



Indian Institutes of Technology Society in New England

SINE WAVES

IIT SINE News No. 5, April 1999

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The opinions presented by our writers are solely their views and do not necessarily represent those of the Indian Institutes of Technology Society in New England, the publisher of this newsletter. IIT SINE, 8 Stonehill Circle, Burlington, MA 01803

Dear Fellow IITians:

On behalf of the IIT SINE Executive Committee, SINE WAVES is sending all of you greetings for the holiday season. May this year bring more joy and prosperity to you and your families. This belated issue of *SINE WAVES* is brought to you by the joint efforts of the IIT SINE Executive Committee. Our charter and duty is to inform you, in a timely fashion, about IIT SINE activities. We are always on the look out for items of interest to include in this newsletter. Please contribute so we can all share our experience.

In the past few months we have established a web page for our organization (www.IITSINE.org). Please visit us there. Business Week (December 7, 1998) has published a very positive article about IITs where they have tried to capture the IIT spirit. Those of you who missed it can access the article on the Internet through our web page. We are also pursuing to make IITSINE a tax-exempt organization.

We have two sponsors for this issue, Subu Kota from The Boston Group and Anil Singhal from Netscout. We thank both of them for their support.

The IIT SINE Executive Committee has planned the next function for May 7, 1999. We look forward to meeting you there. Thank you for your continued support.

SINEing out,

Narender K. Chhabra, Editor

This newsletter has been sponsored by:
Subu Kota, The Boston Group (www.bostongroupusa.com)
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Message From the Executive Committee

Dear IIT SINE member:

Happy New Year!

As you know, we are the third Executive Committee elected by you for a two-year term ending in November 1999. We have completed slightly more than half of our term and herein we would like to take the opportunity to present to you our progress report. Please review it and give us your feedback and comments.

First of all, please note that there are three changes in the make up of the Executive Committee:

Secretary: This position was vacant at the time of the election. Later, an IIT SINE member nominated Dwarika Agarwal for this position. The Executive Committee accepted the nomination. Please join us in congratulating Dwarika Agarwal.

Vice President for IIT Bombay: Jatin Shah moved to India during fall of 1998. He nominated Varun Nagaraj as his replacement for the VP position. The Executive Committee accepted his nomination. The IITSINE general body later ratified this selection at the Annual meeting. Please join us in congratulating Varun Nagaraj.

Vice President for IIT Kanpur: Sanjay Tikku had asked us to find a replacement because he is currently unable to devote time to IITSINE. Consequently, the Executive Committee has selected Sudhir Mody as his replacement for the VP position. Please join us in congratulating Sudhir Mody.

Now let me give you a brief summary of our accomplishments. The Executive Committee meets generally once a month to formulate and govern the affairs of the IIT SINE organization. At the beginning of the term, we defined some general goals for the Executive Committee. In order to implement those goals, a number of special committees were formulated. The basic idea is that each committee is chaired by one member of the Executive Committee and then staffed by other members on a task basis. Please note that we will be formulating more committees on as needed basis. The make up of some of our current committees is, as follows:

- **Newsletter Committee:** Narender Chhabra (Chair)
- **Program Committee:** Puran Dang (Chair).
- **Membership Committee:** Dwarika Agarwal (Chair)
- **Webmaster:** Krishna Srikrishna (Chair)
- **Advertisement:** Vinay Aggarwal (Chair)

Tell a fellow IITian about us

The diligent efforts of these Committees have resulted into the achievements, as follows:

- **1998 Spring Function** highlighted below.
- **1998 Annual Picnic** highlighted below.
- **The Annual Meeting along with New Year Party** was held on January 9, 1999 at the Bangalore Club in Winchester. About 60 people attended the celebration.
- **IIT Kanpur Alumni Reunion** has held on March 20, 1999.
- IITSINE has been placed on the World Wide Web at www.iitsine.org.
- We have continued the publication of our newsletter "SINE WAVES".
- We have started the process to get **Tax Exempt status for IIT SINE**. We expect this process to take about six months.
- We are using **emails** for faster communication.
- **Membership Database:** Currently there are about 190 members. We added about 40 new members but at the same time lost about 20 members due to lack of forwarding addresses. Please notify us if there is a change of address. It is very important for us to have your correct mailing address along with any e-mail address and phone number.
- **Member Dues:** The total number of members whose dues are current is 67. There are 33 Life members (19 new for this term) and 30 Regular members. There are 14 members who have not yet renewed their dues.
- **Finances:** We started the year with approximately \$1955 and the current balance is approximately \$2737. For further details, please refer to the Treasurer's Report that was presented and ratified at the Annual Meeting.
- **1999 Spring Function** has been planned for May 7, 1999 at Wyndham hotel, Burlington. The keynote speaker will be Jeff Bennett from Lycos.

Finally, we ask for your continued support and invite you to actively participate in the activities of your organization. The names and telephone numbers of the IIT SINE Executive Committee members are listed on the first page of this newsletter. Please call any one of us if you have any feedback or if we can be of any help to you. We need your help in making your organization succeed!

Subhash Varshney, President IIT SINE

Visit us at www.IITSINE.org

What is IIT SINE

IIT SINE stands for Indian Institutes of Technology Society in New England.

IIT SINE is an autonomous, independent, non-profit New England based alumni organization. It consists of members who have been affiliated with any of the IITs. It also consists of colleagues, friends and families of the members.

IIT SINE was founded in the fall of 1993. An Executive Committee elected for a two-year term by IIT SINE members governs its activities.

The objectives of IIT SINE are:

- To promote the professional, intellectual, social, cultural and economic growth of its members.
- To renew and nurture ties with fellow IITians.
- To provide opportunities for interaction amongst members by organizing activities such as dinners with keynote speaker, seminars, discussion groups and dialogues with visiting IITians.
- To create consciousness among members about the importance of involvement in civic and current affairs and to generate visibility and contacts in those areas for the good of IIT SINE community.

Local IIT SINE Happenings

News from the Boardroom

By: Dwarika Agarwal

For the past few months, your Executive Committee has been meeting regularly on the third Sunday of each month in Mr. Puran Dang's office. One common theme in our discussions has been to find ways to increase communications among our members. The start of a website was the first major step in this direction. This website has links to the e-mail addresses of all Executive Committee members. I am giving these addresses here also with the hope that all of you will use this efficient method of communication to send your suggestions and comments about IIT SINE to us.

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Varun Nagaraj	vnagaraj@prtm.com
Subhash Varshney	svarshney@mediaone.net

In addition to the Newsletter, we also want to send you information about your Society regularly through the e-mail system. At present our database contains about 180 names but we have e-mail addresses for only about 40% of these friends. I am planning on sending e-mail to the group and it is very likely that it will reach you before this Newsletter arrives in your mailbox. Please send us your e-mail address and include the addresses of your friends also. More addresses we have, better we can communicate with you. We will keep the mailings in the BCC format unless you request it otherwise. Currently, we reach less than 10% of the IITians in the New England area. Let us make a combined effort to increase that number to more than 50%. I will keep you informed.

IITSINE.ORG on the web

By: Dr. Krishna P. Srikrishna

Dear members,

We are excited to inform you that we are on the World Wide Web now! The web-site is easy to remember: <http://www.iitsine.org>! Please visit our site and bookmark it. The web-site provides information about upcoming IIT SINE events and links to any breaking news about IITians, for instance the recent article on IITians in the Business week! Our latest newsletter is on the web-site. We have included links to all the IITs as well as other IIT alumni organizations around the world.

The web-site is a convenient way to let you all know of upcoming events. It makes it easy to pass on the word about IIT SINE to a potential member, who can browse through our web-site and learn about IIT SINE. Members can now send feedback and update us of any change in address.

Advertising on the WebPages is a revenue stream to us and we welcome any readers interested in advertising. We are constantly working on the web-site to add features and we would like to get more ideas from you all.

For more information, email Krishna at srikrish@alum.mit.edu

Annual Picnic

By: Vinay Aggarwal

The 1998 IIT SINE picnic was held on September 13 at the Cochituate State Park in Wayland, MA.

The day started out with dark clouds and a strong probability of rain. The proverbial saying about New England weather “If you don’t like the weather just wait half an hour” was true again and it saved the day. The sun came out eventually and a number of people, more than 50 in all, joined in including several



new faces.

Barbecue fires were started with great determination. Although the charcoal resisted being lighted-up stubbornly, the will to roast the corn finally prevailed. Thanks to Subhash Varshney for providing the corn, and Vivek Varshney, Dwarika Aggarwal, and others for helping in creating the “roasted delicacy” of the day.



Tell a fellow IITian about us



The food was great! Thanks to Vyjayanti Chhabra, Aruna Varshney and Manju Aggarwal for their artistry in creating sumptuous dishes.

Just the thought of the Chhole and the Pav-Bhaji is still mouth watering. The feast ended with hot tea made “dhaba” style with a delicate aroma of barbecue smoke.

The only things that were missing were some games like volleyball and cricket. Hopefully we would do better next time on that front.

I take this opportunity to thank the executive committee for organizing this event, and also thank the participants that pitched-in during the picnic to make this get-together a success.

IIT-SINE Spring Event

By: Puran Dang

On April 10, 1998, IIT SINE organized a very interesting seminar, *From Garage to Wall Street*, at the Marriott Hotel, Burlington, MA. It was a tremendous success, attended by close to 100 people including IITians and non IITians. Entrepreneurs, company executives and



professionals from various sectors were in the audience.

The keynote speaker was Mr. Ashok Trivedi, Co-Founder and Co-Chairman of Mastech, a well known IT consulting corporation based in Pittsburgh, PA. The title of his talk was: From Garage to Wall Street and true to this subject Ashok Trivedi took the audience through his ten year journey of trials, tribulations and his ultimate triumph. Today, Mastech has a valuation of more than one billion dollars and has about 3200 employees across the world. They have offices in India, Australia, Singapore, New Zealand, Japan, Netherlands, and several other countries. Mastech has been listed many times in the INC magazine as one of the fastest growing companies of America and has received many other awards. It is truly a story of great success and an example worthy of emulation by all new entrepreneurs. Through a beautiful slide presentation, Ashok made an effective exposition of various steps that led to the crowning success that he and his partner Ashok Wadhvani have achieved.

Native of Delhi, Ashok has degrees in Physics and Business Administration and before starting his company, worked in UNISYS for a number of years. He has been honored by Ernst & Young and Inc. magazine.

IIT-SINE President, Dr. Subhash Varshney, welcomed the guests and spoke about the achievements and future programs of IIT-SINE. Mr. Trivedi's talk was followed by a very interesting question and answer session. Our Executive Vice President, Mr. Vinay Agarwal presented Ashok Trivedi a book on Boston and a bouquet to Mrs. Trivedi who also graced the occasion. Mr. Puran Dang gave the vote of thanks.

An Indian dinner followed the program. It turned out to be a grand evening. Thanks go to the Executive Committee of IIT SINE and especially to their spouses who pitched in to make the program a very delightful event.

Congratulations!
Dr. Desh Deshpande
IITian Of The Year

By: Puran Dang

We are pleased to announce that our own Dr. Desh Deshpande was honored as the IITian Of

The Year by his alma mater, IIT Madras. Dr. Deshpande recently returned from the 25th Reunion of his class held at IIT Madras. Our hearty congratulations go to one of the brightest stars among Indian American entrepreneurs.

Desh is the Chairman and CEO of Sycamore Networks. He is our fellow IITian who has made history in USA by virtue of his so many achievements. Desh came to Canada for studies and after his Ph.D. degree started his career as a teacher at the same university. Later he held management positions at Codex/Motorola but finally plunged into the exciting world of entrepreneurship.

His first company, Coral Networks, did not meet much success but Cascade Communications, Inc. which he founded later in 1991 became a major story of success. Starting with one employee and zero revenue, Desh was able to build this company into a major player in the network world. In 1997, Cascade had sales of \$500 million with 900 employees and was bought by Ascend Communications for \$3.2 billion. Desh is currently also the Chairman of two other companies: Cimaron Communications and Netdialogs, Inc.

Two years ago Desh founded TiE-Atlantic, a Not-For-Profit organization, with a mission to foster and infuse entrepreneurship into budding young men and women of the Indus Region. In a short period, TiE-Atlantic has been successful in helping several start-up companies. Desh Deshpande has received numerous recognitions and awards with the IITian Of The Year being the latest.

Desh has done very well financially because of his Cascade phenomenon and could sit on his laurels as a disconnected proud man but humility is his greatest quality. He mixes and mingles with high and low alike and his helping hand is available to everyone. His gentle disposition is worthy of emulation. We are also proud of Desh's generosity as he recently donated Rs 100 Lakhs to IIT Madras.

We are very proud of you, Desh. The path that you are paving for others to follow is a path of glorious achievements and service. You are our worthy fellow IITian.

News From IIT Bombay

By: Dr. Dwarika Agarwal

The first freshmen class of IIT Bombay started in 1958 in a rented building in the Worli section of Bombay. They moved into a picturesque but almost inhabitable campus on the shores of Powai Lake in 1959. The following 40 years have brought changes to the environment, but the biggest change noticed by an alumnus, especially in the US, is the improvement in communications. For over thirty years, my contact with our alma mater was limited to two short visits to the campus. Now, I can have a virtual visit, any time I want, through a web-site at www.iitb.ernet.in. The download of this website is slow but it is worth a visit. Its contents are being updated regularly and it is the best way to keep in touch with our college. If you need a copy of your transcripts or any other information from the Institute, you may write to Aruna Thosar-Dixit, Public Relations Officer, at pro@cc.iitb.ernet.in.

Even though, there is no homecoming in India, they have been celebrating Alumni Day on the last Sunday of every year for the last few years. In fact, the Class of 1973 celebrated their Silver Jubilee on Sunday, December 27, 1998. I do not recall any such celebration for the Class of 1965, but we are going to make up for it by having a Reunion in Southern California next year. You can learn about these and a lot of other alumni related activities by visiting iitbombay.org web-site. This is the official site of the IIT Bombay Alumni Association. The Class Notes section is a very popular feature on this web-site. This web-site also has links to the other IITs.

A Letter from the Director of IIT Delhi

By: Dr. V. S. Raju

Dated: Nov. 5, 98

At IIT Delhi we continuously work to sustain and enhance the excellence of our Institute for both the near and the distant future.

After completing over three years as Director, I was reflecting upon what makes IIT Delhi a great Institute and what makes us all proud members of the IIT Delhi family. In my opinion it comes down to the quality of people that we are able to attract and their relationships to one another. When you

reflect upon your days in IIT, you must be reminded of your favourite Professors or your classmates or your hostel friends. I am sure that you think of the time that you spent for your academics and extra-curricular activities at IIT Delhi, which has become a part of the IIT culture. Most of all when we think of the IIT Delhi alumni we feel very proud of the important and exciting work that all of you are involved with and it is your efforts and achievements that is responsible for the fame and repute of IIT Delhi.

I am happy to inform you that your Alma Mater has made significant progress in several areas with innovative ideas, specially dealing with the funding patterns which has changed over the years. The funding from the Government from about 90% of the budget in 1992-93 has been reduced to about 70%. In due course we would be required to generate about 40% of the budget ourselves, which is imperative for our future growth, enhancing our excellence and to remain leaders of quality technical education. For this we have set ourselves a challenging goal of generating a corpus of Rs. 100 crores (approximately US \$ 26 millions) by June 2000. With the help of our alumni and the industry we have been able to generate over Rs. 20 crores and have still a long way to go. As a major stake holder of the IIT Delhi system, I urge you to make a generous contribution the details of which are attached. Needless to say your contributions will be significant towards fulfilling our mission "To produce leaders in their respective fields for the country and the globe".

For further clarifications and your suggestions, please do not hesitate to call me at 91-11-6867541 (Off) 6867537 (Res.) or Prof. Ashok Misra, Dean of Alumni Affairs and International Programmes at 91-11-6963969 (Off.), 6863364 (Res.). I would be delighted to have your response. I also take this opportunity to request you to visit your Alma Mater and look forward to meeting you.

You can also contact me at the following email address: director@iitd.ernet.in, amisra@polymers.iitd.ernet.in

Wishing you all the best to you and your family.

Yours Sincerely,
(V.S. Raju)

Featured Article

What Can I Patent?

Dr. Kaplesh Kumar, Esq., '69 Kanpur

(Disclaimer: The author makes no representations as to the accuracy or completeness of the information presented in this article. It should not be relied upon in reaching any decision as to the merits of a specific case, or considered a substitute for opinion from a practicing attorney.)

A patent grant by the United States Patent and Trademark Office gives the inventor the right to exclude all others from making, using, or selling, in this country, any product or process that infringes the patented invention, as defined by the claims of the issued patent. This exclusive right is granted for a term of twenty years from the filing date of the application and is in return for the prompt disclosure of the invention to the public, which the law encourages.

Patents are granted in three categories: Utility, Design, and Plants. Utility patents are issued for inventions that perform a function and serve a useful societal purpose. Design patents are granted for their ornamentality, and plant patents, which are limited to plants that are produced asexually, are granted for their distinctiveness.

Utility patents are the most common, and have the greatest impact on the economic well being of the nation. The invention must be new, useful, and nonobvious, or be a similarly new, useful, and nonobvious improvement of existing art, and belong to one of the following four statutory classes: process, machine, article of manufacture, or composition of matter. Process includes the method by which a product is made, and if in itself new, useful, and nonobvious, constitutes a process invention, even if the product that is produced is not novel.

The novelty inquiry asks whether the product or process was anticipated by others prior to the claimed invention, or whether one of several events occurred more than twelve months prior to the inventor's submission of the patent application to the Patent Office, the patent being denied in either case. Anticipation issues are concerned with whether the claimed invention was known or in use in this country, or described in a printed publication or patent in this or any foreign country. Events barring patentability, where they occurred more than twelve months

prior to the submission of the patent application to the Patent Office, include the invention being in public use or on sale, or described by the inventor or anyone else in a printed publication or patent in this or a foreign country. For the patent grant to be denied in these cases, substantial identity is required between the disclosed invention and the prior art. The utility requirement ensures that patents are denied for inventions which, although novel, are of no value to society. The disclosed invention must meet a societal need and is granted for that purpose. For instance, process patents are generally patentable only if the products that they produce are in themselves useful to society. Utility cannot be presumed and must be specifically identified. Utility, however, need only be substantial. In the development of a new drug, as an example, even though an intermediate compound is effective on animals and not on humans, it may still be patentable if it is substantially useful for developing drugs for the treatment of humans.

The claimed invention must also be nonobvious. Obviousness is examined in view of all prior art. Even though the invention may be new and useful, a patent grant would still be denied if it would be obvious to a person skilled in the art to which the subject matter of the invention belongs. Where known elements in the art are combined, courts invariably look for synergistic effects, i.e. whether the combination yields results in excess of those expected from the sum of the parts. For instance, a pencil with an eraser mounted at one end, while novel, is not patentable as a combination. The pencil and eraser both continue to function as they would separately; the results of the sum of the parts are no different from the sum of the results of each part.

While the above are the basic requirements for patentability, there are a number of judicially created exceptions as to what subject matter may be patented. The invention must be man-made and not pre-exist in nature. For this reason, abstract principles of science cannot be patented. They have always been around. Ideas by themselves cannot be patented; however, their application may be patentable subject matter. Printed matter, methods of doing business, fundamental truths, and methods of calculation, no matter how

innovative, cannot be patented. Computer programs are patentable when they are integral to a product or process within the classes of inventions described above. Computer software, standing alone, cannot be patented, and must be copyrighted if protection is desired. The first step in seeking patent protection is to

examine the invention's patentability.

Dr. Kaplesh Kumar, Esq., former IIT SINE vice president, is one of a few Indian American patent attorneys registered to practice before the United States Patent and Trademark Office. His practice includes all aspects of Intellectual Property Law and Licensing



IIT SINE Presidents: From Left - Puran Dang 93-95, Subhash Varshney 97-99 and Narender Chhabra 95-97



Some of current Executive Committee Members

Personal Updates

Reena, daughter of Puran and Kamlesh Dang, was blessed with a lovely baby girl Sabrina on 26th January 1999. Great gift on the Republic Day of India! Puran and Kamlesh, the proud grandparents are overjoyed and so are the parents: Reena and Lalit. Congratulations to the parents and grandparents from the entire family of IIT SINE

X

IIT SINE Life Members

Dwarika & Connie Agarwal	'65 Bombay
Chandra & Veena Khattak	'65 Bombay
Suresh & Janet Masand	'65 Bombay
Krishna & Aruna Vedula	'67 Bombay
Prakash & Jayshree Joshi	'71 Bombay
Jaynarayan H. & Michele Lala	'71 Bombay
Anil & Ranjani Saigal	'79 Bombay
Varun & Arati Nagaraj	'86 Bombay
Jatin & Mala Shah	'86 Bombay
Manu & Manisha Sharma	'86 Bombay
Narender & Vyjayanti Chhabra	'70 Delhi
Jitendra S. & Geeta Goela	'72 Delhi
Shashi & Raj Chawla	'77 Delhi
Prem S. & Dolly Sinha	'85 Delhi
Kedar P. & Renu Gupta	'68 Kanpur
Vishwa Nath & Asha Shukla	'69 Kanpur
Triveni & Sadhana Upadhyay	'68 Kanpur
Kaplesh & Savinder Kumar	'69 Kanpur
Subhash & Aruna Varshney	'72 Kanpur
Rakesh K. Jain	'72 Kanpur
Kailash & Manjul Shukla	'72 Kanpur
Puran & Kamlesh Dang	'59 Kharagpur
Ajoy Banerjee & Marjorie Burren	'66 Kharagpur
Subu & Virginia Kota	'68 Kharagpur
Bharat & Punita Khatau	'74 Kharagpur
Dilip & Ranjana Bhavsar	'74 Kharagpur
Debashish & Anita Mallick	'80 Kharagpur
Vinay & Suman Goel	'69 Madras
Ranjan & Mary Mathew	'73 Madras
George Verghese	'74 Madras
Jagadeesh Moodera & Geetha Berera	'78 Madras
Ajai & Sridevi Thirumalai	'84 Madras
Padma Lakshman	'89 Madras

PS. If you are a life-member, and your name is not on this list please inform us. If you are not a life

IITSINE invites you to an evening with

Jeffrey S. Bennett

Vice President of Electronic Commerce, Lycos Network

Date: Friday, May 7, 1999

Place: Wyndham Hotel, Burlington, Mass

Details & RSVP: www.iitsine.org

Reception: 6:30 PM – 7:30 PM

Keynote Speech: 7:30 PM – 8:45 PM

Dinner: 8:45 PM –