

# APPLICATION FORM

Two days workshop on Comparative Osteology  
at ZSI, HQ, Kolkata during 21<sup>st</sup>- 22<sup>nd</sup> August, 2019

Name of the Candidate:

(in Block letters)

1. Date of birth :

2. Educational Qualification:

3. Present designation:

4. Sponsoring authority of the Candidate :

5. Research interest in attending training :

6. Computer Skills, if any:

7. Whether attended any other:

training course of ZSI earlier

8. Phone/Mobile/E-mail ID of the Candidate:

Affix recent  
passport size  
photograph

Signature of the recommending  
Authority/ Officer-in-Charge

Signature of the Candidate

Date:

Duly filled Application form should be sent by email to [acharya.shelley@gmail.com](mailto:acharya.shelley@gmail.com)  
(Dr. Shelley Acharya, Officer-in-Charge, Training & Extension Division) by  
11.08.2019. Selected candidates will be informed accordingly.



Ministry of Environment, Forest &  
Climate Change



## Zoological Survey of India

Ministry of Environment, Forest & Climate Change

### Two days Training Workshop on Comparative Osteology



21<sup>st</sup>-22<sup>nd</sup> August, 2019

Organized by

Training & Extension Division, Head Quarter, Kolkata

## Background

ZSI is frequently receiving remnants of animal samples including bones, skull and skeletons confiscated by various law enforcement agencies across the country for identification. ZSI's species identification report make the ground for the legal cases to prosecute in the court of law. The confiscated materials often received at ZSI for identification, are mangled or destroyed to conceal the true identity. Here comes the forensic field where one can easily identify material up to species level, and the offender shall be prosecuted based on ZSI's identification report. ZSI is known for its taxonomic strength and wealth for its repositories. ZSI has been declared as the Designated Repository for the National Zoological Collection as per section 39 of the National Biodiversity Act, 2002. Mammal & Osteology section, alone holds about 27,791 examples (15,048 flat skins, 7,570 wet collections and 5,173 osteological collections) with valuable number of 'Type Specimens' (#214) as on July 2017.

Hence, ZSI proposes to host a two days training workshop on 'Comparative Osteology' to strengthen, enriching their knowledge and capacity building of the participants who are involved in identifying bones, skulls and skeletons. The best way to teach about morphological variations among the bones, skulls and skeletons of mammals from the real and type specimens. During the workshop, The participants will explore similarities and differences between the size and shape of skulls, bones and skeleton think critically about what those differences in shape might mean in terms of diet, feeding behavior and local adaptation. The participants will work together or in groups to identify and analyze different features between mammal skulls. Special education kits / manuals specific to skull, long bones morphology will be developed.

## Aims and Objectives:

- Introduce participants - mammalian skeleton and its interpretation in archaeological studies
- Develop participant's skills in the identification and observation of the various bones in animal skeletons
- Introduce participants to the variability that relates to sex, age, etc.

- Familiarise participants with the use of osteological data to produce technical faunal bone reports on species identification

## Learning Outcomes

- knowledge of the typical body plan of a mammal skeleton
- understand the reasons for the skeletal variability between taxa
- Understanding of the processes that affect the preservation and recovery of human and animal remains from archaeological sites
- Writing of technical animal bone reports
- Analysis of a faunal assemblages as a source of understanding of past environments, subsistence practices, craft, and trade
- knowledge of how molecular studies can be used to gain information on human and animal migrations, diet, and population history
- Analysis of quantitative data

**Patron:** Dr. Kailash Chandra, Director, ZSI

**Organising Secretary** Dr. C. Raghunathan, Scientist-E

**Co ordinators:** Dr. C. Venkataraman, O/c, Mammals & Osteology Section

Dr. Shelley Acharya, O/c, Training & Extension Division

Dr. Mukesh Thakur, Molecular Systematic Division

**Resource Persons:** Dr. Hemant Joshi, Asst. Professor, CVAS, Udaipur

Dr. Reena Rani Singh, Asst. Professor, SBS College, Dehradun

Dr. Mukesh Thakur, Scientist-C

Dr. C. Venkataraman, Scientist-D

**Chief Guest:** PCCF, West Bengal

**Application Deadline:** 11<sup>th</sup> August, 2019

**Number of seats:** 25

**Course Fee:** There is no course fee

**For further correspondence:**

Dr. C. Venkataraman, Coordinator Email: cvramanmbs@yahoo.com

Dr. Mukesh Thakur, Coordinator Email: thamukesh@gmail.com