

Institutional Distinctiveness

Promotion of Research & Innovation culture – A Holistic approach

Vivekanand Education Society's College of Pharmacy (VESCOP) was established in 2007 with the goal to be at the forefront of research, novel idea creation and innovations to healthcare for the betterment of society. Over the years, this goal has been carried forward by the faculties and students who are working with an intent to "create an atmosphere where research & innovation flourish and is translated to products, processes and services 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 both basic and applied research, as well as, promote entrepreneurial culture through innovation. The objective in alignment with vision and mission is to sensitise stakeholders for research-intensive activities, to establish a conducive environment for providing support to undertake exploratory activities, to strengthen attempts to translate research outputs into knowledge and technology and to promote research having scientific and societal relevance. The institute strives hard to set up the culture of entrepreneurship by encouraging students to think 'out of the box'. The goal of the institute, in alignment with NEP 2020 is to gain autonomy and to become a research-intensive institution in the next 10 years.

Research projects are underway in significant areas of synthetic medicinal chemistry, molecular docking, formulation development, reverse engineering, nano-formulation, basic and clinical pharmacology, translational medicine, isolation of phytopharmaceuticals and application of principles of analytical chemistry in the design and development of drug substances and products.

VES College of Pharmacy is aiming at continuously achieving excellence in the arena of research and innovation. The Institute has constituted an Institute Innovation Cell (IIC) in the year 2018 as per the directives of MHRD's Innovation Council. Through the IIC platform, the institute has taken several initiatives like **creating awareness on innovation & IPR through seminars/workshops/webinars** and conducting **competitions like e-ideologue, Ignition, TechShow** to encourage original ideas. In addition, VESCOP has set up a pre-incubation centre to encourage and promote budding entrepreneurs from the institute.

What VESCOP does to foster the culture of research & innovation?

To sustain the momentum and to increase the number of research-related activities, the institute has taken several initiatives and developed policies to ensure and enhance quality research in the frontier areas of pharmacy and interdisciplinary areas as depicted in **Figure 7.3.a** below.



Figure 7.3.a: VESCOP initiatives to foster research & innovation culture

Additionally, to inculcate the research aptitude in undergraduate (UG) and postgraduate (PG) students right from the entry-level, the Institute Ethics & research Committee (IERC) committee has introduced a roadmap for UG & PG students as depicted in **Table 7.3.a** below:

Table 7.3.a: Research Roadmap for UG & PG students

Year of study	Activity	Outcome
F. Y. B. Pharm	Survey-based activity	To communicate with survey participants in a professional manner and be vigilant of the role of the pharmacist in society
S. Y. B. Pharm	Poster club activity	To promote awareness of research skills and develop the ability for application of knowledge to an environmental and a sustainability challenge
T. Y. B. Pharm	Journal club activity	To develop the ability for understanding, analyzing & interpreting the scientific data with proper justification
S. Y. M. Pharm		
Final Year B. Pharm	Live Project activity	To develop the ability for application of knowledge to a research problem or unmet need
F. Y. M. Pharm	Review article – Manuscript preparation, communication & publication	To analyse the available literature & develop and impart effective scientific writing skills

Key Performance Indicators for Research & Innovation activities:

a. Awards & Accolades:

- **AICTE-CII survey:** The Institute has been awarded as Best Industry Linked Pharmacy Institute in 2018 in the AICTE-CII survey and has received a platinum ranking in 2019. VESCOP was one of the top 7 Pharmacy Institutes at the National level to receive the platinum ranking in 2019. For past 5 cycles, VESCOP has retained the highest platinum ranking.
- **NIRF Ranking:** The Institute has been ranked consistently in the band of 51-75 for Pharmacy Institution by NIRF since the 9th year of establishment of VESCOP. The Institute has been ranked 63rd and 67th among Pharmacy institutes across the nation at NIRF 2020 and 2019 respectively.
- **Avishkar Research Convention:** The Institute has been conferred with the **Overall Championship** at the "15th Inter-Collegiate/Institute/Department Avishkar

Research Convention 2021, University of Mumbai” in the Medicine & Pharmacy category (amongst 45 participating colleges) and Pure Sciences category (amongst 78 participating colleges). In Avishkar 2019 – Inter-university Research Convention, the Institute had won the overall runner-up championship. VESCOP has been participating in this event since 2014 and has won 6 Gold medals and 1 silver medal in categories like M. Pharm, PhD. and Teachers pursuing PhD. One of the projects is 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. The students who participated in these research conventions in turn became the brand ambassador for promoting research culture at VES College of Pharmacy.

- **Institute Innovation Cell (IIC) Ranking:** VESCOP IIC has received a 4-star rating in the year 20-21 & 2018-19. We are amongst the top 5 Pharmacy Institutes in Maharashtra state to receive a 4-star rating in the year 2021..
- **ARIIA:** VES College of Pharmacy under the aegis of VES has participated in Atal Ranking & Innovation framework and as per the ranking of 2020, VES is amongst the top 100 colleges in the nation.
- **Our Principal, Dr Supriya Shidhaye** was awarded with ‘Research Project of the Year’ honored by the 54th Indian Pharmacy Congress Trust in the year 2012-13 at National level.
- **Best Educational Quality Enhancement Team Award:** National Centre of Quality Management awarded the Institute with top ranks in two consecutive years, 2018 and 2019 in the contest of “Best Educational Quality Enhancement Team”.
- **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 the following companies Procter & Gamble, Aqua Dry Pharma, Verodex Healthcare, B & B Pharma, Adroid Biomed, Cerelia Nutritech, Boolani Engineering Corporation, Super Vet Clinics and Diagnostics.
- **Joint collaborative research centre:** The Institute has joint collaborative research centre with Merck Specialties Pvt. Ltd. and then with Procter & Gamble Ltd. since 2014.
- **Research Grants:** To date the Institute has received grants of about Rupees Two Crore Seven Lakhs Five Thousand from Government agencies and industries for various research projects.
- **International collaborations:** The Institute has to its credit three international collaborations with the University of Pittsburgh, Pennsylvania, University of Lancashire, UK & University of Strathclyde, UK 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 Prashant Kharkar, Professor, ICT, Acquapharm Innovation Centre, Pune and Dr Mangal Nagarsenkar, Former Prof. Bombay College of Pharmacy, Dr Anilkumar Gandhi, CEO, Southeast Asia, DFE. The institute also has an Industrial Advisory Board to give suggestions and recommendations on effective curriculum delivery, how to create awareness about innovation & act as a mentor from time to time.
- **NBA Accreditation:** The Institute has received NBA Accreditation for the B. Pharm. up to 2022 as per Outcome Based Education - OBE System, Washington Accord.
- The Institute has been granted a **Permanent Affiliation for the B. Pharm. Course** by the University of Mumbai. The Institute has got recognition from **UGC under 2f/12b**.
- **Publications:** In last five years, more than 95+ papers have been published by the faculty members in various National & International Journals with a good impact factor
- **Patents:** 6 patents have been filed by the college to date. The patent on Curcumin Microemulgel has been recently granted to Dr Rajashree Hirlekar
- Many PG students are working in **R & D departments** of companies like Rubicon Research, Encube, Cipla, Glenmark, Sun Pharma, Cadila Pharmaceuticals etc.

The Key Performance Indicators for research & innovation milestones are listed in **Figure 7.3.b** below:

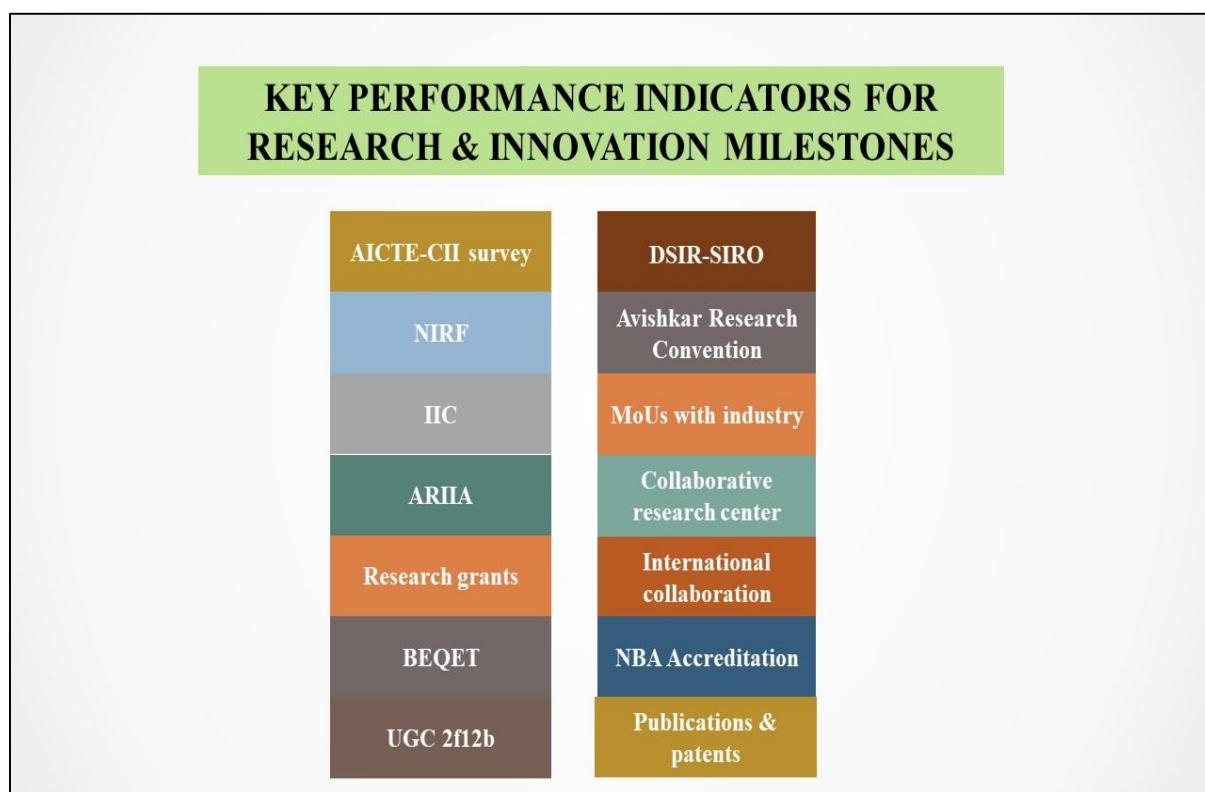


Figure 7.3.b: Key Performance Indicators for Research & Innovation Milestones

VES College of Pharmacy is committed to achieving excellence in research through innovations and inculcating the spirit in our students to meet future challenges in healthcare as evident from the research & innovation milestones depicted in **Figure 7.3.c**.

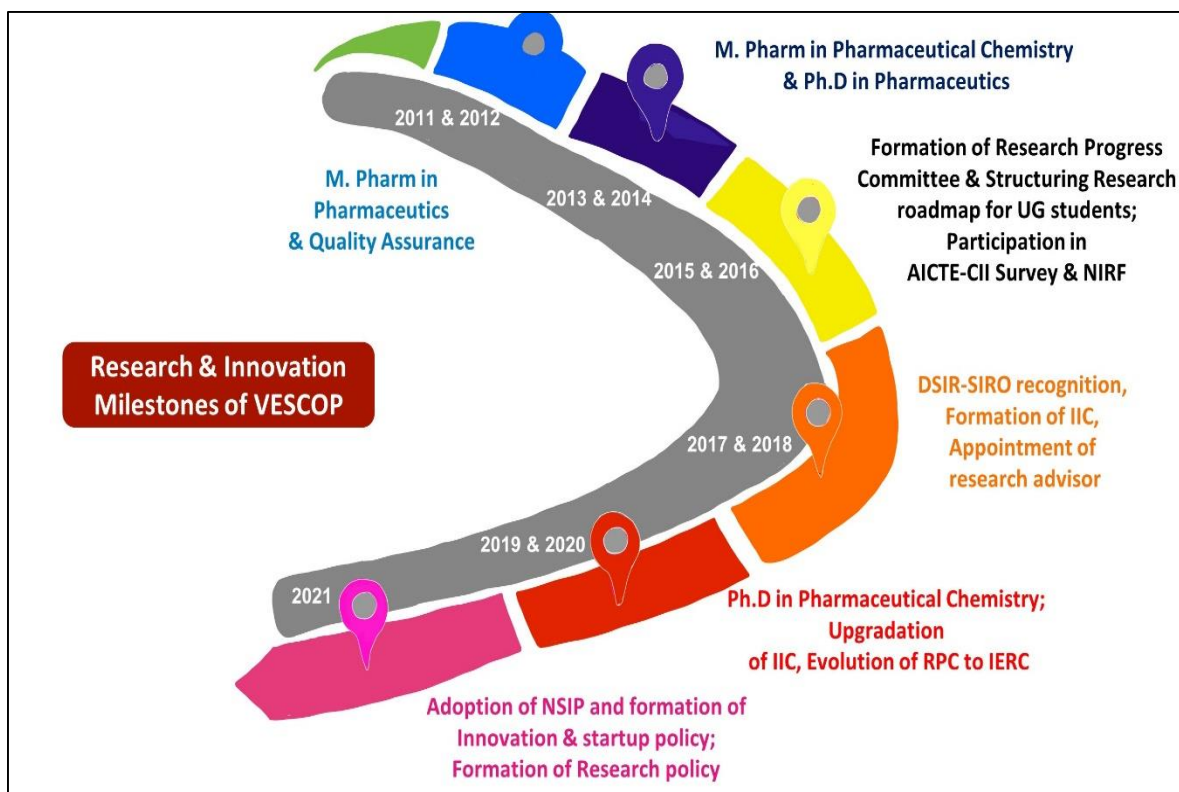


Figure 7.3.c: Research & Innovation milestones of VESCOP

As Albert Einstein has rightly quoted, *'You can't solve the problem on the same level that it was created, you have to rise above it to the next level'*