# MYCORRHIZA: SUSTAINABLE, LOW-COST OPTION FOR NUTRIENT USE EFFICIENCY



## **REGISTRATION DETAILS**

- The registration fee is Rs 8,000 per participant (additional registration from the same organization qualifies for 10% discount).
- Registration fee is non-refundable. Substitutions in nominations are acceptable only till 31st January 2018.
- Registration fee does not include accommodation.
- Registration will be confirmed after receiving the registration fee
- The registration fee covers admission to training workshop/lab sessions, training material (laboratory manual), interactive coffee breaks, lunches, GST

## RETREAT

A model sustainable habitat based on new and clean technologies



**RETREAT**, a residential training facility for executives, is designed to be selfsufficient, and independent of any external power supply. It consists of two semicircular blocks arranged one behind the other. The south block comprises the living quarters with 24 single-occupancy rooms and 6 suites and the north block comprises the conference centre with a large hall, a dining room, a lounge, recreational facilities, and a library.



The Energy and Resources Institute

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#### Organized By



The Energy and Resources Institute

# HANDS-ON TRAINING-CUM-WORKSHOP ON TECHNIQUES IN MYCORRHIZAL RESEARCH FOR SUSTAINABLE AGRICULTURE AND FORESTRY

21-23 February 2018

The RETREAT, TERI Gram, Gual Pahari, Gurgaon-Faridabad Road, Gurgaon, Haryana

ycorrhiza is of great relevance and significance to nutrient-deficient, poor-guality, and marginal land. The only known fungal system categorized as a biofertilizer, mycorrhizae provide a nature-friendly alternative to chemical fertilizers. These symbiotic fungi form permanent association with plant roots, and provide them with extended arms that help them tap soil nutrients that are otherwise beyond the reach of plants. For plants, this means better uptake of phosphorus, more nitrogen, and greater availability of other micronutrients. These help the plants in overcoming tough physical conditions, while enriching the soil. Enriched soil leads to decreasing dependence on chemical fertilizers, and thus, improved human and environmental health.

The Centre for Mycorrhizal Research, TERI (The Energy and Resources Institute), New Delhi, with support from the Department of Biotechnology, Government of India, is organizing a Hands-on Training-cum-Workshop on Mycorrhizal Research Techniques from 21-23 February 2018. The participants will be trained on the different aspects of mycorrhizal fungi. Practical laboratory sessions will be supported by lectures and discussions. Technical manuals containing all experimental protocols will be provided to the participants.

The course will be held from 21-23 February 2018 at The RETREAT, TERI Gram, Gual Pahiri, Gurgaon-Faridabad Road, Gurgaon, Haryana A certificate of successful completion will be provided upon conclusion of the programme. Enrolment is for (short-listed) 25 participants on first-come-first-served basis.

#### **OBJECTIVES**

The main objective of the course is to impart hands-on training in research techniques on mycorrhizal research so that the participants can apply them in their research programmes. Therefore, besides demonstrating the techniques,



participants should be encouraged to carry out the techniques/laboratory exercises themselves. The specific areas include

- basic work, involving isolation and identification of mycorrhiza;
- applied work, involving selection, culture and inoculation of arbuscular mycorrhizal fungi under nursery and field conditions;
- advanced techniques, involving molecular and biochemical tools; and
- promoting understanding on the relevance of mycorrhizal research in the Indian context.

#### PROGRAMME

The course would essentially be practical based.

However, practical laboratory sessions will be supported by lectures and discussions. It will include the following.

- Recovery and guantitative estimation of AM (arbuscular mycorrhizal) spores from soil
- Image analysis of AM spores
- Assessment of intraradical colonization by AM fungi
- Trap culturing and monosporal culturing for AM
- Biochemical and molecular characterization of AM fungi
- Bio-safety issues
- Impact of IPR (intellectual property right) regimes on agricultural biotechnology issues

In addition, lab tour of TERI Deakin NanoBiotechnology Research Centre will be organized. This building is a world class facility and has been inaugurated in April 2017 by Indian and Australian Prime Ministers.

## PARTICIPANTS

Researchers and budding scientists who are engaged in the field of mycorrhiza research; Technologists and middle-level scientists from government; Agriculturists (who are involved in organic farming); Agricultural Technology Information Centre, ICAR; Students and Faculty from State Agricultural Universities; Farmer-Entrepreneurs and Extension workers; Development agencies (Non-governmental organizations, community-based organizations); Other stakeholders.

## VENUE

HANDS-ON TRAINING-CUM-WORKSHOP ON TECHNIOUES IN MYCORRHIZAL RESEARCH FOR SUSTAINABLE AGRICULTURE AND FORESTRY 21-23 February 2018, TERI, New Delhi

## WORKSHOP REGISTRATION FORM

Name (Ms/Mr/Dr/Prof.)

Dept/Program\_\_\_\_\_

Institution

Address

City/State/Zip\_

Work Phone

Home Phone

Fax

E-mail

MrTP Sankar Cellular: 9810793533

For on-line registration: www.mycorrhizae.org.in/

The workshop will be held at The RETREAT, TERI Gram, Gual Pahiri. Accommodation can be arranged on payment basis at the RETREAT.

Payment should be made through demand draft favouring TERI, payable at New Delhi along with completed registration form at below address:

