

**Report on AICTE sponsored online STTP on  
Innovations in effective teaching, learning pedagogy and research skill development**

**Date: 19/04/2021 to 24/04/2021**

**Name of College/Institute: PES Modern College of Pharmacy, Nigdi, Pune 44**

**Coordinator: Dr. A. A. Phatak**

AICTE sponsored online STTP on 'Innovations in effective teaching, learning pedagogy and research skill development' was organized successfully by PES Modern College of Pharmacy, Nigdi, Pune from 19/04/2021 to 24/04/2021. Total 16 sessions were delivered by 15 resource persons. The details are given below.

**1] Day1: 19/04/2021**

Inaugural address was delivered by Dr. P. D. Chaudhari, Principal Modern College of Pharmacy, Nigdi, Pune. This was followed by Keynote address.

**1) Keynote address by Dr. Sanjay Jachak**

The keynote address was the optimum blend of techniques of effective teaching, their innovations, learning pedagogy and research skill development.

**2) Resource person: Dr. Sanjay Jachak**

**Topic: Innovative teaching learning and research skills in natural products curriculum**

During the technical session, Dr. Sanjay Jachak discussed basic teaching elements like:

- Research based studying
- Student centered learning
- Inclusivity of diversity

**3) Resource person: Dr. Kapil Kadam**

**Topic: Effective ICT methods in teaching learning process for higher education**

The use of ICT in class was discussed which included:

- Learn 21st-century skills and develop their ICT capability and ICT literacy.
- Improves their attainment levels.
- Prepares them for an integrated society dominated by ICT developments.
- So that they learn the notion of using ICT as a tool for lifelong learning.

The P-O-E concept was discussed which stands for Prediction Observation and Explanation. The problems associated with use of ICT methods and solutions to it were discussed through different activities.

## 2] Day2: 20/04/2021

### 1) Resource person: Dr. Sumathi Narayanan

#### Topic: Innovations in effective teaching, learning pedagogy

She has discussed following points with participants

- Introduction to neuro linguistic programming,
- Mental model-power of subconscious mind,
- Perception-how we take in reality
- Sensory channel-VAK

### 2) Resource person: Dr. Jyoti Bawane

#### Topic: Authenticity in Teaching

Dr. Bawane explained 3Es for effective learning: Experience, Engaging opportunities and Encouraging environment.

Approaches toward authentic teaching were discussed -

- Scenario based teaching: real life situations, problem solving environment, facilitate decision making, enhance critical thinking skills
- Collaborative learning: use of groups to enhance learning, let learners work together
- Reflection: motivate and explore learners, take feedback.

### 3) Resource person: Dr. S. B. Bhise

#### Topic: Vision for a Research-based University

Session started with details of basic facts like Research, University and teaching.

Technical session included following points

- Importance of HEFEI Statement about RBU: Importance of statement to identify the key characteristics that make research universities effective and to promote a policy environment that protects, nurtures and cultivates the value, standards and behaviors.
- Characteristics of Research Base University: 10 different characteristics of RBU were discussed like excellence across all operations, internationally recognized research, commitment to research training, Commitment to teaching, open and transparent set of governance arrangement.

## 3] Day 3: 21/04/2021

### 1) Resource person: Dr. D. N. Sansanwal

#### Topic: Research Skill Development for Higher Education Teachers

D. N. Sansanwal has covered about research in common parlance refers to a search for knowledge. He has discussed the purpose of research is to discover answers to questions through the application of scientific procedures.

He has discussed following points in his presentation:

- The main aim of research is to find out the truth which is hidden and which has not been discovered as yet.

- Difference between discovery and inventions
- Types of variables: He has discussed the types of variable Includes continuous variable and discontinuous variable. Continuous variable is for any species, a characteristic that changes gradually over a range of values shows continuous variation. Examples of such characteristics are like height, weight.

## 2) Resource person: Dr. Nilesh Gaikwad

### Topic: Utilization of pomegranate for food, Pharmaceuticals and Cosmetics Industry

Dr. Nilesh Gaikwad has covered about research on Pomegranate. All parts of pomegranate tree have great therapeutic value like antimicrobial, antioxidant, anticancer, anti-inflammatory, antioxidant, antiparasitic, antidiabetic, antiviral and also used to maintain skin, dental, reproductive health. He has highlighted different parts of pomegranate with active constituents of tree and fruit and their utilization, therapeutic utility. pomegranate processing and value addition, Pomogranate utilization for pharmaceutical and cosmetic purpose.

## 4) Day 4: 22/04/2021

### 1) Resource person: Dr. Shubhada Nagarkar

#### Topic: Predatory Journals

Citations are depending on impact factor of journal, on h-index, on i10 index, SJR and SNIP. Predatory open access publishing is an exploitative open access academic publishing business model that involves charging publication fees to authors without providing editorial and publishing services associated with legitimate journals.

Hiacked journals: They are difficult to recognize as they mimic the reputable publications in name, logos and website.

Cloned journals: They are online dubious version of print only authentic journals.

Crony publishing: Institutional publications in which editorial board members are a majority of the authors are from the same institutes.

Predatory journals have lack of standard publishing practices.

### 2) Resource person: Ms. Rashmi Arya

#### Topic: Patent filling procedure and Importance in research

Basics of Intellectual Property Rights (IPR): IPR is creations of mind, such as inventions literary and artistic works, design, symbols, names and images used in commerce. Types of IPR Patents, Trademarks, Copyright, Trade Secrets, Geographical Indications, Utility models, Domain names.

Patent is a right granted to inventors to prevent unauthorized use of an invention, within a particular territory, for a limited time. ho can file a Patent? Any person claiming to be the true and first inventor of the invention.

### 3) Resource person: Dr. Vandana B. Patravale

### **Topic: Strategies for Effective Research Grant writing**

With increasing demand for treatment of Cancer, Neurodegenerative disorder in many more areas, it is natural the number of research ideas and proposals will grow accordingly. These proposals and ideas need recognition that researchers do perform at their best in widely dispersed colors. It is not possible without facilities and funds. There are various funding agency for health care. Then purpose/Utility of research, research goals and objectives, background, convincing rationale; unmet need, these are the problem statements she explained when you write a proposal. Next how can we review literature. At end of session she shared case studies.

**5] Day 5: 23/04/2021**

**1) Resource person: Dr. Ranjit Barshikar**

**Topic: QbD: Opportunities and Challenges**

The presentation included:

- Detail about manufacturing process and product development process with risk assessment
- Risk assessment is very important in QbD, product development should meet patient expectation

**2) Resource person: Dr. Megha Upalane**

**Topic: Research skills for teachers**

An interactive and informative session was conducted by Dr. Megha Upalane on Research skills for teachers. Importance of Research skill for teachers included:

- It established the relationship between good researchers and good teachers
- Improves their approaches towards research
- Research skills development for teachers is very important to keep them updated regularly by research grants and funds.
- Also its very useful for developing teaching learning skills of teachers

**3) Resource person: Dr. Bhushan Pimple**

**Topic: Animation: An Effective Pedagogical Tool**

Importance of using animated presentation for better understanding of things to participants

- He has given many wonderful examples like morphology of plant parts, how to highlighted the different parts of plants by using different colors.
- Also he explained how to draw the glassware and apparatus.
- Also teaching technique of understanding TLC development method using animation tool

5] Day 6: 24/04/2021

**1) Resource person: Dr. Sanjay Boldhane**

**Topic: Research data- Evaluation and Interpretation**

Dr. Sanjay Boldhane has discussed that -Experiment Never Fails, if you define the problem correctly, you almost have solution. He has explained following points.

- Models- Mathematics, Mechanistic, Hybrid, Empirical
- Experimental Design- Comparative, Screening, Interaction, Optimization, Modelling
- OFAT Vs DOE
- QbD- Statistical Equation which is acquired by six sigma

**2) Resource person: Dr. Remeth J Dias**

**Topic: Tools for effective teaching learning process**

Following points were discussed during session by Dr. Remeth J Dias

- Teaching method (Offline/ Online)
- Traditional Teaching Vs Modern Pedagogy
- Change in Knowledge, Attitude and Skills
- Types of Learners- Learning Style
- Student Diversity

**3) Valedictory address: by Dr. V. V. Chopade**

The whole STTP was concluded by valedictory address. Participants presented their views about the STTP contents, interaction with speakers and organizers and benefits of STTP.

The feedback form was circulated among participants and they were asked to fill and submit online. The quiz was conducted every day through google forms online.

Dr. A. A. Phatak

Coordinator, STTP



Screenshots of AICTE sponsored online STTP on  
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