



In This Issue >>>

Page 1.1: Message from Principal

Page 1.2: Useful AI techniques in Pharmacy

Page 2.1: Editorial

Page 2.2: Insulin Patch Pumps

Page 2.3: Microchips Implantable DDS

Page 3.1 Academic Activities

Page 3.2: Technology for Drug Manufacturing

Page 4.1: N.S.S. (RO water distribution)

Page 4.2: Achievements of Students

Vision: To be recognized as one of the best pharmacy institutes.

- Mission:**
- 1. To impart value based pharmaceutical education through innovation and excellence empowering individuals to become leader in their field.
 - 2. To create an ambiance of excellent pharmaceutical education through pharma skills, business skills and life skills by fostering learning environment that empowers individuals to achieve their full potential.
 - 3. To foster strong relationship amongst all the stakeholders by inculcating personal touch and mutual respect in all our interactions.

Useful AI techniques in Pharmacy

Over the last several years, the use of artificial intelligence (AI) in the pharma and biomedical industry has gone from science fiction to science fact. Increasingly, pharma and biotech companies are adopting more efficient, automated processes that incorporate data-driven decisions and use predictive analytics tools. The next evolution of this approach to advanced data analytics incorporates artificial intelligence and machine learning.

Types of Artificial Intelligence

Most artificial intelligence solutions used in healthcare today are based on human-created **data science algorithms**. This type of AI uses multivariate data analytics supported by past experiential evidence. Another level of AI is **machine learning**, which relies on so-called neural networks that mimic the way a human brain works, but can potentially reach decisions much faster and more accurately. The next level of AI is **deep learning**, which is also based on neural networks, but includes a combination of separate layers of calculations along with combined signals.

Manufacturing process improvement

In development and production, AI provides numerous opportunities to improve processes. AI can perform quality control, shorten design time, reduce materials waste, improve production reuse, perform predictive maintenance, and more. AI can be used in many ways to make production more efficient with faster output and less waste.

Processing biomedical and clinical data

Perhaps the most developed use of AI so far is in algorithms designed to read, group and interpret large volumes of textual data. This can be a big time-saver for researchers in the life sciences industry, providing a more efficient way to examine the enormous amounts of data from the growing volume of research publications in order to validate or discard hypotheses.

Rare diseases and personalized medicine

Combing information from body scans, patient biology and analytics, AI is being used in various ways to detect diseases such as cancer, and even predict health issues people might face based on their genetics.

Message from Principal...

Dear Parents, Teachers and Students,
As we embark on our journey towards success, I would like to take a moment to emphasize the importance of self-development and continual learning in our journey toward personal and professional growth. Learners, teachers should learn to construct, and then ask themselves questions for self-assessment. These questions are the essence of learning for the soul and acquiring the luminance of the light. Learners should begin to ask these questions while they are in any learning environment. The self-development can be navigated by embracing curiosity as a driving force in your educational journey and exploring diverse subjects to establish both short-term and long-term goals for yourself. These goals will serve as guiding your efforts and helping you stay focused on what truly matters to you. Remember, goals provide direction and purpose. Meaningful relationships with peers, faculty, and professionals in your field of interest. Networking and Continuous Learning provide opportunities for collaboration and mentorship. Remember, your time at **SVERI's College of Pharmacy (Poly.)**, is not only about obtaining a degree but also about evolving as individuals with a deep understanding of oneself and the world around you. Each of you has the potential to make a significant impact, and your commitment to self-development will undoubtedly contribute to your success.

Principal
Prof. S. V. Mandave



EDITORIAL

It gives me great pleasure to prepare the Eleventh issue of our **College of (Poly.), Pandharpur** newsletter “ **Pharma - People**” which gives us the opportunity to focus the achievements in our college and new trends in Pharmacy field. We are thankful to all the students and faculties who have contributed during the preparation of this newsletter. We have tried our best and given positive efforts expecting creative responses from everyone to continue the flow of this knowledge.



Insulin Patch Pumps

Diabetes pump patches are small digital devices that are modern alternatives to insulin injections. These computerized devices can be programmed to automatically deliver doses of insulin on a regular schedule during both the day and night. This automatic system helps ensure that your blood sugar levels stay within your target range. For the device to work properly, it needs to stay attached to your body most or all of the time. When using a diabetes pump, you need to check your blood sugar levels at least six times a day. Many people decide to use insulin pumps because they're faster than taking the time to administer manual shots. Once you have your diabetes pump patch device programmed, it can administer both basal (baseline) and bolus (mealtime) doses.

Mr. Om Wangade (DCP-II)

Microchips Implantable Drug Delivery Device

The wireless Microchips device can store 100s of doses for months or even years and be programmed to release the drug at precise times or schedules. The microchip-based implant is truly at the intersection of digital technology and medicine and the future of drug delivery for patients, who cannot tolerate needles, require regular self-administered injections or where compliance is critical to outcomes.

Miss. Mhetre Kaveri (DCP-II)





Academic Activities



As human being it is our moral responsibility to contribute towards society in order to address somebody's needs. So, from **College Pharmacy (Poly.), Pandharpur** Faculty and students have visited old age home "**Matoshree Vrudhashram**", and "**Palavi**". They have distributed some essentials to them.

Technology Impact on Drug Manufacturing

Regulatory authorities are updating their guidelines as we step into Pharma 4.0 – and keeping technology and automation at the forefront of the safety of the end user. A prime example of this is the recent update to GMP Annex 1. In this update, an emphasis is placed on removing humans from the cleanroom and implementing automation wherever possible. This keeps processes more consistent and reduces risk contamination.

The recent worldwide pandemic has only made the need for automation more apparent, with pharmaceutical robots playing a vital role in designing, testing and dispensing vaccines. The use of robotics in pharmaceutical automation will only increase, especially as available technologies improve.

Robots used in pharma industry to

- Reduce time to market
- Scaling production
- Lowering cost
- Improving Health and Safety

-Mr. Dhanaraj Randive (DCP –II)



