

Summer Training On Biotechnology & Entrepreneurship

**June 7, 2010 – July 9, 2010
at
STEP, Thapar University, Patiala**



**Science & Technology Entrepreneurs' Park
(Department of science & Technology)
Government of India, New Delhi
Thapar University
Patiala– 147 004, PUNJAB
www.thapar.edu**

Thapar Technology Campus

The Thapar Technology Campus (TTC) located on the 250- acre campus in Patiala, Punjab has the unique distinction of having three institutions viz, Thapar University (TU), Thapar Polytechnique (TP) and Thapar Centre for Industrial research & Development (TCIRD), is today a unique Campus in our country with extraordinary potential for development of indigenous technology and its engineering industries. Thapar University offers Post-graduate and undergraduate programs in Engineering, Science, Management and Social Sciences. Thapar Technology Campus is synonymous with a diverse community that is committed to scholarship, entrepreneurship, research and development.

Science and Technology Entrepreneur's Park (STEP) at Thapar University (TU) is a centre for Business Incubation to promote business in the upcoming multidisciplinary area of Biotechnology. Established as a joint venture between National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology (DST), Government of India and Thapar University (TU) in April, 2005 offers a platform to individuals with semi-developed novel idea into proof of concept from bench scale to pilot plant by providing infrastructure support and forging link with relevant organizations and industries. STEP has taken the lead in nurturing innovations and converting them into commercial ventures.

STEP activities are intended to stimulate technological innovation, utilization of research results, transfer of knowledge and setting up of technology driven businesses so that fruits of knowledge reaches the society in the shortest possible time. STEP focuses on business potentials in biotechnology, agri-biotechnology, biofertilizers, mushroom cultivation, plant tissue culture and food processing technology. STEP has successfully incubated 8 companies out of which 4 have graduated.

Summer Training – Objectives and Coverage

Programme is an intensive hands on training, imparting technical & management knowledge, and developing entrepreneurial skills in different areas of biotechnology.

Contents:

Microbial Technology

1. Introduction to Microbial Technology, Fermentation Technologies
2. Mass production of microbial inoculants, including quality control measures.
3. Cultivation of mushroom using agricultural wastes.
4. Biowaste recycling, Biofuels and bioenergy

Techniques in Genetic Engineering

1. Genomic DNA and plasmid DNA isolation from Bacteria
2. Restriction digestion, transformation and gel electrophoresis
3. PCR amplification

Plant Tissue culture

1. Introduction to PTC
2. Stock and media preparation
3. Mass propagation using different propagating techniques and hardening of micro-shoots

Entrepreneurship and Management

1. Entrepreneurship: Basics, Process and Behaviour
2. Introduction Business Management and Business Environment
3. Marketing Strategy & Planning
4. Financial Accounting for Business and funding opportunities
5. Business Incubation for venture start-up
6. Case Study/B-Plan

Food Processing and Food Safety

1. Various aspects on food quality testing and food adulteration
2. Development and optimization of Soy products and other food products
3. Heavy metal analysis by AAS and pesticides by GC

Methodology:

Lectures, discussions and hands on practicals.

(Certificate will be given upon successful completion of the training programme)

Dates and Venue:

Date: June 7, 2010 – July 9, 2010

Venue: STEP, Thapar University, Patiala

No of seats: 20

Last Date of Registration: May 31, 2010

Course Fee:

Rs. 15, 000/-payable by DD in favour of “**STEP–TIET**” payable at Patiala.

(Course fee includes only programme fee and course material; Boarding/lodging and travel to be borne by the candidate; Campus hostel accommodation can be provided on request on chargeable basis subject to availability, Fee once deposited will not be refunded back)

For further information and registrations please contact:

Sumitr Nauhria

Project Manager

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REGISTRATION FORM

**Summer Training
On
Biotechnology & Entrepreneurship
(June 7, 2010 – July 9, 2010)**

1. Name: -----
2. Designation: -----
3. Qualification: -----
4. Organization: -----
5. Address: -----

6. Phone No: -----
7. Fax No: -----
8. E-mail: -----

Fees Payable to “STEP-TIET” payable at Patiala

I am enclosing a demand draft No. _____ dated _____ of
Rs. _____ drawn on (Bank name) -----

Date:

Signature of applicant

Please send your registrations to:

**Sumitr Nauhria
Project Manager
STEP, Thapar University,
Patiala – 147 004 (Punjab)
Tel: (0175)–2393600, 2393602
Mobile: 9417829697
Fax: (0175) – 2393011
E-mail: ccstep@thapar.edu, ccstep.tu@gmail.com**