



Venus Science Conference 2023 (Venus-SC 2023)

Online Conference: 21-22 September 2023
Physical Research Laboratory, Ahmedabad, INDIA



Programme

Day 1: 21 September, Thursday

Indian Standard Time (IST) in Hours

Inaugural Session

IST (hrs)	Event	Speaker
9:25 IST* hrs	Log-in for the Inaugural Session	
9:30-9:35 hrs	Welcome	Prof. Anil Bhardwaj, Director, PRL
9:35-9:45 hrs	Inaugural Address	Shri A. S. Kiran Kumar, Council Chair, PRL
9:45-9:55 hrs	Overview of Venus SC-2023	Dr. Jayesh Pabari, Convener, Venus-SC 2023
9:55-10:00 hrs	Vote of Thanks	Prof. D. Banerjee
10:00-10:05 hrs	Break	

*IST = GMT + 5:30

Session 1: Surface Science and Exploration

Session Chairs: Neeraj Srivastava (PRL), K. Satheesan (CUSAT), Deepak Putrevu (SAC)

No.	IST (hrs)	Local Time (Other than India)	Title of the Talk	Speaker	Affiliation
1.	10:05-10:35	12:35-1:05 AM EDT	The Evolution of Venus: Themes Derived from the Observed Geologic Record for Tectonism, Magmatism, and Atmosphere/Climate	James Head	Brown University, RI, USA
2.	10:35-10:50	-	Active volcanism on Venus	R. K. Sinha	PRL, Ahmedabad
3.	10:50-11:05	-	Surface and subsurface Science from ISRO's Venus Mission Perspective	Sriram Sharan	SAC, Ahmedabad
IST		Local Time		Scientific Discussion	
11:05-12:30		1:35-3:00 AM EDT 1:35-3:00 AM EDT - 12:35-2:00 AM CDT 10:35 PM - 12:00 AM MST (Previous Day)		Surface Science and Exploration Moderator: S. Vijayan (PRL)	
12:30-13:30		Lunch Break			
		Panellists		Affiliation	
		1. James Head 2. Noam Izenberg 3. Amit B. Sarbadhikari 4. Justin R. Filiberto 5. Joseph G. O'Rourke		Brown University, RI, USA John. Hop. APL, MD, USA PRL, Ahmedabad ARES, NASA JSC, USA Arizona State Uni., USA	

Session 2: Ionosphere and Radio Science

Session Chairs: R. Satheesh Thampi (SPL), Varun Sheel (PRL)

No.	IST (hrs)	Local Time (Other than India)	Title of the Talk	Speaker	Affiliation
4.	13:30-13:45	-	Venusian Ionosphere: Current Understanding and Outstanding Questions	N. V. Rao	NARL, Gadanki
5.	13:45-14:00	-	Exploring the Venus ionosphere using radio techniques and physics based ionospheric models	K. M. Ambili	SPL, Thiruvananthapuram
6.	14:00-14:20	5:30-5:50 PM JST	Latest results from Akatsuki radio occultation	Takeshi Imamura	University of Tokyo, Japan
IST		Local Time		Scientific Discussion	
14:20-15:50		- - - 10:50-12:20 PM CEST 2:20-3:50 PM IST		Ionosphere and Radio Science Moderator: D. Chakrabarty (PRL)	
15:50-16:00		Break			
		Panellists		Affiliation	
				1. S. A. Haider 2. S. Thampi 3. Varun Sheel 4. Masatoshi Yamauchi 5. Janusz Oschlisniok	
				PRL, Ahmedabad SPL, Thiruvananthapuram PRL, Ahmedabad SISP, Sweden Uni. Cologne, Germany	

Session 3: Lightning and Habitability

Session Chairs: T. Maria Antonita (SPO), Jayesh Pabari (PRL)

No.	IST (hrs)	Local Time (Other than India)	Title of the Talk	Speaker	Affiliation
7.	16:00-16:20	-	Whistler mode waves from lightning on Venus	S. A. Haider	PRL, Ahmedabad
8.	16:20-16:35	-	In search of habitability in Venus through its atmosphere A hypothetical and experimental analysis	Rajagopal S	Jain University, Bangalore
9.	16:35-16:50	-	Ground Based Optical Observations of Lightning on Venus	S. Nambiar	PRL, Ahmedabad
IST		Local Time	Scientific Discussion	Panellists	Affiliation
16:50-18:00		7:20-8:30 AM EDT	Lightning and Habitability	1. Sara Seager 2. Jayesh Goyal 3. Ravi Kumar Kopparapu 4. Jayesh Pabari 5. Sanjay Limaye*	MIT, Cambridge, MA, USA NISER, Bhubaneshwar GSFC NASA, USA PRL, Ahmedabad Uni. Wisconsin, USA
		7:20-8:30 AM EDT			
		6:20-7:30 AM CDT	Moderator: Kinsuk Acharyya (PRL)		

Day 2: 22 September, Friday

Session 4: Atmosphere

Session Chairs: K. Kishore Kumar (SPL), M. V. Sunil Krishna (IITR), Sanjay Mishra (PRL)

No.	IST (hrs)	Local Time (Other than India)	Title of the Talk	Speaker	Affiliation
10.	10:00-10:30	11:30 PM - 12:00 AM CDT (Previous Day)	Venus Climate from Radio Occultation Atmospheric Profiles Obtained since 1967	Sanjay Limaye	University of Wisconsin, USA
11.	10:30-10:45	-	Venusian Clouds using AKATSUKI UV imager	Sandhya Nair	SPL, Thiruvananthapuram
12.	10:45-11:00	-	Venusian atmospheric characteristics with a focus on wind variability & thermal tides	Jagabandhu Panda	NIT, Rourkela
13.	11:00-11:15	-	Electrostatic solitary waves in atmos. permeated by SW	Rubia R.	SPL, Thiruvananthapuram
14.	11:15-11:35	8:45-9:05 AM MSK	Instrument for Venus atmosphere studies onboard Venus orbiter mission of ISRO	Andrey Patrakeev	Space Research Institute, IKI, Moscow
IST		Local Time		Scientific Discussion	
11:35-13:00		3:05-4:30 PM JST 8:05-9:30 AM CEST 8:05-9:30 AM CEST - 4:05-5:30 PM AEST		Atmosphere Moderator: D. Pallamraju (PRL)	
13:00-14:00		Lunch Break			
		Panellists		Affiliation	
		1. Masahiro Takagi 2. Sebastien Lebonnois 3. Oksana Shalygina 4. K. Kishore Kumar 5. Franklin Mills		Kyoto Sangyo Uni., Japan CNRS, France Max Planck SSR, Germany SPL, Thiruvananthapuram Austr. Nat. Uni., Australia	

Session 5: Short Oral Presentation

Session Chairs: T. Upadhyaya (CHARUSAT), Kinsuk Acharyya (PRL)

14:00-15:30 hrs IST		Short Oral (5 Min Each)	
No.	Speaker	Affiliation	Title of the Talk
S1	Rajiv R. Bharti	PRL, Ahmedabad	Study of Venus Subsurface Using Shallow Radar
S2	Mansa, M. J.	Mangalore Uni., Mangalore	Deciphering Venusian Polygonal Patterns: Exploring Potential Clues to Climate Change Dynamics
S3	Aarti Yadav	PRL, Ahmedabad	Study of variations in the height of Venusian Ionopause
S4	R.S. Pandey	Amity University, Noida	Whistler wave by generalized distribution function for relativistic plasma in the Venusian ionosphere
S5	Ria P. Dey/ Akshita Gaba	Amity University, Noida	Spacecraft charging estimation using PVO data set
S6	Keshav Aggarwal	IIT Indore	Retrieving sulphuric acid profiles of Venus Atmosphere from Radio Occultation data of Akatsuki spacecraft
S7	Sonam Jitarwal	PRL, Ahmedabad	Statistical Analysis of lightning frequency spectrum obtained using LIVE Instrument
S8	Sneha Gokani	Amity University, Mumbai	ELF-VLF Remote Sensing – A Powerful Tool to Detect Lightning
S9	Rashmi	PRL, Ahmedabad	Design and Development of Processing Electronics for Lightning Instrument for VEnus (LIVE)
S10	Agnish Chatterjee	St.Aloysius College, Asansol	Whispers of Venus: Speculative Explorations into its Mysterious Atmosphere and Possible Inhabitants
S11	Anindita Das	Univ of Kalyani, Kolkata	Biotic Habitability, Adaptability, Associations, Resilience and Geodynamics in Venusian Analogues (BHAARGAVA)
S12	Ramdayal Singh	SAC, Ahmedabad	Venus Thermal Observations: Retrospects and Prospects from VTC
S13	Jayadev Pradeep	SPL, Thiruvananthapuram	A GCM-based theoretical inspection of the Cyclostrophic Balance in the Atmosphere of Venus
S14	Aanchal Sahu	PRL, Ahmedabad	Dynamics of Dust in the Orbit of Venus
S15	Khushi Sharma/ Shivam Saxena	NISER, Odisha/ J. S. University, Shikohabad	On the method to calculate the Venus's circumsolar dust ring's momentum & mass
S16	K. Aravind	PRL, Ahmedabad	Polarisation: Probing the dust particles of Solar system bodies
15:30-15:45 hrs		Tea Break	

Session 6: Interplanetary Dust Science

Session Chairs: N. V. Rao (NARL), D. Banerjee (PRL)

No.	IST (hrs)	Local Time (Other than India)	Title of the Talk	Speaker	Affiliation
15.	15:45-16:05	12:15-12:35 PM CEST	Dust Populations in the Inner Solar System Observed Continually with Solar Orbiter	Samuel Kociscak	UiT The Arctic University of Norway, Norway
16.	16:05-16:25	6:35-6:55 PM CST	The population and dynamics of interplanetary dust in the orbital region of Venus	Wing-Huen Ip	Nati. Central Uni., Macau
17.	16:25-16:45	-	Metallic ion layer in Venusian atmosphere	Jayesh Pabari	PRL, Ahmedabad
IST		Local Time		Scientific Discussion	
16:45-18:00		7:15-8:30 PM CST 12:15-1:30 PM BST - 1:15-2:30 PM CEST - -		Interplanetary Dust Science Moderator: V. K. Yadav (SPL)	
18:00-18:30		Concluding Session			

Programme Summary (21-22 September, 2023)

Session	Session Chairs	Day, Time (IST, hrs)
Inaugural Session	Day 1, 9:30-10:40 hrs	
Session 1: Surface Science and Exploration	Neeraj Srivastava (PRL), K. Satheesan (CUSAT), Deepak Putrevu (SAC)	Day 1, 10:05-12:30
Session 2: Ionosphere and Radio Science	R. Satheesh Thampi (SPL), Varun Sheel (PRL)	Day 1, 13:30-15:50
Session 3: Lightning and Habitability	T. Maria Antonita (SPO), Jayesh Pabari (PRL)	Day 1, 16:00-18:00
Session 4: Atmosphere	K. Kishore Kumar (SPL), M. V. Sunil Krishna (IITR), Sanjay Mishra (PRL)	Day 2, 10:00-13:00
Session 5: Short Oral Presentation	T. Upadhyaya (CHARUSAT), Kinsuk Acharyya (PRL)	Day 2, 14:00-15:30
Session 6: Interplanetary Dust Science	N. V. Rao (NARL), D. Banerjee (PRL)	Day 2, 15:45-18:00
Concluding Session	Day 2, 18:00-18:30 hrs	