



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

FDP on

Density functional theory

(Deptt. Of Physics, SoAS, Paralakhemundi)

Date: 13-05-2019 to 14-05-2019

Resource person:

Dr. Susant Mohanta

Asst. Prof, GCE, Kalahandi

Number of Participants: 20

About Resource Person: Dr. Mohanta is working as an Assistant Professor in Department of Basic Sciences, Government College of Engineering, Kalahandi. His research areas include Nuclear Condensed matter Physics, First Principles Calculation based on DFT, Quantum Phase transition, Single impurity Kondo Problem, Strongly correlated Electronic systems.

About the FDP:

- Many Body Systems: Introduction, Systems of identical particles,
- Thomas Fermi Model, Hartree Fock Approximation,
- Density Functional Theory: Basics
- Why DFT?? Quantum Mechanical Many Body Problem,
- Hohenberg–Kohn theorems, Kohn-Sham Equations
- Applications in various systems
- Computational Methods to use DFT techniques
- Basis Set Function Expansion

Outcomes:

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

List of Participants:

Sl. No.	Campus	Name of Faculty Member	Department
1	CUTM Paralakhemundi	Dr. P. Tripathy	Physics
2	CUTM Paralakhemundi	Dr. D. Swain	Physics
3	CUTM Paralakhemundi	Dr. Narayan Gouda	Chemistry
4	CUTM Paralakhemundi	Prof.G.K. Sahu	Physics
5	CUTM Paralakhemundi	Prof. S. Dhal	Physics
6	CUTM Paralakhemundi	Prof. I. Siva Ramakoti	Chemistry
7	CUTM Bhubaneswar	Dr. P. Patnaik	Physics
8	CUTM Bhubaneswar	Dr. S. Behera	Physics
9	CUTM Bolangir	Dr. Nilaya Kumar Mohanty	Physics
10	CUTM Bolangir	Rajguru Rajesh Raman Mishra	Chemistry
11	CUTM Bolangir	Gyanendra Kumar Mishra	Physics
12	CUTM Bolangir	Aditya Kumar Purohit	Chemistry
13	CUTM Andhra Pradesh	Dr Katuri Venkata Prasad	Physics
14	CUTM Chatrapur	Dr. Lingaraj Sahu	Physics
15	Ganjam Degree College, Ganjam. Odisha	Dr.J. Surya.Narayana Acharya	Physics
16	CUTM Rayagada	Anupam Sahoo	Chemistry
17	CUTM Rayagada	Truptimayee Behera	Physics
18	CUTM Rayagada	Pritisudha Patra	Chemistry
19	CUTM Rayagada	Niladri Sarkar	Chemistry
20	Kalam Institute of Technology Berhampur Ganjam	Dr. Nilambar Muduli	Physics



Photographs of session: Density functional theory

Prabhat

Prabhat K. Pattnaik
FDP Coordinator

Prasanta

Dr. Prasanta Ku. Mohanty
Dean Academic