DEPARTMENT OF RASASHASTRA & BHAISHAJYAKALPANA

DEPARTMENT PROFILE:

Rasashastra & Bhaishajyakalpana Department takes pride in providing the enriching experience it offers to the students in terms of traditional and modern aspects of Ayurvedic pharmacology. The professors always walk that extra mile to take the students at newer heights carrying forward its work culture since its inception in 1999. From the humble beginning of old premises 25 year ago, to the specious Rasashala, labs, museums and now to a separate pharmacy building, quality control laboratory, students' labs and museum; the department is consistently getting upgraded with newest infrastructure. The department is about ayurvedic pharmacy and pharmacotherapeutics. Students learn to identify hundreds of drugs, get hands on experience of making ayurvedic medicines, test those for quality standards and of course by heart the mode of actions and therapeutic uses in practical-clinics. The rotinely used formulations like Arogyavardhini, Gandhak rasayan, Drakshasava, Saraswatarishta, Brahmi Ghrita and such over 100 products are made in the pharmacy. Some difficult to perform products like Rasapottali, Rasasindura, Yashad bhasma, Abhrak bhasma and Abhrak satva are also made and demonstrated.

Rasashastra Bhaishjyakalpan is 'the backbone' of Ayurvedic medical science, because it develops the thought process in the minds of students regarding activities of drugs and formulations for any disease. Rational selection of appropriate medicine using the chronotherapeutic approach and food drug interaction is the uniqueness (USP) of Ayurvedic treatment. The subject builds a foundation of good clinical practice of Ayurveda.

FACULTY PROFILE:

Name	Qualification	Designation
Dr. Wele Asmita	B.A.M.S., M.D.	Professor
Dr. Pawar Madhuri	B.A.M.S., M.D.	Asso. Professor
Dr. Gadgil Swati	B.A.M.S., M.D., Ph.D.	Asso. Professor
Dr. Patil Trupti	B.A.M.S., M.D., Ph.D.	Asst.Professor
Dr. Patil Sarika	B.A.M.S., M.D. PhD Scho	Asst. Professor



In the department of RSBKV you will meet enthusiastic teachers who have been committed to the overall development of the students. They strive hard to train the students in traditional and new research based aspects of the subject. Innovative approaches of teaching and hands on practical training is the key.

Prof. Asmita Wele is the professor of the department who has a vast experience in the core areas of *Rasaushdhies* and *Bheshaj kalpas*. Innovation and contemporary approach of *Rasabhaishajya* is the motto of her work. She is the recipient of the Extra Mural Research grant from the Ministry of AYUSH in 2004, the first in the College. With a group of her 25 M. D. and Ph. D. students nationally and internationally; she has over 50 publications and one book to her credit and has h index 6 and i-10 index 5. She was on deputation by the Government of India, as Ayurveda Chair, University of Debrecen, Hungary. She has also visited many countries on professional assignments, and she makes use of her connect for the development of students.

Vaidya Madhuri Dalvi -Pawar is the senior Associate professor of the department. A very passionate teacher having command on practical aspects of the subject; is her identity. She is known for her crystal clear and good delivery of topics. She is the favourite teacher of students across all professional years. She also shoulders the responsibility of students support

cell of the college. She has guided over a dozen M. D. and Ph. D. students. Acumen for product development and testing has led her to publish a good number of research papers in indexed journals and has h -index 5 and i-10 index 4.

Vaidya Swati Gadgil is the Associate professor of the department with a tight grip on *samhitas* and classical texts of *Rasabhaishjya*. A well balanced blend of traditional practical approach and modern analytical methods is her strength. Quick learning, methodical approach and fine delivery are her plus points. She is also a favourite teacher and an eminent guide. She is a popular Guru at Madhavachrya Gurukula for past decade. With her pioneering research on the concept of 'Potentiation' using medicated ghee *Brahmyadi*, she has thrown light on some unexplored areas of research in neuropsychology. She has a very good connect with Vaidyas, Pharmacies and research laboratories. Her h index is 2 and i-10 index is 1.

Vaidya Trupti Patil -Bhole is the Assistant Professor with the zeal to explore new boundaries in the science. Specially interested in *Rasaushdhies* and nanoscience for Bhasmas; her research on bioavailability of *Shwaskuthar Rasa* and *Suvarna bhasma* has added new mechanistic knowledge about the drugs. She also has an expertise in analytical testing of raw materials of herbal and metal -mineral types. She is a good orator with a pleasing personality and has delivered lectures in the College of Ayurveda associated with Middlesex university of UK, participated in meetings at House of Lords, and at present is a member of Ayur-Yoga project of University of Vienna. Her h-index and i-10 index are 1. Updated with newer developments in the field this enthusiastic teacher of the department has a good potential.

Vaidya Sarika Patil is the Assistant Professor of the department. She is the bright alumni of this institute She has worked in Dinanath Mangeshkar Hospital, Pune before joining recently to the department. She is currently pursuing her Ph.D in the area of drug discovery for the *rasayan* (immunomodulatory) and *vayasthapana* (Antiaging) activities.

MUSEUM:



- A well maintained museum is structured in a smart way to give a student, perfect knowledge of the drug materials that are used in Ayurveda. Specimens of various metals and minerals, their subtypes, are grouped appropriately and sequentially displayed in museum. U.G & P.G students get to see samples of rare herbal and mineral drugs. This display of raw drugs helps to identify and understand the ideal sample of mineral and herbal drugs. A complete section of hundreds of ready to use formulations is a distinguished feature of the museum.
- It also consists of fiberglass models of traditionally used instruments and assemblies for processing mercury, sulfur, copper and other metal minerals to convert them into drugs.
- The specimens of Abhrak [Mica] are collected from corners of India and displayed accordingly. Unique collection of precious, semi-precious stones and 'Parad Shivling' is also available. Various rare samples collected and gifted by our past students increase the value of the museum. This shows the connect of the alumni students with the department and highlight the integrity of the teaching -learning.
- Informative pictorial charts which simplify the complex phenomena are displayed in the museum. One reading of the charts brushes up the concepts of Metal-Mineral and Herbal ayurvedic dosage forms.



UG & PG PRACTICAL LABORATORY- PG RESEARCH LABORATORY

STRENGTH OF THE DEPARTMENT:

- Well qualified, enthusiastic, and experience rich teaching faculty always working in harmony.
- A good number of Post Graduate alumni shining in bright colors are attached to the department to mentor new students. All are well placed entrepreneurs, practitioners, company heads, academicians each one perusing a good career path.
- The department has conducted over 50 research projects focused on drug development including two major funded and some minor research projects.
- Collaboration with other sister institutes viz. Pharmacology department of Medical college, Poona College of Pharmacy, College of Engineering,

many industries like Ayurveda Rasayani, Pharmaza herbals, Shri Dhootpapeshwar Ltd., Punarvasu Aushdhalaya and national laboratories like RIFTR, NCL, C-MET, CCIH and Physics department of SPPU with interdisciplinary approach.

UNIQUE FEATURES:

- Problem based teaching and learning methods since it is a very practical subject.
- Encouraging work culture in the department to explore innovative research ideas in ayurvedic drug development those deal with nanomedicine, bioavailability of bhasmas, drug potentiation, food supplements and nutraceuticals based on Ayurvedic theories of nutrition and proof of concept studies.
- The modern teaching pharmacy attached with quality control laboratory that manufactures over 100 quality medicines for the institutional Ayurveda hospital.
- Well-equipped analytical laboratory functional for Post graduate research purpose.
- Museum of Minerals and Metals used in Ayurvedic medicines, exhibits many varieties of one drug including rare specimens like ores of precious stones.
- Stimulus to design new products using contemporary dosage forms like gels, incense sticks, shampoos, sanitizers, cosmetics and also nutri-bars like chocolate flavored Shatavari bar.

ACHIEVEMENTS:

- Prof. Dr. Asmita Wele has been honored as 'the Professor' of Department of Pharmacology and Pharmacotherapeutics at University of Debrecen, Hungary in December 2019. Prof. Dr. Asmita Wele received Pa. Ya. Khadiwale 'Samshodhan Puraskar' in the year 2012. She has been reviewer of many indexed journals. She has been nominated on various academic bodies like BoS, Research and Ethics Committees, Academic Councils of other universities. She is member of many professional organizations like IAA, NIMA, IASTAM, European CAM Association. She has been nominated as associate editor for the international journal of Natural Health Products Research Society, Canada in year 2021.
- Dr Madhuri Pawar is an active member of Sharada Shakti, an organization working for women empowerment. She has been a reviewer of indexed scientific journals.
- Dr. Swati Gadgil has been a resource person of the academic activity of Vaidya MVK Pratisthan's Charak Gurukul for past several years. She is also member of ethics committee of regional center of CCRAS Pune. She is a reviewer of some indexed journals for the subject *Rasashastra Bhaishajyakalpanavigyan*.

- Dr. Trupti Patil Bhole is member of International academy of Ayurveda and also a reviewer of some indexed journals.
- Renowned persons of national and international repute, e. g. Padmavibhushan Prof. M. S. Valiathan, Padmashri P. R. Krishnakumar of Arya Vaidya Shala, Padmashri Darshan Shankar of FRLHT, Padmashri Balendu Prakash, and many more have visited and praised the department for its teamwork and futuristic approach.
- Three students of the department have received Gold medal of Bharati Vidyapeeth (Deemed to be University)

Vaidya Nashir Parmar year 2014
Vaidya Aishwarya Koyande year 2020
Vaidya Mrinmayee Hedaoo year 2021

• Faculty member Vaidya Swati Gadgil received first prize for her Ph. D. thesis at National level given away by Ayurveda Teacher's association.

ILLUSTRIOUS ALUMNI OF THE DEPARTMENT

- Dr. Omkar Kulkarni, Head,Formulation Development at Charak Pharma, Pune, Maharashtra
- Dr. Gaurav Gupte, Director Advanced Integrated Medicine Solutions and Research Head, Urban Ayurveda- Manoved
- Dr. Ashutosh Pande, Asstt. professor at IAMS, Lucknow, UP
- Dr. Poonam Gupte, Senior Research asstt. At IRSHA, Pune
- Dr. Nasir Parmar Gold Medalist of the department is asstt. Professor at EVA college of Ayurveda, Gujarat
- Dr. Ekta Tomar is associate professor at D. Y. Patil College, New Mumbai.
- Dr. Rashmi Kulkarni is practicing as a Vaidya in Dubai
- Dr. Prashant Nimbalkar, Successful *rasavaidya* and owner of 5 bed Ayurvedic hospital in Akluj, rural area of western Maharashtra. (Link Video)

EVENTS ORGANISED:

- Yearly organization of 'Ayurvedic Diet Recipe' competition since 2011-till 2019.
- Organization of RoTP [CME] in Rasashastra Bhaishajya kalpana in 2011
- Making and distribution of Dhoopan kits to patients, 2016-19
- Making and distribution of COVID-19 prevention kit during pandemic

RESEARCH ACTIVITIES:

1) Grant in Aid Research Projects:

Completed: Major 02, Minor 03

Ongoing: Minor 03

- 2) Research Projects for Ph.D.: Completed 02
- 3) Research Projects for Ph.D.: Ongoing- 04

- 4) Research Projects for M.D.: Completed 43
- 5) Research Projects for M.D.: Ongoing 06

6) Books:

- Wele A. Principles of Research Methods for Ayurveda. First. Varanasi, UP: Chaukhambha Orientalia; 2019.
- Kulkarni O., Wele A., Ex-vivo antimicrobial activity of Ayurvedic formulations, LAP Lambart Academic publishing, Germany; 2010.
- Khadatar N. Pawar M., Standardization of Pathadyasava used in Bronchial Asthma', ed., Kylie Wilson Scholars' Press, Sarrbruken, Germany; 2012

7) Publications:

Dr. Asmita Wele: 45 Dr. Madhuri Pawar: 19 Dr. Swati Gadgil: 10 Dr. Trupti Patil: 13

Ex Faculty members of the department:

- 1. Dr. Nandini More served the department for over 20 years. With her simple approach of teaching and demonstrations in lab and pharmacy, she connected with students. She was also the administrator for the D. Pharmacy Ayurveda course from 2002 to 2007.
- 2. Dr. Atul Gaikwad is a product of BVDU. After receiving his M.D. in 2009, he joined the department as assistant professor. His expertise to make tedious rasa-formulations was an asset to the department for UG teaching. Mild demeanor and practical skills were his strong points.

Both the faculty members are in connect with the department and students as and when needed.

Alumni of the department

1. Omkar Kulkarni (2005-08) [M. D. Ayurveda]



Product Development Manager, Charak Pharmaceuticals

We were fortunate to gain the knowledge of life, Ayurveda and ayurvedic pharmaceutics along with pharmacology in the department of Rasashastra and Bhaishajyakalpana, BVDUCOA, by all these three ways. It was a wonderful experience to be a part of the department for more than 4 years. I believe whatever I have achieved so far in my life is majorly the fallouts of the knowledge gained in the department. Everyone, from Dr. Wele, Dr. Pawar, Dr. More, Vd. Gadgil; to even the lab assistants play a crucial role in molding you from a crude BAMS graduate to a well learned person as a whole.

2. Dr. Gaurav Gupte (2007-10)



The crucial 3 years of my MD AYURVED were like turning point of my life. We all were exposed to huge field of Rasashastra during the same. Values like Open mindedness and Adaptability adhering to the principles of ayurved were embedded in us which helped me to find myself. Sincere gratitude for all my teachers and support team of RSBKV DEPT.

Vaiidya. Gaurav J Gupte MD AYURVED

Director -Dhanwanthari health and wellness solutions pvt ltd

Director - Aadvance Integrated Medicine solutions llp

Director - Wardwizard mobility solutions Ltd.

Research head - Urban Ayurved, manoved.

3. Dr. Nashir Parmar (2011-14)



"RSBK dept of Bharati Vidyapeeth University is one of the best places to do Post graduation in Rasashastra and Bhaishajya Kalpana Vigyana. This department is well equipped with instruments and infrastructure, which was helpful to us during our academic years. It comprises with many ultra modern facilities for preparation of medicine and research. Department holds the unique position in Ayurveda teaching institutes due to its practical trainings, research output and teachings which is possible only because of consistent efforts of the faculty of this department.."

Dr. Nashir N. Parmar [

Assistant Professor Eva College of Ayurved Zanzmer Road, Supedi Tal. Dhoraji, Dist Rajkot 360440(Gujarath

3. Poonam Gupte (2012-15)



"It gives me immense pleasure to talk about my teachers at Rasashastra and Bhaishajyakalpana of BVDUCOA. I owe my entire research approach and mindset to them. They put in all their efforts to inculcate values of work ethics, discipline, and research orientation within us. We had a spacious department which was designed to suit out post graduate curricular activities. There were specific sections; viz quality control lab with well equipped instruments for analysis of physicochemical parameters of raw herbs and processed formulations, Two laboratories for formulation processing and ample provision of raw materials. A separate section for incineration of metals and metalloids was provided. The teaching techniques were very engaging and thought provoking. Power point presentations were a helpful tool as many topics were made simpler and interesting. Field trips were arranged to different pharmacies. Besides, a one month- hands on training in a GMP accredited pharmacy provided us a platform to visualize and experience current practices. Conducting demonstrations of drug processing for undergraduates helped us acquire teaching skills as a

futuristic career approach.

Freedom of expression was a distinct feature given by our teachers which helped us grow. I am totally indebted to my wonderful teachers and proud to be a part of RSBKV."

Dr. Poonam Gupte-Deshpande

Senior Research Assistant at Obesity & Diabetes Research Lab, IRSHA, BharatiVidyapeeth Deemed University BAMS, MD [Rasashastra and Bhaishajyakalpana]

4. Ashutosh Pande (2012-15)



I did PhD from BHU after completing MD from BVDU, Pune. Now a days, I am working as an Assistant Professor at the Institute of Ayush Medical Sciences, Lucknow, Uttar Pradesh. I shall always be indebted to passionate teachers of this department for playing an important role in shaping my career and life. I understood the subject and Ayurveda on the basis of classical as well as contemporary parameters due to my learnings at department of RSBK, BVDU, Pune.

5. <u>Dr. Ekta Chauhan (Tomar) (2013-16)</u>



Dr. Ekta Chauhan Associate professor, School of Ayurveda D. Y. Patil University, Vashi, New Bombay

I completed my postgraduation in 2016. I'm currently working as associate professor at D.Y. university school of Ayurveda.

I don't know if it is possible to convey in words the sense of gratitude I feel towards my RSBKV Dept. But I want to say from the depth of my heart how interesting and fulfilling a course it was, and how dynamic my department and the teachers made it.

Now as I work as a teacher, I am so pleased and grateful that I had the experience of wonderful teaching and the intriguing course to help me make my own teaching better. Thank you.

6. Dr Rashmi Kulkarni (2014-17)



"I reside in Dubai from past 4 and half years. I did my MD from BVDU college of Ayurveda Pune(batch 2014-2017). Currently I work as Ayurvedic Doctor (part time) at Ayurcure Ayurvedic Medical Centre, Khalid Bin Al Waleed Road, Burdubai UAE. I am also attached as Assistant Teacher (part time) to the Ananda Ayurveda Acadamy Illinois, Willowbrook within Soder world wellness centre, USA for online classes.

I am grateful to all my teachers for inculcating a view towards Ayurveda and modern medicine which collaboratively has helped me a lot."

PHOTO GALLERY:

AYURVEDIC PHARMACY UNIT, RSBK DEPT, BVDUCOA



Figure 1 Ayurveda Pharmacy



Figure 2 The quality control lab



Figure 3: Beginning of new production year of the pharmacy on Dashahara 2021



Figure 4 Hon'ble principal Dr. A. B. Patil sir, faculty members, staff and students 2021



Figure 5: Vaidya Atul Nimkar, Rashtriya Guru for Making of Rasasidur- an important medicine 2021



Figure 6 Making of Chavanprash 2021



Figure 7: PG students who received prizes in different competitions at national level 2021