



A  
Project Report on

**SYNTHESIS OF CAFFEIC ACID-g-XANTHAN GUM  
HYDROGELS AND EVALUATION OF THEIR  
GEL-SOL TRANSITION PROPERTIES**

*Submitted by*  
**SOURAV PATRA**

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Under the guidance of  
**DR. HRIDAY BERA**  
(M. Pharm, Ph.D.)  
Assistant Professor


In partial fulfilment of the Requirement for the Degree of  
**Bachelor of Pharmacy**

Submitted to  
**Maulana Abul Kalam Azad University of Technology**  
**West Bengal**

**Dr. B. C. Roy College of Pharmacy and Allied Health Sciences**  
**Durgapur, 713206**

**Academic Year: 2022 - 2023**



  
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## DECLARATION

I hereby declare that the Project entitled "Synthesis of Caffeic acid-g-Xanthan gum-based hydrogels and evaluation of their sol gel transition properties" in partial fulfilment of the requirement for the award of Bachelor of Pharmacy submitted to Maulana Abul Kalam Azad University of Technology, West Bengal, is an authentic record of bona fide work carried out by me, under the guidance of Dr. Hriday Bera.

The matter embodied in this Project has not been submitted for the award of any other degree or diploma to any University / Institution.

Sourav Patra  
Signature

Name of Candidate: Sourav Patra

Roll no: 18901919060

Date : 15/05/2023

Place : Durgapur



*[Handwritten signature]*  
15/05/23

Prof. (Dr.) Samir Kumar Samanta  
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## CERTIFICATE

This is to certify that the Project entitled "Synthesis of Caffeic acid-g-Xanthan gum-based hydrogels and evaluation of their sol gel transition properties" by Sourav Patra in partial fulfilment for the BACHELOR OF PHARMACY under MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY is a record of the original research work under our supervision and up to our satisfaction. To our knowledge, neither this thesis nor any part of it has been submitted for any other academic award anywhere before. The thesis is forwarded to Controller of Examination MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY for assessment.


  
15/5/2023

Signature of Guide

Name of Guide: Dr. Hriday Bera

Date: 15/05/2023

Place: Durgapur

  
15/5/23

PROF (DR.) SAMIR KR. SAMANTA  
(PRINCIPAL)

Date: 15/05/2023

Place: Durgapur



Signature

Name of External Examiner:

Date: 15/05/2023

Place: Durgapur

  
15/5/23

  
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