

XXII International  
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Book of Abstracts 论文摘要集



General Theme:  
Globalization and Diversity:  
Diffusion of Science and Technology throughout History

会议主题：  
全球化与多样性：  
历史上科学和技术的传播

International Union of History and Philosophy of Science  
Division of History of Science

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## Who Were the Earliest Scholars of Submarine Volcanoes and their Submerged Hydrothermal Vents?

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Medieval Indian manuscripts dating from the 17<sup>th</sup> century to the 4<sup>th</sup> century and possibly as far back as 1500 BCE (similar to BC, Before the Common Era), have been found to contain 16 remarkable descriptions by medieval scholars that pieced together carefully, produce an image of a submarine volcano with an associated hydrothermal vent (“hot spring”) system. Moreover, the volcano is described to be precisely in the area of ocean geophysicists would point to today: India’s northwestern continental margin. The remarkable texts suggest Indian scholars were aware of a volcanic structure off their shores, and deduced a little, at least, about its submerged physical features and hydrothermal system – its structure, “plumbing” and effects on the composition of the surrounding water. Significantly, *all* the descriptions of the volcano are coherent. The descriptions pertain to its:

- a) Volcanic Nature
- b) Oceanic Location
- c) Hydrothermal Vents
- d) Submerged Appearance
- e) Location in the Arabian Sea

A single parallel description might be discarded as a fluke coincidence, but 16 parallel descriptions become much harder to ignore. A natural and simple source for their remarkable knowledge about an object normally submerged deep beneath the ocean surface, can be modeled on the basis of a recently witnessed volcanic phenomena. This was the sudden emergence of Surtsey in 1963 – a volcanic island near Iceland – from beneath the ocean. Could medieval people in India have witnessed a similar event? The geophysical evidence is positive. The medieval descriptions run parallel.