

Faculty Development Programme

on

"Nanotechnology based drug delivery system: Challenges and opportunities"

Date - 7th Nov, 2020

Resource Person

1. Dr. Somnath Mondal

Assistant professor, Uttar Banga Krishi Viswavidyalaya, West Bengal

2. Dr. Prithu Sayak Mondal

Assistant professor, Uttar Banga Krishi Viswavidyalaya, West Bengal List of Participants: 32

About the session:

This event was conducted on 7.11.2020 at CUTM with the total number of participants 175. This event was inaugurated by our respected registrar madam Dr. Anita Patra. Dr. Supriya Pattnaik, Hon'ble Vice Chancellor, Dr. Somnath Mondal, Assistant Professor of U.B.K.V. and Dr. Prithu Sayak Mondal, Assistant Professors of U.B.K.V. were the resource persons for this workshop.

Nanoparticles used as drug delivery vehicles generally range in the size with < 100 nm in at least one dimension and are composed of different biodegradable materials like natural or synthetic polymers, lipids, or metals. Nanoparticles coated with drugs are taken up by cells more efficiently than larger micromolecules and thereby they serve as efficient carriers for transport in delivery systems. Nanosystems with different compositions and biological properties have been extensively investigated for drug and gene delivery applications. The current thrust is on the development of efficient drug delivery nanosystems based on the understanding of their interactions with the biological environment, target cell population, target cell-surface receptors, changes in cell receptors that occur with progression of disease, mechanism and site of drug action, drug retention, multiple drug administration, molecular mechanisms, and pathobiology of the disease under consideration.

Dr. Somnath Mondal had given a brief idea through his presentation on the topic of "Types of drug delivery systems based on nanotechnology". Dr. Prithu Sayak Mondal discussed on the applications of

Nano-drug delivery system in various systems. A question-answer session was organized by the end of the session in order to gain a better understanding on the topic. Lastly, the program concluded with a vote of thanks by the Dean, Student Affairs, Dr. Atanu Deb.

Objective:

- The workshop was organized with a prime objective of imparting a basic knowledge on the use of different nanoparticles to mediate in the delivery of drugs to different target systems.
- The workshop also provided an insight on the creation of different types of nanoparticles like gold and silver nanoparticles.

Outcome:

• The participants of the workshop to gain a thorough knowledge on the different methods involved in the creation of nanoparticles as well as how to efficiently use these in the areas in medicine and allied sectors

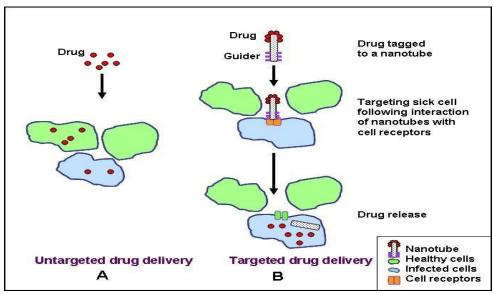


Figure 1: The targeted and untargeted drug delivery system



Figure 2: Brochure of the faculty development programme on "NanoTechnology based drug delivery system"

Participants list:

Sl no.	Name	Registration No
1.	Dr. Tumanath Samantara	Associate Professor
2.	Dr. Swarnalata Jena	Associate Professor
3.	Dr. Ajit Kumar Pradhan	Associate Professor
4.	Dr. Biswanandan Dash	Associate Professor
5.	Saubhagyalaxmi Singh	Asst. Professor
6.	Sasi Bhusan Padhi	Asst. Professor
7.	Subhashree Hota	Asst. Professor
8.	Uma Sankara Sahu	Asst. Professor
9.	Sarat Kumar Jena	Asst. Professor

10.	Saban Kumar Maharana	Asst. Professor
11.	Gyana Ranjan Panigrahi	Asst. Professor
12.	Dr. Gayatri Acharya	Asst. Professor
13.	Dr. V. Parvati Sai Arun	Asst. Professor
14.	Dr. Gagan Kumar Panigrahi	Asst. Professor
15.	Dr. Bibhudutta Mishra	Asst. Professor
16.	Tanuja Biswal	Professor
17.	Narayan Chandra Biswal	Professor
18.	Aruna Kumar Swain	Professor
19.	Maheswara Behera	Professor
20.	Dr. Mohammed Siddique	Associate Professor
21.	Dr. Goutam Kumar Mahato	Associate Professor
22.	Dr. Prafulla Kumar Panda	Assistant Professor
23.	Dr. Rajib Kumar Majhi	Assistant Professor
24.	Mr. Vishal Kumar Singh	Assistant Professor
25.	Dr. P. Srinivasa Rao	Professor
26.	Mr. Mir Sadat Ali	Associate Professor
27.	Dr. Vijay. Miditana	Associate Professor
28.	Dr. N. B. Karthik Babu	Assistant Professor
29.	Dr. Nagesh Kolagani	Professor
30.	Ms. A. Abhilasha	Assistant Professor
31.	Mr. Debendra Maharana	Assistant Professor
32.	Mr. Md. Sameen Chishti	Assistant Professor

Dr. Prasanta Ku. Mohanty Dean Academic

Prof. KVD Prakash Dean - IIE & HRD