Curriculum Vitae

Name: Dr. Vipin K Yadav

Designation: Scientist/Engineer - SF

Email: vipin_ky[at]vssc[dot]gov[dot]in

Academic Qualifications: BSc (Physics Hons.) B.Ed., MSc (Physics), PhD [Physics (Plasma Physics)], PDF (Post-Doctoral Fellow)

Research Area & Interests: Plasma Physics, Space Plasmas, Plasma Waves, Space-borne particle detectors, Plasma parameter measurements, Electric and Magnetic field measurements in Space.

Life Membership in Professional Bodies:

International

01. Member (1393), Association of Asia-Pacific Physical Societies – Division of Plasma Physics (AAPPS-DPP), Kyoto, **Japan**.

02. URSI Individual Member (MURSI No. M1810501857), International Union of Radio Science, Ghent, **Belgium**.

03. Associate of COSPAR (Committee on Space Research), Paris, **France**.

04. Individual Member, IAU (International Astronomical Union), Paris, **France**.

National

01. Plasma Science Society of India (**PSSI**), Gandhinagar, Gujarat.

02. Indian Centre for Space Physics (**ICSP**), Kolkata.

03. Astronomical Society of India (**ASI**), Hyderabad.

04. Indian Physical Society (**IPS**), Kolkata.

05. Indian Physics Association (**IPA**), Mumbai.

06. Indian Vacuum Society (**IVS**), Mumbai.

07. Magnetics Society of India (**MSI**), Hyderabad.

08. The Indian Science Congress Association (**ISCA**), Kolkata.

09. Indian Society of Atomic & Molecular Physics (**ISAMP**), Ahmedabad.

10. Space Society of Mechanical Engineers (**SSME**), Ahmedabad.

11. Life member (LM638), Indian Society of Systems for Science & Engineering (**ISSE**), Thiruvananthapuram.

12. Life member, Indian Space Scientists Association (**ISSA**), Trivandrum.

13. Life member (LM-11071), Indian Nuclear Society (**INS**), Mumbai.

14. Life member (L-161), Thermophysical Society of India (**TPSI**), Jaipur.

15. Life member (LM-500), Indian Society for Particle Accelerators (**ISPA**), Indore.

Participation in Space/Planetary Missions:

01. **Co-Principal Investigator** (Co-PI) MAPS (MArs Plasma Science & Magnetometers) onboard Mars Orbiter Mission–2; June 2017 onwards.

02. **Principal Investigator** (**Science)**, Flux-gate Magnetometer onboard Aditya-L1 Mission; June 2018 onwards.

03. Member, Working Group for Aditya-L1 Indian Solar Mission; February 2016 onwards.

04. Project Manager (PM) [Mechanical], Payload Realization and Execution Team (PRET); Plasma Analyser Package for Aditya (PAPA) onboard Aditya-L1 (First Indian Solar) Mission; February, 2014 onwards.

05. Project Manager (PM) [Langmuir Probe (LP) – Payload Characterization], Payload Realization and Execution Team (PRET); RAMBHA (Radio Anatomy of Moon Bound Hyper-sensitive Atmosphere & Ionosphere) onboard Chandrayaan–2 Lander Mission; February, 2014 onwards.

06. Project Manager (PM) [Material Management and Sub-system Development], Payload Realization and Execution Team (PRET); CHACE-2 (CHandra Atmospheric Composition Explorer–2) onboard Chandrayaan–2 Mission; May, 2017 onwards.

07. Project Manager (PM) [Payload Development], Payload Realization and Execution Team (PRET); CHACE-2 (CHandra Atmospheric Composition Explorer–2) onboard Chandrayaan–2 Mission; April, 2014 – May, 2017.

08. Deputy Project Manager (DPM) [Payload Development], Payload Realization and Execution Team (PRET); CHACE-2 (CHandra Atmospheric Composition Explorer – 2) onboard Chandrayaan-2 Orbiter Mission; October, 2011 – April, 2014.

09. Deputy Project Manager (DPM) [Payload Development], Payload Realization and Execution Team (PRET); Mars Exospheric Neutral Composition Analyser (MENCA) onboard Mars Orbiter Mission (MOM); September, 2011 onwards.

10. Deputy Project Manager (DPM) **[**Mechanical], Payload Realization and Execution Team (PRET); PLEX (PLasma Energy Explorer) for future space mission; January, 2012 onwards.

In-charge of facilities

1. X-Ray Laboratory at ICSP, Kolkata. December 2006 – November 2010.

2. Clean-Room Laboratory at SPL, VSSC, Thiruvananthapuram. November 2013 onwards.

Review Committee Membership

1. Member, 4 member review committee to review the IIT-Madras student satellite & payload.

2. Member, Academic Committee (SPL) to review the JRFs/SRFs/RAs.

Registered PhD Thesis Supervisor

1. Calcutta University, Kolkata (Theoretical and experimental Physics) since June 2009.

2. Kerala University, Thiruvananthapuram (Physics/Science) since June 2015.

3. Cochin University of Science & Technology (CUSAT), Kochi (Faculty of Science) since October 2016.

Reviewer for Journals

01. **Acta Astronautica**; Elsevier, Amsterdam, The Netherlands.

02. **Advances in Space Research**; Elsevier, Amsterdam, The Netherlands.

03. **Indian Journal of Radio & Space Physics**; India.

Publications:

Books edited (1)

1. Comment Editor, Proceedings of the 27th National Symposium on Plasma Science & Technology "Plasma 2012" June 2013.

Chapters in Books (2)

01. Plasma Diagnostics in Space onboard Planetary Missions
Vipin K. Yadav
Advances in Experimental and Theoretical Physics; Editor: Unnikrishnan Kaleekkal; June, 2017, 72–78; NSSHC Press, NSS Hindu College, Changanacherry 686 102, Kerala, India; ISBN: 978-81-933197-0-3

02. Plasma Waves beyond the Solar System
Vipin K. Yadav and Anil Bhardwaj
Plasma and Fusion Science: From Fundamental Research to Technological Applications; Part II: Space and Atmospheric Plasma, Chapter 15; Editors: B. Raneesh, Nandakumar Kalarikkal, Jemy James, Anju K. Nair; January, 2018; 231–241; Apple Academic Press, USA; Hard ISBN: 978-1-77188-453-2, E-Book ISBN: 978-1-315-36594-7

Journals (20)

1. **Vipin K. Yadav** & D. Bora (2004), "Ultrasoft x-ray emission from a linear ECR plasma source", ***Plasma Sources Science & Technology***, **13** (2), 2004, 231-236

2. **Vipin K. Yadav** & D. Bora (2004), "Observation of parametric decay spectrum in a cylindrical ECR plasma system", ***Physics of Plasmas***, **11**(7), 2004, 3409-3416

3. **Vipin K. Yadav** & D. Bora (2004), "Electron Cyclotron Resonance Heating in a short cylindrical plasma system", ***Pramana***, **63** (3), September 2004, 563-577

4. **Vipin K. Yadav** & D. Bora (2004), "Electron Bernstein wave generation in a linear plasma system", ***Physics of Plasmas***, **11** (10), October 2004, 4582-4588

5. D. Bora, ..., **V. Yadav**, ... (2006), "Cyclotron Resonance Heating systems for SST-1", ***Nuclear Fusion***, **46** (3), March 2006, S72-S84

6. **Vipin K. Yadav**, K. Sathyanarayana, D. Purohit & D. Bora (2007), "A tetrode based fast pulsed microwave source for ECR breakdown experiments", ***Review of Scientific Instruments***, **78** (2), February 2007, 023503

7. **Vipin K. Yadav**, K. Sathyanarayana & D. Bora (2008), "Electron cyclotron resonance breakdown studies in a linear plasma system", ***Pramana***, **70** (3), March 2008, 487-501

8. **Vipin K. Yadav** & D. Bora (2008), "Electric probes for the characterization of microwave-produced plasma", ***Physica Scripta***, **T131**, 2008, 014023:1-6

9. Sandip K. Chakrabarti, … , **V. Yadav** & R. Sarkar (2009), "Fresnel zone plate telescopes for X-ray imaging I: experiments with quasi-parallel beam", ***Experimental Astronomy***, **24** (1-3), May 2009, 109-126

10. Sourav Palit, … , **Vipin K. Yadav**, V. Girish (2009), "Fresnel zone plate telescopes for X-ray imaging II: Numerical simulation with parallel and diverging beam", ***Experimental Astronomy***, **27** (1-2), December 2009, 77-93

11. A. Nandi, … , **Vipin K. Yadav**, … , (2011), "Instruments of RT-2 experiment onboard CORONAS-PHOTON and their test and evolution III: Coded Aperture Mask & Fresnel Zone Plate in RT-2/CZT payload", ***Experimental Astronomy***, **29** (1-2), February 2011, 55-84

12. S.K. Chakrabarti, … , **Vipin K. Yadav**, … (2012), "VLF signals in summer and winter in the Indian sub-continent using multi-station campaigns", ***Indian Journal of Physics***, **86** (5), May 2012, 323-334

13. Anil Bhardwaj, … , **Vipin K. Yadav**, A.V. Aliyas (2015), "MENCA Experiment aboard India's Mars Orbiter Mission", ***Current Science,*** **109** (6), September 2015, 1106-1113

14. Anil Bhardwaj, …, **Vipin K. Yadav**, and A.V. Aliyas (2015), "MENCA onboard the Indian Mars Orbiter Mission", ***Physics Education,*** 31 (3), July – September 2015, 1-8

15. Anil Bhardwaj, …, **Vipin K. Yadav**, … (2016), "On the evening time exosphere of Mars: Result from MENCA aboard Mars Orbiter Mission", ***Geophysical Research Letters***, **43** (5), March 2016, 1862-1867

16. **Vipin K. Yadav** (2016), "Plasma Waves in the Sun", ***Universal Journal of Physics and Applications,*** Volume 10, Issue 6, December 2016, 193-197

17. Anil Bhardwaj, …, **Vipin K. Yadav**, … (2017), "Observation of Suprathermal Argon in the Exosphere of Mars", ***Geophysical Research Letters***, **44** (5), March 2017; 2088–2095

18. P. Janardhan, …, **Vipin K. Yadav**, … (2017), "Probing the heliosphere using in-situ payloads on-board Aditya-L1" ***Current Science***, **113** (4), August 2017, 620- 624

19. **Vipin K. Yadav**, Nandita Srivastava, S. S. Ghosh, P. T. Srikar and K. Subhalakshmi (2018), "Science objectives of the Magnetic Field Experiment onboard Aditya-L1 Spacecraft", ***Advances in Space Research*, 61** (2), 749-758

20. **Vipin K. Yadav,** (2018), "Alfven wave detection at first Lagrangian point with magnetic field measurements"**,** ***IETE Technical Review***, (Accepted, in Press)

Refereed Conference Proceedings (12)

1. D Bora, ... , **Vipin Yadav** , …. (2005), "*Test and Commissioning of 82.6 GHz ECRH system on SST-1"*, Journal of Physics: Conference Series, Vol. **25**, Page: 96-102 Third IAEA Technical Meeting on ECRH Physics and Technology in ITER, Como, Italy, 2-5 May 2005

2. **V.K. Yadav**, K. Sathyanarayana & D. Bora (2007), "*Microwave Produced Plasma Study in a Cylindrical System"*, International Conference on Research & Applications of Plasmas (PLASMA - 2007); 4th German-Polish Conference on Plasma Diagnostics for Fusion & Applications; 6th French-Polish Seminar on Thermal Plasma in Space & Laboratory, Greifswald, Germany, October 16-19, 2007; AIP Conf. Proc., **993**, Page: 307 - 310

3. **Vipin K. Yadav** and D. Bora (2008), "*Electric probes for the characterization of microwave produced plasma"*, Physica Scripta, T131, 014023, Proceedings of XIIth Latin American Workshop on Plasma Physics, Caracas, Venezuela, September 17-22, 2007

4. Sourav Palit, … , **Vipin Yadav** and Anuj Nandi (2008), "*Fresnel zone plates for Achromatic Imaging Survey of X-ray sources"*, Proceedings of the Second Kolkata Conference on "Observational Evidence for Black Holes in the Universe" & Satellite Meeting on "Black Holes, Neutron Stars & Gamma Ray Bursts from February 10-17, 2008; Kolkata, India, Eds. S.K. Chakrabarti and A. Majumdar, AIP Conference Proceedings, **1053**, New York, Page: 391 - 394

5. S.K. Chakrabarti, … , **V. Yadav** and A.R. Rao (2008), "*CSPOB - Continuous Spectrophotometry of Black Holes"*, Proceedings of the Second Kolkata Conference on "Observational Evidence for Black Holes in the Universe" and Satellite Meeting on "Black Holes, Neutron Stars & Gamma Ray Bursts from February 10-17, 2008; Kolkata, India, Eds. S.K. Chakrabarti and A. Majumdar, AIP Conference Proceedings, **1053**, New York, Page: 409 - 412

6. **Vipin K. Yadav**, S.K. Chakrabarti, A. Nandi, S. Palit (2009), "*X-ray experiments for Space applications in intermediate energy range"*, Proceedings of the "International Conference on Space Technology"; August 24-26, 2009; Thessaloniki, Greece, Eds. G Lampropoulos & M. Petrou. ISBN-9-781901-725384 (arXiv: 0912.5290)

7. S.K. Chakrabarti, … , **Vipin K. Yadav**, D. Debnath (2009), "*Fresnel Zone Plate Telescopes as high resolution imaging devices"*, Proceedings of "International Conference on Space Technology"; August 24-26, 2009; Thessaloniki, Greece, Eds. G Lampropoulos & M. Petrou. ISBN-9-781901-725384 (arXiv: 0912.4127)

8. **Vipin K. Yadav**, R. Satheesh Thampi and Anil Bhardwaj (2013), "*Plasma Waves in the*

Solar System", Proceedings of "27th National Symposium on Plasma Science & Technology"; December 10-13, 2012; Pondicherry University, Puducherry, India. SA02, Page: 454 - 458.

9. **Vipin K. Yadav**, … , Anil Bhardwaj (2015), "Performance evaluation of a newly designed Langmuir probe with a variable energy electron source", Proceedings of the "National Symposium on Vacuum Technology and its Applications to Electron Beams (IVSNS-2015)", November 18-20, 2015; Tata Institute for Fundamental Research (TIFR), Mumbai. Page: 1-4

10. R. Satheesh Thampi, … , **Vipin K. Yadav**, … (2015), "A novel technique for the characterization of low energy electron beam under high vacuum conditions", Proceedings of the "National Symposium on Vacuum Technology and its Applications to Electron Beams (IVSNS-2015)", November 18-20, 2015; Tata Institute for Fundamental Research (TIFR), Mumbai. Page: 1-4

11. Rasul Muthu A., **Vipin K. Yadav** and Shefin Shoukath (2016), "Solar plasma wave studies at L1 point with magnetic field measurements from magnetometers", Proceedings of International Conference on Advanced Communication, Control & Computing Technologies (ICACCCT-2016) ; May 25–27, 2016; Syed Ammal Engineering College, Ramanathapuram, Tamil Nadu, India. Page: 298–302; ISBN: 978-1-4673-9545-8

12. **Vipin K. Yadav**, "Solar Alfven wave detection at L-1 point with interplanetary magnetic field measurements", Proceedings of the National Conference on Plasma Physics and Non-linear Dynamics (NCPPND-2017); March 23–24, 2017; Editors: Swarniv Chandra and Manjistha Dutta; JIS University, Kolkata, India. Chapter 11; Page: 102–109; ISBN: 978-93-5288-918-1

Conference Proceedings (07)

1. **Vipin K. Yadav** and D. Bora (2004), "Plasma heating due to X-B mode conversion in a cylindrical ECR plasma system", Proceedings of 12th International Congress on Plasma Physics, Nice, France, 25-29 October 2004, arXiv:physics/0410112 v2 6 Nov 2004

2. **Vipin K. Yadav** and D. Bora (2006), "Plasma production using microwaves and its characterization in a cylindrical chamber", Proceedings of 5th International Conference Plasma Physics & Plasma Technology, Minsk, Belarus, 18-22 September 2006

3. Anil Bhardwaj & the CHACE-2 Team(*); The CHACE-2 Team: SV Mohankumar, P Sreelatha, P Pradeepkumar, B Sunder, TP Das, Amarnath Nandi, Neha Naik, G Supriya, RS Thampi, G Padmanabhan, **VK Yadav**, MB Dhanya, N Raghu, AV Aliyas (2011), "Study of Lunar *Exosphere with the CHACE-2 Experiment"*, Proceedings of the conference "Planetary Sciences & Exploration"; December 12-14, 2011; Physical Research Laboratory (PRL), Ahmedabad, India. Page: 09-10

4. Anil Bhardwaj, …, **Vipin K. Yadav**, … (2011), "*Exploration of Martian Upper Atmosphere-Exosphere"*, Proceedings of the conference "Planetary Sciences & Exploration"; December 12-14, 2011; Physical Research Laboratory (PRL), Ahmedabad, India. Page: 14-

15

5. R. Satheesh Thampi, Abhinaw Alok, Anil Bhardwaj, **Vipin K. Yadav** and M.B. Dhanya (2011), "*Plasma Energy eXplorer (PLEX) - A novel electrostatic analyser for planetary plasma exploration"*, Proceedings of the conference "Planetary Sciences & Exploration"; December 12-14, 2011; Physical Research Laboratory (PRL), Ahmedabad, India. Page: 134-135

6. **Vipin K. Yadav**, and Anil Bhardwaj (2011), "*Plasma Waves in Planetary Ionosphere-Magnetosphere System"*, Proceedings of the conference "Planetary Sciences & Exploration"; December 12-14, 2011; Physical Research Laboratory (PRL), Ahmedabad, India. Page: 160 - 161.

7. **Vipin K. Yadav**, Anil Bhardwaj & R. Satheesh Thampi (2014), "*Plasma Waves in and around Sun"*, Proceedings of the "URSI Regional Conference on Radio Science"; January 2-5, 2014; Symbiosis Institute of Technology (SIT), Pune, India. Session 3H, Page: 97-98.

Invited Talks / Lectures: International (04)

01. "Studies on ECR produced plasmas", October 21, 2004; Centre de Recherché en Physique des Plasmas (CRPP), Ecole Polytechnique Federale de Lausanne (EPFL), Lausanne, **Switzerland**.

02. "Studies on ECR produced plasmas"; August 30, 2005; Institute of Plasma Physics (IPP), Prague, **Czech Republic**.

03. "Plasma and Fusion Research in India"; August 30, 2005; Institute of Plasma Physics (IPP), Prague, **Czech Republic**.

04. "Studies on ECR produced plasmas"; September 2, 2005; Instituto di Fisica del Plasma - Consiglio Nazionale delle Ricerche (IFP-CNR), Milan, **Italy**.

Contributory talks / Oral presentations: International (06)

01. Oral, "Studies on ECR produced plasmas"; "Autumn College on Plasma Physics: Collective Processes"; September 5–30, 2005; The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, **Italy**.

02. Oral, "Plasma Wave Detector System for Space Missions"; Commission D (Space Plasmas in the Solar System including Planetary Magnetospheres), Session D3.4 (Acceleration Processes in the Magnetosphere); 39th COSPAR Scientific Assembly; July 14–22, 2012; Infosys, Mysore, **India**.

03. Contributory talk**,** "Plasma Waves in and around Sun"; 1st URSI Regional Conference in Radio Science (URSI RCRS-2014); January 2–5, 2014; Symbiosis Institute of Technology (SIT), Pune, Maharashtra, **India**.

04. Contributory talk**,** "Plasma Waves in the Ionospheres of Terrestrial Planets"; 2nd URSI Regional Conference in Radio Science (URSI RCRS-2015); November 16–19, 2015; Jawaharlal Nehru University (JNU), New Delhi, **India**.

05. Contributory talk, "Science Objectives of the Magnetic Field Experiment Onboard

Aditya-L1 Spacecraft"; International Conference "Dynamics Sun: I. MHD Waves & Confined Transients in the Magnetized Atmosphere"; February 22–26, 2016; IIT (BHU), Varanasi, Uttar Pradesh, **India**.

06. Contributory talk**,** "Alfven wave detection at first Lagrangian point with magnetic field measurements"; 3rd URSI Regional Conference in Radio Science (URSI RCRS-2017); March 01–04, 2017; Tirupati, Andhra Pradesh, **India**.

Invited talks / Lectures / Seminars: National (13)

01. "Plasma and its importance for us"; May 16, 2007; Ramakrishna Mission Residential College, Narendrapur, Kolkata, West Bengal.

02. "X-ray Imaging using shadow masks"; September 2, 2010; Institute for Plasma Research (IPR), Gandhinagar, Gujarat.

03. "Imaging of X-ray radiation emitted from Astrophysical plasma sources using Shadow Masks"; 25th National Symposium on Plasma Science and Technology (Plasma-2010), December 8–11, 2010; Institute of Advanced Study in Science & Technology (IASST), Guwahati, Assam.

04. "Particle and wave detection in space Plasmas"; Two-day lecture series on selected topics in Atomic & Molecular Physics (April 2–3, 2012); Indian Institute of Space Science & Technology (IIST), Valiamala, Kerala.

05. "Indian Mars Orbiter Mission"; December 2, 2013; Institute of Physics (IoP), Bhubaneswar, Odisha.

06. "Indian Mars Orbiter Mission"; April 24, 2014; Indian Institute of Technology (IIT), New Delhi.

07. "Plasma Waves on Venus"; 1st Venus Workshop; June 2–6, 2014; ISRO Satellite Integration & Testing Establishment (ISITE) campus – ISAC, Bangalore, Karnataka.

08. "Venus Plasma Environment & Waves"; 2nd Venus Workshop; October 28–29, 2014; National Geophysical Research Institute (NGRI), Hyderabad, Telangana.

09. "Plasma Waves Beyond the Solar System"; 29th National Symposium on Plasma Science and Technology (Plasma-2014), December 8–11, 2014; Mahatma Gandhi (MG) University, Kottayam, Kerala.

10. "Indian Mars Orbiter Mission", October 14, 2015; Vellore Institute of Technology (VIT), Chennai-Campus; Chennai, Tamil Nadu.

11. "Measurement of Plasma Parameters in Space onboard Spacecraft"; December 15, 2015: National Seminar on Experimental Techniques in Astronomy & Space Sciences (NSETAS-2015); N.S.S. Hindu College, Changnacherry, Kerala.

12. "Plasma Waves in the Universe"; March 10, 2017; Indian Institute of Geomagnetism (IIG); Navi Mumbai, Maharashtra.

13. "Plasma Instrumentation and Waves in Universe"; April 12, 2017; Institute for Plasma Research (IPR); Gandhinagar, Gujarat.

Contributory talks / Oral presentations: National (10)

01. Oral, "Interaction of neutrinos in electron-positron plasma in supernovae explosion"; Young Astronomers Meet, YAM-99; June 01–03, 1999; Uttar Pradesh State Observatory (UPSO) [Now ARIES], Nainital, Uttarakhand.

02. Oral, "Studies on ECR produced plasmas"; 19th National Symposium on Plasma Science and Technology (Plasma-2004); December 7-10, 2004; Bundelkhand University (BU), Jhansi, Uttar Pradesh.

03. Oral, "X-ray experiments using shadow masks for space applications in Intermediate energy range"; Young Astronomers Meet (YAM-2010); September 3-5, 2010, Physical Research Laboratory (PRL), Ahmedabad, Gujarat.

04. Contributory talk**,** "Planetary Magnetic Field and Plasma wave detection experiments onboard Indian Orbiter Mission"; Brain Storming Session on Mars Exploration and Science (BSSMES); March 24-25, 2011; Physical Research Laboratory (PRL), Ahmedabad, Gujarat.

05. Oral**,** "Plasma Waves in the Solar System"; 27th National Symposium on Plasma Science & Technology (Plasma 2012); December 10-13, 2012; Pondicherry University (PU), Pudducherry.

06. Contributory talk**,** "Solar Plasma Waves"; NLST-Aditya Meeting; November 18-20, 2013; Indian Institute of Astrophysics (IIA), Bangalore, Karnataka.

07. Oral**,** "Performance evaluation of a newly designed Langmuir probe with a variable energy electron source"; 29th National Symposium on Vacuum Technology and its Application to Electron Beams (IVSNS-2015); November 18-20, 2015; Tata Institute of Fundamental Research (TIFR), Mumbai, Maharashtra.

08. Oral**,** "Science from magnetometer"; First Workshop: Science with Aditya-L1 Mission; March 6, 2017, B.M. Birla Auditorium, Jaipur, Rajasthan.

09. Oral**,** "Solar Plasma (Alfven) wave observation at L-1 point with the magnetic field measurements"; XXXV Meeting of Astronomical Society of India (ASI-2017); March 7-10, 2017; B.M. Birla Auditorium, Jaipur, Rajasthan.

10. Oral, "Solar Plasma wave studies at the first Lagrangian (L-1) point"; 32nd National Symposium on Plasma Science & Technology (Plasma-2017); November 7-10, 2017; Entrepreneurship Development Institute of India (EDI), Gandhinagar, Gujarat.

Scientific sessions Chaired/Co-chaired (04)

01. Chair, "Nuclear Fusion" (December 10); 27th National Symposium on Plasma Science & Technology (Plasma 2012); December 10–13, 2012; Pondicherry University, Puducherry, **India**.

02. Chair, "Science from Venus" (June 2); First Venus Workshop; June 2–6, 2014; ISITE Campus ISAC, Bangalore, Karnataka, **India**.

03. Co-chair, "Planetary Atmospheres, Space Weather & Solar Studies" (February 9); 19th National Space Science Symposium (NSSS – 2016); February 9–12, 2016; VSSC, Thiruvananthapuram, Kerala, **India**.

04. Chair, "Planetary Data Processing & Future Planetary Instrumentation" (February 11);

19th National Space Science Symposium (NSSS – 2016); February 9–12, 2016; VSSC, Thiruvananthapuram, Kerala, **India**.

Scientific sessions Judged (06)

01. Poster Session "Space Plasmas"; 27th National Symposium on Plasma Science & Technology (Plasma 2012); December 10–13, 2012; Puducherry, **India**.

02. Student Paper Competition; 1st URSI Regional Conference on Radio Science (RCRS-2014); January 02 – 05, 2014; Pune, Maharashtra, **India**.

03. Poster Session "Plasma Processing"; 29th National Symposium on Plasma Science & Technology (Plasma 2014); December 08–11, 2014; Kottayam, Kerala, **India**.

04. Poster Session "Nuclear Fusion"; 29th National Symposium on Plasma Science & Technology (Plasma 2014); December 08–11, 2014; Kottayam, Kerala, **India**.

05. Student Paper Competition; 3rd URSI Regional Conference on Radio Science (RCRS-2017); March 01 – 04, 2017; Tirupati, Andhra Pradesh, **India**.

06. Poster Session "Space Plasmas"; 32nd National Symposium on Plasma Science & Technology (Plasma-2017); November 07-10, 2017; Gandhinagar, Gujarat, **India**.

Scientific Awards, Prizes & Recognition (04)

01. Nominated for Buti Young Scientist award by PSSI in 2004.

02. "Certificate of Outstanding Contribution in Reviewing" for March 2015 by the Editors of Advances in Space Research, Elsevier, Amsterdam, The Netherlands.

03. "Certificate of Reviewing" for March 2015 by the Editors of Acta Astronautica, Elsevier, Amsterdam, The Netherlands.

04. "Certificate of Merit", Special Mention Prize, VSSC Innovation Day 2016 for "MENCA Experiment for the Mars Orbiter Mission"; August, 2016.

Visits to International Institutes / Centres

01. Physikzentrum; September 10–21, 200; Bad Honnef, **Germany**.

02. Institut fur Plasmaphysik;, Forschungszentrum Jeulich GmbH; September 24–26, 2001; Jeulich, **Germany**.

03. Max-Planck Institute fur Plasmaphysik (IPP); September 27–28, 2001; Munich, **Germany**.

04. Centre de Recherché en Physique des Plasmas Ecole Polytechnique Federale de Lausanne (CRPP-EPFL); October 21–23, 2004; Lausanne, **Switzerland**.

05. Acropolis; October 25–29, 2004; Nice, **France**.

06. Institute for Plasma Physics (IPP); August 29–31, 2005; Prague, **Czech Republic**.

07. Instituto di Fisica del Plasma – Consiglio Nazionale delle Ricerche (IFP-CNR); September 1–2, 2005; Milan, **Italy**.

08. The Abdus Salam International Centre for Theoretical Physics (ICTP); September 3 – October 3, 2005; Trieste, **Italy**.