

TEQIP III Sponsored

One Week Short Term Course

On

Bioactive Compounds from Natural
Sources and their Healthcare
Applications

January 8—14, 2018



Coordinators

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Department of Biotechnology

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NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

ABOUT THE COURSE :

With the growing risk of health disorder due to day to day stress and consumption of pesticide, heavy metal and adulterant contaminated food, consumers are opting for health protecting compounds, viz., bioactive compounds, in their diet. Due to this, the work on bioactive compounds has intensified and has become an area of rapid research. Many plant and algal products as well as microorganisms have shown the presence of a wide variety of biologically active chemicals. These biologically active compounds vary widely in their structure and function and thus are grouped accordingly. Researchers have found that these compounds have high potential as anticancer, antioxidant, antithrombotic, anti-inflammatory and anti-viral agents. Some of the examples of well known bioactive compounds are carotenoids, flavonoids, anthocyanin, tannin etc. In this short term course, a wide range of bioactive compounds from plant and microbial sources will be discussed. Application of bioactive compounds for improved health and its mechanism will be discussed. Both theoretical and experimental training will be imparted for an in-depth understanding of bioactive compounds.

COURSE CONTENTS

- Bioactive compounds from food, food waste and plant materials
- Health promoting effects of bioactive compounds
- Extraction and purification of bioactive compounds
- Mechanism of action of bioactive compounds
- Computational drug design with phytochemicals
- Nanoparticle based drug delivery
- Lifestyle management for disease prevention

WHO MAY BENEFIT

Faculty members of academic institutes/universities/colleges, experts from government organizations, industry personnel, scientists, research scholars and M.Sc./M.Tech students will benefit from the course.

REGISTRATION FORM

One Week Short Term Course on
Bioactive Compounds from Natural Sources and
their Healthcare Applications

January 8-14, 2018

NAME (BLOCK LETTERS):

Gender: M / F

Qualifications:

Experience: Yrs:.....

Designation:.....

Organization:

Mailing Address:.....

Telephone :(O)..... (M).....

Email:

Food Preference: Veg/Non-veg.....

Payment: D.D. No.:..... Dt.
Rs.

[Demand draft should be drawn in favour of
"BioNutra"], payable at Durgapur.

Date:

Signature of Applicant

Signature & Seal of Head of Department/Institute

ABOUT THE INSTITUTE

The National Institute of Technology, Durgapur is located at the heart of steel city of Durgapur, one of the fastest growing tier-II city, in the state of West Bengal. At present, altogether about 5,000 students are pursuing their Bachelor's, Master's and Ph.D. programmes at NIT Durgapur. The institute embarked upon its tireless journey in 1960 as a joint venture between Govt. of India and Govt. of West Bengal in the name of Regional Engineering College. Eventually, the institute got transformed into National Institute of Technology under the Ministry of Human Resource Development, Govt. of India in 2004. The institute has now acquired a status of 'Institute of National Importance' through implementation of NIT Act, 2007.

ABOUT BIOTECHNOLOGY DEPARTMENT

The Department of Biotechnology commenced with the B.Tech. program in Biotechnology in 2005. The M.Tech. program was subsequently introduced in 2009. The department is steadily emerging as a leader in providing excellent education at the undergraduate and postgraduate levels in Biotechnology and in developing cutting-edge technology through research, training, and technical innovation.

ABOUT CHEMICAL ENGINEERING DEPARTMENT

The Department of Chemical Engineering of National Institute of Technology, Durgapur, was established with active support of UNESCO. The B.E. course in Chemical Engineering was started in 1964 and the first batch of students were awarded the degree in 1969. The Post-graduate programme with the specialisation 'Production Fertilisers' was introduced in 1968, along with the doctoral programme in Chemical Engineering. Curriculum and syllabi of the courses offered are continuously updated over the years to keep pace with rapidly changing technological development.

LIST OF SPEAKERS (TENTATIVE)

- **Dr. Arunangshu Ganguly, IQ City Narayana Hospital, Durgapur**
- **Dr. Rahul Roy Chowdhury, Saroj Gupta Cancer Centre & Research Institute**
- **Dr. Sri Siva Kumar, IIT Kanpur**
- **Mr. Alias Verghese, Sathva Bioactives Pvt Ltd., Bangalore**
- **Dr. Mahua Ghosh, Calcutta University**
- **Mr. Amiya Kumar Kalidaha, WBDST**
- **Dr. Dipankar Halder, Jadavpur University**
- **Dr. Hari Kumar K B, Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram**
- **Dr. Vasudha Agnihotri, G B Pant Institute of Himalayan Environment & Development**
- **Dr. Ankur Karmokar, Astra Zeneca UK**
- **Dr. Koel Mukherjee, BIT Mesra**
- **Dr. Kaustav Aikat, NIT Durgapur**
- **Dr. Ashish Bhattacharjee, NIT Durgapur**
- **Dr. Surabhi Chaudhuri, NIT Durgapur**
- **Dr. Debjani Dutta, NIT Durgapur**
- **Dr. Susmita Dutta, NIT Durgapur**



ACCOMODATION

Candidates will have to make their own arrangement for boarding and lodging. However, assistance may be provided in finding suitable accommodation nearby.

VENUE OF CLASSES

Seminar Hall, Department of Biotechnology, NIT Durgapur

COURSE FEE

Industry personnel/Faculty members/Research scholars/ PG Students: Rs. 2000/-

Course fee includes registration kit, working lunch and study materials. The Demand Draft will be drawn in favour of "BioNutra", payable at Durgapur.

Last date of receiving completed application form – November 30, 2017.

Intimation of selection for the course – December 4, 2017
Incomplete application forms will not be entertained.

For electronic transfer: Bank—Canara Bank, Branch -NIT Durgapur, Account Number 111172957, IFSC Code—CNRB0008569, Account Name—BIONUTRA, Nature of the Account— Savings Bank, Account Holder's Name— Department of Biotechnology, NIT Campus, M G Avenue, Durgapur 713209, WB, INDIA

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