

IIST Newsletter

Indian Institute of Space Science and Technology (IIST)

Department of Space, Govt. of India, ATF Campus, V S S C, ISRO (PO), Thiruvananthapuram - 695 022



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Chairman ISRO Dr. Madhavan Nair

releasing the first issue of

Drishtikon5



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Yes! it was a very satisfying first year for IIST. We completed our first academic year (2007-2008) successfully with a wide variety of curricular and extra curricular activities. A well structured curriculum for the second semester was introduced and the novel feature was the conduct of real life practical experiments using VSSC facilities for students, which was an exciting experience for students. This second news letter will cover most of our activities during second semester which began on 4th March 2008 and ended on 30th June 2008.

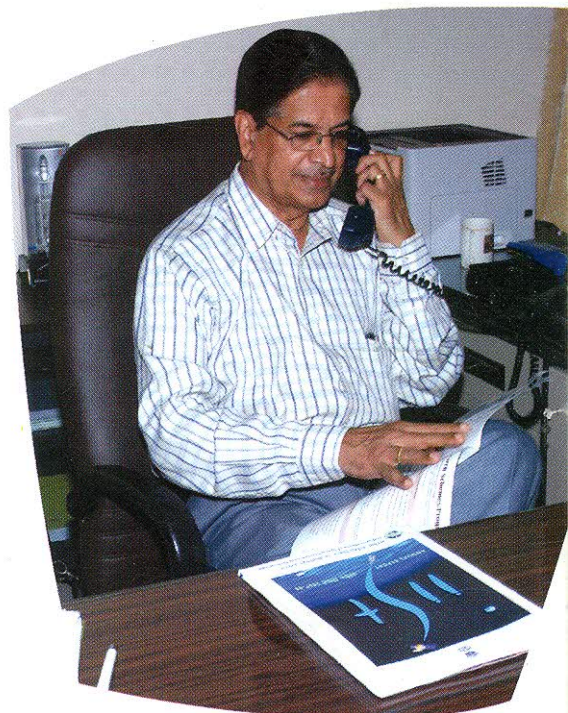
We started the second semester by inaugurating a sports complex in the campus with Volleyball court, Cricket net practicing pitch and a shuttle court. We conducted regular matches among intra houses and IIST's first sports day was organized on 5th May 2008. Similarly greater impetus was given to cultural and literary activities. Detailed report on sport, literary and cultural activities involving IIST students and faculty are reported elsewhere in this news letter. The first ever IIST annual day was celebrated on 5th June and our Chairman was the chief guest. It was an excellent opportunity for our students and faculty to exhibit their talents.

On the academic front I am happy to inform you that eminent personalities like Wing Commander Rakesh Sharma (the first Indian to go to space), Roddam Narasimha (JNCASR), Prof. U R Rao (Former Chairman, ISRO) and Prof. Yashpal (Former UGC Chairman) visited the Institute, interacted with faculty and students and gave very interesting and educative talks. They also provided very valuable suggestions to improve the academic curriculum of the Institute.

We have initiated the necessary actions to initiate M.Tech courses on certain specific disciplines which are of interest to ISRO. We are also in the process of registering a selected few from ISRO centres for Ph. D courses at IIST. A major thrust was given to research activities by setting up a research board with Dr. Adimurthy as Chairman. A few proposals from faculties are already under process.. More faculty members have joined in various departments and we have now Mr. Vasudevan, IFS (Indian Forest Service) as our Registrar. Compared with the first semester, IIST students have improved considerably in their academic performance in the second semester.

I take this opportunity to record my sincere thanks to each and every one who has made valuable contribution in building this Institute and convey my warm greetings and best wishes to all readers of this newsletter.

From Director's Desk



Dr. B N Suresh, Director IIST at Work

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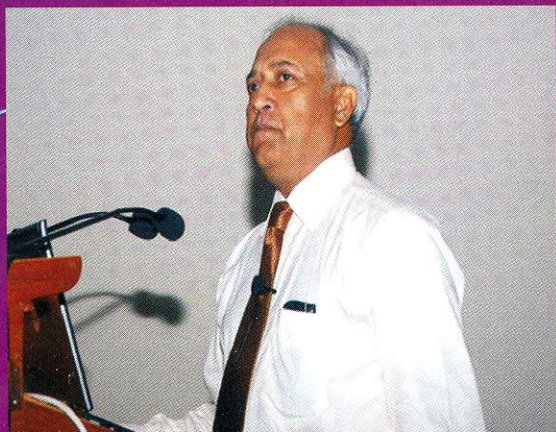
Academic activities

@ IIST

Rakesh Sharma addressing students

Ms. Sheeba Rani welcoming Prof. U R Rao at the entrance of IIST

Prof. Yashpal and Prof. Kuruvilla sharing a joke



Seminar Series

Every, Wednesday at 17.00 hrs, seminars are regularly organized at IIST. On these days, IIST students give seminars on various topics and once a month, eminent personalities are invited to for special lectures.

From April to June 2008, students gave seminars on variety of topics which are of interest to students and faculty. Nitin Kumar Mishra, (Aero), Prakhar Agarwal (Aero), Kanav Setia (Aero), Dhinesh Dhankar, (Avionics), Shomil Saxena(Avionics), and Umang Kumar Rath(iAero) delivered seminars on topics like Space Physics (Solar winds and Sun Spots, Time Travel), Galaxies, Indian Scientific Heritage, Mountaineering, Flying Wind Mills etc.

Rakesh Sharma (First Indian to go to space)

IIST was fortunate to have some of the eminent personalities delivering lectures and interacting with students during the second semester. The first Indian to go to space, Shri Rakesh Sharma was the first to visit IIST and interact with students. Abhinav, Tejeswita and Pradeep interviewed him on his experiences in space. (Details of this interview is published in IIST's in house magazine Dhrishtik on (Vol. I No. I). Later, Shri Rakesh Sharma addressed the students and faculty of IIST along with VSSC scientists.

Prof. Roddam Narasimha (Eminent Fluid Dynamist)

On May 14th, 2007, Prof Roddam Narasimha, one of India's greatest Fluid Dynamists who inspired many at India's prestigious IISC (Indian Institute of Science) for several decades visited IIST. He interacted with the faculty of IIST discussing the credit system and how to lift underperforming students etc. in detail. He then gave an excellent talk on "The Science and Technology of Fluid Flows" followed by intense interaction with IIST students for almost about an hour.

Prof. U R Rao (Former ISRO's Chairman)

Prof. U R Rao, one of India's greatest space scientists and former Chairman of ISRO who inspired ISRO's young scientists for several decades, visited IIST on 4th June 2008. His presence at IIST was very

inspiring and IIST used this opportunity to interact with him. True to his stature Prof. U R Rao delivered a very interesting talk on "Exciting Ten Challenges in Space" for IIST's young students, who have opted for a career in ISRO.

Prof. R Natarajan (Former Director, IIT Madras)

On 11th June 2008, Prof. R Natarajan, former Director of IIT Madras and Chairman AICTE visited IIST along with Prof. Yashpal. Prof. Natarajan later delivered a talk at VSSC auditorium and interacted with IIST faculty on curriculum and credits.

Prof. Yashpal (Former UGC Chairman)

Prof. Yashpal's visit to IIST was really a great turning point to our seminar series. Prof. Yashpal, apart from his outstanding contributions to academics as UGC Chairman, Astrophysicist at TIFR or Director SAC, really inspired not only willing students but also unwilling common people in India through his simple explanations. Who can forget his innings at TURNING POINT on TV? IIST was really very fortunate to have him for several hours interacting freely with students and faculty on 11th June 2008. Prof. Yashpal while interacting with IIST faculty explained the various aspects of the Indian education system. Prof. Yashpal answered a variety of questions put forward by IIST students in both Hindi and English effortlessly with his usual humor.

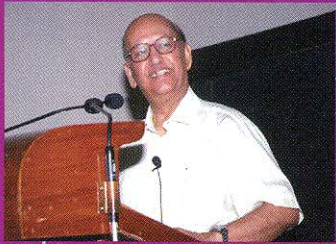
Invited talks

R Krishnan, Dean (Academic)

- Delivered an invited talk on "Strategic Information Extraction" at the C4I2SR workshop at Pune organized by the Aeronautical Society of India
- Delivered series of invited talks on "Image Processing" at the Amrita Viswa Vidyalyaya, Coimbatore between 12th and 14th July 2008



Prof. Rao addressing the audience at VSSC auditorium
 Prof. Yashpal with IIST students and Director, in IIST library
 Director of IIST, Dr. B N Suresh, presenting
 the memento to Prof. Narasimha



Thomas Kurian, Department of Avionics

- Delivered an invited talk on "Power Electronics in Avionics" at the COMPCON-08 national seminar on communication, power electronics and control system on 28th June 2008 at the Mohandas College of Engineering and Technology, Trivandrum

N. Selvaganesan, Department of Avionics

- Delivered an invited talk on "Intelligent Controller and Fault Simulation for High Pressure Heater in Thermal Power Plant" at the National Seminar on "Automation Systems Technology" conducted by CDAC, Trivandrum, on 5th May 2008

Raju K George, Department of Mathematics

- Three lectures on "Introduction to Maple and Solutions of Differential Equations Using Maple" between 13th and 15th March 2008 at Dr. BAM University, Aurangabad
- Delivered an invited talk on "Differential Equations and its Applications to Controls" at the University of Calicut on 8th January 2008

Papers presented at International Conferences

CS Narayanamurthy, Department of Physics

- Presented a research paper on "Photoelasticity using Digital Holography" at the ICO (International Commission for Optics) -21 Congress, held at Sydney, Australia between 7th and 10th July 2008
- Presented a research paper on "Coherent Properties of Laser and White Light Speckled Beams" at the ICO-21 Congress held at Sydney, Australia between 7th and 10th July 2008

T G Deepak, Department of Mathematics

- Presented a research paper on "Inventory with Service Time and Transfer of Customers and/ Inventory" at the Sixth International Conference on Matrix- Analytic Methods in Stochastic Models, Beijing, China, between June 11th and 14th 2008
- Presented a research paper on "Multi-commodity Inventory Problem without/with Lead Time and Positive Service Time", at the Sixth International Conference on Matrix-Analytic Methods in Stochastic Models, Beijing, China, between June 11th and 14th 2008

J Sheeba Rani, Department of Avionics

- Presented a research paper on "A Novel Feature Extraction Technique for Face Recognition" at the International conference on computational intelligence and multimedia applications (ICCIMA07), between December 13th and 15th 2007 at MAPCO, Sivakasi, Tamil Nadu, India

Papers presented at National Conferences

Thomas Kurian, Department of Avionics

- Presented a research paper on "Digital DC-DC converter using PIC micro controller" in the COMPCON 08 conference, held at Mohandas College of Engineering and Technology, Trivandrum, on 28th June 2008

Congratulations!

Thomas Kurian, Head, Dept. Of Avionics, IIST is appointed as AICTE-INAE Distinguished Professor in the field of Power Electronics and Digital Systems at Sona College of Technology, Salem, Tamil Nadu.

Sports Activities

@ IIST



Beenamol holding IIST's sport torch



Nidhi jumping over the bar.....

Inauguration of Sports Complex

A sports complex was inaugurated by the Director, IIST on 31st March 2008, in ATF campus area, which includes a volleyball court, badminton court and a cricket pitch for net practice.

Participation in inter-collegiate tournaments

The IIST basketball team participated in the inter-collegiate basketball tournament held at the College of Engineering, Trivandrum, between 7th and 11th April 2008. The team won their first match and lost to the reigning champions in the second round.



Sishir, Rashmit, Piyush, Naga Vineet and Pulkit trying to be IIST's fastest boy (100 meters race)



It is Gigy Alex, IIST faculty trying her throw in shot-put

Inauguration Of Sports Complex

IIST inter-house tournaments

Four IIST houses namely, Akashganga, Kritika, Sharmista and Devyani (named after four famous constellations) were formed and various intra house tournaments were held in volleyball, chess, carom and cricket during April, May and June 2008.

Annual Sports Day

IIST celebrated its first ever Sports Day on 5th May 2008. Olympian Ms. K L Beenamol, an Arjuna Awardee and a renowned athlete, inaugurated the Sports day at the Chandrasekharan Nair stadium, Thiruvananthapuram.

There were 25 track and field events held for boys, girls and faculty members separately on that day. Ms. Sneha Kishore Patkotwar and Mr. Sishir Kumar Singh were adjudged IIST's best female and male sports persons respectively during the year 2007-2008 for their outstanding individual performances.

CONGRATULATIONS SNEHA and SISHIR KUMAR SINGH !

Cultural Activities

@ IIST



Dignitaries sitting in front row before occupying the center stage

IIST

Movie Club

IIST Movie club was inaugurated by our Director on 17th March 2008 by screening the film Chak De India. Popular Hindi and English movies (student's choice) along with world class movies from various countries were screened on alternate weeks regularly, on Monday afternoons. The students also got a chance to watch award-winning movies from different parts of the world like the exquisite Iranian movie, Children of Heaven and by our own Satyajit Ray.



Chairman ISRO Dr. Madhavan Nair releasing the first issue of Drishtikon (IIST's in house Magazine)



Dhinesh receiving certificate from Director, IIST Dr. Suresh

Cultural Competition

IIST students' cultural competitions started with a pencil drawing competition (April 21, 2008), solo singing, on line poetry, short story competitions with some of VSSC subject experts as judges. On 12th May 2008, IIST ARTSFEST DAY was celebrated in which events like Anthakshari, Dumb Charades and just a minute were the popular items. An inter-house quiz competition was held on 19th May 2008 and this quiz programme was conducted by quiz master Dr. Abraham Joseph, a well known quiz master in Kerala.



Amritha receiving her certificate from Director, VSSC, Dr. Radhakrishnan

IIST Day Celebrations

The first IIST Day was celebrated on 5th June 2008 at Kottakattu convention center, Nalanchira, a nice venue in one of Trivandrum's better suburbs. IIST students and faculty were fortunate to have ISRO's Chairman and Chairman IIST Board of Management Dr. G Madhavan Nair as the chief guest on this historical day. Along with him, Shri M Ranganath (Addl. Secretary DOS) and Dr. K Radhakrishnan, Director VSSC were the other esteemed guests present on that day. Also, participation from Scientists of VSSC, LPSC, IISU, Principals of MIC, CET and invitees from the Kerala Government added color to the function.

Chairman ISRO and Chairman BOG, IIST
Dr. G Madhavan Nair delivering
his IIST Day speech



The IIST Day programme started with an invocation - a devotional song by students Pavani and Amritha. Director of IIST, Dr. B N Suresh in his speech listed the curricular and extra curricular achievements of IIST during the past year. He also listed various actions taken to improve the research activities, mentoring system and initiatives to start graduate courses like M.Tech/Ph.D.

Dr. Suresh in his first annual report dealt with a large number of issues pertaining to IIST and the measures taken. The IIST director thanked a number of personnel who contributed significantly in bringing up IIST to where it is today and especially Dr. Madhavan Nair for not only giving continuous support but also for carefully nurturing it.

Then, Dr. Radhakrishnan, Director VSSC spoke about the growth of IIST in a short span of time and he pledged VSSC's continued support to IIST. He also mentioned that the first batch of IIST must set certain bench marks so that ISRO can achieve larger goals in future.

Shri M Ranganath, Additional Secretary, DOS congratulated the IIST team for its achievements in a short time and he promised continuous support from the Head quarters.

Finally, Dr. Madhavan Nair, during his address, spoke about how IIST took birth in a short span and the tremendous progress it made in just one year. He specially congratulated the Director of IIST Dr. B N Suresh for his visionary leadership in shaping IIST. Before starting his speech the Chairman of ISRO released IIST's in-house magazine named Dhrishtikon which, was completely designed and edited by students. Dr. Madhavan Nair advised IIST students to excel in studies so that ISRO can achieve the desired goals like human space mission, going to Mars or making colonies in space etc.

After this, various prizes and certificates were distributed to all winners by the dignitaries. The programme ended with an excellent cultural programme by IIST students which was appreciated by one and all. IIST Day ended with a wonderful dinner.



IIST boys and girls during a group dance on IIST Day

Ms. Darshana during her dance performance on IIST Day



Acknowledgements

We acknowledge our Respected Director, Dr. B N Suresh who in spite of his busy schedule spared his valuable time and gave us expert guidance and inputs to bring out this news letter in excellent format. We also thank the Dean (academic) Dr. Krishnan and all faculty members for bringing out this news letter. Among faculty members, we specially thank Shaijumon and Babita for providing inputs on IIST's sports and cultural activities respectively.



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