



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA
FDP
on
“Carbon nanomaterials for waste water remediation”
(3-09-19 to 7-09-19)
REPORT

No. of Participants: 14

DATE AND VENUE: 3-09-19 to 7-09-19 Centurion University of Technology and Management (CUTM), Paralakhemundi campus.

ABOUT RESOURCE PERSON: Dr. Narayan Gouda is an Assistant Professor of Chemistry at Centurion University of Technology and Management in Odisha, specializing in thermal conversion of waste biomass and waste plastics for production of fuels and synthesis of carbon nanomaterials from wastes by using pyrolysis approach. He obtained his doctoral degree from Centurion University of Technology and Management, Odisha. He has more than 10 years of teaching experience. His current interests are focused on the development of fast pyrolysis of biomass for the upgradation of the fuel property to make it a better substitute for the fossil fuels and utilisation of waste plastics for the preparation of carbon nanomaterials and polymer nano composites. He has published articles in reputed international and national journals.

ABOUT THE SESSION:

A total of 14 faculty members from the departments of Physics, Chemistry & Mechanical Engg. of Paralakhemundi, Bhubaneswar, Bolangir & Rayagada campuses attended the program assiduously. The topics like: Exploration of different bio wastes and plastic wastes for thermal degradation process, practical demonstration of the conversion of these wastes into carbon nanomaterials by pyrolysis and hydrothermal and combustion process and usage of these carbon nanomaterials for waste water remediation etc. were covered in the FDP through interactive and practice modes. The entire interactive lecture sessions were conducted in CSREM Conference hall followed by the respective practical demonstration at the chemistry lab. Related study materials were prepared and distributed among all participants. Overall, the FDP was well-structured, informative, interactive, and enriched with knowledge. I owe my gratitude to Dr. Narayan gouda for delivering the contents relentlessly and his untiring discussions throughout the 5 days of this FDP.

OBJECTIVES:

1. To give a brief introduction on Thermolytic conversion of wastes into carbon nanomaterials.
2. To teach the basics of conversion of biowastes and plastic wastes into carbon nanomaterials by using pyrolysis and hydrothermal techniques.
3. To show how to use the carbon nanomaterials in waste water remediation (dye and heavy metal removal).

OUTCOME:

After the conduction of this FDP, the faculty members would be able to deliver the contents of the pyrolytic conversion of bio and plastic wastes into carbon nanomaterials and to teach

students of B.Sc. M.Sc. programmes on the topics related to conversion of waste plastics into carbon nanomaterials by pyrolysis, hydrothermal, combustion methods and to use these carbon nanomaterials in heavy metal and dye removal from waste water efficiently. A Faculty Development Program was organized by School of Applied Sciences, Paralakhemundi from 3-09-19 to 7-09-19 on " Carbon nanomaterials for waste water remediation ". This programme was coordinated by Prof. I.Siva Ramakoti Department of Chemistry and was facilitated by the resource person Dr. Narayan Gouda, Assitant Professor,HOD, Department of Chemistry.

Comments and suggestions:

- i. This FDP was very beneficial to all the faculty members.
- ii. This type of interactive and participatory FDP in other fields/topics should be arranged at least twice a year to advance and update the knowledge of faculty members.
- iii. Another FDP may be arranged on the topic "Synthesis of carbo based polymer nanocomposites" within the next six months.



Faculty Development Programme on "Carbon nanomaterials for waste water remediation"



Resource Person:

Dr. Narayan Gouda
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• Date: 3rd-9th September, 2019

School of Applied Sciences

Centurion University of Technology and Management
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