# **Invited Speakers**



Dr. Ravindra Kumar: Principal Scientist and HOD, Molecular Biology and Biotechnology Division, NBGFR, Lucknow, UP His current area of research focuses on physical chromosome map development, whole genome/transcriptome sequencing, genomic resource databases development/maintenance. cell line development/maintenance for conservation and sustainable use of the genetic resources.



Prof. S Jithender Kumar Naik Department of Zoology, University College of Science, Osmania University, Hyderabad

He has vast experience in the fields of Environmental Biology, Toxicology, Genetics, Reproductive Biology, Occupational Health Hazards, Fisheries and Limnology.

Coordinator of the program: Prof. Seema Langer, HOD Zoology and Dean, Life Sciences, University of Jammu

**Organising Committee:** Convener: Dr. Arti Sharma Sr. Assistant Professor, Zoology, JU Organising Secretory: Dr. Rakesh Kumar Assistant Professor, Zoology, JU

# **Registration & Contact Details**

Interested candidates must register and only selected candidates will be invited for the workshop.

For selected candidates, registration fee, local travel, boarding and lodging will be covered by Department of Zoology, University of Jammu.

Registration for the workshop can done through the following link.

https://forms.gle/SEav4fbUE86VvFsg8

Registration Deadline: 5th of Nov. 2022. Shortlisted candidates will be intimated by email, latest by 7<sup>th</sup> November 2022.

# **Eligibility Criteria**

a) Minimum qualification: Post Graduation in Life sciences. b) Professor/Scientists/College faculty/Post Docs/PhD fellows/Industry persons. c) Not more than 03 people from one institute.

For more Information: Email:

hodzooluniveristyofjammu@gmail.com Mobile: 09906027016, 9419131914

Address: Department of Zoology, University of Jammu, Jammu, J&K, 180006

#### Acknowledgements:



## **Department of Science & Technology (DST)** funded

**Training workshop under STUTI** (Synergistic Training Program Utilizing the Scientific and Technological Infrastructure)

## 7 Day Workshop on

# **Atomic Absorption** Spectroscopy (AAS) and **Polymerase Chain Reaction** (PCR)

14<sup>th</sup> Nov. To 20<sup>th</sup> Nov. 2022 Department of Zoology, University of Jammu, Jammu



# **Contents of the Workshop**

#### Sessions Day 1A-B

Inauguration Introduction of the participants and the Host.

#### Session 2A-B

Introduction to AAS. Sample preparation

#### Session 3A-B

Sample and Data analysis of AAS Basics of DNA extraction and qualitative and quantitative analysis of extracted DNA

## Session 4A

Field Trip

#### Session 5A-B

Fundamentals applications of PCR Amplification of DNA of interest

#### Session 6A-B

Fundamentals of Electrophoresis Agarose gel electrophoresis of PCR products.

### Session 7A-B

Data interpretation and Discussions Valedictory

## **Overview of STUTI and objectives of Workshop**

STUTI (Synergistic Training Program Utilizing the Scientific and Technological Infrastructure) is a DST scheme which intends to build human resource and its knowledge capacity through open access to S&T infrastructure across the country. In this program, training sessions are conducted on state of art equipment that is fully funded by DST. IIT Gandhi Nagar has been identified as Project management Unit to conduct these training sessions under the STUTI program.

The Department of Zoology University of Jammu has the privilege for being funded by DST schemes and has been selected for conducting 07 Day workshop on AAS and PCR based techniques w.e.f 14<sup>th</sup> of Nov. 2022 to 20<sup>th</sup> of Nov. 2022.

The workshop is aimed to provide the participants the understanding of AAS and PCR related techniques which have a wide range of applications in the field of biological sciences. The participants will be introduced to the basic concepts of functioning of AAS, sample preparation and analysis of samples. The participants will also learn the molecular biology techniques of DNA isolation from various tissue, DNA amplification by PCR and visualization of amplicons through agarose gel electrophoresis and gel documentation. They will be demonstrated about the principles and working of equipment used in these techniques.

### **TENTATIVE SCHEDULE**

<b>DAY1</b> 9:30 AM	Registration	<b>DAY3</b> 10:00 AM	3-A	<b>DAY6</b> 10:00 AM	6-A
10:30	1-A	1:00 PM	Lunch Break	1:00 PM	Lunch Break
12:30	Lunch Break	2:00 PM onwards	3-В	2:00 PM onwards	6-B
1:30	1-B	DAY4		Unwards	
		10:00 AM onwards	4-A		
<b>DAY2</b> 10:00 AM	2-A	DAY5		DAY7	
1:00 PM	Lunch Break	10:00 AM	5-A Lunch Break	10:00 AM	7-A
		1:00 PM		1:00 PM	Lunch Break
2:00 PM onwards	2-B			2:00 PM	7-B
		2:00 PM onwards	5-B	onwards	/-D