



**Uka Tarsadia University**



**Department of Physics**

## **Expert talk on Nanomaterials for Agriculture, Medical and Environmental Applications.**

**Date:** 17<sup>th</sup> January 2025

**Venue:** 4<sup>th</sup> floor Gopal Bhavan, UTU

**Time:** 10:30 am -12:30 pm

**Total No. of Participants:** 65

**Name of the Expert:** Dr. Jignesh Kumar V. Rohit

**Significant Insights Shared:**

**Expert Detail:** Dr Jignesh, working as an Assistant Professor at the Department of Chemistry, National Institute of Technology Srinagar, Jammu and Kashmir. He started his research career in 2011 as a project fellow at S. V. National Institute of Technology (SVNIT) Surat, Gujarat and worked with the project up to 2013. Then, he enrolled for a Ph.D. degree and completed it in 2017 from SVNIT. After completion of Ph.D., he joined the NIT Srinagar in 2018 and currently working with the same institute. He has authored 19 research publications in journals of international repute and 08 book chapters in Elsevier publications and CRC Press books. He is having one research project sponsored by UGC-DAE. Under his guidance, currently 06 students are pursuing their Ph.D. degrees, and he guided 06 PG dissertations. His team is focusing on the (1) preparation of nanosensors for the detection of pesticides, drugs, and metals from water and food samples, and (2) the development of green nanomaterials for therapeutics, drug delivery, and cellular imaging applications.

**Event Coordinator:** Dr Bhumika K Sharma

**Program Objective:** The talk aims to highlight how nanotechnology is revolutionizing agriculture, medicine, and environmental sustainability, leading to a smarter and greener future.

**Program outline:** 1. Welcome address of guest

2. Lecture by guest

3. Question session

4. Vote of thanks

5. Memento from UTU



**Program outcome:** Participants will leave with a comprehensive understanding of how nanotechnology is shaping agriculture, medicine, and environmental sustainability, along with the challenges and future possibilities of this rapidly growing field.

Gain a comprehensive understanding of nanomaterials, including their fundamental properties and various types, while exploring the transformative impact of nanotechnology across multiple fields. Recognize the role of nanotechnology in agriculture, particularly in applications such as nano-fertilizers, nano-pesticides, and nanosensors. Additionally, delve into advanced medical applications, highlighting innovations in diagnostics, drug delivery, and treatment strategies.

**Key highlights:**

- Develop a comprehensive understanding of how nanotechnology is revolutionizing agriculture, medicine, and environmental sustainability, while addressing key challenges and future opportunities.
- Explore the fundamental properties and classifications of nanomaterials, and their transformative applications across various industries.
- Understand the impact of nanotechnology in agriculture, including innovations like nano-fertilizers, nano-pesticides, and nanosensors for enhanced productivity and sustainability.
- Examine cutting-edge medical advancements, focusing on precision diagnostics, targeted drug delivery, and breakthrough treatment strategies.



## GUEST LECTURE ON NANOMATERIALS FOR AGRICULTURE MEDICAL AND ENVIRONMENTAL APPLICATIONS



ORGANIZED BY

DEPARTMENT OF PHYSICS, UKA TARSADIA UNIVERSITY



### Guest lecturer

Dr Jigneshkumar V.  
Rohit

Assistant Professor,  
Chemistry  
National Institute Of  
Technology, Srinagar



### Event coordinator

Dr Bhumika K Sharma

Assistant Professor,  
Department of  
Physics, Uka Tarsadia  
University

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REGISTRATION LINK

<https://forms.gle/HS1vF9x7DesPCHj18>







***List of participants***

<b>Name of Participant</b>	<b>Stream</b>	<b>Name of Program</b>
Dr. Abhitosh Kedia	Physics	Faculty
Hetvi Naik	C.G.B.I.B.T	Ph.D
Harshavali Gurav	C.G.B.I.B.T	B.Sc. Biotechnology (sem-6)
Viral Vilasbhai Gamit	KIASRC	Bsc(Hons) Agriculture sem-5
Patel Dhruvikumari Jagdishbhai	KIASRC	BSc (Hons) agriculture and Semester 5
MuskanKumari Mukeshbhai chaudhari	KIASRC	Bsc( Hons.) agriculture. sem-5th
Patel Bhumikaben Ghanshyambhai	KIASRC	B.sc( honos) Agriculture
Patel Sejalkumari Vallabhbbhai	KIASRC	B.Sc.(Hons.) Agriculture , 5th
Gangoda Anjali Shantilal	KIASRC	B.Sc.(Hons) Agriculture. And 5th sem
Jill patel	KIASRC	5
Max Salat	KIASRC	B.sc (Hons). Agriculture, 5th Semester
Gamit Mandip Anilbhi	KIASRC	B.sc(Hons.) Agriculture - 5th semester
Patel Jaykumar Hirabhai	KIASRC	B.sc (hons) agricultural 5th
Tadvi Dhrupaliben Nileshbhai	KIASRC	B.Sc(hons.) Agriculture (sem-5)
Chaudhuri nidhi j	KIASRC	5
Patel Bhumikumari surendrabhai	KIASRC	B.Sc(Hons) Agriculture
Patel Hetashvikumari maheshbhai	KIASRC	B.sc( Hons) agriculture sem: 5
Vasava Shrutikumari Ratilal	KIASRC	B.Sc.(Hon.) Agriculture sem -5th
Mahi Bhakta	KIASRC	Bsc.(Hons.) Agriculture ; Sem 5
Chaudhari Maitri Y.	KIASRC	B.sc(hons)agriculture - 5th
Chaudhari Devanshikumari Hiteshbhai	KIASRC	B.Sc.(Hons.)Agriculture , 5th Semester
Chaudhari khushikumari Ajitbhai	KIASRC	B.sc (Hons) Agriculture , 5th semester
Gamit Hardikbhai Natubhai	KIASRC	Bsc agriculture (5th sem)
patel krutarth	KIASRC	B.sc (hons) Agriculture
Patel Devang Ganeshbhai	KIASRC	B.sc.(Hons.) Agriculture - Semester :- 5
Khant Dhavalkumar babubhai	KIASRC	B.sc.(Hons) Agriculture and 5
SINGH SUMITKUMAR LALLAN	C.G.B.I.B.T	B.Sc Biotechnology And 6th Semester
Dr. VISHVA MAHAVIR JAIN	Physics	faculty
Dr. Bhumika K. Sharma	Physics	faculty
Harikumar Patel	Physics	ss10
Chaudhari Vrunal	Physics	Integrated M.Sc Physics, sem 10
Keyurkumar mukeshbhai halpati	C.G.B.I.B.T	M.sc microbiology,sem 4
Prachi kevat	KIASRC	B.sc(hons) agriculture (sem-5)
Heer Modi	Department of Physics	Bsc sem-4
Krusha Patel	Department of physics	B.Sc physics sem-4
Chaudhari Renik Pinakin	Department Of Physics	B.Sc Physics 4th Semester
Chaudhari Sansuya Rajnikantbhai	C.G.B.I.B.T	M.Sc. Biotechnology 4 Semester
Dr. Vikas Patel	PHYSICS	Staff
Rathod Urvi Arvindbhai	KIASRC	B.sc.(Hons.)Agriculture sem5

Hany parmar	C.G.B.I.B.T	M.sc microbiology,sem 4
Chaudhari mansi	KIASRC	4 sem
Virani meet bipinbhai	KIASRC	4sam
Mahida hetvi sanjaysinh	Kiasrc	B sc (hons) agriculture
Margi Solanki	Department of Physics	PhD
Chaudhari Brahmaxi S	Department of Physics	MSc sem 4
Patel Purnima	Department of physics	Int. M.Sc. physics (10th)
Gayakwad Mansi Kantilal	KIASRC	BSc.(Hon.) Agriculture (4 semester
Vahia Meetkumar Mineshbhai	Department of physics	Integrated MSc physics -Semester-10th
Mahida hetvi sanjaysinh	Kiasrc	4 sem b sc hon's agriculture
Amankumar Mahendrabhai Patel	Department of Physics	M.sc physics sem-4
Patel bhargav ishvarbhai	KAISRC	Bsc(hons) agriculture sem 4
Chaudhari Shreyash Rasikbhai	B.SC (Hons) Agriculture	BS.c (Hons) Agriculture 4th Semester
Maitri Prajapati	Physics	Msc. Sem 4
Chaudhari Devyani Hiteshbhai	KIASRC	B.sc agri (Hons)4th
Mayur Khasatiya	Bsc (hon.)agriculture	Bsc (hon..) agriculture 4th
Chaudhari Sushil Sahdevbhai	KIASRC	B.Sc (Hons.)Agriculture [sem-4]
Kinjalben Patel	Department of Physics	NA
Krish Rathod	KIASRC	B.Ac(Hons)Agriculture 4th sem
Prajapati Krutarth Bharatbhai	KIASRC	B.sc (Hons) Agriculture
Bijal solanki	KIASRC	B.S.c (HONS) Agriculture
Kanat Nikunj Sanjaybhai	Kiasrc	5
Anas D Fazal	TICS	PhD
Dr. Raval Kalpesh	KIASRC	Faculty
Dr. Ankit R. Chaudhary	KIASRC	NIL
Ms. Snaa Mohammad Farooq Mistry	KIASRC	Faculty

## NAAC: 5 & 7

Report prepared by Dr Bhumika K Sharma  
Department of Physics

Date 18/1/2025

*Abhitosh Kedia*

Dr Abhitosh Kedia  
HOD

