Faculty Profile		
Name:	Dr. Shreeraj Shah (Principal	
Name.	and Professor, LJIP)	
Date of Birth:	09/01/1983	
Educational Qualifications:		
-Ph.D. (University)	Ph.D. in Pharmacy, Ganpat University (2008-2011)	
-Master's (University)	M.Pharm. in Pharmaceutics, S.P. University (2004-2006)	
-Bachelor's(University)	B.Pharm., HNGU (2000-2004)	
-Any Other:		
Area of Specialization:	Pharmacy, Pharmaceutics, Pharmaceutical Technology	
Date of Joining (LJIP)	07/09/2006	
Present Position:	Principal, Professor and Head of the Dept. (HOD), Pharmaceutical Technology, L.J. Institute of Pharmacy	
Contact Details:		
-Address :	11, Niharika Bunglows, opp. Himmatlal Park, Ambawadi, Ahmedabad-380 015, Gujarat, India	
-Email	shreeraj.shah@ljinstitutes.edu.in, shreerajljip@gmail.com,	
-Phone	(R) 079-26740266 (M) 9879049169	
Work Experience :	Teaching (14 years) Industrial() Research& Development()	
Subjects taught:	and and the	
-Under Graduate level	Physical Pharmacy (2 nd and 3 rd sem.), Dispensing Pharmacy (4 th sem.), Pharmaceutical Technology-I (7 th Sem.) & Pharmaceutical Technology-II (8 th sem.), Dosage form design (7 th and 8 th sem.)	
-Post Graduate level	PFD (1 st sem.), IP (1 st sem.), NDDS-I (2 nd sem.), NDDS-II (3 rd sem.) ITD (3 rd sem.), Dissertation (4 th sem.)	
Area of Specialization in your field	Novel drug delivery system – Gastroretentive dosage forms & liquid dosage forms	
A brief account of work done by you in	M.Pharm:	
the M. Pharm. and Ph.D.	"Preparation, Optimization and Characterization of Multiple Emulsion taking Isoniazid as model drug"	
	Isoniazid is used in prolonged therapy. So it is advisable that it may be formulated in the form of Controlled Drug Delivery Systems. Multiple emulsions have been reported to be used for prolonged release of certain drugs. The anti-tubercular drug Isoniazid is used in Tuberculosis disease for chronic therapy. So this drug can be incorporated in to multiple emulsions for prolonged release. Being liquid dosage form patient compliance will be more especially in pediatric and geriatric patients. For preparation of multiple emulsions, liquid paraffin and Isopropyl myristate were used as the oils Span-80, Span-83 were used as the primary emulsifiers and Tween-80 was used as a secondary emulsifier. Polyvinyl pyrrolidone was used as a stabilizer for multiple emulsions. Preliminary batches were taken for both oils using different proportions of primary and secondary emulsifier and finally a working formula was decided containing PVP as a stabilizer to produce stable multiple emulsions. A 3 ² factorial design was applied to formulate multiple emulsions using each oil in combination with different primary emulsifier and secondary emulsifier. Accordingly nine batches of each formulation were	

Viscosity (rheological evaluation), % drug entrapment, % drug release and morphological characteristics (Photomicrography). The data for % drug release at the end of 6 hours at different combinations of primary and secondary emulsifier were subjected to multiple regression analysis to derive polynomial equations describing the effect of each factor on % drug release. Isopropyl myristate batches show better long term stability compared to liquid paraffin batches while controlled release effect is better seen in liquid paraffin batches than Isopropyl myristate batches Ph.D. "Formulation Development and Evaluation of Gastroretentive formulations for treatment of Helicobacter Pylori infections" Helicobacter pylori bacteria are the causative agents of gastric ulcers. It is also a carcinogenic organism. Certain conventional dosage forms fail to eradicate the bacteria from the stomach so a novel drug delivery system is the need of the hour for proper elimination of these bacteria locally as well as systemically. Now it is well established that the Gastro retentive systems like Floating drug delivery and Mucoadhesive systems can be the remedy and the substitute for the conventional dosage forms, which will have more rationality with excellent efficacy towards the eradication of H.pylori infections. The focus of the research work to formulate and evaluate the newer Gastro retentive dosage forms of various approaches containing latest polymers and to find out optimized formulation for each approach with the help of optimization techniques. Certain newer drugs like Gatifloxacin and Levofloxacin are locally targeted at the site of H.pylori residence where they act locally, since the local route is more efficacious than systemic route. It was necessary to design drug delivery system, which could not only curtail and alleviate the shortcoming of the conventional delivery vehicle, but also place the antimicrobial to the infected cell lines. It is expected that if local delivery of antimicrobial agents from the gastric lumen into the mucus layer can be achieved then H.pylori eradication rate can be increased. The contact time of antimicrobial agents with the organism needs to be sufficiently long. Better stability and longer residence time will allow more of the antibiotic to penetrate through the gastric mucus layer to act on H.pylori. It can be expected that local delivery of narrow spectrum antibiotics (such as Gatifloxacin and Levofloxacin) through a gastroretentive drug delivery system or site specific drug delivery system may result in complete removal of the organism in the fundal area of the gastric mucosa due to bactericidal drug levels being reached in this area, and might lead to better treatment of peptic ulcer disease. Various approaches were use such as low density approach (gelucire) including floating approach, Mucoadhesive approach with PEO with combination of carbopol and HPMC K100M. Finally to address "All or none phenomenon" multiparticulate gastroretentive dosage forms (floating microspheres) were also prepared. **New Technologies / methods** developed by you Scale up and Technology Transfer **Industrial Projects Carried Out :(** 02 from Vasa Pharm. Chem. Pvt. Ltd., Ahmedabad No.) Revenue/Royalty earned by the ----**Organization in Indian Rupees**

Received Minor Research grant (MRP) from GUJCOST for

No. Government funded Projects

undertaken by you and their total	of Rs. 1,95,000/- project entitled 'Formulation Development of novel	
value	single Solid oral dosage form for the treatment of type 2 Diabetes and preceding disorders' for 2014-15	
Research Guidance :		
-Master's	31	
-Guide for PhD	06 (allotted by the Gujarat Technological University)	
Summer/Winter/School/Conference/	16	
Workshops attended:		
Summer/Winter/School/Conference/	03	
Workshops Conducted:		
Patents taken/applied for:	 01 (Published) 4578/MUM/2015: 'Self Micro Emulsifying Drug Delivery System for combination therapy of Paracetamol (PCM) and Vitamin E'(2015) 01 (filed with complete specification) 'Blood Group Identification Development System (BIDS)'(2019) 	

Publications: No of books: $\underline{03}$ (all international)

1. Formulation and Evaluation of Gastro retentive Drug Delivery System: Formulation Development and Evaluation of Gastro retentive Formulations for Treatment of H. Pylori Infection (Publisher: LAP LAMBERT Academic Publishing. U.S., U.K. And GERMANY, ISBN: 3845442093, PAGES: 268)

2011

http://www.amazon.com/Formulation-Evaluation-Gastroretentive-Delivery-System/dp/3845442093/ref=sr 1 4?ie=UTF8&qid=1360690301&sr=8-4&keywords=shreeraj+shah

2. Design and Evaluation of Colon Specific Drug Delivery System (as co-author- Publisher: LAP LAMBERT Academic Publishing, U.S.• U.K. and GERMANY, ISBN: 3844394826, PAGES: 288)

2011

288,

http://www.amazon.com/Design-Evaluation-Specific-Delivery

System/dp/3844394826/ref=sr 1 6?ie=UTF8&gid=1360690301&sr=8-6&keywords=shreeraj+shah

3. Multiple Emulsion: A Novel Drug Delivery System:

Preparation, Optimization and Characterization of Multiple Emulsions as Drug Delivery Systems (Published LAP LAMBERT Academic Publishing. U.S., U.K. And GERMANY, ISBN: 3659355984, PAGES: 104) **2013**

http://www.amazon.com/Multiple-Emulsion-Preparation-Optimization-Characterization/dp/3659355984/ref=pd_rhf_se_p_t_1_0RMX

Research Papers: <u>54</u> (27 in International Journals- Science Direct-07, Elsevier- 02, Springer-01, Pubmed- 07, 27 in National journals)

Some of the notable papers are mentioned below:

Asian Journal of Pharmaceutical Research and Development
 Liposomal Formulations In Cancer Therapy: Passive Versus Active Targeting http://www.ajprd.com/index.php/journal/article/view/489

2. International Journal of Current Advanced Research
Formulation and evaluation of colon targeted drug delivery of exenatide
https://www.journalijcar.org/issues/formulation-and-evaluation-colon-targeted-drug-delivery-exenatide

3. International Journal of Current Advanced Research
Formulation Development And Evaluation Of Loteprednol Etabonate And Tobramycin Loaded Ocular

In-Situ Gel

https://journalijcar.org/sites/default/files/issue-files/6162-A-2018.pdf

4. International Journal of Recent Scientific Research

2017

Development and validation of UV spectrophotometric method for the determination of Metformin Hcl, Rosuvastatin calcium and Telmisartan in bulk drug

http://recentscientific.com/development-and-validation-uv-spectrophotometric-method-determination-metformin-hcl-rosuvastatin-cal

5. World Journal of Pharmaceutical Research

2017

Formulation And Evaluation Of Stomach Specific Drug Delivery System For Cefpodoxime Proxetil LEVALUATION_OF_STOMACH_SPECIFIC_DRUG_DELIVERY_SYSTEM_FOR_CEFPODOXIME_PROXETIL

6. World Journal Of Pharmacy And Pharmaceutical Sciences (International Journal) 2015

An Overview On Bilayered Tablet Technology

https://www.wjpps.com/Wjpps_controller/abstract_id/2862

7. Journal of Pharmaceutical Science and Bio-scientific Research 2015

A Review On: SeDeM Expert System in Formulation Development of Pharmaceutical Forms http://www.jpsbr.org/volume-5/JPSBR-Vol-5 Issue 4.htm

8. Drug Delivery and Translational Research (Springer and Pubmed-International Journal)

Formulation development, optimization, and evaluation of sustained release tablet of Valacyclovir hydrochloride by combined approach of floating and swelling for better gastric retention https://link.springer.com/article/10.1007/s13346-014-0207-x 2014

9. Research Journal of Pharmaceutical, Biological and Chemical Sciences

Formulation and Evaluation of Once Daily Sustained Release Tablet of Eprosartan Mesylate Involving Dissolution Enhancement Approach.

2014

https://www.researchgate.net/publication/287267532_Formulation_and_evaluation_of_once_daily_sustained_release_tablet_of_eprosartan_mesylate_involving_dissolution_enhancement_approach

10. Journal of Pharmaceutical Science and Bioscientific Research

Development of Stable Formulation and Evaluation of Combination of Amoxycillin and Clavulanic Acid 2013

https://www.semanticscholar.org/paper/Development-of-Stable-Formulation-and-Evaluation-of-Valera-Upadhyay/fc00ad42a000bb35fca83e95c9e2d9b1c08f419a

11. Der Pharmacia Sinica (International Journal)

Formulation and evaluation of once a day bilayer floating tablet of antihypertensive drug involving dissolution enhancement approach 2013

https://www.imedpub.com/articles/formulation-and-evaluation-of-once-a-day-bilayer-floating-tablet-ofantihypertensive-drug-involving-dissolution-enhancement-approac.pdf

12. Pharma Science Monitor

2013

2012

Formulation Development And Evaluation Of Modified Release Combination Therapy For Arthritis http://www.pharmasm.com/article.php?archive=8

13. International Journal for Pharmaceutical Research Scholars

Intranasal Liposomes: An Approach For Drug Delivery To Brain http://www.ijprs.com/index.php?p=varchive&v=V1&i=I2

14. International Journal of Pharmaceutical Sciences and Research 2012

Microsponges as the versatile tool for topical route: a review

http://www.doaj.org/doaj?func=abstract&id=1130825&recNo=6&toc=1&uiLanguage=en

15. American Journal of Pharmtech Research (International Journal) 2012

Time Controlled Pulsatile Drug Delivery System – A Review

http://www.ajptr.com/archive/volume-2/june-2012-issue-3/article-186.html

16. Journal of Pharmaceutical Science and Bioscientific Research 2012

Formulation and Optimization of Lamotrigin Fast Dissolving Tablet

http://www.jpsbr.org/index_htm_files/6%20JPSBR%2012067.pdf

17. Asian Journal of Biomedical and Pharmaceutical Sciences (International Journal)

2012

In Situ Gel: A Novel Approach of Gastroretentive Drug Delivery

http://www.jbiopharm.com/index.php/ajbps/article/view/48/37

18. American Journal of Pharmtech Research (International Journal) 2012

Floating Bilayer drug delivery systems- An Unconventional approach in Conventional Form

http://www.ajptr.com/archive/volume-2/april-2012-issue-2/article-174.html

19. Die Pharmazie (International Journal)

2011

Central composite design for the formulation and optimization of a multi-unit potential colonic drug delivery System of budesonide for ulcerative colitis

http://www.ncbi.nlm.nih.gov/pubmed/21434575

20. Der Pharmacia Lettre (International Journal)

2010

Formulation and development of gastroretentive multi-layer coated tablets containing Gatifloxacin against H.pylori infection

http://scholarsresearchlibrary.com/DPL-vol2-iss4/DPL-2010-2-4-384-392.pdf

21. Der Pharmacia Sinica (International Journal)

2010

Formulation and evaluation of effervescent floating tablet of Levofloxacin against H.pylori infection

http://pelagiaresearchlibrary.com/der-pharmacia-sinica/vol1-iss3/DPS-1-3-232-244.html

22. Der Pharmacia Lettre (International Journal)

2010

Formulation and optimization of Gastric floating matrix tablets of Gatifloxacin with combination of polymers using Box-Behnken experimental design.

http://scholarsresearchlibrary.com/DPL-vol2-iss3/DPL-2010-2-3-21-32.pdf

23. Asian Journal of Pharma. Sciences (International Journal) 2010

Floating Multiple Unit Lipid Granules of Gatifloxacin-Gelucire 39/01: Formulation Optimization Using Factorial Design

http://www.asianjps.com:8080/Jweb ajps/EN/Y2010/V5/I1/35

24. Acta Pharmaceutica (International Journal)

2010

Box-Behnken experimental design in the development of pectin-compritol ATO 888 compression coated colon targeted drug delivery of mesalamine

http://www.ncbi.nlm.nih.gov/pubmed/20228040

25. Int. J. Res. Pharm. Sci.

2010

Design, development and in vitro evaluation of Mesalamine tablets containing Pectin and Chitosan for colon-specific drug delivery

http://ijrps.pharmascope.org/issues/archives?task=view.download&cid=2

26. Research in Pharmaceutical Sciences (International Journal) 2009

In vitro controlled release of colon targeted mesalamine from compritol ATO 888 based matrix tablets using factorial design

http://www.ncbi.nlm.nih.gov/pubmed/21589801

27. Zhong Xi Yi Jie He Xue Bao (Chinese Journal Of Integrative Medicine-(International Journal)

Gastroretentive floating drug delivery systems with potential herbal drugs for Helicobacter pylori eradication: a review

http://www.ncbi.nlm.nih.gov/pubmed/19828110

28. International Journal of PharmTech Research

2009

Stomach specific floating drug delivery system: a review

http://www.sphinxsai.com/PTVOL3/PT=38,%20S.H.%20%20SHAH%20(623-633).pdf

29. Asian Journal of Pharma. Sciences (International Journal)

An overview of a gastro-retentive floating drug delivery system

http://www.asianjps.com:8080/Jweb_ajps/EN/Y2009/V4/I1/65

30. Journal of Pharmacy Research

2009

2009

Formulation and in-Vitro evaluation of mesalamine matrix tablets using chitosan for colonic drug delivery

http://jpronline.info/index.php/jpr/article/view/53/45

31. In Pharma Communique

2009

In-vitro Evaluation of Tamarind Gums as Compression Coatings for Drug Targetting to the Colon

32. Journal of Pharmacy Research

2009

Brain Targetting: A Novel Drug Delivery System

http://jpronline.info/index.php/jpr/article/view/291/251

33. Pharmaceutical Reviews

2009

An Overview on Brain Targeting Drug Delivery System

http://www.pharmainfo.net/reviews/overview-brain-targeting-drug-delivery-system

34. Pharmaceutical Reviews

2008

Transdermal Drug Delivery Technology Revisited: Recent Advances

http://www.pharmainfo.net/reviews/transdermal-drug-delivery-technology-revisited-recent-advances

35. Pharmaceutical Reviews

2008

Nanotechnology - A Review on Revolution In Cancer Treatment

http://www.pharmainfo.net/reviews/nanotechnology-review-revolution-cancer-treatment

36. Journal of Pharmacy Research

2008

An alternative dissolution method for Mesalamine dosage forms

http://jpronline.info/index.php/jpr/article/view/184/156

37. Journal of Pharmacy Research

2008

Novel Pharmaceutical Approaches For Colon Specific Drug Delivery: An Overview

http://jpronline.info/index.php/jpr/article/view/67/54

Conferences, Workshops and Seminars

- **1. Poster presented** in national conference entitled" Development and Validation of UV Spectrophotometric Method for the determination of Metformin HCl, Rosuvastatin Calcium and Telmisartan in bulk drug" at 69th IPC, Varanasi, 2017
- 2. Poster Presentation Accepted for presentation entitled" Formulation, Evaluation and Optimization of Floating Oral In-situ Gelling System to treat gastric ulcers caused by H. Pylori infection" with abstract id 10203 in at the 41st Annual Meeting & Exposition of the Controlled Release Society, July 13 16, in the Hilton Chicago in Chicago, Illinois, USA, 2014
- **3.** Attended the 28th Annual Conference of Indian Pharmacy Graduates' Association (IPGA) on "Pharmaceutical issues and challenges of new decades" on 23rd Feb.,2013 as delegate at Hotel Grand Cambay, Ahmedabad, 2013
- **4.** Attended National Symposium on Innovations in Pharmaceutical Sciences (NSIPS-2013) on "Innovative insights on the Pharmaceutical Industry" as delegate, held on 16th Feb.,2013 at AMA, Ahmedabad, 2013
- 5. Attended "APOCALYPSE-2012" at KBIPER, Gandhinagar as Judge of "MASTERMIND-2012"
- 6. Abstract entitled: "Implementation of E-Prescribing in India- Beneficial or Detrimental" accepted for oral presentation in the International Conference on "The future vision and challenges in Hospital Pharmacy", Bangkok, Thailand, 2012
- **7.** Attended the National Conference on "Innovations In Pharmaceutical Industry' on 28th-29th Jan, 2012 as judge in the pharmaceutical technology section of scientific poster presentation as well as the member of Organizing committee at LJ Campus, 2012
- **8.** Attended a workshop on Entrepreneurship organized by iCreate on 26th-27th Jan, 2012 at LJ Campus.
- 9. Attended the two day workshop on 'Patenting in Pharmaceuticals' organized by Gujarat Technological University on $3^{rd} 4^{th}$ Sept, 2011
- 10. Poster Presentation Accepted for presentation entitled" Formulation and optimization of Gastric floating matrix tablets of Norfloxacin with combination of polymers using Box-Behnken experimental design" as Poster 597 in Poster Session II: Oral Controlled Release Technologies at the 37th Annual Meeting & Exposition of the Controlled Release Society (CRS), at the Oregon Convention Center, Portland, OR, USA, 2010
- **11.** Poster presented in national conference entitled" Formulation and Optimization of "Floating Multiple Unit Lipid Granules against H.pylori Infection" at 61st IPC, Ahmedabad, 2009
- **12.** Attended the one day seminar on "Intellectual Property Rights: Oppurtunities and Challenges" at Anand Sept, 2009
- **13.** Attended the national seminar on "Frontiers in Nanotechnology: A Pharmaceutical Perspective" as delegate at Nirma University, Ahmedabad on 20th March,2009
- 14. Attended Faculty Development Program (FDP) organized by ICFAI University at Ahmedabad, 2008
- **15.** Poster presented in national conference entitled" Formulation, Characterization and Optimization of Multiple emulsion containing Isoniazid for Pediatric Tuberculosis (T.B.) disease" at 59th IPC, Varanasi, 2007
- **16.** Attended the Symposium on "Scientific writing: Skills and Ethics" organized by Shri B. M. Shah College of Pharmaceutical education and research, Modasa, Gujarat. 2007
- **17.** Attended the INDO-US/EU seminar organized by IPA-Industrial Pharmacy Division as delegate at Ahmedabad on 28th March. 2007

Notable Achievements and activity excuted:

- Nominated as Independent Director and partner of the start-up company named: *Remedios De Hierbas Herbalive Ayurvedic Healthcare LLP*. The company has trademarked **brand 'HerbALivE'**
- Nominated one of the Resource persons by IDMA and FICCI for academia for Gujarat for 5th International conference and exhibition of Pharmaceuticals and medical devices-2020
- Has touched 570 citation index at Google Scholar (as on 27-05-2020) http://scholar.google.co.in/citations?user=MlZ0rbAAAAJ&hl=en
- Editor of Journal of Pharmaceutical Science and Bioscientific Research
- Approved Ph.D. guide in Pharmacy at GTU, Ahmedabad
- Approved Ph.D. guide in Pharmacy at CU shah University, Surendranagar
- **Approved Ph.D. guide** in Pharmacy at JJTU, Rajasthan
- Passed GATE examination (IIT, Delhi) with 94.84 percentile in 2004 and got JRF of Rs. 8,000/- per month from AICTE for consecutive 2 years.
- Stood First in the Quiz competition during academic year 2003-2004 at BMCPER, Modasa
- Got 2nd rank in M.Pharm. (Pharmaceutics) in S.P. University (2005)
- Working as the Chief coordinator of AICTE approval process committee for LJ group of institutes comprising 7 technical colleges including Engineering institute, Polytechnic, MBA, Architecture, MAM and MCA since 2010
- Convener, GUJCOST sponsored National seminar on "Quality by Design: Recent Perspective on Process Development and Implementation" on 24th & 25th July 2015
- Member, Accreditation committee, LJK
- PRO, L. J. Institute of Pharmacy (Under ACBC, LJK)
- Associate editor of "Renaissance"- Annual Newsletter of LJIP
- Judge of "MASTERMIND-2012" at "APOCALYPSE-2012" at KBIPER, Gandhinagar
- **Judge in the scientific poster presentation** in the National Conference on "Innovations In Pharmaceutical Industry' on 28th-29th Jan, 2012 organized by PharmaNext and L.J. Institute of Pharmacy
- Worked as Co-ordinator, 5th Semester (from July, 2013 to June, 2015) LJIP
- **Head of Literature committee in the Interzonal Youth Festival** organized by GTU and hosted by L.J. Group of Institutes in 2012
- Member, Literature committee in the Zonal and Interzonal Youth Festival organized by GTU and hosted by L.J. Group of Institutes in 2011

Association with Professional Bodies	 The Association of Pharmaceutical Teachers of India (APTI) GU/LM-194 (Life Member) The Indian Pharmaceutical Association (IPA) - GUJ/AHM/LM/0375 (Life member) He is the scientific member in the animal ethics committee
	of Rose labs, Ahmedabad, India
Grants Received/Fetched:	 Received travelling grant from WHO of Rs. 35,000/- as Development fund for attending the international conference on "The future vision & challenges in Hospital Pharmacy" organized by Pharmanext in association with WHO, FIP, SEARPharm, HosPAN and IHPA in Bangkok (Thailand) Received Minor Research grant (MRP) from GUJCOST for Rs. 1,95,000/- project entitled 'Formulation Development of no single Solid oral dosage form for the treatment of type 2 Diabetes and preceding disorders' for 2014-15
Consultancy and Expertise available	Novel drug delivery system – Gastroretentive dosage forms &
for industries	Liquid dosage form especially Syrup , suspension &
	Emulsion including multiple and micro emulsion.