



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad
Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

RESEARCH AND DEVELOPMENT

The contribution of faculty towards research including international/national publications, citations and Ph.D guidance during the assessment years is presented in the following.

ACADEMIC RESEARCH

a) Research papers and books/books chapters published by the faculties in the assessment years

Table: Total number of International and National publications in indexed journals published by the faculties in the assessment years.

Year	National	International	Total
2018-19	13	00	13
2019-20	09	02	11
2020-21	07	15	22
TOTAL	29	17	46



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

Table: Publications with citations by the faculties in the assessment years

Sr. No	Name of Faculty	Total no of Publications	Publications in the assessment years (2018-2021)	Total numbers of Citations
1.	Dr. Shrenik K. Shah	12	07	06
2.	Dr. Ankit B. Chaudhary	48	12	205
3.	Dr. Dhaval J. Patel	27	08	297
4.	Dr. Kaushik B. Kanada	09	07	02
5.	Dr. Sanjeshkumar G. Rathi	30	15	156
6.	Dr. Ritu D. Patel	06	02	20
7.	Dr. Navneet F. Chauhan	03	01	03
8.	Ms. Shweta M. Bhadani	14	00	28
9.	Mr Sandip N. Badeliya	07	05	05
10.	Ms. Jigna T. Patel	04	04	00
11.	Ms. Charmy D. Pandya	04	02	00
12.	Mr. Ravi. R Thakar	03	03	00
13.	Dr. Jinal L. Chaudhary	01	01	00
14.	Ms. Sejal D. Patel	02	02	00
15.	Ms. Dipal M. Patel	06	02	23
16.	Mr. Sohansinh S. Vaghela	04	04	00
17.	Ms. Bhoomi D. Patel	10	07	16
18.	Dr. Maulik D. Vaja	05	02	87
19.	Dr. Madhuri Pandole	03	00	00
20.	Ms. Sainika H Kanzaria	02	00	00
21.	Ms. Sneha P Dave	01	00	00
22.	Ms. Tinkal R. Patel	02	01	01



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

Table: Book/Book Chapters published by the faculty members

Title of the book	Author	Year of Publication	ISBN
Pharmaceutical Microbiology Laboratory Manual	Dr. Dhaval Patel, Dr Sanjesh Rathi, Dr Ankit Chaudhary	2019	97815-43343-40-3 S.Vikas And Company (Medical Publishers), PV BOOKS
Physical pharmaceutics-II Practical Lab Manual	Dr Sanjesh Rathi, Dr Dhaval Patel, Mr Sohansinh Vaghela, Dr Ankit Chaudhary	2019	97815-43343-71-7 S.Vikas And Company (Medical Publishers), PV BOOKS
Concise course in Pharmaceutical Microbiology	Dr Sanjesh Rathi, Dr Maulik D Vaja, Sohansinh Vaghela, Dr Ankit Chaudhary	2020	97815-43343-89-2 S.Vikas And Company (Medical Publishers), PV BOOKS
The Elementary Manual of Medicinal Chemistry-III	Dr Sanjesh Rathi, Dr Maulik D Vaja, Ms Charmy D Pandya, Dr Ankit Chaudhary, Dr. Asim K Mishra	2020	978-81-945701-03 Read-on publishers Doonville Publishers Private Limited, New Delhi, India.
Pharmaceutical Organic Chemistry-I	Dr. Maulik D Vaja, Dr. Asim K Mishra	2020	978-81-945701-58 Read-on publishers Doonville Publishers Private Limited, New Delhi, India.
Laboratory Manual of Human Anatomy and Physiology-I	Dr Sanjeshkumar G. Rathi, Dr. Jinal L. Chaudhary, Ravi R. Thakar	2020	97815-43344-27-1 S. Vikas and Company, Medical Publisher, (Pee Vee Books)
Lab Manual of Pharmaceutical Quality Assurance - II	Dr. Maulik D Vaja, Bhoomi D. Patel, Dr. Ankit B. Chaudhary	2020	978-15-43344-26-4 S. Vikas and Company, Medical Publisher, (Pee Vee Books)
Laboratory Manual of Herbal Drug Technology	Dr Sanjeshkumar G. Rathi, Sneha P. Dave, Dr. Kaushik B. Kanada	2020	978-15-43344-30-1 S. Vikas and Company, Medical Publisher, (Pee Vee Books)
Laboratory Manual of Pharmaceutical Analysis	Dr Sanjeshkumar G. Rathi, Jigna T. Patel, Bhoomi D. Patel, Dr. Ankit B. Chaudhary	2020	978-15-43344-29-5 S. Vikas and Company, Medical Publisher, (Pee Vee Books)
Laboratory Manual of Pharmacognosy and Phytochemistry-II	Dr Sanjeshkumar G. Rathi, Sneha P. Dave, Dr. Kaushik B. Kanada	2020	978-15-43344-28-1 S. Vikas and Company, Medical Publisher, (Pee Vee Books)



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

Novel Drug Delivery System (NDDS)	Dr Sanjeshkumar G. Rathi, Dr. Maulik D. Vaja, Sohansinh S. Vaghela	2020	978-81-951179-4-9 Sathya Publisher, Tamil Nadu, India.
-----------------------------------	--	------	---

Table: Patents published by Faculty members

Sr No	Patent	Author	Date of Publication
1	Furosemide nanosuspension (Granted)	Dhaval J. Patel, Mr. Agrawal Milan	26.06.2019
2	Lozenge	Dhaval J. Patel, Mr. Nisarg R Bhatt	30.08.2018
3	Stable pharmaceutical composition comprising Entacopone	Dhaval J. Patel, Ms. Arti J. Parekh	10.04.2019

Table: Faculties membership with professional bodies

Sr. No	Name of Faculty	Membership with Professional Body
1	Dr. S. K. Shah	(IPA) GUJ/AHM/LM/0389, (GSPTA) LM-320, (APTI) GU/LM-083, (IPGA) LM-4100, (IPA) GUJ/AHM/LM/0389
2	Dr. Ankit B. Chaudhary	(APTI) GU-LM-204
3	Dr. Dhaval J. Patel	(APTI) GU/LM-315
4	Dr. Kaushik B. Kanada	(APTI) GU/LM/425, Society of Pharmacognosy – ISP/LM-GJ/060, (GSPTA) GPTA-LM00199
5	Dr. Sanjesh G. Rathi	(APTI)GU/LM-353
6	Dr. Navneet F. Chauhan	(APTI) ASSN-629.
7	Dr. Maulik D. Vaja	(APTI) GU/LM-597, (APP) APP/GJ/LM-090/19, (ACS) 30793671, (MRSC) 546880
9	Ms. Jigna T. Patel	(IPGA) LM3650,



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

		(APP) GJLM093/19
10	Ms. Sainika H. Kanzaria	IACS (International academy of cardiovascular science)
11	Ms. Sneha P. Dave	Society of Pharmacognosy – ISP/LM-GJ/S
12	Mr. Ravi R. Thakar	LASA (laboratory Animal Science Association)
13	Ms. Bhoomi D. Patel	(ACS) 32340709





SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

SPONSORED RESEARCH

Table: Summary of the research projects sanctioned in details project title, funding agency, amount and duration

Sr No	Year	Name of Faculty	Title	Funding Agency	Sanction Amount
1	2021	Dr. Maulik D. Vaja, Dr. Ankit B. Chaudhary	Preparation of sugar-free products at low price from Stevia plant	SSIP-LMCP	35000/-
2	2020	Dr. Maulik D. Vaja, Dr. Ankit B. Chaudhary	Synthesis of key intermediate of allopurinol using new route	SSIP-LMCP	100000/-
3	2020	Mr. Ravi R. Thakar	Polyherbal formulation for mastitis	SSIP-LMCP	40000/-
4	2019	Dr. Dhaval Patel	Design and Development of dry suspension based in-situ gel of Cefpodoxime Proxetil	SSIP-GTU	83000/-
5	2019	Dr. Kaushik B Kanada	Herbal Nasal Drops of <i>Clitoria ternatea</i> for Migraine	SSIP-GTU	85000/-

R_x



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

DEVELOPMENTAL ACTIVITIES

Provide details:

- Product Development
- Research laboratories
- Instructional materials
- Working models/charts/monographs etc.

PRODUCT DEVELOPMENT

Academic Year: 2018-19

Sr No.	Name of Student	Name of Guide	Title of Project	Type of Formulation	Status
1	Bhatt Poorvee Piyushbhai	Dr. Dhaval Patel	Formulation and evaluation of raft forming gallic acid chewable tablets for peptic ulcer	Chewable tablets	Completed
2	Parekh Aarti Jayprakash	Dr. Dhaval Patel	Development & evaluation of gastro retentive floating tablets for oral drug delivery of Entacapone	Floating tablets	Completed
3	Shah Jigar Pradipkumar	Mr. Sohansinh Vaghela	Formulation Development and Evaluation of Floating tablets of Apremilast	Floating tablets	Completed

Academic Year: 2019-20

Sr No.	Name of Student	Name of Guide	Title of Project	Type of Formulation	Status
1	Shah Urja, Sandip Rajput	Dr. Dhaval Patel	Design and Development of dry suspension based in-situ gel of cefpodoxime Proxetil	Dry Suspension	Ongoing
2	Suva Dipalee, Panseriya Vrunda, Dhanani Urvashee, Patel Sheetal	Dr. Kaushik B Kanada	Herbal Nasal Drops of <i>Clitoria ternatea</i> for Migraine	Nasal Drops	Ongoing
3	Patel Suresh Kuberbhai	Dr. Dhaval Patel	Formulation and Optimization of stable non-aqueous solution of Doxycycline Hyclate.	Injectable Solution	Completed
4	Sharma Pankaj Gorkhnath	Dr. S.K Shah, Ms.	Development and optimization of	Ophthalmic gel	Completed



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

		Dipal M. Patel,	Loteprednol Etabonate loaded in ophthalmic nanogel		
--	--	-----------------	--	--	--

Academic Year: 2020-21

Sr No.	Name of Student	Name of Guide	Title of Project	Type of Formulation	Status
1	Vishal Chauhan	Dr. Maulik D. Vaja, Dr. Ankit B. Chaudhary	Synthesis of key intermediate of allopurinol using new route	Drug intermediate	Ongoing
2	Sumit Patel, Vishal Chauhan	Mr. Ravi R. Thakar	Polyherbal formulation for mastitis	Ointment	Ongoing
3	Parth C. Ramani	Dr. Maulik D. Vaja, Dr. Ankit B. Chaudhary	Preparation of sugar-free products at low price from Stevia plant	Jaggery	Ongoing
4	Modi Meghna, Patel Riddhi	Mr. Sandip N. Badeliya	Design, Synthesis and Evaluation of Azodye Derivatives	Azodye Derivatives	Completed
5	Modi Priyal, Dave Zalak, Makwana Jainam	Dr. Navneet F. Chauhan	Synthesis of new derivatives of macrolide	Chemical synthesis	Completed
6	Patel Nirja, Patel Nidhiben, Patel Anjali, Patel Jatin, Nayi Kaushal	Dr. Kaushik B Kanada, Ms Sneha P Dave	Pharmacognostical and Phytochemical Evaluation of Plants used in Dental Analgesis	Topical Gel	Completed
7	Patel Bhumi, Mangukiya Khushbhu, Malani Mansi, Shiyaniya Priyanka, Makwana Varun	Dr. Kaushik B Kanada, Ms Sneha P Dave	Pharmacognostical and Phytochemical Evaluation of Plants used in Vitiligo	Topical Gel	Completed
8	Shah Urjaben Rakeshkumar	Dr. Kaushik B Kanada	Formulation and Evaluation of Chitosan based Berberine HCl and Extract of Achyranthus Aspera loaded Bioadhesive gel for Vaginal Infection	Topical Gel	Completed
9	Solanki Jignasaben Mukeshbhai	Dr. Dhaval J. Patel	Formulation and Evaluation of Spherical Crystal Agglomerates of Azilsartan Medoxomil	Tablet	Completed



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad
Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

Central instrumental facility

The institute has central instrumentation facility spread over a 80Sq mt meant for faculty and students of departments. This lab is equipped with HPLC (Waters), HPLC (Younglin), UV Spectrophotometer-1600, UV Spectrophotometer-1800, Polarimeter, Fluorimeter, Nephelometer, Turbidimeter, Colorimeters, Conductometers, pH meters, Karl-Fischer for water determination, Potentiometer, etc.

Animal House

The institute has facilities spread over an area of 80 sq mts. The facility abides by CPCSEA guideline and is regulated by IAEC no: 1161/ac/08/CPCSEA dated 27.03.2008.

Department level research lab

Every Department has specialized research lab for UG, PG and Pharm.D students equipped with sophisticated equipment like Dissolution apparatus, Sieve shaker, pH meter, Ball Mill, Homogenizer, Probe Ultrasonicator, Refrigerated Ultracentrifuge, Autoclave, Friability apparatus, Rota vapor, Electrophoresis, Auto-analyzer, RotaRod, Digital Analgesimeter, Cook's Pole climbing apparatus, BOD Incubator, Digital Photoactometer, Electroconvulsimeter, Orbital Shaker Incubator, Fermentor, Trinocular microscope, etc.

Instruction Materials

Every teacher needs supplies and resources in order to have a successful classroom. Instruction materials can really help to introduce new concepts to the students and assist them in attaining the course outcomes. The faculty have developed various instruction materials which includes digital notes and presentations. Several digital notes and presentations are uploaded by a faculty member on institute website (<http://www.sips.org.in/students-corner/>).

Course Plans – Course plan is an essential tool when designing any course. They add important structure to lesson planning and the delivery of instruction. They act as a guide for both the teacher and student; and can provide a valuable routine. Also, course plan works as a reference for colleagues, administrators, and accreditation agencies. It allows others to see what the teacher is doing in the course, and what is expected of the students.

Manuals – The students are provided with laboratory manuals to prepare themselves for the experiments in advance.



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

Working models/charts/monograms: - These will help the student conceptualize the learning objectives. The faculties have put in place array of charts and working models in the laboratory as well as standard operating procedures for the specific instrument for the facile comprehension of the concepts.





SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

DETAIL OF MODELS/CHARTS

Academic year 2018-19

Sr no	Type (Models/Charts)	Title	Name of Participants (course & semester)	Guided by
1.	Model	Laboratory scale fermentor-	<u>6th sem B.Pharm</u> Naimil. S. Kadia Riddhi Modh Trupal H. Desai Dhruvil K. Bhatt	Ms. Bhoomi.D Patel, Dr Sanjesh G.Rathi
2.	Model	Aer ophonix-	<u>8th sem B.Pharm</u> Chandni D.Patel	Dr. Kaushik B. Kanada
3.	Model	DNA Model	<u>2nd Year Pharm.D</u> Bhavsar Vedant	Ms. Charmy D. Pandya
4.	Chart	Urea Cycle	<u>1st Year Pharm. D.</u> Jahnvi Patel	Ms. Charmy D. Pandya
5.	Chart	Classification of Solid Dosage Form	<u>1st Year Pharm. D.</u> Shreya Jain	Ms. Dipal M. Patel
6.	Chart	Classification of dosage forms	<u>1st year Pharm. D.</u> Prakruti Patel	Ms. Dipal M. Patel

Academic Year 2019-20

Sr No	Type (Models/Charts)	Title	Name of Participants (course & semester)	Guided by
1.	Model	Lab Scale- Microtome	Yash Patel	Dr.Kaushik B. Kanada
2.	Model	Aerophonix	<u>7th sem B.Pharm</u> Dilip Garopandya Yadav Sahil	Dr.Kaushik B. Kanada
3.	Chart	Biosynthesis of Purine Nucleotides	<u>3rd Sem B. Pharm.</u> Harsha Gulabani	Ms. Bhoomi D. Patel
4.	Chart	Hexose Monophosphate Shunt	<u>3rd Sem B. Pharm.</u> Agrawal Smit	Ms. Charmy D. Pandya
5.	Chart	Glycolysis	<u>3rd Sem B. Pharm.</u> Chamar Narayan	Ms. Charmy D. Pandya
6.	Chart	Urea Cycle	<u>1st Year Pharm. D.</u> Saiful Khan	Ms. Charmy D. Pandya
7.	Chart	Antacids	<u>1st Year Pharm. D.</u> Shubham S. Savaliya	Ms. Jigna T. Patel
8.	Chart	Agonist and Antagonist	<u>6th Sem B. Pharm.</u> Malani Mansi, Patel Anjali	Mr. Ravi R. Thakar



SARASWATI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Managed by Shree Saraswati Education Sansthan –Gujarat)

Recognized by the Government of Gujarat & Affiliated to Gujarat Technological University, Ahmedabad

Approved by the All India Council of Technical Education (AICTE) & Pharmacy Council of India (PCI), New Delhi

9.	Chart	Physiological Salt Solution	<u>6th Sem B. Pharm.</u> Nidhi Patel, Nirja Patel	Mr. Ravi R. Thakar
10.	Chart	Schedules to the Rules	<u>4th Sem B. Pharm.</u> Patel Vedant	Mr. Sohansinh Vaghela
11.	Chart	History of Pharmaceutical Legislation	<u>4th Sem B. Pharm.</u> Patel Smit	Mr. Sohansinh Vaghela
12.	Model	The Human Memory	<u>2nd sem B.Pharm</u> Ms Harsh Gulbani Ms Bhatt Vidhi	Dr. Jinal Chaudhary

Academic Year 2020-21

Sr. No	Type (Models/Charts)	Title	Name of Participants (course & semester)	Guided by
1.	Chart	The Respiratory System	<u>1st Year Pharm. D.</u> Parmar Palak, Patel Nancy	Mr. Ravi R. Thakar
2.	Chart	Female Reproductive System	<u>1st Year Pharm. D.</u> Parmar Palak, Patel Nancy	Mr. Ravi R. Thakar
3.	Chart	Kidney: Excretory System	<u>1st Year Pharm. D.</u> Patel Zeel, Sonara Avani, Aseri Babita	Mr. Ravi R. Thakar
4.	Chart	Cardiovascular System	<u>1st Year Pharm. D.</u> Gopika Menon, Mausam Patel, Hritik Ranjan	Mr. Ravi R. Thakar
5.	Model	Human Eye	<u>1st Year Pharm. D.</u> Patel Dharani, Patel Shreya	Mr. Ravi R. Thakar
6.	Chart	Respiratory System	<u>1st year Pharm. D.</u> Parikh Vaidehi, Pandya Khushi, Patel Jinal	Mr. Ravi R. Thakar
7.	Chart	Correlation of Carbohydrate Metabolism	<u>1st year Pharm. D.</u> Aseri Babita	Dr. Maulik D. Vaja
8.	Chart	Glaucoma Therapeutics	<u>2nd year Pharm.D</u> Diya Parmar	Dr Madhuri Pandole
9.	Chart	POTC Medication	<u>2nd year Pharm.D</u> Om Dixit	Dr Madhuri Pandole