



SINGH BIOTECH LLP

(EARTH, ENVIRONMENT AND HUMANS)

INFORMATION BROCHURE

Industrial Training Certificate in the field of Biotechnology Techniques, Photoshop, Coral Draw and Soft Skills- a complete Skills enhancement programs.



From the Directors Pen:

Necessity is the mother of all inventions and inventions are achieved through analytical brains and innovative thinking. And our country comprise of many such individuals' who due to lack of opportunity and platform cannot give their best. SINGH BIOTECH believes that biotechnology is a very strong tool that can combine both development and environment conservation giving ample opportunity to eco-friendly growth. SINGH BIOTECH vows to contribute to the creation of a developed and eco-friendly economy with an aim to create employment opportunity and research facility be developing the infrastructure and study facilities to impart the much needed technical knowledge to achieve the same. In this regard we will start a training facility, e-learning, organic farming and also establish Institute to provide the important know-how.



Registration:

Trainees can apply for various modules by registration by sending an application form with **Rs. 500** (general training and projects) and **Rs. 1000** (through Demand Draft) for Professional Training Module in favor of SINGH BIOTECH LLP by Courier Only. You can also transfer the fees through Online and email us the details of the transaction.

Note: The registration fee is non-refundable and Service Taxes extra.

Training:

We provide training in a customized manner in which we try to impart the technical skills both theoretically and practically to our customers/trainees according to their qualification and their requirement. In Biotechnology we have three; Beginner, Intermediate and Expert levels. Other than this we also give the option of training through our standardized modules. Each Module emphasizes on imparting analytical and application skills to utilize in a possible best manner to prepare the candidate according to the industry needs.

In order to provide some good industry standard exposure into IT field we provide Training in some of the in-demand techniques and software. Also, we believe it's our duty to help prepare the managers and leaders of tomorrow for which we provide management training too.

Many a times even a brilliant candidate with fantastic technical skills is not able to receive a call for interview and even when facing an interview fails to crack it. The reason being lack of important soft skills that the employers seek even into the new comers which help them to implement their technical skills. We offer Specialized Soft Skills Training which aims to bridge the important gap into soft skills as per the industry and hierarchy needs at different organizational levels. They are designed specifically for Fresher and Working professionals.



1) Soft Skills Training-

- i. Interview Preparation
- ii. Communication skills
- iii. CV Writing and Professional Email Writing
- iv. Interpersonal Skills
- v. Presentation Skills
- vi. Time Management
- vii. Personality Development etc.
- viii. Option for Customization also available as per the need of the client.

2) Hard Skills Training-

- i. Biotechnology techniques Training
- ii. Training in Multimedia and Animation
- iii. Training in Web Designing
- iv. Management Training
- v. Graphics Designing
- vi. Interior Designing
- vii. Product Designing



Training to be Trainer Program

If you like to help people and wish to make a career out of it, then join SINGH BIOTECH LLP's **TTT (Training to be Trainer) program**. And get Trained to help professionals and students realize their goals. Also get your first pay check from SINGH BIOTECH LLP.

Eligibility: Minimum 1 year Experience in the relevant field.

Duration: Total Duration- 11 months, In 2 modes

- 1) 6 months- Weekend Classroom+ 5 months Internship
- 2) Online- 6 Months+ 5 days classroom in the end + 5 Months Internship

Internship: With Stipend

Selection Process: Application submission + Interview

Fees: Rs. 50,000/- Only Option for payment in 2 installments. Second Installment must be paid after 30 days from the date of registration.

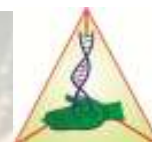
Number of Seats: 6 (SIX) only

Note: Depending on the number of candidates the company reserves the right to add more steps for screening of the deserving candidates.



Details of the Biotechnology Training Modules

Instrumentation and General Laboratory Rules	
S.No.	Name of the experiment
1	Sample Collection and Handling
2	Study of Scientific Methodology
3	Methods of Documentation and Lab record maintenance
4	Guidelines for Working in Various Labs
5	pH meter calibration
6	Working with Micropipette and Pipette
7	Working in Laminar Air Flow
8	Autoclaving principle and working (wet sterilization)
9	Hot Air Oven principle and working (dry sterilization)
10	Handling Water Bath
11	Spectrophotometer principle and working
12	Use of Colony counter
13	Working with Microscope
14	Micrometry
15	Use of Digital weighing balance
16	Using Analytical weighing Balance



Microbiology

S.No.	Name of the experiment
1	Methods of Various Sample collection
2	Preparation of Different Types of Media and their significance
3	Serial Dilution
4	Pour Plate Method
5	Spread Plate Method
6	Isolation of Microbes from Soil
7	Isolation of Microbes from Water
8	Isolation of Microbes from Air
9	Different Methods of Streaking and their significance
10	Subculturing
11	Culture Maintenance
12	Gram Staining
13	Biochemical Identification of the Unkown Microbes
14	Measuring the size of the microbes using Micrometry

Environmental Biotechnology

S.No.	Name of the experiment
1	Sample Collection
2	Study of Water Hardness and its impact
3	Study of Water Alkalinity and its impact
4	Study of Water Acidity and its impact
5	Determination of Total Dissolved Solids in Water
6	Study of Chloride Content in Water and its impact
7	Study of Biological oxygen demand of water and significance
8	Study of Chemical oxygen demand of Water and significance
9	Isolation of Heavy metal tolerant Microbes and significance
10	Isolation of Pesticide degrading Microbes and significance
11	Isolation of Urea Degrading Microbes and significance
12	Isolation of Nitrogen fixing Bacteria from Rhizospheric Soil



Industrial Biotechnology

S.No.	Name of the experiment
1	Isolation of amylase producing microbe from soil
2	Isolation of amylase producing microbe from rotting vegetables
3	Isolation of antibiotic producing Microbe(Crowded Plate Method)
4	Preparation of Synthetic Seed
5	Immobilization of Cells
6	Isolation of beta-galactosidase producing microbes from fermented food
7	Growth Kinetics of <i>E.coli</i>
8	Study on effect of pH on Microbial Growth
9	Study on effect of Temperature on Microbial Growth
10	Study on effect of Salt concentration on Microbial Growth
11	Study on effect of Carbon source on Microbial Growth
12	Study on effect of Nitrogen source on Microbial Growth
13	Preservation of Commercially Important Strains
14	Strain Improvement and its significance

Molecular Biology

S.No.	Name of the experiment
1	Isolation of Genomic DNA from Bacteria
2	Isolation of Plasmid from Bacteria
3	Isolation of Genomic DNA from Plant CTAB method
4	Isolation of Total RNA from Plant
5	Agarose Gel Electrophoresis
6	RNA Electrophoresis (Denaturing gel)
7	Isolation of Total Protein from Plant
8	Native Polyacrylamide Gel Electrophoresis (PAGE)
9	SDS-Polyacrylamide Gel Electrophoresis (SDS-PAGE)
10	Quantification of DNA using DPA method



Biochemistry

S.No.	Name of the experiment
1	Buffers and Solutions Preparation
2	Protein Isolation from Plant Sample
3	Estimation of Protein by Bradford Method
4	Estimation of Protein by Biuret Method
5	Estimation of Protein by Lowry's Method
6	SDS – PAGE
7	Western Blotting
8	Dot- ELISA
9	Enzyme Assay: Amylase Assay
10	Beta Galactosidase Enzyme Activity Assay
11	Chromatography Techniques: Paper Chromatography
12	Thin Layer Chromatography
13	Column Chromatography
14	Phytochemical Analysis of Plant Secondary Metabolites

Genetic Engineering

S.No.	Name of the experiment
1	Isolation of Bacterial DNA
2	Isolation of Plasmid from Bacteria
3	Isolation of Plant DNA
4	Agarose Gel Electrophoresis
5	PCR
6	Gel Elution
7	Restriction Digestion
8	Ligation
9	Competent Cell Preparation
10	Transformation in <i>E.coil</i>
11	Blotting Techniques (Southern and Northern)



Food Microbiology

S.No.	Name of the experiment
1	Collection of Food sample
2	Isolation of food spoilage microbes
3	Identification of good microbes from fermented food
4	Microbial load in food item
5	Detection of Pesticides etc in food, fruits and vegetables
6	Detection of Fungal toxin in food
7	Testing Water Quality
8	Isolation of Bacteriocin producing lactobacillus
9	Identifying food adulterants
10	Isolation of Enzyme producing Microbe

Soft Skills Training:

The Fees for the soft skills training can be obtained by mailing directly to singhbiotechllp@gmail.com . We have a special package for Soft skills + Hard skills details of which can also be obtained by mail or by phone.

IT Training:

The fees for the various trainings in IT can also be obtained by direct mailing to singhbiotechllp@gmail.com .



Biotechnology Specialized Modules

Beginners Module	
S.No.	Name of the experiment
1	Sample Collection and Handling
2	Study of Scientific Methodology
3	Methods of Documentation and Lab record maintenance
4	Guidelines for Working in Various Labs
5	pH meter calibration
6	Working with Micropipette and Pipette
7	Working in Laminar Air Flow
8	Autoclaving principle and working (wet sterilization)
9	Hot Air Oven principle and working (dry sterilization)
10	Isolation of Protein
11	Quantitative Analysis of Protein in Sample
12	Spectrophotometer principle and working
13	Preparation of Different Types of Media and their significance
14	Serial Dilution
15	Maths in Labs
16	Introduction to Microbiology Experimentation
17	Introduction to Biochemistry Experimentation
18	Introduction to Molecular Biology Experimentation

Note: This is a standard Module for the Beginner Level Trainees, fees is fixed accordingly. Trainees have the option of choice from among the list of experiments which may cost same or modified fee according to the modification done.



Intermediate Module

S.No.	Name of the experiment
1	Isolation of Microbes from Soil
2	Isolation of Microbes from Water
3	Isolation of Microbes from Air
4	Subculturing
5	Culture Maintenance
6	Gram Staining
7	Measuring the size of the microbes using Micrometry
8	Biochemical Identification of the Unkown Microbes
9	Study of Water Hardness
10	Study of Water Alkalinity
11	Study of Water Acidity
12	Microbial staining a method to identify Microbes-Introduction
13	Isolation of Genomic DNA from Bacteria
14	Isolation of Plasmid from Bacteria
15	Isolation of Plant DNA
16	Agarose Gel Electrophoresis
17	Introduction to Manipulative DNA Technology
18	Introduction to Applied Microbiology

Note: This is a standard Module for the Intermediate Level Trainees, fees is fixed accordingly. Trainees have the option of choice from among the list of experiments which may cost same or modified fee according to the modification done.



Expert Module

S.No.	Name of the experiment
1	Introduction to Metabolomics
2	Growth Kinetics of <i>E.coli</i>
3	Isolation and Identification of metabolite producing Microbes
4	Preparation of Synthetic Seed
5	Isolation of Bacterial DNA
6	Isolation of Plasmid from Bacteria
7	Isolation of Plant DNA
8	Agarose Gel Electrophoresis
9	PCR
10	Restriction Digestion
11	Blue –White Selection
12	SDS-Polyacrylamide Gel Electrophoresis (SDS-PAGE)
13	Quantification of DNA using DPA method
14	Ligation
15	Study of Biological oxygen demand of water and significance
16	Isolation of RNA from Plant
17	Electrophoresis of RNA
18	Polyacrylamide Gel Electrophoresis (PAGE)

Note: This is a standard Module for the Expert Level Trainees, fees is fixed accordingly. Trainees have the option of choice from among the list of experiments which may cost same or modified fee according to the modification done.



The list of modules and details of their fees is as follows:

Module No.	Module name	Duration	Fees (Rupees)
SB1	Basic and Instrumentation	15 days	3,800
SB2	Food Microbiology	15 days	4,500
SB3	Biochemistry	15 days	5,500
SB4	Advance Industrial Biotechnology	30 days	6,500
SB5	Advance Environment Biotechnology	30 days	6,500
SB6	Advance Molecular Biology	30 days	7,500
SB7	Advance Genetic engineering	30 days	8,000
SB8	Advance Microbiology	30 days	5,500
SB9	Advance Bioinformatics	45days	7,500
SB10	Beginners	30 days	7,000 or as per customization
SB11	Intermediate	30 days	9,000 or as per customization
SB12	Expert	30 days	11,000 or as per customization

Note: General fee for 1 month, 2 months, 3 months, 4 months and 6 months project is as follows Rs. 8,000/-, 13,000/-, 17,000/-, 21,500/- and 28,000 respectively.



Biotechnology Projects

The project initially can be carried out extending to finishing the training module as per the trainees requirements. Basically the project work comprise of initial 1 week training on handling work in lab and then its application into the completion of the project work. The below listed projects are based on different fields of biotechnology comprising microbiology, Industrial biotechnology, Environment Biotechnology etc enabling the Trainees to use their analytical skills and implement them such that they are pre-trained for the industry. The fees of the project vary according to the topic and its duration.

1. Comparative Study of antimicrobial property of plants.
2. Study of different solvents in extraction on antimicrobial property of plant.
3. Estimation of Antioxidant activity of plants.
4. Estimation of Total Phenol of plants.
5. Estimation of Total Phenol and Antioxidant activity of Plants and their relation.
6. Study of anti-helminthic property of Plants.
7. Isolation and Identification of Antibiotic producing Microbe from soil and Production of antibiotics.
8. Isolation and Identification of Bacteriocin producing microbe from soil.
9. Isolation of Protease producing Microbe.
10. Isolation of Protease Inhibitor producing Microbes.
11. Isolation and Characterization of Multiple Drug Resistance Pathogens.
12. Induction of Mutation and Random Screening for Strain Improvement (α -amylase).
13. Isolation of Pyocyanin producing *Pseudomonas spp.*, Production and culture condition optimization for maximum pyocyanin production.
14. Evaluating Positive interaction of *Actinomycetes* with plants.
15. Isolation and Comparison of Oil degrading efficiency of different Oil degrading isolates from soil and water.
16. Isolation of Lipase producing bacteria, Identification and Production.
17. Study of Phylogenetic Relationship among different gram -ve and gram +ve bacteria using RFLP marker.



18. Comparison of Antimicrobial activity of different Plant parts.

Services:

1. **Business Growth Consultancy**- Marketing and Strategy Building.
2. **Digital Solutions**- Website building, Content writing, Graphics, Logo.
3. **Human Resource Solutions**- Learning & Development, Recruitment.
4. **Lab Solutions**- Equipment & Reagent supplier.
5. Organizing **Seminars, Workshops and Symposiums** to impart good knowledge in Biotechnology.
6. **Industrial Training**: Option of Different Modules to choose from.
7. **Customization: Make your own module**- Select from list of experiments your choice, duration and your fees accordingly.
8. **Customized Project designing and its execution.**
9. **Scientific articles, report and thesis writing and editing.**
10. SINGH BIOTECH also **provides scientific images and template**, which can be used to prepare scientific presentation.
11. **Career Guidance for Biotech and Related Field**: Confused about your career in biotech and path to choose to succeed, come to us and we will guide you how and where to go.
12. **Personality Development program**: Problem facing an interview, putting your point forward to your boss or man to man management. We help you **bring out the best in you.**
13. **Combined Advertisement Facility**: Come **ad with us to grow with us**- If you are a small business or your business has come to a standstill and you are looking to move ahead and grow, then come to us we will **Post your business online** along with ours helping you to reach the desired market and profit.

Products:

1. **Microbial Bank**- Isolation, Storage, Buying and Selling of commercially important microbes like bacteria and fungi.
2. **Organic fruits and vegetables.**
3. **Biofertilizers**
4. **Biopesticides**
5. **Dried parts of Medicinal plants.**
6. **Floral Oils and extracts of Medicinal plants.**



Admission Announcement:

1. **SINGH BIOTECH LLP announces commencement of six months Professional Training Module starting from June, 2016 as a part of Training cum In-house placement program. Top two trainees would be absorbed In-House at the end of the training and series of evaluations one each in the management and research. Selection of the Trainees would be done based on Online test result. The time of test would be mailed individually to every applicant.**

- **Eligibility: B.Tech Biotech, M.Tech Biotech, B.Sc. & M.Sc. Biotech., Microbiology and Biochemistry/ related field.**
- **Fees : Rs. 30,000/Trainee**
- **Registration Fees: Rs.1000/-**
- **Last date of application: 11th June, 2016**
- **Duration: 6 months**

2. **Applications are also open for Industrial Training and Project Dissertation for the New Batches.**

- **Eligibility: B.Tech Biotech, M.Tech Biotech, B.Sc. & M.Sc. Biotech., Microbiology and Biochemistry/ related field.**
- **Registration Fees: Rs. 500/-**
- **Training Fee: According to the Module**
- **Last Date of Application: Till 10 days before the Commencement.**



3. Training to be Trainer Program

Eligibility: Min. 1 year experience in relevant field.

Application Fees: Rs. 100/-

Training Fee: Rs. 50,000/-

Last Date of Application: 19th June, 2016.

NOTE:

- **5% discount on total fee to every girl Trainee (An Initiative to help in women empowerment)**

Contact:

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