

## Registration Form

SMARTATM2017

Name (CAPITALS):

Organization:

Designation:

Address for communication:

Mob. No.:

E-mail:

Tour (optional):

A) No. of persons above 14 years of age:

B) No of children below 14 years of age:

Payment:

A) Registration:

B) Tour:

Total:

Total (in words):

Payment details:

RTGS :

D.D.:

Wire transfer:

Bank details:

Please register me for the STC on SMARTATM2017 to be held during 8 to 9 December, 2017 at IIT (BHU), Varanasi.

Date:

Place:

Signature of the Applicant

## Fees

Participant Type	Course fee before 01.01.2018 (After 01.01.2018)	Tour fee per person	
		Above 14 years of age	Below 14 years of age
Industries, R&D Organization, Others	5,000 (8000)	2500 (3,000)	1000 (1,500)
Faculty	3,500 (6000)		
Students from outside IIT (BHU)	2,500 (4,000)		
Students of IIT (BHU)	1,000 (2,500)		
Foreign (general)	USD100 (USD150)		
Foreign (student)	USD50 (USD100)		

### Fees include:

Course material in soft copy, course kit (bag, writing pad, pen, pencil etc.), Coffee and snack during course hours, participation certificate

### Registration procedure:

The registration fee is to be paid in the form of either Demand Draft (D. D.)/Cheque or through account transfer. Registration fee or proof of fee payment along with completed registration form is to be sent to "Dr. Nilanjan Mallik, Course co-ordinator, STC on SMARTATM2017, Department of Mechanical Engineering, IIT (BHU), Varanasi – 221005, Uttar Pradesh, India". The scanned copy of the two are also to be sent to the e-mail id: [nmallik.mec@iitbhu.ac.in](mailto:nmallik.mec@iitbhu.ac.in)

### Account transfer:

Account Name: SMARTATM2017, Account No.: 37321091333 , Account type: Current, Bank: State Bank of India, Branch: IT-BHU, Branch code: 11445, IFSC code: SBIN0011445

### D.D.:

In favour of: SMARTATM2017, Payable at: IT-BHU Branch, SBI, Varanasi

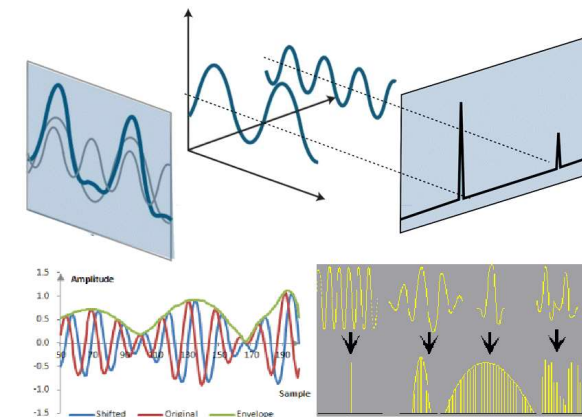
### D.D./Cheque should be sent to

Dr. Nilanjan Mallik  
Course co-ordinator,  
STC on SMARTATM2017,  
Department of Mechanical Engineering,  
IIT (BHU), Varanasi – 221005, Uttar Pradesh, India

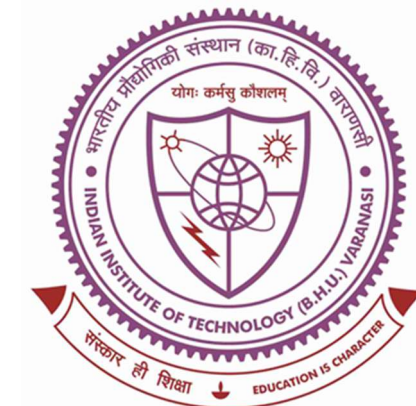
### How to reach:

The city of Varanasi is well connected by road, rail and air with all the important cities of India. There are regular flights from Varanasi to Delhi, Mumbai, Chennai, Hyderabad, Bangalore, Kolkata, Khajuraho and Lucknow operated by Airindia or other private airlines. The IIT (BHU) campus is about 5 Km from Manduadih railway station, 10 Km from cantonment railway station, 20 Km from Mughalsarai railway station and 35 Km from Babatpur (Varanasi) airport.

## Short Term Course (STC) under Continuing Education Programme (CEP) ON Smart Materials and Structures: Analysis by Transformation Methods (SMARTATM2017) January 20 – 21 , 2018



Organized by  
QIP & CEP Centre , IIT (BHU)



Course co-ordinator

Dr. Nilanjan Mallik

Department of Mechanical Engineering

Indian Institute of Technology (BHU)

Varanasi – 221005, Uttar Pradesh, India

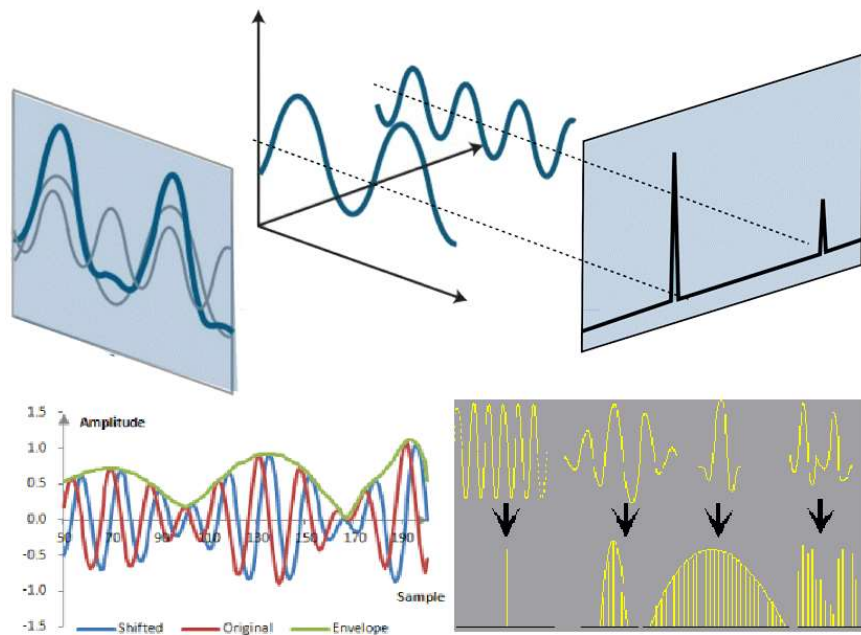
Mob.: +91 9793682244 , +91 7080814522

E-mail: [nmallik.mec@iitbhu.ac.in](mailto:nmallik.mec@iitbhu.ac.in)

Website: [www.drnilanjanmallik.com](http://www.drnilanjanmallik.com)

## Who should attend

1. Faculty members from Institutes/Colleges/Universities working in disciplines like mechanical, aerospace, civil, ceramics, electrical, electronics, biomedical, mining, metallurgy engineering, naval or allied disciplines, materials science, physics, chemistry, mathematics or allied science disciplines and/or doing research and/or planning to do research on any topic of smart materials and structures field.
2. Students (research scholars, post graduate, under graduate) from any of the above mentioned disciplines or allied disciplines who are doing research or willing to do research on any topic of smart materials and structures field.
3. People from industries who are already in business in smart structures field or planning to explore business opportunities.
4. Scientists from R&D organizations who are already doing research and implementing or planning to explore.
5. People from medical disciplines already implementing smart technologies in treatment or willing to implement

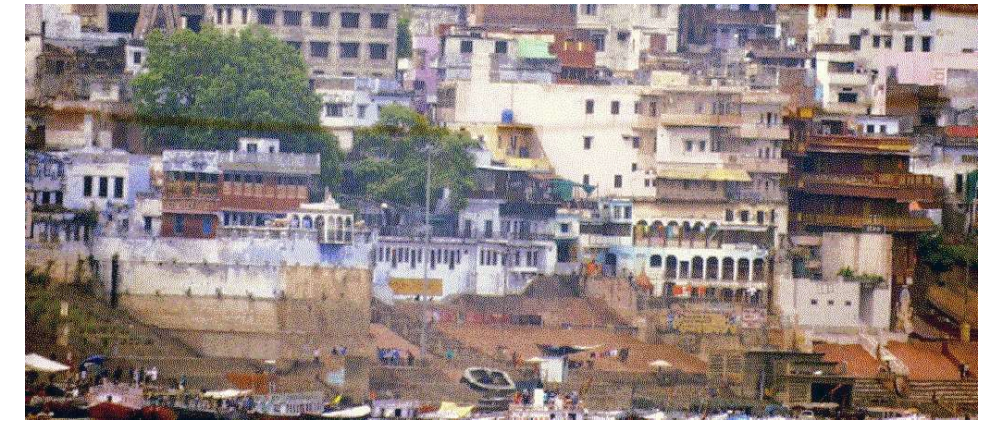


## About the course

This two days short term course (STC) under continuing education programme (CEP) will deal with the analysis of smart structures covering the cases of coupled problems by transformation techniques. Wave equations and solution by transformation techniques have become essential working tools of nearly every engineer and applied scientists like materials scientists, physicists, chemists and mathematicians. Transformation techniques of various types viz. Fourier, Fractional Fourier, two and multi-dimensional Fourier, Discrete Fourier, fast Fourier, Laplace, Legendre, z-transformation, Hilbert, wavelet, Henkel, Mellin, Walsh have applications in all categories of smart materials and structures viz. material modeling, structural health monitoring, optical fiber, heat conduction, circuit analysis, signal processing, filtering, coding and multiplexing, pattern recognition, image processing, spectroscopy, statistical analysis, communication systems, control systems, electromagnetic wave propagation, boundary value problems in cylindrical coordinates etc.

## Topics to be covered

1. Fourier transformation
2. Fractional Fourier transformation
3. Two and Multi-dimensional Fourier transformation
4. Discrete Fourier transformation
5. Fast Fourier transformation
6. Laplace transformation
7. Legendre transformation
8. z-transformation transformation
9. Hilbert transformation
10. Wavelet transformation
11. Henkel transformation
12. Mellin transformation
13. Walsh transformation
14. Radon transformation



## Accommodation

1. Guest house inside campus (subject to availability)
  2. Hostel inside campus (subject to availability)
  3. Guest house outside campus
  4. Hostel outside campus
  5. Hotel outside campus
- Inside campus accommodation will be provided on first come first serve basis on request

## About Varanasi

The holy city Varanasi is the oldest living city in the world which is known to be "older than history". Varanasi is also known as spiritual capital of the world. The city has a great historical and cultural importance. The religious and cultural capital of India is situated in the bank of the holy river Ganges and is famous for temples of Lord Shiva, Buddha (Sarnath), Sankat Mochan and numerous other religious temples. Varanasi is also a center for learning from long back and in modern times also it is keeping pace with advanced knowledge. This vibrant city of art and culture, religion and contemporary and modern knowledge has over the years attracted numerous tourists from all over the world.