Department of Pharmacy

Department of Pharmacy offers Bachelor of Pharmacy, Master of Pharmacy (with specializations in Pharmaceutics and Pharmaceutical Chemistry) and PhD programs. Admissions to B. Pharm. and M. Pharm. programs are through BITSAT. Admission to PhD program is based on the requirement and can happen twice a year, in July and January of respective academic year. We have a dynamic team of teachers and researchers with an optimal mix of experience and youthfulness. Department’s emphasis on research has resulted in attracting sponsored research funding from governmental organizations and industries. This vibrant research activity would also allow B. Pharm. and M. Pharm. students to work on research projects and often co-author high impact journal articles. This is a unique teaching method our department has harnessed over many years to provide hands-on experience to students.

Our students have been consistently placed in Pharmaceutical Industry or have been pursuing higher education within and outside India. In all, Department of Pharmacy at BITS Pilani, Hyderabad Campus is poised to become one of the top destinations for Pharmacy education in India.

Thank you for your interest in Pharmacy!

V. Vamsi Krishna Venuganti
Head of the Department
Pharmacy at BITS Pilani, Hyderabad Campus

B.Pharm. (Hons.)
Admission to this 4-year program is through BITSAT entrance test which is recognized as one of the competitive examinations in the country. As a result, some of the brightest students join the department.

In the first year, students study multiple courses on Mathematics, Physics and Chemistry resulting in enhancement of their fundamental knowledge on broad-based fields. Core courses in Pharmacy are taught from Second Year with more emphasis on practical orientation. Students spend a cumulative of seven months in Industry as part of Practice School program I and II. Moreover, students pursue research projects with faculty and contribute to conference presentations and paper communications.

M. Pharm.
The admissions to this 2-year program are through BITSAT entrance test. M. Pharm. is offered in three categories namely, General Pharmacy, Pharmaceutical Chemistry and Pharmaceutics. The compulsory courses are designed to offer exhaustive exposure to various practical aspects of research methodologies, instrumental techniques, emerging areas and industrial operations. Further, students pursue research projects and Advance level elective courses to gain in-depth knowledge in their field of specialization. Students can choose to spend their last semester in industry as part of Practice School Program or take up dissertation on-campus/off-campus.

Ph. D. Program
Ph.D., Doctor of Philosophy in Pharmacy is offered in varied thrust areas like drug design, Organic drug synthesis, medicinal chemistry, pharmacology, Molecular pharmacology, Drug delivery systems, Novel drug delivery systems, Nano pharmaceuticals, Natural product based drug development, drug metabolism etc. The input for this program is vast covering interdisciplinary students with Pharmacy, Biology, Biotechnology and Organic Chemistry background. Many students in Ph.D. program are sponsored through funded projects from government and some students have been selected based on DST-INSPIRE program (Toppers in PG programs), UGC-CSIR-JRFs, etc.
Research

The Department of Pharmacy has been excelling with regard to research since the inception of the campus in 2008. The department is majorly funded by various government agencies like UGC, CSIR, DST, DBT, OSDD, etc in the form of research grants.

Faculty members are actively involved in various projects. The current worth of the applied projects is around 6 crore rupees. The department boasts of its state of art infrastructure to focus on the major thrust areas, namely, Drug Design, Screening, Drug Delivery Systems, Phytochemistry and Natural Drugs. Following are research laboratories in the Department of Pharmacy:

- Drug Discovery Laboratory
- Computer Aided Drug Design Laboratory
- Center for Excellence and Laboratory for research in Tuberculosis
- Cell Culture Laboratory

Publications

As a research focused university, Department of Pharmacy at BITS Pilani, Hyderabad campus also stresses on getting the research work published and holding conferences.

Here is the consolidated information about the papers published in journals and conferences held during 2011-2012.

<table>
<thead>
<tr>
<th>Publication Type</th>
<th>In 2012</th>
<th>In 2011</th>
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<tbody>
<tr>
<td>International Journals</td>
<td>28</td>
<td>26</td>
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<tr>
<td>Conferences held abroad</td>
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<td>02</td>
</tr>
<tr>
<td>Conferences held in India</td>
<td>16</td>
<td>12</td>
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</tbody>
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Awards

Each faculty member of the department has won awards in various categories, and has been acclaimed internationally for their works in their own fields.

A complete list of Awards and honors can be found at:

http://www.bits-pilani.ac.in/hyderabad/BPharmacy/BPharmacy
Faculty

D. Sriram, Ph.D.
B.K.Birla & Sarala Birla Chair Professor

Professor D. Sriram completed his M. Pharmacy (Medicinal Chemistry) and Ph. D. in Medicinal Chemistry from Institute of Technology, Banaras Hindu University. He is a gold medalist in B. Pharmacy from The Tamilnadu Dr. M G R Medical University, Tamil Nadu.

His research interest spans over Tuberculosis and Anti-infective drug research. He has 201 (194 of them are International) papers published on various topics in the research in Medicinal Chemistry. According to Scopus citations, his work has been cited 3600 times with a Scopus “h” index of 34. Prof. D. Sriram, with Prof. P. Yogeeswari has a patent on Novel N-Substituted compounds for the treatment of Epilepsy and Neuropathic pain. Patent Application No.: 1138/CHE/2009 A (18/05/2009)


P. Yogeeswari, Ph. D.
Professor
Professor In-Charge, Sponsored Research & Consultancy Division

Professor P. Yogeeswari has completed her M. Pharmacy (Medicinal Chemistry) and Ph. D. in Medicinal Chemistry from Institute of Technology, Banaras Hindu University. She is a gold medalist in B. Pharmacy from The Tamilnadu Dr. M G R Medical University, Tamil Nadu.

Her research interest spans over Drug discovery, Design and Synthesis of anti convulsants, anticancer agents and newer drugs for the treatment of Neuropathic pain.

She has a total of 186 papers published and has a “h index” of 28. She has co-authored a book with Prof. D. Sriram: Medicinal Chemistry, published by Pearson Education, Singapore. Prof. P. Yogeeswari, with Prof. D. Sriram has a patent on Novel N-Substituted compounds for the treatment of Epilepsy and Neuropathic pain. Patent Application No.: 1138/CHE/2009 A (18/05/2009). Currently 14 students are pursuing their Ph. D. under her guidance.
**Punna Rao Ravi, Ph. D.**  
*Assistant Professor*

Dr. Punna Rao Ravi has completed his B. Pharm (Hons.), M. Pharmacy and Ph. D in Pharmaceutics from BITS Pilani.

His research interest spans across Designing and Evaluation of Novel drug delivery systems and Analytical and Bioanalytical Method Development and Validation.

He has 10 published papers and many more under review. He has co-authored a book chapter: Application of polynomial & composite methods to optimize the design & development of controlled release oral drug delivery system; Punna Rao Ravi, Sajeev Chandran; In, Mathematical Modeling- Application Issues & Analysis, Eds. Mishra BK., Satpathi DK,  Anne Books India, New Delhi, 2006, p15-21. Currently, three students are pursuing their Ph. D. under his guidance.

**A. Sajeli Begum, Ph. D.**  
*Assistant Professor*

Dr. Sajeli Begum has completed her M. Pharmacy in Pharmaceutical Chemistry from Institute of Technology, Banaras Hindu University and Ph. D in Medicinal Chemistry from Institute of Medical Sciences, Banaras Hindu University.

Her research interests includes: Development of lead molecules from medicinal plants for treating cancer and rheumatoid arthritis and Study on interaction of beneficial bacteria with pathogenic fungi to develop biocontrol agents.

V Vamsi Krishna Venuganti, Ph.D.
Assistant Professor and Head

Vamsi Venuganti had joined BITS Pilani, Hyderabad campus in 2010. He holds a Ph.D. in Pharmaceutical Sciences from South Dakota State University, USA. His research interests include nano/micro-carrier mediated drug delivery for transdermal/topical applications, non-viral carriers for gene-based drug delivery and development of biomaterials for drug delivery.


Swati Biswas, Ph. D.
Assistant Professor

Dr. Swati Biswas has completed her Ph. D in Pharmaceutical sciences from Wayne State University, Detroit, Michigan in 2008. She had been a Postdoctoral fellow at the same university from 2008-2009, and Postdoctoral research associate at Northeastern University, Boston, Massachusetts, USA during 2009-2013.

Her research interest spans over development of novel nanoparticulate and macromolecular drug delivery systems (liposomes, polymeric micelles and dendrimers) loaded with or conjugated to poorly soluble chemotherapeutics for the treatment of cancer. She is also interested in developing cationic polymer and lipid based siRNA and siRNA/drug co-delivery systems for cancer treatment. She has 21 international papers published. Currently two students are pursuing Ph. D. under her guidance.

Shrikant Yashwant Charde, Ph. D.
Assistant Professor

Dr. Shrikant Charde completed his B Pharm (1999) from Nagpur University and did his M Pharm (2001) and PhD (2008) from BITS-Pilani. He has completed PG Diploma in Patents Law from NALSAR, Hyderabad in the year 2009.

He is associated with BITS-Pilani since 2001 and was transferred to Hyderabad Campus of BITS in July 2013. His areas of interest are Novel Drug Delivery Systems with special emphasis on transmucosal drug delivery and nanotechnology based delivery systems, Analytical and Bio-Analytical Method Development and Intellectual Property Rights.
He is a life member of Association of Pharmaceutical Teachers of India and Controlled Release Society Indian Chapter. He has completed various industrial and government sponsored projects. Dr. Charde has published several technical reports, research papers, and attended several conferences of international and national level. He is currently guiding four PhD students and has supervised projects of more than 75 B. Pharm and 30 M. Pharm students.

Balaram Ghosh, Ph. D.
Assistant Professor

Dr. Balaram Ghosh has completed his Ph.D. from Wayne State University, Detroit, Michigan, USA in 2009. He has been a Postdoctoral Research Fellow at Center for Human Genetic Research, Harvard Medical School, Harvard University, USA during 2009-2013.

Dr. Ghosh’s research is involved in exploring and understanding biological systems at the molecular level with a tool set offered by modern chemistry. He works in the interface of synthetic organic chemistry and cell biology. The major focus is in the development of subtype specific histone deacetylase (HDAC) inhibitors/activators as epigenetic modulators. His specific work deals with the development of potent and isoform selective HDAC inhibitors with fairly acceptable blood brain barrier permeability to understand which isoform of HDAC is responsible to turn on the transcription machineries involved with the coding genes responsible for the improvement of cognition, memory and mood stabilization of patients suffering from depression and dementia. He has 18 international papers published.

N. Aditya, M.Pharm
Lecturer


His research interests include: Pre-formulation characterization of small molecules; Formulation of Solid Lipid Nanoparticles (SLN) and Polymeric Nanoparticles/Nanocapsule/Nanocomplex for small molecules; Formulation of in-situ gelling systems for water-soluble and insoluble drugs with potential application in nasal and rectal drug delivery; Solubility improvement for BCS II drugs by techniques like co-milling with hydrophilic excipients and solid dispersion; Design and optimization of formulation with Design of Experiments (DOE) using Design Expert v 8.0.

He is also involved in Development and Validation of Bio-analytical methods for drugs in plasma and serum matrices using liquid chromatography-PDA system.
Rahul Vats, M. Pharm

Lecturer

Mr. Rahul Vats has completed M. Pharmacy in Pharmacology from Manipal College of Pharmaceutical Sciences. Before joining BITS-Pilani, Hyderabad Campus, he worked as a research scientist in Torrent Research Centre, Gandhinagar and Lupin Research Park, Pune. During his work he was involved in pharmacokinetic profiling of NCEs and bio-analytical method development & validation. He is a trained and certified bio-analytical Thermo Scientific LC-MS/MS (Ion Trap & Triple Quardrapole). He is associated with BITS Pilani since 2010 and pursuing his Ph. D. under the guidance of Dr. Punna Rao Ravi.

His research interests include: Designing and Evaluation of nanoparticulate drug delivery systems; Analytical and Bio-analytical Method Development and Validation; Pharmacokinetic profiling; Identification of drug metabolite and metabolic pathways; Drug-Drug Interaction. He has 08 international papers published.
Contact Information

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