



Weekly Seminar Program – (2023-24)
Department of Physics – Bharathiar University
Coimbatore- 641046

Seminar-3



Ms. Architha N.

Research scholar (III Year)
Crystal Growth Laboratory,
Department of Physics, Bharathiar University.

Speaks on

“Polymorphic control and separation of active pharmaceutical material through solution crystallization process”

Abstract

Crystallization is a key technology used in the separation, purification, and production of pharmaceutical feedstock, food ingredients, inorganic materials, and salts. Producing pure crystalline forms of active pharmaceutical ingredients is a huge challenge for the drug industry. A major difficulty faced during crystallization is when crystals of identical chemical composition frequently have different forms, called polymorphs. Polymorphism is the property of a substance to exist in different crystallographic structures, resulting from different packing arrangements of its molecule in the crystal lattice. Each polymorph of a model compound possesses a unique crystal structure and hence differs in thermodynamic, kinetic, and mechanical properties which in turn have a direct impact on manufacturing, bioavailability, stability, and efficacy of drug product. It is reported that more than 80 % of the API's show polymorph phenomenon. In this presentation, we will discuss the polymorphic separation and crystallization of a selected pharmaceutical material for a potential application.

About the Speaker

Ms. Architha N is from Udumalpet, she has completed her bachelor's degree at Sri G.V.G. Visalakshi College for Women, Udumalpet, and her master's degree at the Department of Physics, Bharathiar University. Her research work focuses on the field of crystal growth. Currently, she is working on the polymorphism and crystallization of pharmaceutical materials.

Venue: Sir C.V. Raman Hall

Date: 01.08.2023

Time: 10.00 am

Kindly be seated by 10:00 am and switch off your mobile phone during the lecture.

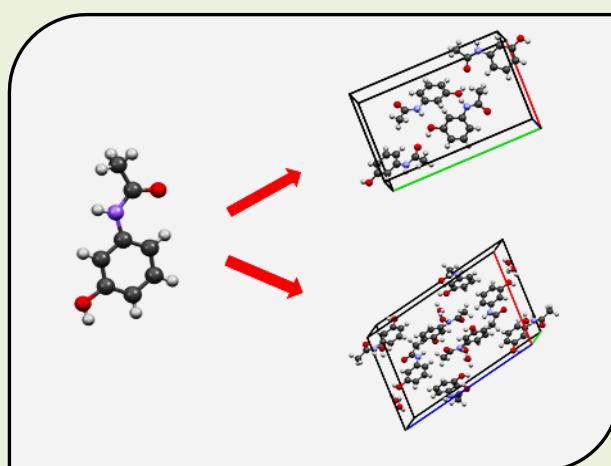
All are cordially invited.

Coordinator (General Seminar)

Head of the Department

Agenda

Time	Event	Name	Designation
10. 00 am	குறள் வணக்கம்	Ms. Anirutthiya A	II M. Sc., (Physics)
10. 05 am	Biography of Scientists (Dr. S. Chandrasekhar)	Ms. Annapoorani M	I M.Sc., (Physics)
10. 10 am	Recent Physics News	Ms. Priya A	II M. Sc., (Physics)
10. 15 am	Seminar	Ms. Architha N	Research Scholar
10. 45 am	பாரதியின் குரல்	Mr. Meganath R	I M.Sc., (Physics)



Department of Physics
Bharathiar University



Tea & Snacks at 10.50 am