia in pre-school tribal children of eastern Gujarat with reference to etiology, pathophysiology and nutritional impact	Dr. Shital Panchal	Indian Council of Medical Research	18,60,610/=
Total Grant				₹ 97,44,780/=

Sanctioned Major Research Project Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Formulation development and evaluation of Nanoparticulate systems for targeted delivery of anticancer agents	Dr. Mayur Patel	28,92,400/=
Total Grant			₹ 28,92,400/=

Minor Research Projects

Completed Minor Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Investigation into the Prevalence of Pre-diabetic Status in Gujarati Population and Evaluation of its Association with Various Risk Factors	Dr. Snehal Patel	Research Society for the Study of Diabetes in India	1,95,000/=

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2.	Development of Self emulsifying Drug Delivery Systems for Poorly Soluble Antihypertensive Drug	Dr. Shital Butani	Gujarat Council on Science and Technology	3,60,000/=
3.	Isolation and Characterization of Marker from Polyherbal Formulation	Dr. Charmy Kothari	Gujarat Council on Science and Technology	5,00,000/=
4.	Investigation into the Prevalence of Pre-diabetic Status in School Going Children in Gujarati Population and Evaluation of its Association with Various Risk Factors.	Dr. Snehal Patel	Gujarat Council on Science and Technology	3,50,000/=
5.	Computer aided Drug Design and Pharmacological Evaluation of Cyclooxygenase-2 (COX-2) Inhibitors: An Efficient Conversion of Non-steroidal Anti-inflammatory Drugs to Potent and Highly Selective COX-2 Inhibitors	Dr. Jignasa Savjani	Gujarat Council on Science and Technology	3,50,000/=
6.	Development and Optimization of Formulations Containing Glycin max (Soyabean), Moringa Oleifera and Phoenix Dactylifera for the Treatment of Malnutrition	Dr. Vimal Kumar	Gujarat Council on Science and Technology	5,00,000/=
7.	Investigating the Role of Histone Deacetylase (HDAC) Inhibitors in Diabetes and Colon Cancer, and Development of Site Specific Drug Delivery Systems	Dr. Mayur M. Patel	Gujarat Council on Science and Technology	4,00,000/=
8.	In-silico designing, Synthesis and Pharmacological Screening of Dipeptidyl Peptidase-4 (DPP-4) Inhibitors as Novel Antidiabetic Agents	Prof. Manjunath Ghate	Gujarat Council on Science and Technology	5,00,000/=
Total Grant				₹ 31,55,000/=

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Ongoing Minor Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Screening & Characterization of Anti-cancer Bioactive Principle from the Indigenous Plants of Dang Forest, Gujarat	Dr. Priti Mehta	Gujarat Council on Science and Technology	3,00,000/=
2.	Effect of Polyphenols Containing plant Extracts in the Treatment and Prevention of age Related Neuro-Degenerative Disorders	Dr. Shital Panchal	Gujarat Council on Science and Technology	5,35,000/=
3.	Design and Synthesis of novel Pteridine Derivatives as Auora Kinase Inhibitors for the Treatment of Cancer	Dr. Hardik Bhatt	Gujarat Council on Science and Technology	2,70,000/=
4.	Investigation of the Role of Tephrosia Purpurea in the Cardiovascular Complications in Rats	Dr. Shraddha Bhadada	Gujarat Council on Science and Technology	3,90,000/=
5.	Evaluation of Chemoprotective Potential of active Constituent of L. Usitatissimum in Colon Cancer Associated with Diabetes Mellitus	Dr. Bhoomika Patel	Gujarat Council on Science and Technology	2,80,000/=
6.	Investigation into neuroprotective effects of Bergenia ciliate roots in Alzheimer's disease with special reference to bergenin	Dr. Niyati Acharya	Gujarat Council on Science and Technology	3,22,000/=
7.	Ocular iontophoretic delivery of nanoparticles via transscleral route for posterior disease	Dr. Jigar Shah	Gujarat Council on Science and Technology	7,00,000/=
8.	Development and Optimization of mucoadhesive film for treatment of vaginal candidiasis	Dr. Renuka Mishra	Gujarat Council on Science and Technology	4,85,000/=
9.	Investigation of Mechanism of Action of Selected Herbal Drugs for the Treatment of	Dr. Jigna Shah	Gujarat Council on	4,80,000/=

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	Attention deficit Hyperactivity Disorder (ADHD)		Science and Technology	
10.	Design and Synthesis of quinoline Derivatives as novel Apoptosis Inducers	Dr. Vivek Vyas	Gujarat Council on Science and Technology	6,55,000/=
Total Grant				₹ 44,17,000/=

Completed Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Studies on Exploring Novel Excipients for Drug Delivery in Oral Cavity (Collaborative project with Chemical Engineering, ITNU)	Dr. Dhaivat C. Parikh	1,80,000/=
2.	Formulation, Design and Development of Sublingual film of an Anti-hypertensive drug	Dr. Renuka Mishra	90,000/=
3.	Standardization and Evaluation of a Polyherbal Formulation for Metabolic Disorder	Ms. Nagja Tripathi	80,000/=
4.	Development of Oryzanol Formulation and its Pharmacological Evaluation for Neurodegenerative disorders	Dr. Shital Panchal	1,00,000/=
Total Grant			₹ 4,50,000/=

Ongoing Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Evaluation of Anti-hypertensive agent in Cancer Cachexia Induced Cardiotoxicity	Dr. Bhoomika Patel	55,000/=
2.	Pharmacological Evaluation of Antiurolithiatic Activity of Roots of Grewia Flavescens	Dr. Niyati Acharya	80,000/=
3.	Beneficial effect of Pimpinella Anisum in Delaying cataract	Dr. Shraddha Bhadada	65,000/=
4.	In-Silico Designing, Synthesis and Pharmacological Evaluation of Novel anti Cancer Agents	Ms. Palak Parikh	90,000/=
Total Grant			₹ 2,90,000/=

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Sanctioned Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Solubility Enhancement of BCS class II drug using Emulsifying Drug Delivery System	Dr. Mohit Shah	90,000/=
2.	Synthesis of co-crystal of Acyclovir for Improvement of Physicochemical Parameters	Dr. Jignasa Savjani	85,000/=
3.	Solubility Enhancement of Lead Candidates as Anti-diabetic agents	Mr. Nrupesh Patel Dr. Bhumika Patel	1,00,000/=
Total Grant			₹ 2,75,000/=

Research Publications

Research Publications in UGC, Scopus and Web of Science Listed Journals during 2016

- Savjani, Ketan, Anuradha Gajjar, and Jignasa Savjani. "Modified Formulation of Febuxostat: Improved Efficacy and Safety" *International Journal of Pharmacy and Pharmaceutical Sciences* 8.1 (2016): 359–366.
- Savjani, Jignasa Ketan, and Chirag Pathak. "Improvement of Physicochemical Parameters of Acyclovir Using Cocrystallization Approach" *Brazilian Journal of Pharmaceutical Sciences* 52.4 (2016): 727–734.
- Shah, Surmil, and Jignasa Savjani. "A Review on ROCK-II Inhibitors: From Molecular Modelling to Synthesis" *Bioorganic and Medicinal Chemistry Letters* 2016: 2383–2391.
- Suthar, V.C., and S.B. Butani. "Preparation and Evaluation of Self-Micro Emulsifying Drug Delivery Systems of Lercanidipine HCL Using Medium and Short Chain Glycerides: A Comparative Study." *Asian Journal of Pharmaceutics* 10.04 (2016). 256-264.
- Suthar, Vrunda, Shital Butani, and Mukesh Gohel. "Solid Self-Emulsified Nanostructures of Lercanidipine Hydrochloride: A Potential Approach to Improve the Fraction of the Dose Absorbed." *Journal of Drug Delivery Science and Technology* 31 (2016): 11–21.
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57. Ingawale, D. K., and S. S. Patel. "Anti-Inflammatory Potential of Hecogenin in Experimental Animals: Possible Involvement of Inflammatory Cytokines and Myeloperoxidase." *Drug Research* 66.12 (2016): 644–656.
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61. Pawar, N.D. et al. "Crocin Rich Extract of *Nyctanthes Arbortristis* Flower Calyx Induces Anti-Angiogenic Activity." *Natural Products Journal* 6.1 (2016): 40–48.
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69. Sukumaran, Shreesha, Hetal J. Patel, and Bhoomika M. Patel. "Evaluation of role of telmisartan in combination with 5-fluorouracil in gastric cancer cachexia." *Life sciences* 154 (2016): 15-23.

Research Publications in Other UGC Listed Journals during 2016

1. Khan, Mohammad Yaseen. "Phytopharmacological and Chemical Profile of *Bergenia ciliata*." *International Journal of Phytopharmacy* 6.5 (2016): 90-98
2. Shah, Nimish, Rajubhai K. Mewada, and Tejal Mehta. "Crosslinking of starch and its effect on viscosity behaviour." *Reviews in Chemical Engineering* 32.2 (2016): 265-270.
3. Mishra, Renuka, Priyanka Joshi, and Tejal Mehta. "Formulation, development and characterization of mucoadhesive film for treatment of vaginal candidiasis." *International journal of pharmaceutical investigation* 6.1 (2016): 47.

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Book Published

Sr. No.	Name of the Faculty	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Dr. Mayur Patel	A Text Book of Hospital Pharmacy	B. S. Shah Prakashan, Ahmedabad	81-8416-008-9	2016

Patent Filed

Sr. No.	Name of the Inventors	Title of the Patent	Year	Status
1.	Dr. Mayur Patel and Dr. Bhoomika Patel	A Formulation Comprising Chitosan-Ethylcellulose Microspheres For Treatment of Inflammatory Bowel Disease	2016	Filed

Ph.D. Awarded

Sr. No.	Name of the Student	Name of the Guide	Title of Thesis
1.	Somnath Chandrakant Sakore	Dr. Bhaswat Chakraborty	In Vitro And In Vivo Correlation (IVIVC) of Formulation Characteristics and Pharmacokinetics of Antihypertensive Drugs
2.	Sharwan Kumar Singhal	Dr. Bhaswat Chakraborty	Toxic Signal Detection in Pharmacovigilance of Anticancer Drugs in Cancer Treatment
3.	Patel Amit Ambalal	Dr. Tejal Mehta	Formulation Development & Optimization of Effervescent Systems for Histamine Antagonists
4.	Shah Unnati Ripalkumar	Dr. Niyati S. Acharya	Phytopharmacological Investigations of Bioactives From Symplocos racemosa Bark With Specific Reference to Anticancer Activity
5.	Kinjal Rahul Shah	Dr. Tejal Mehta	Development and evaluation of Taste masked Immediate Release Dosage forms of Lornoxicam
6.	Hiral Dineshbhai Koradia	Dr. Shital Butani	Studies in oxcarbazepine modified release formulations

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			using Quality by Design approach
7.	Dadhaniya Tejaskumar Madhavji	Dr. Priti Mehta	Development and Analysis of Long Acting Depot Formulation for Pharmaceutical Use
8.	Patel Bhumika Dipen	Dr. Manjunath Ghate	Rational Designing, Synthesis and Biological Evaluation of Novel Antidiabetic Agents

Research Awards

Research Awards Received by the Faculty Members

Sr. No.	Name of the Faculty Member	Recognition / Honor / Award	Reason for Recognition / Honor / Award	Name of the organization
1.	Dr. Jigar Shah	Best Presentation Award	Best Presentation Award	18 th International Conference on Pharmacology and Pharmaceutical Medicine 2016 at Vancouver, Canada
2.	Dr. Dhaivat Parikh	Best Paper Award	Best Paper Award	6 th Indo-Japanese International Symposium, Goa
3.	Dr. Bhoomika M. Patel	Best Poster Award	Best Poster Award	Society for Pharmacoeconomics and Outcomes Research and Delhi Pharmaceutical Sciences & Research University

Travel Grant Received by the Faculty Members / Students

- Dr. Jigar Shah, Assistant Professor, Institute of Pharmacy received travel grant of ₹ 1,00,000/- from Indian Council of Medical Research (ICMR), New Delhi and ₹ 25,000/- from Nirma University to attend 18th International Conference on Pharmacology and Pharmaceutical Medicine (ICPPM 2016) at Canada. During the conference, he presented a paper titled, “Combined effect of vesicular system and iontophoresis on skin permeation enhancement of an analgesic drug”.

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Conferences / Seminars / Workshops

National Conference Organized by the Institute

The 2nd National Conference of Institute of Pharmacy (NCIP 2017) was organized by Institute of Pharmacy, Nirma University on the theme of “Emerging Trends in Drug Discovery, Development and Molecular Targets for Cancer Research” during January 24-25, 2017. The conference was inaugurated by Chief Guest, Dr. Shilin Shukla, Professor Emeritus and Former Director, Gujarat Cancer Research Institute and Guest of Honor Dr. Harish Padh, Former Vice Chancellor, Sardar Patel University and renowned researcher in the field of Cancer and Genetics. In his inaugural address, Dr. Shilin Shukla encouraged the young researchers and students to take up research in field of Oncology. Dr. Harish Padh stressed on interdisciplinary research as a tool for the fruitful research in the field of cancer. He also emphasized on early detection of cancer for successful treatment of cancer and to prevent mortality due to cancer. More than 300 researchers, students and faculties participated in the conference. The conference included various plenary sessions by eminent speakers from industry, academics & research organizations. The conference also provided an opportunity to scientists and research scholars from various organizations to put forth their innovative ideas and research findings by means of session lectures and more than 130 poster presentations in various thrust areas of cancer.

Seminars Organized by the Institute

- Department of Pharmacognos organized a national seminar on “Herbal Cosmetics: Recent Advances, Regulations and Market Trends” on March 04, 2016 under the Centre for Continuing Education, Nirma University.
- Department of Pharmaceutical Chemistry organized a national seminar on “Recent Advances in Drug Discovery - 2016” on March 28, 2016.



**Institute of Science
Research Statistics at a Glance**

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Institute of Science - Research Statistics at a Glance

April 01, 2016 - March 31, 2017

Major Research Projects		Total
Completed Major Research Projects Funded by the External Funding Agencies	Projects Completed	04
	Total Grant	₹ 91,89,160/=
Ongoing Major Ongoing Research Projects Funded by the External Funding Agencies	Projects Ongoing	06
	Total Grant	₹ 2,02,83,000/=
Sanctioned Major Research Projects Funded by the External Funding Agencies	Projects Sanctioned	05
	Total Grant	₹ 1,25,08,000/=
Minor Research Projects		
Ongoing Minor Research Projects Funded by the External Funding Agencies	Projects Ongoing	03
	Total Grant	₹ 11,45,000/=
Sanctioned Minor Research Projects Funded by the External Funding Agencies	Projects Sanctioned	01
	Total Grant	₹ 1,00,000/=
Research Publications		
Research Publications in UGC, Scopus and Web of Science Listed Journals		22
Research Publications in Other UGC Listed Journals		10
Book Chapters Published		01
Doctoral Research		
Ph.D. Degree Awarded		09
Total Ph.D. Students from Science Discipline		59
Total Ph.D. Guides from Science Discipline		73
Research Awards		
Research Awards Received by the Faculty Members		02
Faculty Members who Received Financial Support from External Funding Agencies and Nirma University for Attending International Conference		02
Conferences / Seminars		
National Conferences Organized by the Institute		01
Seminars / Workshops / Refresher Courses Organized by the Institute		01

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Research Projects

Major Research Projects

Completed Major Research Projects Funded by External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Understanding the Nature of Liver-Stage Specific CD8+T Cells Generated following Infectious Sporozite Challenge that Ensure Long-Lived Protection against Plasmodia Infection	Dr. Sarat K Dalai	Department of Biotechnology	42,89,000/=
2.	Biochemical Basis of Repression of MPS Phenotype in Rhizobia	Dr. Shalini Rajkumar	Gujarat State Biotechnology Mission	13,30,160/=
3.	Identification of CD8+T Cell – Specific to Liver-Stage Antigens of <i>Plasmodium Berghei</i> to Understand Anti-Malarial Protective Immunity	Dr. Sarat K Dalai	Gujarat State Biotechnology Mission	19,75,000/=
4.	Generation of Thermostable Variants of a Mesophilic Amylase by Directed Evolution and their Characterization	Dr. Mili Das	Gujarat State Biotechnology Mission	15,95,000/=
Total Grant				₹ 91,89,160/=

Ongoing Major Research Projects Funded by External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Infectious Nature of Plasmodia Modulating the Innate Response of Host in Liver Stage Infection Deciding the Fate of Adaptive Immunity	Dr. Sarat K Dalai	Department of Science and Technology	52,10,000/=
2.	Development of Chimeric IL-15 to Improve its Bioavailability and Efficacy	Dr. Sarat K Dalai	Department of Biotechnology	34,18,000/=
3.	Molecular Basis of Succinate Mediated (Catabolite) Repression of Mineral	Dr. Shalini Rajkumar	Science and Engineering	28,88,000/=

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	Phosphate Solubilization in Nitrogen Fixing <i>Klebsiella Pneumoniae</i>		Research Board	
4.	Role of Synaptogenic Adhesion Molecules (SAMs) in Insulin Secretion: Effect of Diabetes and Hypoglycemia	Dr. Ameer K. Nair	Department of Science and Technology	29,40,000/=
5.	'Humanized Liver' to Study Liver Stage Infection of Plasmodium Falciparum	Dr. Rajeev Tyagi	Department of Science and Technology	43,00,000/=
6.	Idiopathic Mental Retardation and Dysmorphisms: Karyotypic and UPD Analysis	Dr. Sonal R. Bakshi	Gujarat State Biotechnology Mission	15,27,000/=
Total Grant				₹2,02,83,000/=

Sanctioned Major Research Projects Funded by External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Determination of Specific Absorption Coefficient for the Dominant Macro Algal Species of Indian Coastal Water- A Step Towards Developing Bio Markers and Pigments Algorithm	Dr. Nasreen Munshi	ISRO	16,00,000/=
2.	Development of Neoadjuvant from Medicinally Important Bamboo Plants for Radiotherapy in Cancer	Dr. Sonal Bakshi	Ministry of AYUSH	42,12,000/=
3.	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	22,51,000/=
4.	Investigation of the regulatory role of miR-712 in inflammation induced skeletal muscle insulin resistance	Dr. Sriram Seshadri	Department of Science and Technology	9,35,000/=
5.	Regulation of MHC II Expression: Immunity to Malaria	Dr. Pranati Sar	Department of Science and Technology- Science and	35,10,000/=

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			Engineering Research Board
Total Grant			₹1,25,08,000/=

Minor Research Projects

Ongoing Minor Research Projects Funded by External Funding Agencies

Sr. No.	Project Title	Project Investigator	Funding Agency	Grant (in ₹)
1.	Downs Syndrome In Gujarat: Molecular Probing In Origin	Dr. Sonal R. Bakshi	Gujarat Council on Science and Technology (GUJCOST)	6,00,000/=
2.	Investigation of the Molecular Basis of Enhanced Exopolysaccharide (EPS) Production by Xanthomonas Campestris under Influence of Audible Sound	Dr. Vijay Kothari	Gujarat Council on Science and Technology (GUJCOST)	3,99,000/=
3.	Demographic Survey of Major Cities of Gujarat for Creation of Diabetic Map	Dr. Ameer K. Nair	Gujarat Council on Science and Technology (GUJCOST)	1,46,000/=
Total Grant				₹11,45,000/=

Sanctioned Minor Research Projects Funded by External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Validation of the in vitro and in vivo efficacy of Herboheal against wound-infective bacteria, with respect to its possible quorum-modulatory potential, and elucidation of the underlining molecular mechanism	Dr. Vijay Kothari	BIRAC SRISTI Appreciation Grant	1,00,000/=
Total Grant				₹ 1,00,000/=

Research Publications

Research Papers in Scopus / Web of Science Listed Journals

1. Kunwar, F. et al. "Constitutional Mosaic Trisomy 13 in Two Germ Cell Layers Is Different from Patau Syndrome? A Case Report." *Journal of Clinical and Diagnostic Research* 10.3 (2016): GD03-GD05.
2. Kunwar, F. and Sonal R. Bakshi. "Familial Constitutional Rearrangement of Chromosomes 4 & 8: Phenotypically Normal Mother and Abnormal Progeny." *Journal of Clinical and Diagnostic Research* 10.4 (2016): GD1-GD4.
3. Tyagi, Rajeev K. et al. "Transdermal Immunization of P. Falciparum Surface Antigen (MSP-119) via Elastic Liposomes Confers Robust Immunogenicity." *Human Vaccines and Immunotherapeutics* 12.4 (2016): 990–992.
4. Patidar, M. et al. "Interleukin 15: A Key Cytokine for Immunotherapy." *Cytokine and Growth Factor Reviews* 2016: 49–59.
5. Sharma, Sonal, and Neeta Shrivastava. "Internal Transcribed Spacer Guided Multiplex PCR for Species Identification of *Convolvulus Prostratus* and *Evolvulus Alsinooides*." *Acta Pharmaceutica Sinica B* 6.3 (2016): 253–258.
6. Sharma, Sonal, and Neeta Shrivastava. "Renaissance in Phytomedicines: Promising Implications of NGS Technologies." *Planta* 2016: 19–38.
7. Patel, Suhani et al. "DNA Binding and Dispersion Activities of Titanium Dioxide Nanoparticles with UV/vis Spectrophotometry, Fluorescence Spectroscopy and Physicochemical Analysis at Physiological Temperature." *Journal of Molecular Liquids* 213 (2016): 304–311.
8. Parmar, Rajesh et al. "Route of Administration of Attenuated Sporozoites Is Instrumental in Rendering Immunity against Plasmodia Infection." *Vaccine* 2016: 3229–3234.
9. Joshi, C., V. Kothari, and P. Patel. "Importance of Selecting Appropriate Wavelength, While Quantifying Growth and Production of Quorum Sensing Regulated Pigments in Bacteria." *Recent Patents on Biotechnology* 10.2 (2016): 145-152
10. Garg, NK. et al. "Fucose Decorated Solid-Lipid Nanocarriers Mediate Efficient Delivery of Methotrexate in Breast Cancer Therapeutics." *Colloids and Surfaces B: Biointerfaces* 146 (2016): 114–126.
11. Garg, NK. et al. "Nanostructured Lipid Carrier Mediates Effective Delivery of Methotrexate to Induce Apoptosis of Rheumatoid Arthritis via NF- κ B and FOXO1." *International Journal of Pharmaceutics* 499.1–2 (2016): 301–320.
12. Garg, NK. et al. "Effective Transdermal Delivery of Methotrexate through Nanostructured Lipid Carriers in an Experimentally Induced Arthritis Model." *Colloids and Surfaces B: Biointerfaces* 147 (2016): 17–24.
13. Prajapati, B. et al. "Preparation and Optimization of Moxifloxacin Microspheres for Colon Targeted Delivery Using Quality by Design Approach: In Vitro and In Vivo Study." *Current Drug Delivery* 13.7 (2016): 1021–1033.

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14. Prajapati, B. et al. "Investigation of Chitosan for Prevention of Diabetic Progression through Gut Microbiota Alteration in Sugar Rich Diet Induced Diabetic Rats." *Current Pharmaceutical Biotechnology* 17.2 (2016): 173-184.
15. Iyer, Bhagya et al. "Organic Acid Mediated Repression of Sugar Utilization in Rhizobia." *Microbiological Research* 2016: 211–220.
16. Bhatnagar, Mukul, et al. "Sub-monolayer growth of Ag on flat and nanorippled SiO₂ surfaces." *Applied Physics Letters* 108.22 (2016): 223101.
17. Balasubramanian, C., et al. "Defective iron-oxide nanoparticles synthesised by high temperature plasma processing: a magnetic characterisation versus temperature." *Nanotechnology* 27.44 (2016): 445701.
18. Singh, Jasbir et al. "Tunable Microwave Absorption in Co[Al] Substituted M-Type Ba[Sr] Hexagonal Ferrite." *Materials and Design* 110 (2016): 749–761.
19. Vyas, Swapnil S. et al. "Development of Real-Time Reference Evapotranspiration at the Regional Scale Using Satellite-Based Observations." *International Journal of Remote Sensing* 37.24 (2016): 6108–6126.
20. Parmar, R. et al. "Route of administration of attenuated sporozoites is instrumental in rendering immunity against Plasmodia infection." *Vaccine*. 34.28 (2016): 3229-3234.
21. Kothari, V. "Anti-virulence approach with quorum sensing as the major target for dealing with the problem of antibiotic resistance". *Recent Patents on Biotechnology*. 10.2 (2016):144.
22. Bhagya I. et al. "Organic acid mediated repression of sugar utilization in rhizobia." *Microbiological Research*. 192 (2016): 211–220.

Research Papers in Other UGC Listed Journals

1. Khambhala, P. et al. "Inhibition of Bacterial Quorum-Sensing by Ferula asafoetida Essential Oil." *Advancements in Genetic Engineering* 5.1 (2016): 105-106.
2. Purandhar, K. et al. "Study of the histoarchitectural and biochemical changes with progression of age in male mice." *Zoologica Poloniae* 59 (2016): 53-78.
3. Zaveri, P. et al. "Assessment of Enzyme Activity and Functional Microbial Diversity in Coastal and Desert Soil Ecosystems of Gujarat." *Journal of Enzymology and Metabolism* 2 (2016): 107-115.
4. Palep, H. et al. "Quorum sensing inhibition: A new antimicrobial mechanism of Panchavalkal, an Ayurvedic formulation." *Bombay Hospital Journal*. 58.2 (2016): 198-204.
5. Kothari, V. "Eukaryotic Microorganisms in Microbiology Syllabi: Better Representation Needed". *Journal of Applied Biotechnology & Bioengineering*. 1.1 (2016): 7.
6. Kothari, V. "Microbiological connection to our food, nutrition, health, and disease" *Journal of Nutrition and Food Sciences*. 6.5 (2016): 6(5): 129-130.
7. Kothari, V. et al. "Colourful side of bacteriology: The pigmented bacteria." *Advancements in Genetic Engineering*. 5.1 (2016) 103-104.
8. Seshadri S. et al. "Age-Dependent Expression of Catspers in Human and Mice Sperm." *Andrology* 5.1 (2016): 51-53.

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9. Jena, P. K. et al. "Influence of Gut Microbiota on Inflammation and Pathogenesis of Sugar Rich diet induced Diabetes." *Immunome Research* 12.1 (2016): 109-119.
10. Shah, A. et al. "Sound stimulation can influence microbial growth and production of certain key metabolites." *Journal of Microbiology, Biotechnology and Food Sciences*. 5.4 (2016): 330-334.

Book Chapter Published

Sr. No.	Name of the Faculty	Title of the Chapter	Name of the Book	Name of Publishing House	Year of Publication
1.	Rahul Jog, G. Nareshkumar and Shalini Rajkumar	Enhancing Soil Health and Plant Growth Promotion by Actinomycetes	Plant Growth Promoting Actinobacteria , A New Avenue for Enhancing the Productivity and Soil Fertility of Grain Legumes	Springer, Singapore	2016

Ph.D. Awarded

Sr. No.	Name of the Student	Name of the Guide	Title of Thesis
1.	Rajput Mahendrapal Singh M.	Dr. Shalini Rajkumar	Carbon Catabolite Repression of Organic Acids in Phosphate Solubilizing Klebsiella Species
2.	Yadav Sheetal	Dr. Neeta Srivastava	Intron-mediated enhancement of the expression of heterologous proteins in plants
3.	Purandhar Kaveri	Dr. Sriram Seshadri	Understanding the role of Toll-Like Receptors and Catspers in Male Reproductive Functioning
4.	Indira Bora	Dr. Neeta Srivastava	Inhibition of breast cancer progression by multi targeting approach using RNAi as a tool: An in Vitro Approach
5.	Sharma Poojadevi	Dr. Neeta Srivastava	Metabolic Engineering in Catharanthus Roseus using rnai as a Tool

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6.	A. Abiramasundari	Dr. Kamala Vasu	Degradation Studies of Cardiovascular and Nonsteroidal Anti-Inflammatory Drugs and Synthesis of the Degradation Products
7.	Tripathy Madhumita	Dr. Prakash Chauhan	Modeling Photosynthetically available Radiation (PAR) from Satellite and Field Data and its Impact on Ocean Primary Production
8.	Gupta Anuroopa	Dr. Harish Padh	Genetic polymorphism and infectious diseases in Indian population
9.	Prabhjot Kaur	Dr. A. S. Rajawat and Dr. Prakash Chauhan	Compositional Variability of Lunar Basalts in selected Basins using Chandrayaan-1 data

Research Awards

Research Awards Received by the Faculty Members

Sr. No.	Name of the Faculty Member	Recognition / Honor / Award	Reason for Recognition / Honor / Award	Name of the organization
1.	Dr. Sriram Seshadri	Outstanding Award for Research Excellence – 2016	Research Excellence	The INDUS Foundation and Omics Publishing Group, USA
2.	Dr. Sriram Seshadri	Outstanding Research Award in Biochemistry-Health Sciences-2016	Research Excellence	Chemical Science Review and Letters, India and Aufau International, USA

Travel Grant Received by the Faculty Members / Students

- Mr. Rajesh Parmar, a student from Institute of Science received travel grant of ₹ 96,503/- from Department of Science & Technology (DST), New Delhi to attend International Congress of Immunology-2016 at Australia. During the conference, he presented a paper titled, “Infectious Status of Sporozoites Evokes Innate Response, Leading to Cell-Mediated Protective CD8+T Cell Response Against Plasmodia Infection”.
- Mr. Rameshbhai Chaudhari, a student from Institute of Science received travel grant of ₹ 1,33,410/- from Bill & Melinda Gates Foundation (USA) to attend international

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conference on, Vectors, Pathogens and Diseases: Current Trends and Emerging Challenges at Durban, KwaZulu-Natal, South Africa. During the conference, he presented a paper titled, “Elastic Liposome-Mediated Transdermal Immunization of Chimeric PfMSP-Fu24protein Confers Perdurable Immune Response against P. Falciparum”.

Conferences / Seminars / Workshops

National Conference Organized by the Institute

Institute of Science organized a national conference on, “Malaria Parasite Biology: Drug Designing & Vaccine Development” during September 09-10. It was indeed a meeting of its own kind in which eminent malaria scientists from all over India came forward to discuss one of the biggest challenges of humanity, human malaria parasites. The major objective was to develop novel approaches to introduce effective therapeutic interventions against human malaria parasite. Dr. Reinhard Glueck, CSO, Vaccine Technology Center, Zydus Cadila was the Chief Guest and Dr. Narottam Sahoo, Member Secretary, GUJCOST was the Guest of Honour for inaugural function. More than 250 participants attended the conference including M.Sc. and Ph.D. students, faculty members, scientists, industry personals, etc. There were lecture sessions on themes like, parasite biology, informatics, drug designing/drug resistance and immunology & vaccine. The students participated very actively in the poster presentations where they got opportunities to discuss and interact with experts comprehensively. As outcome of this conference, the proposed strategies included Artemisinin Combination Therapy (ACT), Transmission blocking regimen and targeting DNA repair mechanism as a plausible solution to malaria infection.

Workshop Organized by the Institute

Workshop on, “Molecular Biology Techniques: Cloning to Expression”

A workshop on, “Molecular Biology Techniques: Cloning to Expression” was conducted during January 16-18, 2017 by Institute of Science, under the aegis of Center of Continuing Education, Nirma University. The workshop was sponsored by ICMR, New Delhi and supported by Orange Biotech, Chennai. The main objective of the workshop was to train young researchers and faculty members in techniques of recombinant DNA technology and acquaint them for research in molecular biology. This was achieved through brief theoretical sessions followed by hands on training.



Institute of Law
Research Statistics at a Glance

Nirma University Research Report 2017

Institute of Law - Research Statistics at a Glance

April 01, 2016 - March 31, 2017

Minor Research Projects		Total
Completed Minor Research Projects Funded by the External Funding Agencies	Projects Completed	01
	Total Grant	₹ 35,519/-
Ongoing Minor Research Projects Funded by Nirma University	Projects Ongoing	01
	Total Grant	₹ 1,00,000/=
Research Publications		
Research Publications in UGC, Scopus and Web of Science Listed Journals		01
Research Publications in Other UGC Listed Journals		05
Books Published		04
Book Chapters Published		01
Doctoral Research		
Total Ph.D. Students from Law Discipline		07
Total Ph.D. Guides from Law Discipline		02
Research Awards		
Research Awards Received by the Faculty Members		02
Faculty Members who Received Financial Support from External Funding Agencies and Nirma University for Attending International Conference		03
Conferences / Seminars		
International / National Conferences Organized by the Institute		01
Seminars / Workshops / Refresher Courses Organized by the Institute		05

Nirma University Research Report 2017

Research Projects

Minor Research Projects

Completed Minor Research Projects Funded by the External Funding Agencies

Sr. No.	Title of the Project	Project Investigator/s	Funding Agency	Grant (in ₹)
1.	Legal Training programme for pharma company: Issues under drugs and cosmetics act.	Prof. (Dr.) Purvi Pokhariyal	Wockhardt Limited Mumbai	35,519/=
Total Grant				₹ 35,519/=

Ongoing Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Judicial Activism dealing with identity based violence: Trends and Challenges	Dr.Varsha Ganguly	1,00,000/=
Total Grant			₹1,00,000/=

Research Publications

Research Publication in UGC, Scopus and Web of Science Listed Journals during 2016

1. Iyengar, Shreekant, and Ravindra H Dholakia. "What Determines Performance Gap Index of Health Care in Gujarat?" Journal of Health Management 18.1 (2016): 95–116 22p.

Research Publications in Other UGC Listed Journals during 2016

1. Molia, Tarkesh. "Quest Of Supreme Court In Nurturing Constitutional Governance In India" A Decadal Anatomization." Journal of Centre for the Study of Law and Governance, Vol 1, no. 1, 2016, pp. 120-141.
2. Saraswat, Pranav. "Credit Rating: A Service to Investors With Reference to Ahmedabad District." Paripex – Indian Journal of Research, Vol 4, no. 2016, 2016, pp. 56-58.
3. Singh, Nongthombam Bangkim. "Agriculture and Climate Justice; Trends Of Farmers Suicide And Climate Justice In Light Of Government Plans And Policies For Farmers In India." The Journal of Legal Studies, Department of Law, University of Rajasthan, XLVI, no. II, 2016, pp. 105-106.
4. Kashyap, Amit Kumar. "Active Role of Indian Judiciary to Protect Refugee Rights with Special Reference to Education." Academic Discourse, Vol 5, no. I, 2016, pp. 93-99.

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5. George, Jacob.” Property Disputes at the WTO: Recent Trends and Challenges.” Indian Journal of Air and Space Law, IX, no. II, 2017, pp. 31-55.

Books Published

Sr. No.	Name of the Faculty	Name of the Book	Name of Publishing House	ISBN	Year of Publication
1.	Krishna Pal Malik	The Right To Information & Protection To Whistleblowers	Allahabad Law Agency	ASIN: B00G6I18HY	2016
2.	Amit Kumar Kashyap	Financial Market Regulations and Legal Challenges in South Asia	Business Science Reference, USA	ISBN-10: 1522500049	2016
3.	Varsha Ganguly	Journey Towards Land Titling in India	Centre for Rural Studies, Mussorie	9788175418710	2017

Book Chapter Published

Sr. No.	Name of the Faculty Member	Name of the Book	Name of the Chapter	Name of the Publisher	ISBN Number	Year of Publication
1.	Arun B. Prasad	Cyber Crimes in 21 st Century	Cyber Crime in India: Time Series Study of Cyber Crimes at State Level	Manakin Press, New Delhi	978-93-843705-3-4	March 2017

Research Awards

Research Awards Received by the Faculty Members

Sr. No.	Name of the Faculty Member	Recognition / Honor / Award	Reason for Recognition / Honor / Award	Name of the organization
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Nirma University Research Report 2017

1.	Dr. Madhuri Parikh	Young Achiever's Award by CEE	Contribution in Education	CEE, Ahmedabad
2.	Dr. Rohit Moonka	Scholarship	Private International Law	Hague Academy of International Law

Travel Grant Received by the Faculty Members / Students

1. Prof. U. Varadharajan, Assistant Professor, Institute of Law received travel grant of ₹ 1,05,000/- from Hague Academy of International Law, The Netherlands, to attend Summer School on Public International Law.
2. Prof. Rejitha Nair, Assistant Professor, Institute of Law received travel grant of ₹ 24,830/- from Nirma University to attend the 16th Bien Biennial Congress. During the conference, she presented a paper titled, "Basic Income as a Step Towards Securing Human Dignity".
3. Prof. Rohit Moonka, Assistant Professor, Institute of Law received travel grant of ₹ 2200/- Euros from The Hague Academy of International Law (a constituent body of International Court of Justice), Peace Palace, The Hague, The Netherlands.

Conferences / Seminars / Workshops

International / National Conference Organized by the Institute

Organized International Conference titled "Ensuring Victim's participation in the Criminal Justice System". The conference was jointly organized by Institute of Law and Indian Society of Victimology, Chennai.

Seminars Organized by the Institute

Seminar on, "Judicial Performance & Access to Justice"

The Centre for Social Justice, Institute of Law organized a seminar on, 'Judicial Performance and Access to Justice' on December 28, 2016. Mr. Harish Narasappa, Partner, Samvadand Co-founder, Daksh Foundation conducted the workshop.

Workshop Organized by the Institute

Workshop on, "Art of Reporting: Legal Journalism and Career Prospects"

Institute of Law conducted a workshop on "Legal Journalism as a Career Prospect" on August 27, 2016. The speakers Mr. Ajay Umat, (Editor-in-Chief at Navgujarat Samay), Mr. R. Prasannan (Chief of Bureau, The Week) and Mr. Somasekhar Sundaresan (Head - Securities and Regulatory Practices), Jyoti Sagar Associates (JSA) interacted with the students. Mr. Somashekar spoke about the life of journalists and the prospects one has for legal journalism. Mr. Ajay Umat, spoke on "Trial by Media". Senior Journalist, Mr. R. Prasannan, discussed the nuances about the writing skills of the reporters and the journalists. The workshop saw a good participation where students interacted on various aspects of media and law. Dr. Krishna BipinMehta, Assistant Professor and Faculty Advisor, Social Media Committee and Newsletter

Nirma University Research Report 2017

Committee, ILNU coordinated for this workshop. The 13th edition of the student magazine--Axiom, was also released on this occasion.

Workshop on, “Paralegal Activities”


Institute of Law organized a workshop on “Paralegal Activities” on October 6, 2016 at the Institute for the students of Batch 2015 (Semester III). The topic of this workshop was “How free legal aid works”. Dr. Jyotsna Yagni, Former Principal Judge, City Civil & Sessions Court, Ahmedabad was invited to conduct a workshop. The students got a broader perspective of about the legal aid initiatives by the State and Central Government.

Workshop on, “Energy Law and Electricity Law”

Shri Raj Singh Niranj, an Energy Law Expert and Counsel, Government of India conducted a workshop on Energy Law and Electricity Law on October 08, 2016 as part of their Institute Elective Courses.

Workshop for the Student Researchers

Centre for Law and Governance, Institute of Law conducted a training workshop on “Judicial Activism and Identity based Violence: Trends and Challenges” for the student researchers on December 24, 2016. About 20 students benefited from the workshop.



**Institute of Architecture & Planning
Research Statistics at a Glance**

Nirma University Research Report 2017

Institute of Architecture and Planning - Research Statistics at a Glance

April 01, 2016 - March 31, 2017

Minor Research Projects		Total
Ongoing Minor Research Projects Funded by Nirma University	Projects Ongoing	01
	Total Grant	₹ 1,00,000/=
Doctoral Research		
Total Ph.D. Students from Architecture & Planning Discipline		04
Total Ph.D. Guides from Architecture & Planning Discipline		01
Research Awards		
Faculty Members who Received Financial Support from External Funding Agencies and Nirma University for Attending International Conference		01
Conferences / Seminars		
Seminars / Workshops / Refresher Courses Organized by the Institute		03

Nirma University Research Report 2017

Research Projects

Minor Research Projects

Ongoing Minor Research Projects Funded by Nirma University

Sr. No.	Title of the Project	Project Investigator/s	Grant (in ₹)
1.	Environment Audit Framework: Case of Nirma University	Prof. Pratima Singh	1,00,000/=
Total Grant			₹ 1,00,000/=

Travel Grant Received by the Faculty Members / Students

1. Prof. Utpal Sharma, Director, Institute of Architecture and Planning was invited to the IVth World Planning Congress at Federal University, Rio-de-Janeiro, Brazil as a presenter in a Plenary Session. As an Executive Member of the Global Planning Education Network (GPAEN), all expenses including travel, lodging and boarding was paid by the conference organisers. He presented a paper titled, "Nature in the City Interactions and Contradictions".

Conferences / Seminars / Workshops

Seminars Organized by the Institute

COA-NIASA Zonal Public Jury 2016: Programme for Excellence in Architectural Thesis

Institute of Architecture and Planning hosted an annual event conducted by the Council of Architecture (COA), through its academic unit – National Institute of Advanced Study in Architecture (NIASA). The three day event was held during August 11-13, 2016. There were 44 entries, representing 74 colleges across 7 states of the west zone. Finally, 10 Shortlisted entries were selected by the eminent jurors (nominated by COA-NIASA). Prof. B.S. Bhooshan, Prof. Abhijit Shirodkar, Prof. Arvind Rangan. Prof. Jyashree Deshpande - Director COA-NIASA were also present as observers for the Public jury held on August 13, 2016. Ten Participants presented their work. At the end of the day, the best two entries were selected and awarded.

Workshop Organized by the Institute

An in-house workshop on "Origami" was organized by Institute of Architecture and Planning on August 04, 2016 for the 80 students of first year B.Arch programme.

A workshop on "Sustainability Sensitizing" was organized by Institute of Architecture and Planning from September 1 to September 2, 2016 for students of 5th semester from B.Arch. programme.



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