Chandrayaan-1: India's Planetary Exploration Mission to the Moon

Jitendra Nath GOSWAMI

Physical Research Laboratory, Ahmedabad

The successful launch of the Chandrayaan-1 spacecraft on 22nd October, 2008 and its insertion into a lunar polar orbit on 8th November are landmark events for the Indian Space Research Organization and marked the beginning of India's foray into planetary exploration. The spacecraft was placed in the designated 100 km lunar polar orbit on 12 November and the Moon Impact Probe was released on 14th November to land on a pre-determined target. All the ten payloads on Chandrayaan-1, performing high resolution remote sensing observations over a broad range of wavelengths, spreading from radio to gamma rays, were successfully commissioned during mid-November to early January period. Quality data have already been obtained by the instruments and new observations, including identification of anorthositic highland crust that validates the global lunar magma hypothesis, have been accomplished [1]. A summary of results obtained by various payloads and their implications in the lunar context will be presented at the meeting along with a brief outline of the India's future planetary exploration programme.

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