



## CSIR Integrated Skill Initiative

### Hands-on Laboratory Experiment and Analytical Exposure

#### CSIR- Institute of Himalayan Bioresource Technology, Palampur (H.P.)

Situated among pristine environs in the lap of Dhauladhar ranges, CSIR-IHBT has a focused research mandate for sustainable development of bioresources to enhance bioeconomy in the Himalayan region. CSIR-IHBT is a leading lab in the area of Natural Product Chemistry under Chemical Sciences and globally known for scientific contribution in identification of molecules, chemistry and knowledge on the ancient Ayurveda medicine and ethno-pharmacology which directly impacts healthcare sector. Our scientists are dedicatedly involved in identification of high value plants to isolate and characterize bioactive molecules, chemically modify to improve efficacy, and nano-chemistry to improve efficacy of the products.

The department is well equipped with sophisticated and advanced analytical instruments like NMR-300 and 600 MHz, GC and GC-MS, HRMS-MS, LC-MS, UPLC, HPLC, HP-TLC, TEM, SEM and AFM for identification and characterization of products/extracts/molecules. For upscaling of any process The Institute has a state of the art Pilot Plant facility for upscaling any process developed at the Institute to meet commercial demand and industrial liaisoning. These instruments are very frequently used in different pharmaceutical, cosmeceutical, chemical and agrochemical sectors for quality control of high value products. and always having huge demand of skilled manpower.

CSIR-IHBT invites application for Certificate Course in “**Hands-on Laboratory Experiment and Analytical Exposure**” as per details given below:

Title of the Training Programme	<b>Hands-on Laboratory Experiment and Analytical Exposure</b>
Duration	8 weeks (2 months)
No. of seats	25 maximum
Educational qualifications	M.Sc. (Biochemistry/Chemistry/ Pharmaceutical Chemistry)/ B.Pharm. from a recognized University with minimum 55% marks in aggregate
Age	23-28 years ( relaxation for SC/ST/OBC/ Women as per GOI rules
Expected date of commencement	2 <sup>nd</sup> Week of August
Application form	Online Application Form will open in May 2017
Course Fee	Rs. 10,000/- (Rupees ten thousand only)
Venue of the training programme	CSIR-Institute of Himalayan Bioresource Technology, Palampur (H.P.)
Residential/ Non-residential	Non-residential

**Training for whom:** This training programme would cover major sophisticated analytical equipments used in any Chemical/Food/Pharma/Herbal industry and research organizations. It is an intensive combination of academic and applied training program to meet the industry requirements. After

successful completion of the training programme, students can become eligible for engagement as laboratory technologists or Research Assistants in Pharma/Chemical/Food industries and research organizations.

**Training programme Structure:** The training programme will include 4 papers: 1. Laboratory Safety, Record keeping and Auditing, Data files Organization. 2. Chromatographic techniques, 3. Organic Synthesis, and 4. Microscopic Techniques and Nanotechnology. All 4 papers are compulsory. Students are required to pass in all 4 papers for successful completion of the training programme.

**Management and Faculty:** The teaching faculty will be largely drawn from a set of highly qualified and competent scientists from CSIR-IHBT and a few experts will be called for specialized topics. Students will be taught about the basic principles of the Technologies with examples of applications. They will be given more time for practical training.

**Methods of Instruction:** Instruction methods involve hands on practice. Medium of instruction will be English.

**Selection Procedure:** A written aptitude test may be conducted to select suitable candidates. Date and Time will be displayed in the advertisement on CSIR-IHBT Web site ([www.ihbt.res.in](http://www.ihbt.res.in)).

**Sponsorship:** Sponsored candidates from established industries, government, public and private organizations are welcomed for their interest. In the selection modality special weightage will be provided to the sponsored candidates from established public, private organization/industries and non-profit organizations.

#### **SALIENT FEATURES OF THE TRAINING:**

- Practical skills
- Analyses of data
- Record keeping and reporting
- Analytical troubleshooting
- Team work
- Presentation abilities
- Independent assignment (problem solving)

**CERTIFICATION:** A certificate will be issued to the successful candidates for the training programme taken by the candidates