APPLICATION FORM FOR PARTICIPATION IN TRAINING

(At Central institute for Research on Cotton Technology, Mumbai)

1. Full name (in block letters)	:
2. Designation	:

- 3. Present employer and address :
- 4. Address to which reply should be sent

(including email, mobile and fax)

5. Permanent Address:

6. Date of Birth	
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7. Sex : Male/Female

8. Teaching/research/professional experience (mention post held during last 5 years and number of publication refereed journals):

9. Marital status : Married/Unmarried

10. Mention if you have participated in any research seminar,

Summer/Winter School/ Short Course, etc. during the previous years under ICAR/Other organizations:

11. Whether accommodation is required: Yes / No

12. Academic record

Examination	Subject	Year of	Class /	University	Other
passed	Main /	passing	Ranks /	or	information
	subsidiary		Distinctions	Institution	
			etc.		
Bachelor's					
Master's					
Ph.D					
Others					

Date	 		

Institute Seal

Place_____ Signature of the applicant

13. Recommendations of forwarding Institute

CERTIFICATE

It is certified that the information furnished above has been verified and found to be correct.

	Signature
Date	Director / Head of the organization

How to reach CIRCOT

From Airport (Domestic) : 10 km From Airport (International) : 12 km Nearest Railway Station : Dadar (1.0km)

Nearest Bus Stop: Kapol Nivas in Dr. Ambedkar Rd,

Matunga East and Five Gardens bus stop

Landmark: Five Gardens

Weather

In the month of November, the dry climate in combination with the mean maximum of 33°C and mean minimum of 20°C, makes it the most pleasant and stable weather.

Important dates to remember

Last date for receipt of nomination: Oct 25, 2011 Intimation to selected participants: Oct 31, 2011

Confirmation by participants : Nov 5, 2011 Course commencement : Nov 16, 2011

Address for Correspondence

Dr. N. Vigneshwaran
Scientist & Course Director

Central Institute for Research on Cotton Technology, Adenwala Road, Matunga, Mumbai – 400 019.

Maharashtra

Email: nanotechtraining@gmail.com;

nvw75@vahoo.com

Phone: 022-24127273 Extn. 149

Mobile: 09869269477 Fax no: 022-24130835

Updates are available at www.nanocellulose.in OR www.circot.res.in

National training course
On

Synthesis and characterization of nanomaterials and their application in Agriculture

November 16-29, 2011

Organized by

Central Institute for Research on Cotton Technology (CIRCOT),

Adenwala Road, Matunga, Mumbai – 400 019, Maharashtra, India



Sponsored by the Indian Council of Agricultural Research

Krishi Anusandhan Bhawan-II, New Delhi – 110012.

Under the component 1 of National Agricultural Innovation Project

Introduction

Nanotechnology is the manipulation or selfassembly of individual atoms, molecules, or molecular clusters into structures to create materials and devices with new or vastly different properties. Nanotechnology can work from the top down (which means reducing the size of the smallest structures to the nanoscale) or the bottom up (which involves manipulating individual atoms and molecules into nanostructures and more closely resembles chemistry or biology). The definition nanotechnology is based on the prefix "nano" which is from the Greek word meaning "dwarf". In more technical terms, the word "nano" means 10⁻⁹, or one billionth of something. For comparison, a virus is roughly 100 nanometres (nm) in size. The word nanotechnology is generally used when referring to materials with the size of 0.1 to 100 nanometres, however it is also inherent that these materials should display different properties from bulk (or micrometric and larger) materials as a result of their size. These differences include physical strength, chemical reactivity. electrical conductance, magnetism, and optical effects.

The first use of the concepts found in 'nanotechnology' was in "There's Plenty of Room at the Bottom", a talk given by physicist Richard Feynman at an American Physical Society meeting at California Institute of Technology (Caltech) on December 29, 1959. Feynman described a process by which the ability to manipulate individual atoms and molecules might be developed, using one set of precise tools to build and operate another proportionally smaller set, and so on down to the needed scale.

Now nanotechnology does not remain as a theoretical science; rather it is being applied in all fields and gained the status of applied science and it is a multidisciplinary subject. Agriculture and Food Production are no exception to it. This has realized the potential of nanotechonology in each stage starting from crop production to consumption. Although no precise figure is available, a largely cited 2006 consultant report estimated that agricultural and food nanotechnologies would represent about \$20 billion of investment in 2010. The reported advantages of nanotech applications range from improved food quality and safety to reduced agricultural inputs and improved processing and nutrition.

Objectives

In the light of aforesaid views, the major objectives of the training course are:

- √ To acquaint participants with basics of nanotechnology
- √ To impart training on preparation and characterization of metal, metal oxide and organic nanomaterials
- √ To demonstrate the characterization and application of nanomaterials in Agriculture and allied sectors

Curriculum

A series of lectures and practical demonstrations will cover the basics of nanotechnology, preparation and characterization of nanomaterials by chemical, biological and mechanical processes and their application in various fields. A visit to nearby nanotechnology laboratory is also planned. This Institute is well equipped with machineries for nanomaterials synthesis (homogenizer, ball mill, refiner, membrane reactor & fermentor) and characterization (atomic force microscope, particle size analyzer).

International Resource Person

Prof. Qingrong Huang Food Science Department Cook College Rutgers University New Brunswick, NJ 08901-8520, USA.

How to apply

Interested candidates can apply in the enclosed proforma. The application duly forwarded by the competent authority of the sponsoring organization should reach the Course Director on or before 25th October 2011.

Eligibility

Applicant should be a post-graduate in any discipline of agriculture or related basic science and working as Scientist in ICAR institutes or as Assistant Professor and above in any of SAUs / Central Agricultural University / Deemed University / General University with agriculture faculty and Krishi Vigyan Kendra.

Boarding and Lodging

Participants will be paid travel fare of to and fro journey by rail or bus as per their entitlement, restricted to the maximum of AC II Tier. TA will be paid on production of tickets. Free boarding will be provided during this training programme. Free lodging shall be provided on first come first serve basis. Since the accommodation is very limited at this institute, participants are requested to arrange for their stay. Cash allowance in lieu of boarding & lodging are not permitted. Local participants will be provided with lunch and inter-sessions tea only.