



**Centurion University of Technology and Management**  
Dept. Of Chemistry, SoAS

**FDP on**

**Gene analysis technique and biomolecular dynamics**

**Recourse person**

Dr. Monalisa Mishra, Dr. Hirak Chakraborty, Dr. Harekrushna Sahoo

**Date: 28<sup>th</sup> and 29<sup>th</sup> May 2019**

**Number of Participants: 42**

**Resource Persons Profile**

Dr. Monalisa Mishra is an eminent scientist with years of Postdoctoral experience who is working as Assistant Professor in the Dept. of Life Science at NIT Rourkela.

Dr. Hirak Chakraborty is a renowned researcher in the field of cellular and molecular biology and a faculty member of Sambalpur University, Odisha. with a Postdoctoral degree.

Dr. Harekrushna Sahoo is an Associate Professor in NIT Rourkela. He is also a guest scientist in the Max Bergmann Center of Biomaterials (MBC) in polymer science.

**About the programme**

Genetic testing is the laboratory analysis of human genetic material including chromosomes, deoxyribonucleic acid (DNA) or ribonucleic acid (RNA) to detect genetic material and/or identify genetic changes. Chromosomes are composed of DNA. Specific DNA segments called genes serve as templates to make (transcribe) RNA. Genetic changes are referred to as “variations” or “variants” and they can have many different effects on the body. While most genetic variations do not affect a person’s health, they are sometimes related to disease. Molecular dynamics (MD) is a computer simulation method for analyzing the physical movements of atoms and molecules. The atoms and molecules are allowed to interact for a fixed period of time, giving a view of the dynamic "evolution" of the system.

In the two days FDP participants can learn about both gene analysis and biomolecular dynamics, so that they can effectively use it in analysing in their research field.

## Objective

- Gene Regulation and Gene Behaviour
- Various Techniques Used to Check the Functionality of a Gene
- Basic Optical Spectroscopy Techniques in Biomolecular Dynamics
- Protein Aggregation and Membrane Fusion
- Advanced Optical Fluorescence Techniques
- Protein stability
- Protein Kinetics
- Protein Dynamics.

## Outcome

- This FDP was very beneficial to all the faculty members, with which they can strengthen their research.
- This type of platform is helpful to interact and connect with different faculties with innovative ideas.
- This FDP was very helpful to learn about different approximation techniques to solve many body problems.
- FDP in other fields/topics should be arranged at least twice a year to advance and update the knowledge of faculty members.







**Figures: Faculty Development Program on Gene analysis technique and biomolecular dynamics**

## List of Participants:



Centurion University of Technology and Management

Faculty Development Program on

Gene analysis technique and biomolecular dynamics

Date: 28<sup>th</sup> and 29<sup>th</sup> May 2019

### Attendance Sheet

Sl No	Name of Participant	Signature(Day-1)	Signature(Day-2)
1	Abhilash Behera		
2	Ivaturi Siva Ramakoti	Siva Ramakoti	Siva Ramakoti
3	Sarita Gamayak	Sarita Gamayak	Sarita Gamayak
4	Suchismita Acharya	S. Acharya	S. Acharya
5	Arun Kumar Pradha	Arun Pradhan	Arun Pradhan
6	Chittaranjan Routray	Chittaranjan	Chittaranjan
7	Pragnya Paramita	Pragnya	Pragnya
8	Niraja rani patra	Niraja Patra	Niraja Patra
9	Suraj Kumar Behera	Suraj Kumar	Suraj Kumar
10	Koustava Kumar Panda	K. K. Panda	K. K. Panda
11	Dr Raghu Gogada	R. Gogada	R. Gogada
12	CHINMAYEE TRIPATHY	chinmayee	chinmayee

13	Bhagyeswari Behera	Bhagyeswari	Bhagyeswari
14	Aditya Kumar Purohit		
15	Sujit Kumar Mishra	Sujit Mishra	Sujit Mishra
16	Rajesh Raman Mishra	Rajesh Rami	Rajesh Rami
17	Mr. Abhishek Joshi	Abhishek	Abhishek
18	Chandana Adhikari	chandana	chandi
19	Dr. Gyanranjan Mahalik	G Mahalik	G Mahalik
20	Jyotirmayee Dash	Jyotirmayee	Jyotirmayee
21	Sunita Mishra		
22	Pankaja meher	Pankaja Meher	Pankaja Meher
23	Dr. Ashish Kumar Sahoo	Ashish Sahoo	Ashish Sahoo
24	Anupam Sahoo	A. Sahoo	A. Sahoo
25	Siva Sankar Anisetti		
26	Niladri Sarkar	Niladri	Niladri
27	Jyoti prakash Rath	Jyoti Rath	
28	Pradip Kumar prusty		Pradip
29	Debashish Tripathy	D. Tripathy	D. Tripathy

30	Dr. M.L.N. Acharyulu	M.L.N. Acharyulu	M.L.N. Acharyulu
31	Dr. Narayan Gouda	Narayan Gouda	Narayan Gouda
32	Dr. Prativa Tripathy		Prativa Tripathy
33	Dr. Satyanarayan Dhal	Satyanarayan Dhal	Satyanarayan Dhal
34	Dr. Banita Mallik	Banita Mallik	
35	Balaji Padhi	Balaji Padhi	Balaji Padhi
36	Sourav Karmakar		
37	SNS Neelima	SNS Neelima	SNS. Neelima.
38	G.K. Sahu		G.K. Sahu.
39	Dr. Debasish Swain	D. Swain	D. Swain
40	Durgadatta Meher	Durgadatta Meher	
41	Dr. Prabhat Kumar Singh		Prabhat Singh.
42	Dr. Sanjeeb Kumar Patro	Sanjeeb Patro	



Dr. Prasanta Ku. Mohanty  
Dean Academic



Prabhat K. Pattnaik  
FDP Coordinator