

**2007 SEDS International Conference
Post-Event Report**



Vellore Institute of Technology University
Vellore, Tamil Nadu, India
22-23 September 2007
<http://earth.seds.org>

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1. Introduction

The 2007 Students for the Exploration and Development of Space International Conference was a wonderful success. More than 350 students met on the campus of the Vellore Institute of Technology in India for three days of lectures, discussions, and activities. Water rockets, HAM radio demonstrations, guidance from ISRO scientists, and student business plans were just some of the activities. SEDSIC 2007 marked the first personal meeting of the international SEDS community in a generation and the initiation of greater activities within SEDS-India.

This post-event report is a historical document, meant to capture information from SEDSIC 2007 so that it can be a resource for participants, future SEDSIC planners, and anyone interested in supporting SEDS. The report includes papers, presentations, notes about activities, and links to more information.

A large portion of the text of this document is taken and edited from the SEDS VIT newsletter, Ex Astris: http://www.vit.ac.in/SEDS_VIT/exastris/sedsic.html. Many thanks to Priyam Srivastava and the SEDS VIT Design & Documentation team for writing a wonderful article.

This version of the report was retrieved on 24 October 2007 from SEDSWiki: http://wiki.seds.org/index.php/SEDSIC2007_Post-Event_Report.

2. Participants

Approximately 350 students attended the SEDSIC, making it the largest SEDS event in history. Students participated from the following (incomplete) list of schools and universities:

- Abdul Hakeem Engineering College, Vellore, India
- Andhra University, Visakhapatnam, India
- Anna University, Chennai, India
- Ariana Afghan-Turk High School, Kabul, Afghanistan
- Basaveshwar Engineering College, Bagalkot, India
- De La Salle University, Manila, Philippines
- Indian Institute of Technology, Kanpur, India
- Indian Institute of Technology, Mumbai, India
- Indian Institute of Technology, Chennai, India
- Infant Jesus College Of Engineering, Thirumelvi, India
- Jawaharlal Nehru Technical University, Hyderabad, India
- Karunya University, Coimbatore, India
- Kumaraguru College Of Technology, Coimbatore, India
- Laboratory High School, Kirtipur, Kathmandu, Nepal
- Lucknow University, Lucknow, India
- Madras Institute Of Technology, Chennai, India
- Osmania University, Hyderabad, India
- Panimalar Engineering College, Chennai, India
- Park College Of Engineering & Technology, Coimbatore, India
- Sastra University, Tanjore, India

- Sri Sairam Engineering College, Chennai, India
- Thapar University, Patiala, India
- University of Central Florida, Orlando, United States
- University Institute Of Technology, Bhopal, India
- University Of Pune, Maharashtra, India
- University of Wales, Aberystwyth, United Kingdom
- Vellore Institute of Technology, India
- Wirtschaftsuniversität Wien, Vienna, Austria

3. Activities

3.1. Pre-Conference CubeSat Workshop

Rei Kawashima of the University Space Engineering Consortium (UNISEC), Dr. Yasuyuki Miyazaki of Nihon University, and Kirk Kittell of Orbital Sciences Corporation performed a workshop on the mission-level aspects of CubeSat design. The SEDS VIT CubeSat team also presented a status report on their satellite design. Over 100 students attended and learned about the history of CubeSats, the lifecycle of CubeSat designs, and an overview of the steps required to operate a CubeSat program. To complete the workshop, the students divided into teams to develop a CubeSat objective and consider the resources that they would need. The purpose of this was to increase the students' confidence in their ability to operate a satellite program, and surely some of the participants will go on to launch the first Indian CubeSat.

For more information, go to:

http://wiki.seds.org/index.php/SEDSIC2007_CubeSat_Workshop.

3.2. Inauguration

The SEDS International Conference was inaugurated on 22 September 2007 by Mrs. D. Purandareswari, Minister of State for Higher Education, Government of India. The Honorable Minister quoted the need for sustainable and relevant higher education opportunities to be created in India and the shortcomings in meeting the industry's requirements of a skilled workforce. She emphasized the need to take up basic sciences seriously and to focus on core research and development to strengthen the industry.

Mr. G. Viswanathan, Chancellor of VIT University, emphasized the importance of space exploration and its benefits to mankind. He pin-pointed the several achievements that India's space programme has achieved in its course to make India a name to reckon with in space exploration and its commercial benefits.

Dr. Ing. B. V. A. Rao, Director of International Relations at VIT University, also shared his thoughts on how space exploration has benefited mankind. He also touched upon the need to thrust our research into this interdisciplinary field as it holds the future for mankind.

SEDS International Conference's souvenir was released at the function after the vote of thanks by Mr. Pranav Agarwal, conference secretary of SEDSIC.

3.3. Astro Expo: Exhibition cum Career Fair

Astro Expo showcased an array of various commercial/non-commercial and space related organizations. It provided a platform for embassies of countries like Russia and U.S.A to showcase the various opportunities for higher education. Eminent banks put up stalls to enlighten the students regarding several loan facilities. Astro Expo aimed at exploring the unleashed talents of young minds in the field of aerospace and astrophysics. The SEDS VIT team took this event to a higher pedestal by displaying working models. The highlight of this event was a mini planetarium set up by Tamil Nadu Science and Technology Centre that created an impression of a virtual solar system. An overwhelming response shown by the young and enthusiastic crowd made this event a success and cultivated their interest in space domain.

3.4. OneSpace: Model Making Contest

The OneSpace programme was an outreach event from SEDS VIT to the school students of India so that they could be a part of SEDSIC. Ten teams from various schools brought forward their models on space colonization, black holes, Mars probes and rocket launch pads. The event was judged by Prof. M. N. Vahia of Tata Institute of Fundamental Research. The OneSpace member from Shrishti Vidyashram won the first prize for a model of the Mars Phoenix lander. The event provided a platform for school students to present their ideas on an international level.

3.5. Cosmo Guide: Career Talk

Three people from different disciplines, levels of experience, and job locations made short presentations on life in space-related industries. Dr. Richard Mondal is currently a professor at VIT, and spend his career working in computational fluid dynamics of jet and rocket engines at Snecma in France. Dr. Soundarraja Perumal from Tamil Nadu Science and Technology Center spoke about careers available in astronomy. Kirk Kittell, a systems engineer at Orbital Sciences Corporation in the United States, presented on the integration of satellites and rockets at Orbital, and the role of systems engineering in design work.

3.6. Space Ventura: Space Business Plan Competition

Space Ventura was a business plan presentation competition with the theme of developing and commercializing space for the benefit of mankind. 25 business plan abstracts were received in the first stage of the event, and after tough marking and thorough reviewing five plans were selected for the finals. The CubeSat team from VIT won the first prize in the event.

3 judges from different areas of expertise were there to check through the business plans, including: Mr. K. Balaji from the Spacecraft Mechanism Group, ISRO Satellite Centre; Dr. H. Sankaran, Management Specialist in Human Relations; and Dr. D. Ashok, Marketing specialist. The business plans that were selected for to be presented at SEDSIC are archived at: http://wiki.seds.org/index.php/SEDSIC2007_Space_Ventura.

Many of the participants and audience members had a first time introduction to entrepreneurship and the experienced were thankful to this event for giving them a platform to exhibit their skills at an international level. SEDS VIT has future plans to provide platforms for showcasing such innovative business ideas.

3.7. Rendezvous: Star Party

Participants gathered on the eighth-floor roof of Technology Tower for a star party, leaving all of the technical work behind for the night. The party was opened with the dedication of the new SEDS VIT telescope, giving the students a closeup view of the moon and stars.

VIT students provided food and drinks and entertainment for all participants. Priyam Srivastava, the secretary of SEDS VIT and Sneha Chate, team-leader, were the soothsayers for the night and predicted the future of the enthusiastic delegates based on their zodiac signs and palmistry. The delegates drew what they thought an alien looked like on a blank sheet, and wrote messages for SEDSIC and SEDS VIT. Krishna Mohanty and Mohsin-bin-Latheef from SEDS VIT composed tattoos on the hands and arms of the other students. And, by the end of the evening, the students from all universities and countries provided entertainment for each other through singing and dancing -- the chance to meet each other informally and complement the technical sessions of the day.

3.8. Nakshatra

Nakshatra was a paper and poster session to encourage students to analyze topics pertinent to the SEDSIC theme. Students submitted abstracts which were reviewed by a panel of experts. The top abstracts were selected to be submitted as full papers and posters and to be given as a presentation at SEDSIC.

Abstracts were invited on the following topics:

- Materials used in space re-entry vehicles
- Clearance of space debris
- Use of space technology/energy for human welfare
- Protection of communication systems from solar flares
- Extra-galactic astronomy
- Planetary sciences

By midnight on 10 August, SEDS VIT had received 156 abstracts, spanning all the 6 topics, with over half of them from VIT University students. The overwhelming response was attributed to the intense publicity campaign undertaken by Miss Krishna Mohanty, Event Coordinator of *Nakshatra*, and the Publicity Committee of SEDSIC.

Between 10 and 25 August, the abstracts were reviewed by 13 eminent scientists and teachers involved in the field of space sciences from VIT University and other organizations from India and abroad. On 26 August, the results of the review process were published on the SEDSIC web site. A total of 84 abstracts were selected, 24 under paper presentation (4 papers in each of the 6 topics) and 60 under poster presentation (10 posters under each of the 6 topics). More than 100 participants were selected from over 30 external colleges.

The abstracts that were selected for the paper and poster presentations at SEDSIC are archived at: http://wiki.seds.org/index.php/SEDSIC2007_Nakshatra_Abstracts.

3.8.1. Paper Presentations

Finalists for paper presentation were to present their ideas for 7 minutes duration followed by a 2 minute question-answer session with the judges and the audience. The presentations were organized into 3 sessions.

Session I

Topics:

- Materials Used in Space Re-entry Vehicles
- Clearance of Space Debris

Date: 22 September, 3:00pm to 4:30pm

Venue: Ambedkar Auditorium, Technology Tower

Chairpersons/Judges:

- Prof. M. N. Vahia, Professor, Department of Astronomy and Astrophysics, TIFR
- Prof. N. Ashokamani, School of Mechanical & Building Sciences, VIT

Session II

Topics:

- Use of Space Technology/Energy for Human Welfare
- Protection of Communication Systems from Solar Flares

Date: 22 September, 4:45pm to 6:00pm

Venue: Ambedkar Auditorium, Technology Tower

Chairpersons/Judges:

- Dr. Narayan Murthy, Project Director, GSLV MK3, ISRO
- Dr. J. P. Raina, Dean, School of Electrical Sciences, VIT

Session III

Topics:

- Planetary Sciences
- Extra-galactic Astronomy

Date: 23 September, 3:00pm to 5:00pm

Venue: Gallery I, Technology Tower

Chairpersons/Judges:

- Dr. S. Soundarajaperumal, TNSC

The first and second sessions were crowd pullers with Ambedkar Auditorium being three-quarters occupied. The question-answer sessions that followed every paper presentation were highly interactive with both the judges and the audience grilling the participants with questions. The third session however was not so much of a crowd-puller owing to its coincidence with the Rock-It competition as well as the poster presentation sessions. Even though the crowd was low, they were very much interactive. At the end of each session, the chairpersons addressed the gathering and enlightened them with their ideas on the topics discussed. On the whole, the feedback from the participants, the audience, and the judges was highly positive.

3.8.2. Poster Presentations

The poster presentations were held on 23 September from 10:00am to 4:00pm in rooms 002 & 003 Technology Tower. Out of 60 selected teams, 46 attended the final session. So as to enable variety, posters were not grouped by topic, but were mixed up. The sessions opened

with the cutting of the ribbon by Dr. M. Khalid, Dean, School of Computing Sciences, VIT. The posters were judged soon afterwards by Dr. Khalid, as well as Dr. Vijalakshmi, CBST, VIT, and a group of delegates from ISRO.

While the judging process was going on, the posters were open to the general public for viewing. A massive turnout of students and staff was seen at the sessions, with both of the rooms being packed at all times other than during lunch. Nakshatra was successful in bringing to light the innovative ideas and theories of over 250 students.

3.8.3. Reviewers

The following members of the ISU and SEDS families offered their assistance as offline reviewers for Nakshatra:

- Eric Choi, Systems Engineer, Planetary Exploration, MDA Space Missions; University of Toronto SEDS alumnus, ISU alumnus
- Laura Swift, Education Program Assistant, Clark Planetarium; ISU alumna
- Matthew Killick, Project Engineer, Avcorp Industries; ISU alumnus
- Daniel Gillies: ISS and STS Flight Controller/Engineer, United Space Alliance; Purdue University SEDS alumnus
- William Glascoe: CEO, Earth Outer Space Organization; ISU alumnus

3.9. REDCOM: HAM Radio

B.A. Subhramani, Secretary and Station Incharge of ISRO's Upagrah Amateur Radio Club, gave a talk about using HAM radio. Mr. Subhramani introduced HAM to a full Kamaraj Auditorium and enlightened the crowd on how to become HAM operators. There were a series of interesting documentaries shown at the end of the lecture, demonstrating the use of HAM radio to contact the International Space Station.

Later that night during the Rendezvous, a HAM demonstration was given by Mr. K. Balaji, Mr. B.A. Subhramani, Mr. Amalnathan and Mr. Vijay, all who work for ISAC and are active members of ISRO's Upagrah Amateur Radio Club. They demonstrated the equipment and also gave a chance to the audience to talk on the transmitter. The demonstrators connected to various places including Chennai and Trichi. They also showed the trajectories of the satellites on a laptop. The demonstration turned to be a very interactive session during which the demonstrators offered several important tips to the international delegates who were working on SEDSAT-2.

3.10. Dialect: Keynote Sessions

Four keynote presentations were given by experts in astronomy and aerospace:

1. Dr. Mayank N. Vahia, Associate Professor, Tata Institute of Fundamental Research, "The Longest Story: Astronomy and Our Universe"
2. Mr. N. Narayanan Murthy, Indian Space Research Organization, "Development of Satellite Launch Vehicle: Indian Scenario"
3. Dr. Mayank N. Vahia, Associate Professor, Tata Institute of Fundamental Research, "Indian Space Programme: Prides of Today and Challenges of Tomorrow"

4. A. K. Sharma, Head, Thermal Fabrication Division, ISRO Satellite Centre, "Thermal Control Materials for Spacecraft Applications"

3.11. Moon Rover Competition

Students were invited to submit conceptual designs for a series of mini lunar rovers. The contest specifications required: multiple rovers; maximum total volume of 0.2m³; maximum mass of 20kg, including the box, which serves as ground station; survive for 30 days in constant sunlight; contain a camera plus scientific payload; and be compatible with a human lunar mission. The full rules are posted at http://wiki.seds.org/index.php/SEDSIC2007_Design_Competition.

Ganesh Kumar of VIT was the winner of the competition with his lunar hawker design, a combination of a ground rover and flying rover. The prize for the rover competition was a half-tuition scholarship to the International Space University, valued at approximately 8,000 euros for the Summer Session Program.

The second place winner was Angarayan Sundarakalharan of Anna University, Chennai. Third place was Prabhu Hari of St. Joseph's College of Engineering, Chennai. Fourteen students submitted abstracts, eight students were selected to submit full papers, and five students were selected to make a final presentation at SEDSIC. The selected papers and presentations from the SEDSIC 2007 Moon Rover Design Competition are archived at: http://wiki.seds.org/index.php/SEDSIC2007_Rover_Results.

The following people generously volunteered their time as guest reviewers for the competition:

- Robert Gershman: Assistant Program Manager, Exploration Systems Engineering, NASA JPL
- Kirk Kittell: Systems Engineer, Orbital Sciences Corporation; University of Illinois at Urbana-Champaign SEDS alumnus, ISU alumnus
- Dr. Richard Mondal: Snecma (retired); Professor, VIT University
- William Pomerantz: Director, Space Projects, X PRIZE Foundation; Harvard University SEDS alumnus, ISU alumnus
- Brian Wilcox: Principal Investigator, All-Terrain Hex-Legged Extra-Terrestrial Explorer (ATHLETE), NASA JPL
- Nick Wyckoff: Systems Engineer, The Boeing Company; University of Alabama at Huntsville SEDS alumnus

Results of the competition were presented in Hyderabad at the International Astronautical Congress in the Hands-On Education technical session:

- Paper: <http://wiki.seds.org/index.php/Image:IAC-07-E1.1.08.pdf>
- Presentation: http://wiki.seds.org/index.php/Image:IAC-07-E1.1.08_Presentation.pdf

The Planetary Society, India, hosted an auxiliary moon rover design event with 150 high school students in Hyderabad. The students interacted by teleconference with the students at Vellore Institute of Technology. The best designs from this event were invited to participate at SEDSIC. News articles for this event are listed in Appendix 2.

Due to the success of the moon rover event, the competition will be repeated at SEDSIC 2008 in the United Kingdom. The 2008 edition of the competition will feature building of rovers in addition to the conceptual design. The competition will be hosted by the American Astronautical Society and will cooperate with the Google Lunar X PRIZE.

3.12. SEDS National Chapter Review

Representatives of several of the national branches of SEDS, supported by SEDS alumni, participated in a discussion about events in their home chapters. The intention of the National Chapter Review was to encourage an exchange of information between chapters on their activities and as a venue where the more established chapters could help the recently established chapters.

More details about the review are listed at:

http://wiki.seds.org/index.php/SEDSIC2007_National_Chapter_Review.

3.13. SEDSAT-2 Design Meeting

SEDSAT-2, the international collaboration cubesat project of SEDS had its first design meeting at SEDSIC. It was the first time that many of the team leaders had met each other face-to-face. The SEDSAT-2 progress review was attended by members from the Philippines, the United Kingdom, Austria, India and USA, most of whom are leaders of subsystem teams. The meeting was also watched by interested students from the VIT CubeSat team.

A wide range of topics were covered in the discussion, the most important of which included member recruitment, the implementation of management accounting, and the current status of all the subsystems. Based on these discussions, it was noted that the progress of the project had been slow, and that a new influx of expertise and an efficient means of managing time and resources would be needed to make the most out of every member's contribution.

An observation of the facilities and abilities of the students at VIT, and the fact that the school had its own CubeSat team, prompted the SEDSAT-2 team to consider recruiting members from this institution. Thus, application forms were accepted for all subsystems, and six students were accepted. The rationale behind that was to take advantage of the knowledge and facilities available at the university to form a sort of hub where there will be representatives from most, if not all, subsystems.

At the end of the review, it was decided that the team would meet again at the 58th International Astronautical Congress in Hyderabad to further discuss the following: information flow within and without the team, a detailed timeline for the project, resolution of obstacles in the systems engineering and ground system teams, funding and networking.

More information about the meeting is available at:

http://wiki.seds.org/index.php/SEDSAT-2_Progress_Review.

3.14. Rock-It: Rocket Design Competition

The last activity of SEDSIC was a water rocket competition held at the VIT athletic stadium. All rockets were propelled by water propulsion and carried an egg payload that had to be safely returned to the ground. Each of the designs was graded on creativity, payload safety,

time of flight, and most importantly: egg survival. Out of the twenty one design reports submitted by the teams, Mr. Kevin Mock of Embry Riddle Aeronautical University SEDS chapter, shortlisted twelve reports which were invited to launch the rockets during the conference. The designs that were selected for launch at SEDSIC are archived at: http://wiki.seds.org/index.php/SEDSIC2007_Rock-It_Abstracts.

More than 100 students attended the event as spectators in addition to the rocket teams. They cheered from the stands as the rockets were launched and parachutes brought the eggs safely to the ground -- of course, some more safely than others. Prof. Natrajan and Mr. Kirk Kittell were the judges for the event, who marked the teams based on their design implementation and the safety of the payload. The first three prizes were won by the teams from VIT, while the IIT Kanpur team won the prize for the best design.

3.15. Valedictory Ceremony

Just like the stars come out to watch the daylight die, the valedictory function of SEDSIC 2007 marked the ending of a great meet of intellect and knowledge. It also marked the beginning of a journey to explore and a quest to conquer space. The chief guest of the function was Dr. A. Iyamperumal, Executive Director, Tamil Nadu Science and Technology Center. The function was also graced by the presence of Mr. G. Vishwanathan, Chancellor VIT University and by Professor Devadas of Devadas Telescopes. Professor R. Asokamani, National Advisory Board Member, introduced the chief guest. Dr. A. Iyamperumal addressed the gathering and appreciated all the delegates for their enthusiasm and passion to widen the portals of space. He also applauded Mr. G. Vishwanathan and the SEDS VIT chapter for their effort and dedication. Professor Devadas, who makes telescopes at low cost for educational institutes and is working hard to promote astronomy among young Indians, expressed his joy and appreciation. He also gifted SEDS VIT with a star catalog, a book written by him, and many other materials of valuable information and encouraged the participants to walk forward and achieve great things.

The Conference Proceedings were given by Miss Priyam Srivastava, Secretary of SEDS VIT. She reminded the audience of all the events that had enlightened and prepared them for their mission. Mr. Tom Nordheim of Norway who represented UKSEDS, Mr. Pradipta Shreshta who represented SEDS-Nepal and Mr. Sanjeev Gupta, a delegate from IIT Kanpur, shared their experiences in the conference. The delegates said that they had a great time meeting different people from different countries, sharing their ideas, and learning new things. They appreciated the hospitality in VIT and said that the conference was enlightening and acted as a platform to bring together people who have a common goal of unveiling the mysteries of space. The vote of thanks was given by Mr. Snehal M. Deshpande, Deputy Head, SEDS VIT. Thus the function ended with zeal to reach out to the stars above as a team with the realization that no one can whistle a symphony, it takes a whole orchestra to play it and with the hope that this small group of thoughtful, committed people can change the world and the galaxies beyond.

4. SEDSIC 2008

SEDSIC 2008 will be hosted by UKSEDS, again in conjunction with the International Astronautical Congress. 2008 will be a milestone year, marking the twentieth anniversary of UKSEDS. The program for the event will be defined later by UKSEDS, but two events will

remain to establish a common SEDSIC pedigree: the moon rover competition and the CubeSat workshop.

For more information about SEDSIC 2008, please visit the SEDS-Earth web site at <http://earth.seds.org> and join the SEDSIC email list at <http://www.seds.org/mailman/listinfo/sedsic>. For more information about SEDS-India programs, please visit <http://india.seds.org> and join the SEDS-India email list at <http://www.seds.org/mailman/listinfo/sedsic>.

5. Supporters

5.1. Sponsors

SEDSIC was sponsored by the following businesses and organizations:

- Indian Space Research Organization (ISRO)
- Tamil Nadu Science and Technology Center (TNSTC)
- Turbo Energy Ltd
- National Aerospace Laboratory (NAL)
- Punjab National Bank (PNB)
- State Bank of India (SBI)
- US Educational Foundation of India (USEFI)
- Russian Science and Culture Center
- International Space University

5.2. SEDS Travel Supporters

The following members of the SEDS family supported the representatives of the various national branches of SEDS in attending SEDSIC:

- Dr. Peter Diamandis: CEO, X PRIZE Foundation; Massachusetts Institute of Technology SEDS alumnus and SEDS founder, ISU founder
- Daniel Gillies: ISS and STS Flight Controller/Engineer, United Space Alliance; Purdue University SEDS alumnus
- Kirk Kittell: Systems Engineer, Orbital Sciences Corporation; University of Illinois at Urbana-Champaign SEDS alumnus, ISU alumnus
- Chris Lewicki: Senior Principal Engineer, NASA JPL; University of Arizona SEDS alumnus
- Carlos Niederstrasser: Senior Principal Engineer, Orbital Sciences Corporation; Princeton University SEDS alumnus, ISU alumnus
- Robert Richards: Director, Space and Atmospheric Division, Optech, Inc.; Ryerson University SEDS alumnus, ISU founder
- Aaron Schultz: Systems Engineer, Honeywell; University of Arizona SEDS alumnus
- George Whitesides: Executive Director, National Space Society; SEDS-USA Board of Advisers

6. Organizers

Chief Patron:

- Shri. G. Viswanathan (Chancellor, VIT, Vellore)

Patrons:

- Mr. G.V. Selvam (Pro-C, VIT, Vellore)
- Mr. Sekar Viswanathan (Pro-C, VIT, Vellore)
- Dr. P. Radhakrishnan (Vice Chancellor, VIT vellore)
- Dr. Anand A. Samuel (Pro-Vice Chancellor, VIT Vellore)
- Prof. P.S. Venkataramu (Dean, Students' Welfare, VIT, Vellore)

Chairman:

- Dr. Ing. B.V.A. Rao (Director International Relations, VIT, Vellore)

Conference Secretariat:

- Prof. R. Natrajan (Professor, SMBS, VIT)
- Dr. Geetha Manivasagam (Asst. Prof., SMBS, VIT)
- Dr. N. Arunai Nambi Raj (Deputy Admissions Officer, VIT)
- Mr. Pranav Agrawal (4th B.Tech Mechanical Engineering, VIT)

Advisory Board:

- Dr. P.Iyamperumal (Executive Director, TNSTC, Chennai)
- Dr. Mayank Vahia (Scientist, TIFR, Mumbai)
- Prof. Srinivasa Murthy.S (Head, Dept of Mechanical Engg., IITM, Chennai)
- Prof. K.Ramamurthy (Visiting Professor, IITM, Chennai)
- Prof. M.V. Krishna Murthy (Director, EC&AR, VIT, Vellore)
- Prof. S. Narayanan (Dean, SMBS, VIT, Vellore)
- Prof. K. Chidambaram (Dean, SSH, VIT, Vellore)
- Prof. R. Asokamani (Visiting Professor, SMBS, VIT, Vellore)
- Dr. S. Soundarajaperumal (Deputy director TNSTC, Chennai)

International Organising Committee:

- Mr. Michael Jensen, SEDS Canada
- Ms. Rachel Newsom, UK SEDS
- Mr. Daniel Anderson, SEDS USA
- Mr. Jayaram Harikrishnan, SEDS Germany
- Mr. Ahmad Shah, SEDS Afghanistan
- Ms. Lavina Parwani, Philippines SEDS
- Mr. Adolfo Vazquez, SEDS Spain
- Mr. Olumuyiwa Oke, SEDS Nigeria
- Mr. Even Evren, SEDS Turkey
- Mr. Federico Heredia, SEDS Mexico
- Mr. Pradipta Shrestha, SEDS Nepal

- Ms. Maryam Aljoaan, SEDS Kuwait
- Mr. Pradeep Mohandas, SEDS India

Local Organizing Committees:

- Mr. Anmol Sharma (Programme Committee)
- Mr. Snehal Deshpande (Technical Committee)
- Mr. Preetham D.Reddy (Hospitality Committee)
- Mr. Venkata Nagendra S (Finance and Sponsorship Committee)
- Ms. Revathi Priya (Registration Committee)

7. About VIT

Mr. G. Viswanathan, a former Parliamentarian and Minister in the Government of Tamil Nadu promoted this institute as Vellore Engineering College in the year 1984 under the auspices of the North Arcot Educational and Charitable Trust. The Vellore Engineering College was then affiliated to Madras University and offered three undergraduate engineering courses namely Civil, Mechanical and Electronics and Communication. The constant support and effort by the Management, Faculty, Students, and Parents led the college to grow in both quantitatively and qualitatively. The All India Council for Technical Education (AICTE), Government of India, has ensured accreditation of all the courses offered at the college by the National Board of Accreditation (NBA), Government of India. The exceptional standards maintained at the college enabled to fetch "A" grade for all the courses.

As early as in 1999, Vellore Engineering College was awarded the ISO 9002 certificate for three years by the Det Norske Veritas (DNV) of the Netherlands. It was the first educational institute in India to achieve this recognition.

The academic excellence, visionary management, exceptional faculty, disciplined students, and highly performing alumni made it possible to get "Deemed University" status by the Ministry of Human Resources Development, Government of India, in June 2001. The founder Mr. G. Viswanathan has become the Chancellor. The Deemed University status enabled the institute to have academic freedom and hence the quality of the programme has increased dramatically making us to grow in size also.

Vellore Institute of Technology today profoundly known as VIT, comprises seven schools offering 17 undergraduate programmes and 28 post graduate programmes. It also offers research programmes leading to M.Phil and Ph.D degrees. Of the 10, 000 students studying in the institute, nearly one fourth of them are women. Nearly 400 fulltime faculty members and about 600 administrative and supporting staff facilitates the students to become not only professional but also employable thereby contributing wealth to the nation. The international linkages established by the institute helps the students to get global education and training locally and if needed globally also.

The campus spread over 250 acres is located on the Ranipet - Katpadi Road at Vellore, a district headquarters town between the two important cities of Chennai (formerly Madras) and Bangalore (known as the Silicon Valley of the South Asia). Well furnished hostels accommodate two third of the student population. The strategic location of the institute adds value to the education by constant interaction with near by industries.

8. About SEDS

SEDS is an independent, student-based organization which promotes the exploration and development of space. SEDS pursues this mission by educating people about the benefits of space, by supporting a network of interested students, by providing an opportunity for members to develop their leadership skills, and inspiring people through our involvement in space-related projects. SEDS believes in a space-faring civilization and that focusing the enthusiasm of young people is the key to our future in space. The SEDS web site is located at <http://www.seds.org>.

SEDS-Earth is the international chapter of SEDS. SEDS-Earth sponsors technical student projects that span boundaries and is the forum where leaders of the various national branches of SEDS communicate. For more information, go to <http://earth.seds.org>

Appendices

Appendix 1: Photos

Photos from SEDSIC are posted at <http://gallery.seds.org/v/sedsic2007>.

Appendix 2: Publicity

"Young Minds Gear Up to Design the 'Moon Rover'", *The Hindu*, 10 August 2007

- Web: <http://www.thehindu.com/2007/08/10/stories/2007081059070200.htm>
- PDF: http://wiki.seds.org/index.php/Image:Rovers_TheHindu_20070810.pdf
- Scan: http://wiki.seds.org/index.php/Image:Rovers_TheHindu_20070810.jpg

"Moon Rover design competition held", *The Hindu*, 27 September 2007

- Web: <http://www.thehindu.com/2007/09/27/stories/2007092761390800.htm>
- PDF: http://wiki.seds.org/index.php/Image:Rovers_TheHindu_20070927.pdf

"Kid scientists to embark on 'moon rover mission'", *Indian Express*, 10 August 2007

- Scan: http://wiki.seds.org/index.php/Image:Rovers_IndianExpress_20070810.jpg

Photo of Hyderabad moon rover participants, *The Times of India*, 10 August 2007

- Scan: http://wiki.seds.org/index.php/Image:Rovers_TimesOfIndia_20070810.jpg

Appendix 3: Other Information

- Vellore Institute of Technology: <http://www.vit.ac.in/>
- Planetary Society, India Moon Rover Campaign: <http://moonrover.blogspot.com/>