

Metal Casting

(Lost-wax Technique in Archaeology)

2-day workshop with hands-on and Lecture session



Organised by

Archaeological Sciences Centre, IIT Gandhinagar, Gujarat- 3823055

Dates: 2nd and 3rd March, 2024

Venue: IIT Gandhinagar, Gujarat

Brief Introduction:

India's lost wax technique is a millennia-old technology with rich cultural ramifications. It has generated oral traditions, performing arts, social practices, rituals, festive events, and knowledge, apart from traditional skills and crafts transmitted from one generation to the next. How the technique is surviving in different pockets of India with regional variations is a fascinating tale-telling study. The name "lost wax" is derived from the wax melting out when the mould is heated, thereby leaving a negative impression of it. Lost wax casting (also called "investment casting", "precision casting", or "cire perdue" in French) is the process by which a duplicate metal sculpture (often silver, gold, brass/bronze and copper) is cast from an original sculpture. Intricate works can be achieved by this method depending on the sculptor's skills.

Objectives:

- Introduce students to various archaeometallurgical techniques.
- Disseminate insights on how metal antiquity aids in comprehending historical technology.
- Utilize experimental archaeology to create interactive experiences for children to connect with the past.
- Employ workshops to comprehend contemporary craft specialization.
- Understand the role of ethnography in archaeological research.

Approach: The workshop will entail lectures accompanied by hands-on practical sessions facilitated by the key resource persons.

Deliverables:

- Participants will gain practical experience in lost wax casting techniques, engaging in creating moulds, melting wax, and casting sculptures.
- Lecture sessions will provide nuanced insights gained from studying craft specialization and traditional techniques in contemporary society.

- **Certificate of Participation:** Participants will receive certificates acknowledging their involvement in and completion of the workshop, validating their acquired knowledge and skills.

Target Audience: This workshop will benefit researchers, graduate and postgraduate students, PhD candidates, teaching faculty, and professionals engaged in archaeology, anthropology, indigenous studies, cultural heritage studies, history, humanities, engineering, and design.

Participation fee: 2000 INR (Non-IITGN); 500 INR (IITGN Students), inclusive of food, accommodation and registration kit (**note-** no travel allowance will be provided)

- **Last Date of Application:** 18th February, 2024
- **Announcement of Shortlisted Participants:** 21st February, 2024
- **Registration Fee Deadline:** 24th February, 2024

Link for workshop Application: [Google Form](#)

TENTATIVE SCHEDULE

Lecture session- Block 5, Room no. 202 (first floor); Practical Session- Pedway (near Block 13)

Day1: 2nd March 2024

9.30 am- 10.00 am	Registration
10.00 am- 10.30 am	Welcome Address by Prof. Sharada C.V and HOD Vikrant Jain
10.40 am- 11.00 am	Keynote address by- Prof. V.N.Prabhakar
11.00 am to 11.10 am	Coffee/tea break
11:00 am to 12 pm	Traditional Wisdom of Lost-Wax method (Bronze Casting): Technique & Making Process (Lecture Session/Public talk) by Dr S. Udayakumar, NIAS
	Transition time- reaching the Pedway and Safety Instructions
12.15 pm 1.30 pm	Practical session of wax model making through the traditional way- by Dr. S. Udayakumar & Dr Diya Mukherjee, NIAS
1.30 pm- 2.30 pm	Lunch break (5/202)
2.30 pm- 3.30 pm	Practical session of wax model making through the traditional way
3.30 pm- 4.30 pm	Practical session of making clay in the traditional way

4.30 pm- 4.45 pm	Coffee/Tea Break
4.45 pm- 5.15 pm	Exhibition of traditional sculpture drawing

Day 2: 3rd March 2024

10.00 am - 11.00 am	<i>Cire perdue</i> : Ancient Lost wax Casting: Technique, Process and Case studies (Lecture Session/Public Talk) by Dr Diya Mukherjee, NIAS
11.00 am - 11.30 am	Coffee/Tea break
	Transition time
11.45 am -1.00 pm	Practical session of De-waxing the clay mould
1.00 pm - 2.00 pm	Lunch break (5/202)
2.00 pm- 4.00 pm	Practical session - Casting the bronze and pouring the melted bronze into the mould
4.00 pm - 4.15 pm	Coffee/Tea Break
4.15 pm - 5.00 pm	Discussion with Participants
5.00 pm - 5.30 pm	Vote of Thanks

Workshop Resource Person(s)-

- Prof. S Udayakumar- Assistant professor, [Heritage, Science and Society Programme, School of Humanities, National Institute of Advanced Studies \(NIAS\), Bangalore](#)
- Dr. Diya Mukherjee- Post Doctoral Research Associate, [Heritage, Science and Society Programme, School of Humanities, National Institute of Advanced Studies \(NIAS\), Bangalore](#)

Organising team:

- Prof. Sharada Visweswara Channarayapatna: Assistant Professor, IITGN
- Prof. V.N. Prabhakar, Associate Professor, IITGN
- Ms. Camellia Biswas: PhD Scholar, IITGN
- Ms. Arefa Chimthanawala, PhD Scholar, IITGN
- Mr. Angad Lamba, PhD Scholar, IITGN

Please send all your queries/questions to the following email Id only-

Contact- asc.iitgnworkshop2024@gmail.com