



NOVATION

CENTRE

Learn to Lead



BITS INNOVATION CENTRE

BITS INNOVATION CENTRE, a unit of BITS Edu Campus, has been established to catalyse proactive applied research. The various facilities, proactive initiatives to promote research (both sponsored & academic research) and consultancy are unparallel at BITS INNOVATION CENTRE.

The vibrant R&D culture will foster innovative spirit and kindle the young minds at the campus under the mentorship of motivated faculty members of all the departments.

VISION:

- To endow state-of-art research facilities for the incubation, realization and promotion of innovative ideas for the betterment of society.
- To impart hands on training on innovative equipments to the researchers.

MISSION:

- To be a hi-tech incubation centre for assisting researchers, academicians and industrialists in real-time realization of their ideas and promoting innovative solutions to real life problems.
- To cultivate strong research ethics, problem solving attitude in the academicians, who will shape tomorrow and, in the students, who are tomorrow.

TEAM BITS INNOVATION CENTRE



Dr. Santosh ShahDirector-Innovation
Prof. Civil Engg. Dept.
Ph.D. (IISc, Bangalore)



Dr. Heli ShahDean-Innovation
Associate Prof. Elect. Engg. Dept.
Ph.D. (SVNIT, Surat)

STUDENT STARTUP & INNOVATION POLICY







#startupindia

Rs. 60 Lacs to Babaria Institute of Technology under the Student Startup & Innovation Policy.

Projects sanctioned by Govt. Engg. College, Dahod

- A project from CIVIL Engg. Dept. titled "3D Printing of Concrete" has been granted Rs. 50,000/- from SSIP.
- A project from Mechanical Engg. Department titled "Application of Thermal Battery to reduce power consumption of refrigerators" has been granted Rs.45,000/- from SSIP.
- A project from CIVIL Engg. Department titled "Scour pattern study of various pier configuration under variable rainfall and flood conditions" has been granted of Rs. 50,000/- from SSIP.

SEMINARS & WORKSHOPS



Shri Bharat Dangar (Hon. Mayor, Vadodara), delivering Key note address during Two Days National Seminar on Smart Cities -Current Scenario & Future Challenges. 24-25 March 2017

Dr. Santosh Shah, Delivering a Talk on "Smart Concrete for Smart Cities" at Two Days National Seminar on Smart Cities - Current Scenario & Future Challenges 24-25 March 2017.



INDUSTRY FUNDED RESEARCH



Project: Development of Hydrophobic Admixture for Concrete

Dr. Prakash Mehta (CEO Tawata Technologies) with Dr. Santosh G. Shah, Director (Innovation)



3D PRINTING - PRINT YOUR IMAGINATION

24th of Sept.,2016. by Mr. Ronaksinh Parmar, CEO, Utpal 3D System Pvt. Ltd. Ahmedabad



Mr. Rajnikant Patel, Director **GTU School of Smart Cities** at National Seminar on Smart Cities 24th-25th March 2017.



11th February 2017 at BITS Edu Campus • BITS Innovative Projects -16 Nos.

45 SCHOOLS PARTICIPATED

from All Over Gujarat

- Working Models 57 Nos.
- Static Models 37 Nos.
- Posters 46 Nos.
- Quiz- 70 Teams

" I am constantly asked by students how I get ideas. My answer is simple: First, have a lot of ideas. Then, throw away the bad ones."

- Linus Pauling, Nobel Laureate







School Students presenting their project at Khoj 2017



Dr. (Prof.) Parimal Vyas, Vice Chancellor The Maharaja Sayajirao University of Baroda

2yantra



PROUD RECIPIENT

COMPUTER SCIENCE & ELECTRICAL ENGINEERING DEPT.

Babaria Institute of Technology has been awarded the e-Yantra (Embedded Systems & Robotics) lab. Sponsored by MHRD, Govt. of India.

Embedded Systems & Robotics Lab Supported by e-Yantra Lab Setup Initiative (eLSI)-IIT Bornbay Funded by MHRD under National Mission on Education through ICT (NMEICT)

Supported by



Babaria Institute of Technology has been designated as **NODAL CENTRE** for







An initiative of
Ministry of Human Resource
Development (MHRD),
Government of India

under the National Mission on Education through ICT in collaboration with





Certificate of Appreciation from GTU Innovation Council by Dr. Navinchandra Sheth, Vice Chancellor of GTU for outstanding efforts in successfully organising student's Project Exhibitions -2017 In accordance with the directives of GTU, Babaria Institute of Technology - BITS Edu Campus organized Project Fair of all the Final Year Students - ExhiBITS 2017 on 8th April 2017 under the banner of CSI, IETE and GESIA.



Shri Darshan Shukla, Sr. DGM, L&T Power at Valedicotry Ceremony, EXHIBITS 2017 15 students presented their project at Sayaji Start-Up Summit

ENTREPRENEURSHIP





Signed MOU with Wadhawani Foundation National Entrepreneurship Network, to accelerate entrepreneurship, innovation & skills development among students.



Dr. Santosh Shah,
Director-Innovation
Next Gen Nanotechnology
at 3 Days Entrepreneurship
Awareness Camp on 11th -13th
August, 2016, by NSTEDB,
DST and Supported by EDI.



Seminar on "10 steps for Successful Entrepreneurship" supported by Alibaba.com





Startup Master Class was organized by GTU Innovation Council @ BITS Edu Campus, Vadodara





"Product Design" by Mr. Kiran Patel

"Idea Validation" by Mr. Haituk Shah

"Product Design" by Mr. Kiran Patel

"Product Development" by Mr. Deepen Barai

"Innovation and IPR" by Mr. Kirti Patel

"Product Validation" by Mr. Rohit Dave

"Market Analysis & Strategies" by Mr. Harsh Shah

"Branding & PR" by Mr. Keyur Patel









"Vibrant Gujarat Startup & Technology Summit 2018" by Mayank Patel, CEO, CrAdLE - EDII





Oct. 6th to 10th, 2016 | Vadodara, India

S.Praveen receiving the 3rd Prize

12 students presented their project. E&C Student won the third prize at SWITCH Global Innovation Expo 2016.





Shri Bhupendra Sinh Chudasama, Education Minister-Gujarat, with BITS Edu Campus Student @ SWITCH Global Innovation Expo.



E&C Engineering Student at Switch Global Innovation Expo, Vadodara

INNOVATIVE PROJECT

WINNING LAURELS



Mechanical Engg Students won cash prize of Rs. 1 Lac at Hi-Tech 360 DegreeTech Fest 2017 - IIM Ahmedabad



Keval, Yagnesh, Keyur & Parth of Civil dept. won 2nd prize @ IMAZE 2017. GCET. For their Project - Harvesting energy from Haulage vehicle towards sustainable future.



Civil Engineering Students at Bridge the Gap Competetion-2017, at CEPT, Ahmedabad



Dimple, Shreya, Azif and Chitrang of Civil dept. won Second Prize@ Hi-tech IIMA 2017 for their project "Ultra high strength concrete with reduced carbon foot prints ".



Zarrar, Richa, Umang, Soham, Khus and Stuti of Computer Science dept. at Finale of Smart India Hackathon 2017, ISSATE Noida.







STARTUP SUMMITS



Mrutyunjay Joshi of Mech. Dept. at B to G meeting with Ministry of Agriculture and farmer welfare, Government of India, at 8th Vibrant Gujarat Global Summit - 2017





Students of Mechanical & Electrical departments displaying their projects at VG Start Up Summit - 2016, a two day event for Start Ups & aspiring entrepreneurs hosted by Government of Gujarat.

TOP INNOVATION IN INDIA

A project titled "Novel Carrier Systems For Targeted Drug Delivery In The Treatment of Arthritis" undertaken at BITS edu campus by Dr.Prachi Pandey, a faculty member of Babaria Institute of Pharmacy was shortlisted among top innovations of India in year 2015. She received appreciation award from Dr.Y.S Rajan, distinguished Scientist-Indian Space Research Organization.

Babaria Institute of Pharmacy, Vadodara received GTU Innovation Council-i2i (Innovate to Impact) Award 2016 on 5th GTU Innovation council Sankul day organized on 14th February, 2016, at Ahmedabad. The Team of Babaria Institute of Pharmacy, Vadodara, Dr. Prachi Pandey and Dr. Vandana B. Patel and got the first rank for their contribution in creating Novel carrier systems for targeted drug delivery in the treatment of Arthritis.



RESEARCH GRANTS

| Name of Faculty | Grants Fetched | Sponsor Body |
|--|-----------------------|--|
| Dr. Prachi Pandey and Dr. S. S. Pancholi | Rs. 14,50,000/- | AICTE |
| Dr. Vandana B. Patel | Rs. 66,000/- | GUJCOST |
| Dr. Vandana B. Patel | Rs. 1,30,000/- | Industry - Shukla Asher Impex Pvt. Ltd., Rajkot |
| Dr. Vandana B. Patel | Rs. 2,50,000/- | GUJCOST |
| Dr. Sangeetha Rajbanshi | Rs. 3,00,000/- | GUJCOST |
| Dr. Naazneen Surti and Dr. Meenakshi Patel | Rs. 1,10,000/- | GUJCOST |

CONSULTANCY PROJECTS



| Title | Sponsor Body |
|---|--|
| Animal and microbial study of the product "Green Clean". | Shukla Ashar Impex Pvt. Ltd. Rajkot |
| Pharmacological Investigation into In-vitro Anti-Spasmodic Activity of 'Caspa' Drops (Export only). | Vasu Research Centre, Vadodara |
| Pharmacological evaluation of Spark capsule (an ayurvedic proprietary medicine) on reproductive functions of male rats. | Vasu Research Centre, Vadodara |
| Oral toxicity study and efficacy evaluation of proprietary ayurvedic tablet in Polycystic ovary syndrome. | Vasu Research Centre, Vadodara |

RESEARCH



A project of Babaria Institute of Pharmacy received a research grant of Rs. 14.5 Lacs, under Research Promotion Scheme of AICTE, New Delhi.







Project appreciated and selected as a potential startup for support by a panel of experts and entrepreneurs from different facets such as healthcare, law, finance, marketing etc. at World's longest and biggest Sayaji Startup Summit, Vadodara in two consecutive years, 2017 and 2018.

MOU's with Pharmaceutical industries:



MOU with Shri Shrenik shah, Technical director,
Montage Laboratories



MOU with Dr.Hardik soni, Sr.Manager, Vasu Research Centre



A faculty member of Babaria Institute of Pharmacy Dr. Prachi Pandey Completed the PG Diploma in Patents laws from National Academy of Legal Studies and Research (NALSAR University), Hyderabad and bagged 1st rank in India with A++ grades and then qualified the Patent agent exam,2019 conducted by Indian Patent office, govt. of India and got her name registered in the official gazette of India for filing and prosecuting patent applications in India.

PROPERTY INDIA



Patents Published

| Application Number | Title of Patent | Applicant and Inventors |
|---------------------------|---|--|
| 1964.MUM.2015 | NOVEL ORAL SOLID DOSAGE FORM OF HERBAL ANTIOXIDANT | Dr. Vandana B Patel, Ms. Roshni Amin, Dr. Prachi Pandey. |
| 201621000190 | ORAL AEROSOL OF VARDENAFIL FOR THE TREATMENT OF ERECTILE DYSFUNCTIONING | Dr. Vandana B Patel, Mr. Niral Parikh, Dr. Prachi Pandey. |
| 201621016158 | VISCOSUPPLEMENTARY DRUG DELIVERY SYSTEM OF SIMVASTATIN FOR OSTEOARTHRITIS | Shri Dhruv J. Patel, Dr. Naazneen Surti, Ms. Karishma Patel. |
| 201621016150 | VAGINAL DRUG DELIVERY SYSTEM OF METRONIDAZOLE AND CLOTRIMAZOLE | Shri Dhruv J. Patel, Dr. Naazneen Surti, Mr. Kushan Shah. |
| 201721013027 | MICRONEEDLE ASSISTED TRANSDERMAL DELIVERY OF BUSPIRONE. | Shri Dhruv J. Patel, Dr. Manisha Lalan, Ms.Aparna Prasad. |

Patents Filed

| Application Number | Title of Patent | Applicant and Inventors |
|--------------------|--|---|
| 201821000775 | PENETRATION ENHANCER CONTAINING VESICLES AS CARRIERS FOR TOPICAL DELIVERY OF CURCUMIN FOR PSORIASIS | Shri. Dhruv J. Patel, Mr. Udit Vyas, Dr. Prachi Pandey. |
| 201821046134 | ELASTIC VESICLES CONTAINING CORTICOSTEROID AS CARRIER FOR TOPICAL DELIVERY IN PSORIASIS | Shri. Dhruv J. Patel, Mr. Udit Vyas, Dr. Prachi Pandey. |



MOU's with Pharma Industries

























SEMINARS & WORKSHOPS

at Babria Institute of Pharmacy to promote innovations and entrepreneurship





3 days Entrepreneurship Awareness Camp sponsored by NSTEDB, DST & supported by EDI, Ahmedabad.



StateLevel Seminar on "Entrepreneurialism and its venture in Pharmacy" 3rd February 2018

GUJCOST Sponsored



Gujcost sponsored National seminar- Expert Lecture by Shri S. K. Nanda, Chairman and Managing Director - Gujarat State Fertilizer Corporation Limited, Government of Gujarat



7th National Seminar "Pharma Vision".



Dr. Mahesh Burande, Adjunct Professor, MCOPS, Manipal, Hon. Director, IPER, Pharma consultant and trainer delivering expert talk.

