



राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण एवं अनुसंधान संस्थान
[मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित]
सेक्टर 26, चंडीगढ़-160 019

**NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING
AND RESEARCH**

अनुप्रयुक्त विज्ञान विभाग
Department of
Applied Science

(Established by Ministry of Human Resource Development, Govt. of India)
SECTOR 26, CHANDIGARH-160 019 (INDIA)
(ISO 9001:2008 Certified)

संदर्भ : एनआईटीटीटीआर/अ.वि./

Ref : NITTTR/App.Sc./BCC/OP-12/

011463

दिनांक:

Date: 03.10.2017

6 OCT 2017

40 The Principal,
College of Technology & Agriculture. Engineering,
Maharana Partap University of Agri., & Tech,
Udaipur (Raj)-313001

Sub: Short term course on "Nanomaterials: Characterization & Applications"
w.e.f. 13-17 November, 2017 at this institute (O.Plan No.ID-69).

Dear Sir,

The Applied Science department of this institute is conducting the above mentioned short-term course for the teachers of Applied Sciences and Engineering (Science background) from Engineering Colleges of northern region. Today, Nanoscience and Nanotechnology are in the forefront of research in synthesis of nanomaterials and development of nano-scale devices. Microchips and Computers have already brought revolutionary changes in the quality of life and nano will be at the center of science, technology and business for the next many years. To be in pace with the advances in technology, I strongly feel that all our technical teachers should be exposed to such kind of technological developments. The course will briefly cover the science of nanomaterials and their future applications in fabrication of nano-scale devices. I shall be grateful if you kindly circulate the enclosed brochure among the faculty of Applied Sciences and Engineering in your institute and sponsor as many teachers as possible for attending this **one-week training programme** at this institute.

Last date for receipt of Sponsored Applications is 02nd November, 2017.

Thanking you,

Yours faithfully,

Tepir cell
6
20-10-2017

(Dr. BC Choudhary)

Professor & Course Coordinator
E-mail: bakhshish@yahoo.com

Encl: As above.



Hindi Version Overleaf



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[मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित]
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दिनांक :
Date : 03.10.2017

विषय: 13-17 नवम्बर, 2017 तक नाइट्, चण्डीगढ़ में आयोजित होने वाला “**Nanomaterials:
Characterization & Applications**” नामक अल्पकालीन पाठ्यक्रम संबंधी (आईडी-69) ।

प्रिय महोदय/महोदया,

इस संस्थान का अनुप्रयुक्त विज्ञान विभाग हमारे देश के इंजीनियरी कॉलेजों के अनुप्रयुक्त विज्ञान तथा इंजीनियरी (जिनकी पृष्ठभूमि विज्ञान है) के शिक्षकों के लिए उपर्युक्त अल्पकालीन पाठ्यक्रम आयोजित कर रहा है। इस समय नैनोमैटिरियल्स तथा नैनो-स्केल डिवाइसेज़ के विकास में अनुसंधान में नैनोविज्ञान तथा नैनोप्रौद्योगिकी सबसे आगे है। माइक्रोचिप तथा कम्प्यूटर से जीवन की गुणवत्ता में पहले से ही क्रांतिकारी परिवर्तन आए हैं तथा अगले कई वर्षों के लिए नैनो विज्ञान, प्रौद्योगिकी तथा व्यवसाय के केंद्र में रहेगा। मैं महसूस करता हूँ कि समाज में हुए परिवर्तनों के साथ चलने के लिए हमारे तकनीकी शिक्षकों का इस प्रकार के प्रौद्योगिकी संबंधी विकासों के बारे में जानकारी प्रदान की जानी चाहिए। कोर्स में नैनोमैटिरियल्स के विज्ञान तथा प्रौद्योगिकी के संबंध में और नैनो-स्केल डिवाइसेज़ में उनके भावी प्रयोगों के बारे में संक्षेप में बताया जाएगा। मैं अति आभारी हूँगा यदि आप अपने संस्थान के अनुप्रयुक्त विज्ञान तथा इंजीनियरी के शिक्षकों में संलग्न विवणिका परिचालित कर दें तथा इस एक सप्ताह के प्रशिक्षण कार्यक्रम में अधिक से अधिक शिक्षकों को भाग लेने के लिए भेजें।

आवेदन भेजने की अंतिम तिथि 02 नवम्बर, 2017 है।

सधन्यवाद,

(डा० बी.सी. चौधरी)
प्रोफेसर एंड हेड तथा कोर्स समन्वयक
E-mail: bakhshish@yahoo.com

संलग्नक: उपर्युक्त।

OBJECTIVES

Today, nanotechnology is in the forefront of research in synthesis of nanomaterials and development of nano-scale devices. Nanoparticles, the building blocks of these devices are generally defined as particles between 10nm to 100nm in size. Nanomaterials synthesized from such tiny particles demonstrate unique mechanical, optical, electronic and magnetic properties. Though nanotechnology means different things for different scientists, a push towards the use of nanotechnology in various field of science and technology including physics, chemistry, materials, optics, electronics, bioelectronics and medicines, is well underway.

The objective of the course is to provide an overview, understanding and progresses made in development, synthesis, characterization and applications of nanomaterials for future nano-scale devices. Field visits / demonstrations will be arranged to supplement the factual knowledge disseminated during the expert lectures.

Course Contents:

- Nanomaterials and Nanostructures;
- Synthesis & Characterization Techniques;
- Modeling & Simulations of nanostructures;
- Nano- Electronics & Hybrid devices;
- Smart Materials & Systems;
- Nanomaterials for healthcare;
- Hands-on Experience with AFM;

Eligibility:

Lecturers and above in Applied Sciences and Engineering disciplines (Science background)

GENERAL INFORMATION & GUIDELINES

1. Admission to the Programme:

Admission is open to teachers from Engineering Colleges/Institutions: Govt., Govt.-aided, private/self-financed. Interested teachers may submit their applications in the prescribed format through proper channel so as to reach the institute on or before 02nd November 2017. Advance copy may be sent, but at the time of admission sponsorship from the appropriate authority must be produced.

2. Course Fee

Fee of Rs. 5000/-+ GST @ 18% (Total Rs. 5900/-) will be charged from participants from the ECs/Institutions covered under TEQIP projects as DD in favor of Director, NITTTR Chandigarh or Cash. No course fee for participants from other technical Institutions: Government/Aided/ Private/ UJETs, provided they should be approved by AICTE.

3. Payment of TADA, Boarding & Lodging

A) Govt./Govt.-aided Enge. Instts.:

TADA of participants from these institutions will be borne by NITTTR, Chandigarh as per institute rules. Any participant who without the approval of the competent authority, discontinues the programme at any stage, will forfeit the claim on TADA.

i) For reimbursement of TA, the participants of the courses conducted at Chandigarh or at the state headquarters, would be limited to 2nd AC for Professors/ Principals/Directors, for others 3rd AC/ AC chair car or the entitled class or actual, whichever is the least. The claimants will have to produce tickets in support of their claim for TA.

ii) Local conveyance at all places is limited to Rs.200/- in general or reimbursement of actual expenditure on submission of genuine printed bills as per Govt. of India rules. Local participants shall be reimbursed Rs. 100/- per day on account of local conveyance.

B) Institutes/ECs covered under TEQIP Projects:

Participants from institutes/ECs covered under TEQIP projects; even if they are sponsored by state government will have to bear TADA and boarding & lodging expenses either by themselves or through their sponsoring organization.

C) Boarding & Lodging:

All outside participants (excluding those from TEQIP project covered institutes) would be provided free boarding & lodging in the institute mess/hostels. *For this claim stay in the hostel is compulsory.* The local participants for training programmes at Chandigarh would be eligible only for the working lunch and tea at the institute on the working days of the training.

APPLICATION FORM

Short Term Course on

NANOMATERIALS: Characterization & Applications

(13-17 November 2017)

(For Engineering College Teachers)

1. Name (in BLOCK Letters): _____
2. Educational Qualification(s): _____
3. Designation & Dept.: _____
4. Office Address: _____
Phone: _____
Fax: _____ E-Mail: _____
5. Whether the Institute is
 Govt. Govt. Aided
 TEQIP Project Private/Self-financed
6. Address for correspondence: (if different from official address) _____
Phone: _____
Fax: _____ E-Mail: _____
7. Years of Experience (if any): _____
8. Hostel accommodation required - Yes / No
10. Signature of the Applicant: _____
Date: _____ Place: _____

Signature of Sponsoring Authority of the Institute
(with office seal)

NO PAYMENT/HONORARIUM IN CASH WOULD BE MADE TO ANY PARTICIPANT FOR ANY UNAVAILABLE FACILITY OF BOARDING/LODGING.

4. Facilities

The institute is located in the educational complex in Sector 26 and the buildings include Main academic block, Computer centre, Educational television centre, Media centre block and New academic/administrative block, besides main hostel, post-graduate student's hostel, student centre, institute guest house. The institute library has a collection of more than 35,000 books, journals and other reading materials. The departments have well established laboratories and testing equipments in the areas of physics, nuclear radiations, lasers and fiber optics.

5. How to Reach Institute

NITTTR (Formerly TTTI), Chandigarh is located in the institutional complex in Sector 26 on Madhya Marg and is about 5 km from ISBT, Sector-17 and Railway Station. Auto rickshaw and taxi are readily available from both the places. Landmarks are: Institute for blinds, Homeopathy Medical College and Hospital, Chandigarh College of Engineering and Technology (CCET).

LAST DATE FOR RECEIPT OF SPONSORED APPLICATIONS IS 02nd NOVEMBER 2017.

Mail to:

**Dr. BC CHOUDHARY
Professor & Course Coordinator,
Department of Applied Science,
National Institute of Technical Teachers'
Training & Research (NITTTR),
Sector 26, Chandigarh-160 019.**

Phones:

**PBX : 0172-2759500 Ext: 556
Direct : 0172-2759556
Cell: 09417521382
Fax No.: 0172-2793893, 2791366
E-Mail: <bakshish@yahoo.com>**

Short Term Course
on

**NANOMATERIALS:
Characterization & Applications**

(13-17 November 2017)

For

Teachers of Engineering Colleges



Venue:

NITTTR, Sector 26, Chandigarh

Organized by:

Department of Applied Science
**National Institute of Technical Teachers'
Training & Research**
Sector 26, Chandigarh-160 019.