

## Popularizing earth science: the rocky way\*

Fossils provide a glimpse of the life which existed in the past. Over the past 50 years scientists at Geology and Palaeontology Group, Agharkar Research Institute (ARI), Pune have been collecting fossils from various places. A two-day exhibition displaying the fossil collection was organized in collaboration with M. F. Makki, an independent mineral collector in the ARI auditorium. The palaeontologist V. G. Phansalkar inaugurated the exhibition. The event was a part of the science popularization programme of the Maharashtra Association for the Cultivation of Science (MACS), Pune, the parent organization of ARI, to enthuse in people an interest for earth sciences.

During the exhibition a wide range of fossils were displayed in separate sections. Fossils from different groups (Figure 1) like bivalves, brachiopods, gastropods, echinoids, nautiloids, etc. formed one section. This section also included preserved crab carapaces and large-sized fossils of the snail-like ammonoid (Figure 2).

Among other sections, the trace fossil collection attracted the visitors. Trace fossils are geological records of biological activity. These fossils are impressions made on the substrate by metabolic activities of ancient organisms. Shweta Gurav, an ichnologist, explained the importance of trace fossils. Trace fossils can be classified into five basic groups on the basis of the behaviour shown by the organism, like locomotory trails, grazing traces, resting traces, dwelling burrows and feeding traces.

The section on fossil remains of vertebrates constituted the skeleton of freshwater fish, dinosaurian remains like bones, a jaw, a claw, eggs, faecal pellets and a cast of their footprints (Figure 2).

\*A report based on a two-day exhibition held at Agharkar Research Institute auditorium during 21 and 22 March 2012.



Figure 1. a, Fossil types on display. b, Large-sized ammonoid fossil.



Figure 2. a, Fossil remains of dinosaurian eggs and bones. b, Fossilized freshwater fish.

Field photographs of dinosaur egg nests and their footprints at Balasinor, Kheda District, Gujarat were included in the section. Apart from fossils, Ajit Vartak (Wadia College, Pune) exhibited a collection of coins and stamps released by different countries to commemorate the dinosaurs.

Fossilized flora was also displayed. Fossils of palm trunks, palm rootlets and leaf impressions of different fern-like plants were interesting.

Most of the displayed fossils (60,000 years to 2500 million years old) were collected from Madhya Pradesh, Tamil Nadu, Karnataka, Gujarat, Rajasthan and other parts of India.

Undergraduate students from Fergusson College, Pune shared their understanding of the minerals with school

children who were fascinated by the colourful crystals displayed in the mineral section. Cavity minerals and zeolites like quartz, amethyst, cavansite, scolecite, stilbite, apophyllite and heulandite were the key attractions.

The exhibition saw a mixed participation. People of all ages and interests visited and enjoyed the exhibition.

Overwhelmed by the response, MACS and ARI are considering organizing similar events on a regular basis for longer duration. Overall the event was well attended (nearly 15,000 visitors) and was widely covered by the media.

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