



**VIVEKANAND EDUCATION SOCIETY'S
COLLEGE OF PHARMACY**

Hashu Advani Memorial Complex, Behind Collector Colony, Chembur (E), Mumbai – 400 074
Sindhi Linguistic Minority, Recognized by DTE,
Approved by Pharmacy Council of India & Govt. of Maharashtra, Affiliated to University of Mumbai.
NAAC accredited with A+ Grade (3.46 CGPA)

7.2.1

Best Practice 2:

Fostering a dynamic ecosystem for research and innovation

1. Title of the Practice

Fostering a dynamic ecosystem for research and innovation

2. Objectives of the Practice

- To encourage faculty and students to identify and solve existing pharmaceutical challenges through research and innovation.
- To promote interdisciplinary collaboration and knowledge exchange by breaking down departmental barriers.
- To provide resources, state-of-the-art labs, and mentorship for experimentation and prototyping.
- To offer platforms for showcasing and celebrating innovative research.
- To collaborate with pharmaceutical industry partners and academic institutions to enhance research capabilities.
- To support continuous learning through professional development programs to keep faculty and students updated on advancements.
- To establish systems to reward creativity and innovation in pharmaceutical research.
- To contribute to societal progress and economic growth through innovative research solutions aligned with broader objectives.

3. The Content

Vivekanand Education Society's College of Pharmacy (VESCOP) was established in 2007 with the goal to be at the forefront of research, idea creation and innovations in healthcare. Over the years, this goal has been carried forward with an intent to "create an atmosphere where research and innovation flourish and is translated to products for societal benefits". The vision, mission and program outcomes of the institute clearly imply the institute's distinctive approach to provide a framework for the conduct of basic and applied research and promote entrepreneurial culture through innovation. The institute strives hard to set up the culture of entrepreneurship by encouraging students to think 'out of the box'. Research projects are underway in significant areas of synthetic medicinal chemistry, molecular docking, formulation development, nano-formulation, basic and clinical pharmacology, translational medicine, isolation of phytopharmaceuticals and application of principles of analytical chemistry in the development of drug substances and products.

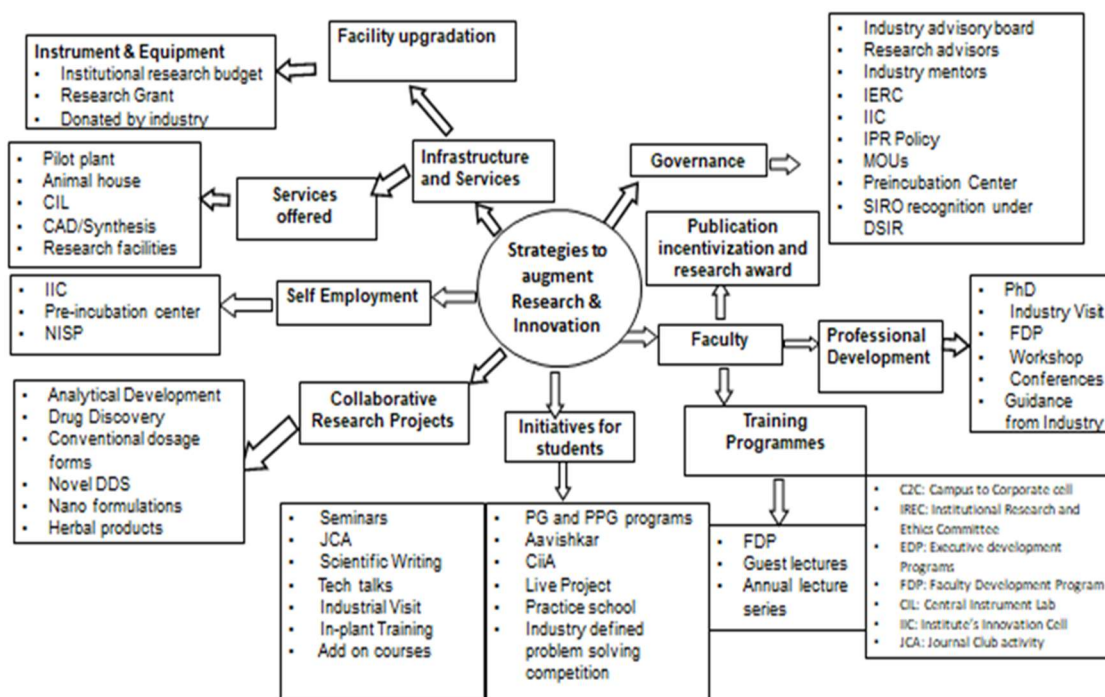
VES College of Pharmacy has constituted the following committees to foster the culture of Research and Innovation:

- a. Research & Development Cell
- b. Institute Innovation Council

Through these committees, the institute has taken several initiatives like **creating awareness of research and innovation through seminars/workshops/webinars**, encouraging students and faculties to work on innovative solutions to cater to industry-relevant problems in research and encouraging students and faculties to participate in internal and external **competitions like Aavishkar, Anveshan and CiiA** to showcase their innovation. In addition, VES COP has set up a pre-incubation centre to encourage and promote budding entrepreneurs from the institute.

4. The Practice

VES COP is a centre of excellence in research/Hub for multidisciplinary research services/Conducive environment for inducing temperament for innovation. The various systems and initiatives taken by the institute are depicted below in **Figure 7.1 a**



5. Evidence of success

a. Awards & Accolades:

- **NIRF Ranking:** The Institute has participated in NIRF ranking in the year 2023-24.
- **Avishkar Research Convention:** The Institute has been conferred with the **Overall Runner Championship (Second Rank)** at the **"18th Inter-Collegiate/Institute/Department Avishkar Research Convention 2023-2024, University of Mumbai"**. VESCOP has been participating in this event since 2014 and has won 9 Gold medals and 1 silver medal in categories like UG, PG, PhD. and Teachers pursuing PhD. Three of the projects were selected for presentation at the **National research convention – Anveshan**. The success at Avishkar is a reflection of the inventive thinking and research aptitude of the faculty and students at VESCOP.
- **Institute Innovation Cell (IIC) Ranking:** VESCOP IIC has received 3.5-star rating in the year 2022-23.
- **NIRF Innovation:** VESCOP has participated in NIRF Innovation in the year 2023.
- **Rx TechFest:** The Institute has been consistently bagging awards every year at Rx TechFest for oral & poster presentations, an intercollegiate event, organised by the Indian Pharmaceutical Association, Maharashtra State Branch.

b. Recognitions:

The staff and students of VESCOP work enthusiastically and meticulously to accomplish their research goals and that is reflected in the recognition received by the college as summarized below:

- **SIRO status:** The Institute is recognized as Scientific and Industrial Research Organization (SIRO) by the Department of Science & Industrial Research (DSIR, Government of India).
- **MOUs with Industry:** To strengthen Industry-Institute linkages, the Institute has signed MOUs with companies like IQGenix, Xavier, IPA, brandtouch analytics Aquadry, Elisynth, Cleanchem, Chemicia, etc.
- **Joint collaborative research center:** The institute has been a joint collaborative research center with Procter & Gamble Ltd. since 2014.
- **Research Grants:** Since inception college has received a total grant of Rs.213.3 lacs from government and non-government agencies.
- **International collaborations:** The Institute has to its credit five international collaborations with the University of Pittsburgh, Pennsylvania, University of

Lancashire, UK & University of Strathclyde, UK, Isha Therapeutics, USA and Teledyne Hanson Research, USA for projects on nanotechnology.

- **Research advisors:** To augment our research activities and take them to the next level, VESCOP appointed the following research advisors - Dr Mangal Nagarsenkar, Former Prof. Bombay College of Pharmacy, Dr. Evans Coutinho, Dean Research, St. John Technical, and Educational Campus. The institute also has a pool of **Industry mentors** to give suggestions and recommendations on curriculum enhancement and review the research progress of M. Pharm students.
- The Institute has been granted a **Permanent Affiliation for the B. Pharm. Course** by the University of Mumbai. The Institute has received recognition from **UGC under 2f/12b**.
- **Publications:** In the year 2023-24, 27 papers have been published by the faculty members in various National & International Journals with a good impact factor
- **Patents:** 5 patents have been granted to date by the college faculty.
- Many PG students are working in **R & D departments** of companies like MAPLab, Procter & Gamble Health Ltd., BASF India Limited, Ipca Laboratories Limited, Fusion Scientific, Rubicon Research, Encube, Micro labs, Beiersdorf India Service Pvt., Sulphur Mills Ltd, Meliorate Health Pvt Ltd., etc.

6. Problem encountered and Resources required

Problems Encountered:

A tight academic schedule makes it challenging to manage time for research activities. Certain advanced instruments are unavailable at the institute and must be outsourced, while facilities for clinical studies are also lacking.

Resources Required:

Collaboration for high-end research with industry, based on current industrial requirements and trends, expertise and training to faculty, funding from industry, support for prototypes, product development, and market testing, access to advanced tools, proprietary technologies, and specialized equipment unavailable in academic labs.

7. Notes: Few prominent evidences of success for achievements in research and innovation
Double Trophy Triumph: Back-to-Back Max Innovation Winners at CiiA- Creative ideas & Innovations

Vivekanand Education Society College of Pharmacy received coveted CiiA-3 (Creative Ideas & Innovations in Actions (CiiA 3.0)) innovations trophy for carrying out innovations and research by students and faculties. CiiA 3.0 is a groundbreaking initiative by the Baldev Sharma Marshalls Foundation and Rotary Club of Bombay, Worli. This honor is a testament to our unwavering commitment to "Developing an Ecosystem for Students to Undertake Research & Innovation," a vision we've tirelessly pursued. The CiiA platform showcases the brilliance of young researchers and also connects them with key players in the innovation landscape and potential investors, propelling their ideas from conception to reality. This triumph marks yet another milestone in our journey of innovation and sets the stage for even greater accomplishments.





Continuing our legacy of excellence, VESCOP soared to new heights in the academic year 2023-24. Out of a staggering 695 submissions to the Confederation of Indian Industry Awards (CIIA), VESCOP's ingenuity shone brightly, with six exceptional projects earning a coveted

spot in the exhibition lineup. Led by visionary innovators Dr. Rajashree Hirlekar and Dr. Neha Chhabra, under the guidance of Dr. Anita Ayre, VESCOP presented groundbreaking research in the dynamic fields of Pharmacy and Biotechnology. This extraordinary achievement culminated in the prestigious recognition of the Innovations Trophy underscoring VESCOP's stature as a paragon of scientific excellence and pioneering creativity in the academic landscape.

Aavishkar Intercollegiate Research Convention

College has received an Overall Championship (First Rank)' in the Medicine & Pharmacy category, Agricultural and Animal Husbandry Category, and for Pharmacy Colleges / Institutes in the 17th Aavishkar: Inter-Collegiate Research Convention by Dept. of Students' Development, University of Mumbai.





Principal, Vescop, Dr. Supriya Shidhaye guided a Research Project titled Ferromla syrup - a go-easy remedy to combat anemia presented by her student Ms. Dalvi Kasturi in Medicine and Pharmacy Category and UG Level at 18th Aavishkar: InterCollegiate / Institute / Department Research Convention (Zonal Round) organized by the University of Mumbai at Dr. Bhanuben Nanavati College of Pharmacy, Vile Parle, Mumbai on December 9, 2023 for Pharmacy Colleges/Institutes zone. The project secured 3rd Prize in the 18th Aavishkar: Inter-Collegiate Level (University Level) Competition, under Medicine and Pharmacy Category

Guide: Dr. Supriya Shidhaye

Team Members: Kasturi Dalvi, Harsh Parihar, Divya Kotian.



Dr. Neha Chhabra guided a Research Project titled **ऑचल: A Reusable, Eco-friendly Sleeping Bag for Battling Neonatal Hypothermia in rural areas** which was presented by her students Ms. Sneha Kumar, Ms. Rutuja Jagatkar, Ms. Ginni Kewalramani and Mr. Gaurav Pandey and won Gold at the 18th Aavishkar: Inter-Collegiate / Institute / Department Research Convention (Final Round) in Humanities, Languages and Fine Arts Category and UG level at DLLE Audio Visual Hall, Vidhyapeeth Vidyarthi Bhavan, Churchgate, on December 22, 2023.



Dr. Neha Chhabra guided a Research Project titled **ऑचल: A Reusable, Eco-friendly Sleeping Bag for Battling Neonatal Hypothermia in rural areas** which was presented by her students Ms. Sneha Kumar, Ms. Rutuja Jagatkar, Ms. Ginni Kewalramani and Mr. Gaurav Pandey and won Silver at the Anveshan Research Convention 2023-24 (West Zone): Inter-Collegiate / Institute / Department Research Convention (Interuniversity State Round) in Social Sciences Category at Kolhapur, on December 29, 2023.



Dr. Neha Chhabra guided a Research Project titled **ऑचल: A Reusable, Eco-friendly Sleeping Bag for Battling Neonatal Hypothermia in rural areas** which was presented by her students Ms.

Sneha Kumar, Ms. Rutuja Jagatkar, Ms. Ginni Kewalramani and Mr. Gaurav Pandey and won Gold at the 18th Aavishkar: Inter-Collegiate / Institute / Department Research Convention (Interuniversity State Round) in Humanities, Languages and Fine Arts Category and UG level at DLLE Audio Visual Hall, Vidhyapeeth Vidyarthi Bhavan, Churchgate, on January 12-15, 2024.



Dr. Neha Chhabra guided a Research Project titled **ऑंचल: A Reusable, Eco-friendly Sleeping Bag for Battling Neonatal Hypothermia in rural areas** which was presented by her students Ms. Sneha Kumar, Ms. Rutuja Jagatkar, Ms. Ginni Kewalramani and Mr. Gaurav Pandey and won:

- 🏆 First Rank: Overall champion in all categories - Anveshan, International Level
- 🏆 First Rank: Social Sciences, Humanities, Commerce, and Law - Anveshan, International Level
- 🥈 Second Rank: Social Sciences, Humanities, Commerce, and Law - West Zone, India-Anveshan