



**Professor Dr Mohd Shafeea Leman**

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Speaking on

**“Tales and Trails of Langkawi”**

### **Biography**

Mohd Shafeea Leman is Professor of Palaeontology, one of the only two palaeontologists in the country. He obtained his BSc from UKM in 1979, MSc and PhD in Palaeontology from University of Glasgow (1983) and University of Durham (1991), respectively.

He is currently Chairman of the Malaysian Geological Heritage Group and has brought the group into limelight in this country and the region. Working closely with Langkawi Development Authority (LADA), Shafeea plays a leading role in making Langkawi a member of the UNESCO Global Network of National Geoparks (GGN) in 2007. He is currently leading the project on Geoheritage Development in Southeast Asia. He has also successfully led two very important events on the GGN calendar - the Asia Pacific Geopark Conference in 2007 and UNESCO International Conference on Geoparks in 2010.

Working closely with the Coordination Committee on Geoscience Programme in East and Southeast Asia (CCOP), Shafeea published the book *Geoheritage of East and Southeast Asia* and is in the final stage of producing another book entitled *Geological Museums of East and Southeast Asia*. His contribution in the field of geoheritage conservation has been rewarded when he was appointed Honorary Associate in 2001 by the University of New England, Chief Geoscientist of Langkawi Geopark by LADA in 2006, member of both Advisory and Coordinating Committees of the Asia Pacific Geoheritage and Geoparks (APGGN) in 2008, and member of Advisory (Expert) Group of the UNESCO and GGN in 2009, all by the UNESCO Earth Science Division.

### **Professional Insight**

Tales of Langkawi began far back to the dawn of life more than half a billion years ago. Along its dynamic evolution, the

boundary between the Proterozoic (barren earth) and Phanerozoic (lively earth) Eons some 547 million years ago is undoubtedly among the most important moments in the earth's history or rather history of life. It was around this period that Malaysia's Langkawi started to take shape. Where? In this instance, we could only tell that it was somewhere on the fringe of an extremely vast barren continent that could supply enormous amount of sediments to the shore, which was fairly lively. As time passed, earth's climate changed, ocean spread and retreated, sea creatures diversified though some met their maker at particular crisis times, earth crust wandered and hosts of other events took place in the proto-Langkawi sea, then part of the so-called Palaeo-Tethys Ocean. How do we know all about this? These chapters were all there - written in the amazing rocks of Langkawi. Langkawi possesses one of the most complete stratigraphic records for almost the entire Palaeozoic Era that spanned between 547 and 256 million years ago. Among its amazing tales is that for some interval (circa 300 million years ago) Langkawi was under the extremely cold climatic regime. It was actually one of the worst global cooling experienced by the earth. Rocks of this period told us that Langkawi's sea was then at the fringe of Gondwana Supercontinent. After that, mantle activity torn Gondwanaland apart, the Meso-Tethys Ocean was developed and the older ocean was rapidly driven to the north until it eventually collided with the Cathaysia land. As a result, Peninsular Malaysia and Langkawi were brought up to the surface, to start a long (over 200 million years) episode of terrestrial evolution. Physically and chemically different rocks reacted differently to the weather and erosion to form various kinds of unique landscape of Langkawi today. These were all furnished later by events on the rise and fall of the sea in the final geological episode of Langkawi. Though only a tiny fraction of this history involved human settlement, their appreciation towards the various landscapes of Langkawi is quite amazing. Tale of the battle between two giants Mat Chinchang and Mat Raya, for example, - designated most of the geographic features of Langkawi's main island, tale of Princess Mambang Sari described geographic features for most of the southern islands, while legend of Mahsuri told the rest. There are more myths connected to Gua Cherita (story cave) and Telaga Tujuh (seven wells). Today, as we promote Langkawi as a geopark, all these amazing geological tales were blended together with the rich biodiversity and culture to establish several geopark trails for those who love nature holistically and are keen to learn more about it while enjoying the nature-based recreation provided.