



# ALL INDIA INSTITUTE OF AYURVEDA

NEW DELHI

Quality Control Laboratory

DEPARTMENT OF RS&BK



LEARN  
PRACTICE  
EXCEL

HANDS-ON TRAINING PROGRAM ON

# PHARMACOPOEIAL STANDARDS

## FOR AYURVEDIC FORMULATIONS

Practical Learning
 Precise Quality
 Assured Standards

### SOPHISTICATED INSTRUMENTS IN OUR LABORATORY



**HPLC**

High Performance  
Liquid Chromatography



**HPTLC**

High Performance  
Thin Layer  
Chromatography



**AAS**

Atomic Absorption  
Spectroscopy



**UV**

UV-Visible  
Spectrophotometer



### COURSE MODULE

#### 1. PHYSICOCHEMICAL TESTS



- Loss on Drying
- Ash Values
- pH
- Extractive Values
- Foreign Matter

#### 2. PHARMACEUTICAL TESTS



- Disintegration Time
- Uniformity of Weight
- Hardness
- Friability

#### 3. ANALYTICAL TECHNIQUES



- HPTLC Fingerprinting
- HPLC Quantification
- UV Spectrophotometry

#### 4. HEAVY METAL ANALYSIS



- Sample Preparation (Microwave Digestion)
- Estimation by AAS

#### 5. RAW DRUG EVALUATION



- Macroscopic Evaluation
- Organoleptic & Physicochemical Tests

#### 6. DOCUMENTATION & QA



- Interpretation of Results
- Documentation as per Pharmacopoeial Standards

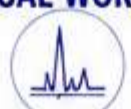
### ANALYTICAL WORKFLOW



Sample  
Collection



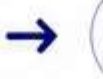
Sample  
Preparation



Instrumental  
Analysis



Data  
Interpretation



Report &  
Documentation

### PROGRAM BENEFITS



Hands-on  
Instrument  
Training



Pharmacopoeial  
Standard Based  
Testing



Assured  
Standards



Expert Faculty  
Guidance



Certificate of  
Participation



Enhance Analytical  
& Research  
Competence



### ELIGIBILITY

- AYUSH Faculty Members
- Research Professionals (JRF/SRF/RA)
- PG & PhD Scholars
- B.Pharm (Ay.) & M.Pharm (Ay.) Scholars
- Medical, Pharmacy & Veterinary Professionals



### PROGRAM DETAILS

- Frequency : Twice in a year  
Additional programs also may be organized considering the requests received from interested groups.
- Duration : 3 or 5 Working Days
- Customization of the training is possible on request from group of participants, however, charges will change proportionately.

Training Duration	Working Hours	Max. Participants	Min. Participants
3 Days	18	10	05
5 Days	30	10	05



### FEE STRUCTURE

₹ 3,500/-	Three Days Training
₹ 5,000/-	Five Days Training

The training program is designed to impart practical exposure to the participants in quality control techniques for Ayurvedic herbs and formulations.



Includes Working Lunch & Tea  
During Training Hours

QUALITY TESTING.  
SAFE MEDICINES.  
BETTER HEALTH.



CONTACT US AT

E-mail: [gclab.aiia@gmail.com](mailto:gclab.aiia@gmail.com)

[rsbk.aiia@govil.com](mailto:rsbk.aiia@govil.com)

ORGANIZED BY

DEPARTMENT OF RS&BK

ALL INDIA INSTITUTE OF AYURVEDA

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Website : [www.aiia.gov.in](http://www.aiia.gov.in)

Address : All India Institute of Ayurveda,  
Gautampuri, Sarita Vihar,  
New Delhi - 110076



# ALL INDIA INSTITUTE OF AYURVEDA PHARMACOLOGY LABORATORY

New Delhi



## HANDS-ON TRAINING PROGRAM ON SMALL LABORATORY ANIMALS

Practical Training in Animal Handling,  
Ethics & Preclinical Pharmacology



Animal  
Handling



Preclinical  
Studies



Behavioral  
Studies



Safety &  
Compliance

### LABORATORY IS INVOLVED IN THE TESTING OF:

- ✓ Ayurvedic Classical Formulations
- ✓ Proprietary Formulations
- ✓ Cosmeceuticals
- ✓ Nutraceuticals
- ✓ Other AYUSH Formulations



### INSTRUMENTAL FACILITIES AVAILABLE

- ◆ Actophotometer
- ◆ Electro convulsimeter
- ◆ Rota road apparatus
- ◆ Cook's pole climbing apparatus
- ◆ Tunnel board apparatus
- ◆ Elevated plus maze
- ◆ Tail flick apparatus
- ◆ Eddy's hot plate
- ◆ Plethysmometer
- ◆ UV chamber
- ◆ Tensile strength machine
- ◆ Anesthesia and Euthanasia System



### FACILITIES AVAILABLE



#### TOXICITY STUDIES

- ◆ Acute Oral Toxicity
- ◆ Acute Dermal Toxicity
- ◆ Repeated Dose 28-Day Oral Toxicity
- ◆ Repeated Dose 28-Day Dermal Toxicity
- ◆ Repeated Dose 90-Day Oral Toxicity
- ◆ Repeated Dose 90-Day Dermal Toxicity



#### EFFICACY STUDIES

- ◆ Anti-arthritis activity
- ◆ Anti-cataract activity
- ◆ Anti-depressant activity
- ◆ Anti-diabetic activity
- ◆ Anti-epileptic activity
- ◆ Anti-inflammatory activity
- ◆ Anti-oxidant activities
- ◆ Anti-psychotic activity
- ◆ Anti-pyretic activity
- ◆ Anti-ulcer activity
- ◆ Adaptogenic activity
- ◆ Analgesic activity
- ◆ Hepatoprotective activity
- ◆ High Fat diet induced NAFLD
- ◆ Hypothyroidism model
- ◆ Immunomodulatory activity
- ◆ Nephroprotective activity
- ◆ Nootropic activity
- ◆ Photoprotective activity
- ◆ Sedative-hypnotic activity
- ◆ Wound healing activity



FREQUENCY: Twice in a year  
Additional programs may be organized  
considering the requests received from  
interested groups.



### DURATION & BATCH SIZE

The duration will be 3 or 5 working days,  
based upon the demand raised from the applicants.

Duration	Working Hours	Maximum Participants	Minimum Participants
Three days	18	15	10
Five days	30	10	08



### ELIGIBILITY

- ✓ Ayush (Ayurveda/ Siddha/ Unani & Homoeopathy) faculty
- ✓ PG, PhD scholars of Ayush systems
- ✓ Professionals from other medical field including medical/ pharmacy students, veterinarians, biochemists
- ✓ Other researchers who are engaged or who will be engaging in animal experiments.

### THREE-DAY TRAINING PROGRAM (18 HOURS)

TECHNICAL SESSIONS	DEMONSTRATIONS	HANDS-ON TRAINING
<ul style="list-style-type: none"> <li>◆ Animal husbandry &amp; care</li> <li>◆ Biology &amp; breeding of Rats and Mice</li> <li>◆ Preparation of experimental protocol</li> <li>◆ Anaesthesia &amp; Euthanasia techniques</li> </ul>	<ul style="list-style-type: none"> <li>◆ Oral gavage to rats and mice</li> <li>◆ Injection procedures &amp; identification methods</li> <li>◆ Anaesthesia &amp; Euthanasia techniques</li> <li>◆ Practical: On behavioral studies</li> </ul>	<ul style="list-style-type: none"> <li>◆ Handling, restraining of rats, mice and Guinea Pigs</li> <li>◆ Oral gavage to rats and mice</li> </ul>

### FIVE-DAY TRAINING PROGRAM (30 HOURS)

TECHNICAL SESSIONS	DEMONSTRATIONS	HANDS-ON TRAINING
<ul style="list-style-type: none"> <li>◆ All topics as in 3-day program</li> <li>◆ Acute &amp; repeated dose toxicity guidelines</li> <li>◆ Minimizing pain &amp; distress in laboratory animals – Aseptic surgery &amp; Perioperative care</li> <li>◆ Humane end points</li> <li>◆ PREPARE &amp; ARRIVE guidelines</li> </ul>	<ul style="list-style-type: none"> <li>◆ Oral gavage to rats and mice</li> <li>◆ Injection procedures &amp; identification methods</li> <li>◆ Anaesthesia &amp; Euthanasia techniques</li> <li>◆ Blood collection techniques</li> <li>◆ Practical: On behavioral and other studies as per feasibility</li> </ul>	<ul style="list-style-type: none"> <li>◆ Handling, restraining of rats, mice and Guinea Pigs</li> <li>◆ Oral gavage to rats and mice</li> <li>◆ Injection procedures by different routes in rats and mice</li> </ul>

### ₹ FEE STRUCTURE

- |   |  |
|---|--|
| <p><b>₹ 5,000/-</b></p> <p>Three-Day Training Program<br/>(per participant)</p> | <p><b>₹ 7,500/-</b></p> <p>Five-Day Training Program<br/>(per participant)</p> |
|---|--|
- ◆ Fee includes working lunch & tea during the working hours of the training period.
  - ◆ The candidates have to pay the applicable fee after confirming their participation from the [pharmacology-lab@aiaa.gov.in](mailto:pharmacology-lab@aiaa.gov.in)

### 📖 TRAINING MODULE

The training program is designed to impart practical exposure to the participants in animal science laboratory.

### ★ KEY HIGHLIGHTS

- ✓ Hands-on Animal Handling
- ✓ IAEC & CCSEA Compliance Training
- ✓ Behavioral & Functional Assessment Techniques
- ✓ Toxicity & Efficacy Study Exposure
- ✓ Preclinical Pharmacology Demonstrations
- ✓ Certificate of Participation

### 📞 CONTACT US

- 🌐 Website: [www.aiaa.gov.in](http://www.aiaa.gov.in)
- ✉ E-mail: [pharmacology-lab@aiaa.gov.in](mailto:pharmacology-lab@aiaa.gov.in)  
[ap-pharmacology@aiaa.ac.in](mailto:ap-pharmacology@aiaa.ac.in)
- 📍 Address: All India Institute of Ayurveda  
Gautampuri, Sarita Vihar,  
New Delhi - 110076



Committed to Animal Welfare & Scientific Excellence