



***A Value-Added Course on  
Pharmaceutical Dissolution Testing – A Way to  
unveil the Science of Solid Oral Dosage Forms  
26<sup>th</sup> – 31<sup>st</sup> October 2023  
Course Duration- 30Hrs***



**ORGANIZED BY**

**Department of Pharmaceutics**

**SEVEN HILLS COLLEGE OF PHARMACY**

**(AUTONOMOUS)**

**Venkatramapuram, R C Puram (Mandal), Chittoor (Dist), Tirupati, 517 561, A.P, INDIA**

**Accredited "A" Grade by NAAC**

**Approved by AICTE, PCI, New Delhi and Awarding Univeristy: JNT University Anantapur – Ananthapuramu**

**Recognized by UGC Under Sections 2(f) & 12(B) of UGC Act 1956**

**Recognized Research Centre by JNTUA, Ananthapuramu**

**[www.shcptirupati.edu.in](http://www.shcptirupati.edu.in)**

**Convener**

**Dr.M.Niranjana Babu**

**Principal**

**Seven Hills College of Pharmacy  
(Autonomous), Tirupati**



**Course Co-Ordinator**

**Dr.P.Sucharitha**

**Associate professor**

**Seven Hills College of Pharmacy  
(Autonomous), Tirupati**

## **ABOUT COLLEGE**

Seven Hills College of Pharmacy (SHCP) was started in 2007 as an institution exclusively specialized in pharmacy education by Global Vision Educational & Welfare Society (Reg. No. 296/2005). Presently the college is offering B. Pharmacy, Pharm.D, Pharm.D (PB) and M. Pharmacy in Pharmaceutics, Pharmacology, Pharmaceutical Analysis. Seven Hills College of Pharmacy is a one step solution for all the higher education and research requirements of pharmacy students. The College is approved by All India Council for Technical Education (AICTE), Pharmacy Council of India (PCI) New Delhi, Affiliated to Jawaharlal Nehru Technological University, Ananthapur- Ananthapuramu. The College is also recognized by UGC under sections 2(f) and 12(B) of UGC act 1956, Certified by ISO 9001: 2015 and Accredited "A" Grade by NAAC Bengaluru. SHCP is crowned with an Autonomous Status by UGC, New Delhi for a period of 10 Years from 2020-2021 to 2029-2030 and also Recognized Research Centre for Ph. D Programme in the area of Pharmaceutical Sciences by JNTUA, Ananthapuramu.

## **Course Objectives**

The goal of Dissolution Testing is to provide delegates a solid grasp of the principles and best practices in dissolution testing.

- To develop a validated drug dissolution model for new drug entity
- To skill-up in the challenges associated with the handling of Dissolution Apparatus.
- To predict the impact of formulation and process parameters changes on Dissolution Efficiency.
- To establish Biowaiver protocols for Class I drugs.

## **Course Outcomes**

By the completion of the course, Student can be able to do

- Characterization of Formulations.
- Dissolution apparatus Qualification, Dissolution Specification Setting, Dissolution profile Comparison and handling of OOS/OOE results.

## Syllabus And Course Description

S.No	Date and Day	Module	Description	No of Hours	Resource Person
1	26.10.2023 Day 1	<b>Module 1</b> Fundamentals of Dissolution Testing: From Physicochemistry to Bioavailability	<ul style="list-style-type: none"> <li>Intrinsic dissolution rate</li> <li>Kinetics of drug release</li> <li>Quality control dissolution testing and in vivo predictive dissolution testing</li> <li>Fraction of a dose absorbed classification system</li> </ul>	06	<b>Dr A Geethalakshmi</b> , Professor & HOD. Department of Pharmaceutics, Ikon Pharmacy college, Bidadi, Karnataka. Pin:562109
2	27.10.2023 Day 2	<b>Module 2</b> Development of Dissolution Methods	<ul style="list-style-type: none"> <li>Method development for Immediate Release, Extended Release and Delayed Release Formulations</li> <li>Dissolution apparatus and medium selection</li> <li>Use of surfactants</li> <li>Adequate discriminatory capability</li> <li>Standard Dissolution Test Conditions (P)</li> <li>Evaluation of bio-relevance</li> </ul>	06	<b>Dr. S. Dinesh Kumar</b> Professor & Head, Department of Pharmaceutics, Saveetha College of Pharmacy, Saveetha University, Saveetha Nagar, Thandalam, Kanchipuram - Chennai Rd, Chennai
3	28.10.2023 Day 3	<b>Module 3</b> Dissolution Specifications	<ul style="list-style-type: none"> <li>Setting of Dissolution Specifications and Presentation on Case Studies (P)</li> <li>Application of Dissolution Testing in Industrial Drug Product Development</li> </ul>	06	<b>Dr.K. Saravana Kumar</b> , Professor Department of Pharmaceutics Seven Hills College of Pharmacy, Tirupati
4	30.10.2023 Day 4	<b>Module 4</b> Dissolution Profile Comparison; Approaches and Issues	<ul style="list-style-type: none"> <li>Importance of dissolution profile comparisons during drug product development and for a commercial product (P)</li> <li>Regulatory requirements concerning dissolution profile comparison</li> <li>Different approaches to compare dissolution profiles: Model dependent and independent approaches. Examples.</li> </ul>	06	<b>Dr.Sucharitha.P</b> Associate Professor Department of Pharmaceutics Seven Hills College of Pharmacy, Tirupati
5	31.10.2023 Day 5	<b>Module 5</b> Dissolution Methods- Applications with Case Study.	<ul style="list-style-type: none"> <li>Application of Design of Experimentation in Dissolution testing</li> <li>Pitfalls in performing the experiments.</li> </ul>	06	<b>Dr.A.Rekha Devi</b> Associate Professor Department of Pharmaceutics Seven Hills College of Pharmacy, Tirupati

**TOTAL LECTURE HOURS – 30Hrs**

## Course References

- Ansel's Pharmaceutical Dosage Forms and Drug Delivery Systems
- Pharmaceutical formulation: the science and technology of dosage forms by Tovey & Geoffrey.
- National Compendia (USP and IP)

## Programme Framing Committee

S.No	Name of the Faculty	Designation	Name of the College	Role
1	Dr. Sucharitha.P	Associate Professor	Seven Hills College of Pharmacy	Course Co-Ordinator
2	Prof.K. Saravana Kumar	Professor	Seven Hills College of Pharmacy	Course Co-coordinator
3	Dr.A.Rekha Devi	Associate Professor	Seven Hills College of Pharmacy	Member
4	Mr.V. Prudhvi Raj	Associate Professor	Seven Hills College of Pharmacy	Member
5	Mrs.L.Divya	Associate Professor	Seven Hills College of Pharmacy	Member

**Participants will receive a Course Completion certificate upon attaining the 80% of attendance and 60% of Marks in the End Test.**

**Course Type:** Self-Made course with the Approval of statutory Bodies

**Assessment Mode:** Offline/Online

**Duration:** 30Hrs

**Internal Assessment Exam Pattern:** Multiple Choice Questions

*Eligible students can Enrol your names with  
Department of pharmaceuticals  
For Further Details Contact- Course Co-Ordinator*

**No Registration Fee**