

Post-Congress Workshop

Fundamentals of Fossil Preparation: From Excavation to Collection

Duration: 3 days

Schedule: 6 contact hours per day

Format: Theoretical and practical

Capacity: 5 persons

Venue: Iziko South African Museum

Course Description

This theoretical and practical workshop provides foundational training in fossil preparation techniques. The course covers the complete workflow, from initial preparation to final curation, emphasizing the correct use of tools, materials, and methodologies. Participants will gain hands-on experience in both manual and mechanical preparation, including pneumatic and electric equipment, while applying best practices in conservation and collection management.

Daily Schedule Structure

- Morning session
 - Morning break
 - Late morning session
 - Lunch break
 - Afternoon session
 - Afternoon break
 - Final practical block
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Day 1 – Introduction, Materials and Manual Preparation

09:00 – 10:30

Introduction to Fossil Preparation

- Role of preparation in paleontology
- Ethical considerations
- Laboratory safety protocols and best practices

10:30 – 10:45

Morning Break

10:45 – 12:30

Materials and Supplies

- Consolidants and adhesives (including Paraloid B-72)
- Preparation of different concentrations
- Selection of appropriate stabilization materials

12:30 – 13:30

Lunch Break

13:30 – 14:45

Manual Preparation Techniques

- Use of hand tools
- Sediment removal strategies
- Surface cleaning methods

14:45 – 15:00

Afternoon Break

15:00 – 16:00

Practical Session

- Application of consolidants
- Supervised manual preparation exercises

Day 2 – Mechanical Preparation and Equipment Handling

09:00 – 10:30

Overview of Preparation Equipment

- Pneumatic tools (air scribes, micro-jacks)
- Electric tools (Dremel, tattoo machine or similar)
- Maintenance and safe handling

10:30 – 10:45

Morning Break

10:45 – 12:30

Mechanical Preparation Techniques

- Step-by-step pneumatic preparation

- Working under magnification
- Substrate differentiation

12:30 – 13:30

Lunch Break

13:30 – 14:45

Supervised Practical Work

- Individual specimen preparation
- Pressure and vibration control

14:45 – 15:00

Afternoon Break

15:00 – 16:00

Advanced Considerations

- Fragile specimens
 - Combining manual and mechanical methods
 - Troubleshooting cases
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Day 3 – Stabilization, Restoration and Collection Curation

09:00 – 10:30

Stabilization and Restoration Principles

- Crack stabilization
- Adhesion techniques
- Reversibility and conservation ethics

10:30 – 10:45

Morning Break

10:45 – 12:30

Finalization Criteria

- Determining completion of preparation
- Surface consolidation
- Ethical limits of restoration

12:30 – 13:30

Lunch Break

13:30 – 14:45

Collection Curation

- Documentation standards
- Cataloguing and labelling
- Storage recommendations

14:45 – 15:00

Afternoon Break

15:00 – 16:00

Final Practical Session and Course Wrap-Up

- Review of prepared specimens
- Feedback and discussion
- Closing remarks