INDIA MARS SCIENCE WORKSHOP

Venue: Centre for Earth Science, IISc Bangalore

Wednesday, 22 April 2026	*08:45 - 09:25*	***Registration***		
	09:30 - 09:55	Steven Ruff	Arizona State University	An overview of the geologic and aqueous history of Mars
	10:00 - 10:25*	Katarina Miljkovic	Curtin University	Mars interior structure and lessons learnt from the NASA InSight mission: from conception to meeting mission science objectives
	10:30 - 10:55	Binod Sreenivasan	IISc Bangalore	Planetary dynamos and the ancient magnetic field of Mars
	11:00 - 11:15	***Tea/Coffee break***		
	11:15 - 11:40*	Amit Basu Sarbadhikari	PRL Ahmedabad	Geochemical Evolution of Mars: Through Meteorites and Mars Exploration Missions
	11:45 - 12:10*	Dewashish Upadhyay	IIT Kharagpur	Formation and early evolution of Mars: constraints from short-/long-lived radiogenic isotope systems
	12:15 - 12:40*	Nachiketa Rai	IIT Roorkee	Planetary differentiation in Mars: Insights from trace elements
	12:45 - 13:00	Discussion		
	13:00 - 14:25	***Lunch***		
	14:30 - 14:55*	Privadarshi Chowdhury	NISER Bhubaneshwar	Crustal Evolution and Tectonic Regimes: Insights from the Early Earth for Its Rocky Neighbours
	15:00 - 15:25*	Vivek Krishnan	NCESS Trivandrum	Martian Tectonics: From Volcanic Loading to Recent Seismic Activity
	15:30 - 15:45	***Tea/Coffee break***		
	15:45 - 16:10	Yamini Jangir	IIT Kanpur	Rock powered life as a putative metabolic strategy in the Martian subsurface
	16:15 - 16:40*	Sudha Rajamani	IISER Pune	Astrobiology and the Mars connection
	16:45 - 17:25	Martin Van Kranendonk	Curtin University	Hot springs and the origin of life: Implications for the search for life on Mars
	17:30 - 17:45	Discussion		
Thrusday, 23 April 2026	09:00 - 09:25*	Katarina Miljkovic	Curtin University	Hydrothermal process in the impact craters on Mars and tracing hydration in the Martian crust
	09:30 - 09:55	V J Rajesh and Asif Iqbal Kakkassery	IIST Trivandrum / Government College Kasaragod	Geomorphological Analysis and Designation of Krishnan Crater, Xanthe Terra: Insights from Orbital Observations
	10:00 - 10:25*	Alka Rani	IIT Roorkee	Unveiling the Red Planet's Secrets Through the Lens of Volcanism
	10:30 - 10:55*	Satadru Bhattacharya and Souvik Mitra	SAC ISRO / Presidency University	Finding Terrestrial Enclaves of Martian Aqueous Environments in Kachchh and Ladakh, India
	11:00 - 11:15	***Tea/Coffee break***		
	11:15 - 11:55	Abhik Kundu and Nilanjan Dasgupta	Ashutosh College / Presidency University	Decoding Areology: Revelations from impact craters, fracture systems and periglacial ice flows
	12:00 - 12:25*	Shiba Shankar Acharya and Rahul DasGupta	Presidency Univ /Assam University	Jarosites of Kutch: A 40-Year Journey from Mineral Discovery to a Terrestrial Analog for Martian Processes
	12:30 - 12:55	Alik Sundar Majumdar	IIT ISM Dhanbad	Understanding the Alteration on Mars: Processes, Products, and Implications
	13:00 - 13:15	Discussion		
	13:15 - 14:45	***Lunch***		
	15:00 - 15:40	Steven Ruff	Arizona State University	The discovery and significance of opaline silica on Mars
	15:45 - 16:25	Michael Rowe	University of Auckland	New approaches to investigating biogenicity in hot spring silica from analogue studies
	16:30 - 16:45	***Tea/Coffee break***		
	16:45 - 17:10	Martin Van Kranendonk	Curtin University	The Columbia Hills of Gusev Crater: so much more to explore
	17:15 - 17:40*	Vijayan S	PRL Ahmedabad	Science process of selecting Martian landing sites
	17:45 - 18:00	Discussion		
Friday, 24 April 2026	09:00 - 09:25*	Andrew S.M. Ang / Akbar Rhamdhani	Swinburne University of Technology	(To be decided)
	09:30 - 09:55	Subham Sarkar and Netra Pillai	IISc Bangalore / URSC, ISRO	Decoding the Red Planet: Milestones in Mars Exploration
	10:00 - 10:25*	Fanavi Zhang	Curtin University	Toward Gentle Robotic Manipulation of Geological Materials in Planetary Exploration
	10:30 - 10:55	Aloke Kumar	IISc Bangalore	Making space bricks from extra-terrestrial regolith
	11:00 - 11:15	***Tea/Coffee break***		
	11:15 - 11:55	Ritu Karidhal	URSC, ISRO	Mars Landing Site aspects for various Science themes
	12:00 - 12:25	Vivek Varadharajan	Uncharted AI	Autonomy Beyond Earth: Teams of Robots for Space Exploration
	12:30 - 12:55	Aastha Kacha	Aaka Space Studio	Terrestrial Analog Environments as Validation Platforms for Space & Planetary Habitat Design and Operations
	13:00 - 13:25*	Siddharth Pandey	Protoplanet Private Limited	Sample collection tech for mars surface missions as well as experience with using terrestrial analogues for training Mars mission teams
	13:30 - 14:30	***Lunch***		
	15:00 - 17:00	Discussion, future directions		

* Virtual Talks