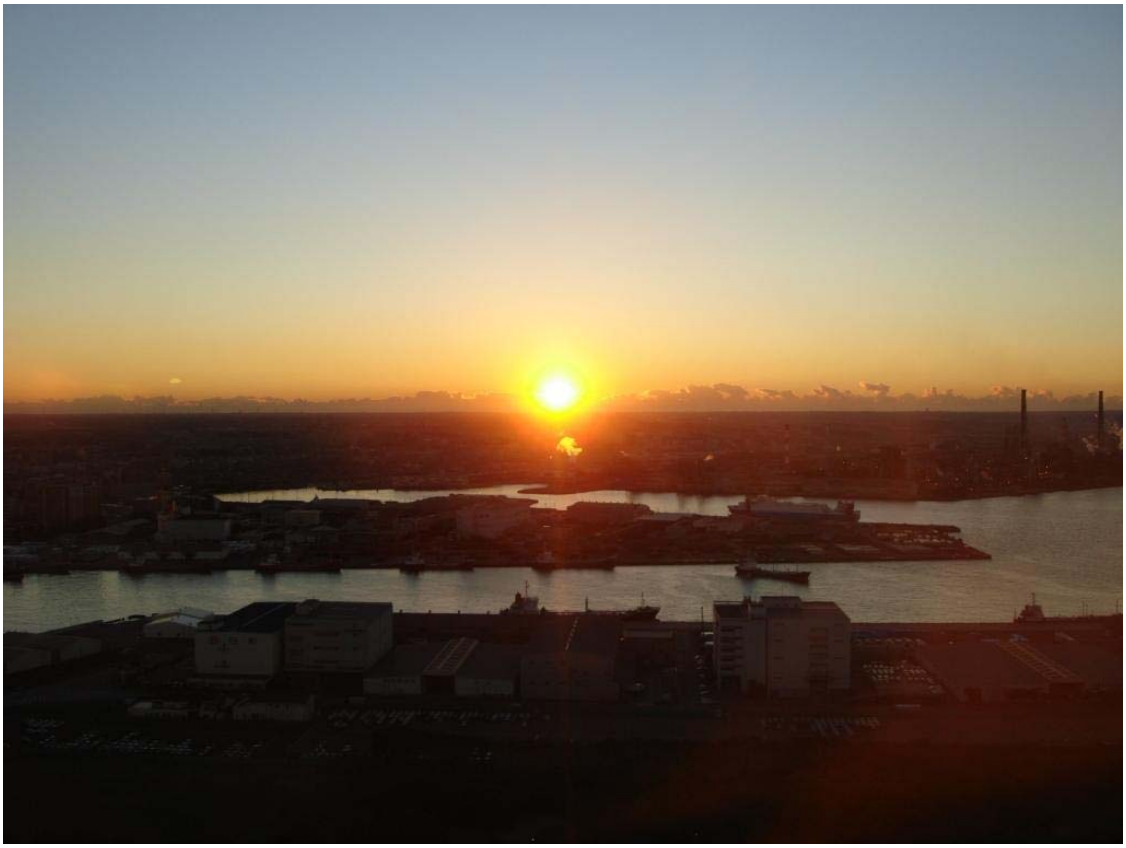
Indian JSPS Alumni Association

CONCORD Vol. 2(1) Year-2008



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Message by Chairman

Dear Indian JSPS Alumni friends,

Wish you a great year ahead!!!..

2007 was a great year for our association. We grew strong during last year and have reached the 100 members mark. Our Chief – Editor and Editorial board could publish the first issue of our News Letter "Concord" in last year. Now we have ascended to one of the strong JSPS alumni associations. Hope that we would be able to grow strong and will launch many good things during this year.

Happy to inform that, we have changed our name from "Indian JSPS Alumni Club" to "Indian JSPS Alumni Association" to give a more professional out look to our group. We had conducted a poll through our yahoo group and the persons voted in the poll unanimously cleared the move to change the name.

Last year JSPS president visited India and he visited some of our leading institutions in Delhi. It was a great moment for our JSPS Alumni Association that, from the head quarters of the JSPS; they had requested to arrange president's visits in our leading institutions. (Normally the visit has to be organized through our Govt. organizations; however this time JSPS approached us to organize the same, and it was really a rare honor to our association) Our JSPS members did a great job, particularly our members in Delhi (Special thanks to Dr. Tharanikkarasu of Delhi University) wholeheartedly welcomed JSPS president. After his visit to Delhi a heart warming letter received from his office suggests that our association is growing in the right direction and our members are ready to help each others when the need arises. I do hope that this kind of attitude will further strengthen our association.

Our General Secretary (Dr. Pravin D. Kunte) moved from Japan to India. I do believe that it is a good move for our association and hope that his work from India may further strengthen our association. I earnestly request all our members living in India to provide a great support to him to strengthen our work in India.

I appeal all our members to join our yahoo group to keep in touch and to participate in meaningful discussions.

Once again I wish all our members a great year 2008!!

Yours

Dr. D. Sakthi Kumar

Chairman

Indian JSPS Alumni Association

JSPS president visited University of Delhi

The President of JSPS, Prof. Ono Motoyuki visited University of Delhi on August 22, 2007. On behalf of Indian JSPS alumni club and University of Delhi, Dr. Tharanikkarasu Kannan, an Indian JSPS alumni club member, gave warm welcome to the President and his delegation. The delegation met Vice Chancellor of the University along with Pro-vice chancellor, Dean of Research and Dean of Colleges and discussed different ways to strengthen scientific co-operation between India and Japan. Then they visited historical buildings of the University including Old Vice-Regal building where more than 6 viceroys stayed. The delegation met HOD of the Department of Chemistry and visited Department of Chemistry where kitchens of viceroys are being used as the chemistry practical laboratories now.

Valasaravakkam institution wins 'Quiz on Japan'

Provided by: Dr. S. Arulkumaran

Source: The Hindu, 31/07/2007

***LAURELS*: Winners of the 'Quiz on Japan,' R.K. Dayalini and R. Nivedita of class X of La Chatelaine Residential Junior College, with Sakura Ozaki, Vice-Consul, Consulate of Japan, and Highways Secretary K. Allaudin in Chennai on Sunday.**

CHENNAI: Winning is just part of the game, but what is important is the spirit of participation. The four teams that participated in the finals of the 'Quiz on Japan' on Sunday had to answer some of the toughest questions. But the rule of the game is that there can be only one team at the top slot.

Sakura Ozaki, Vice-Consul, Consulate of Japan, Chennai, who distributed prizes, said though she was a Japanese, she could not have answered the questions. She said she was impressed with the range of questions that included those on ancient history, modern technology and the cultural diversity of Japan.Secretary in the Highways Department K. Allaudin said such programmes should not be confined to the city alone. Of the 62 schools that participated, 31 qualified for quarter-finals and eight for the semi-finals, said M.R. Ranganathan, founder-president of ABK-AOTS Dosokai. The quiz programme originated 15 years ago in his home as a summer holiday event. In the early years the quiz was confined to children who had access to books in the organisation's library. Today, a compact disc with about 8,000 questions on Japan is distributed to over 200 schools in the city free of cost. Schools have to give in a requisition for the CDs and they will be sent. The quiz is conducted by the organisation's members and past winners.

This year's winners R. Nivedita and R. K. Dayalini of Standard X from La Chatelaine Residential Junior College, Valasaravakkam, won the rolling shield. The second place went to a boys' team from Don Bosco Matriculation Higher Secondary School. The team also won a rolling shield. The schools were given a replica of the rolling shield to keep. The other two participating teams that took home prizes and certificates were from DAV Public School, Velachery, and C.S.I. Ewart Matriculation Higher Secondary School, Washermenpet.

Train flying in flying colours!

Dr. Rajeev

Yes, that is magnetically levitated train. These trains are literally flying. At very high speeds, these trains are "flying" approximately 10cm above the ground level. There is no contact between the train and the ground at high speeds!

What is magnetic levitation?

The meaning of levitation is "To rise or cause to rise into the air and float in apparent defiance of gravity". We can levitate a ball by keeping it near the output pipe of a vacuum pump. If we levitate an object using magnetism, then we are magnetically levitating that object. But ordinary magnets may not do the trick. We need very strong magnets, especially if we need to levitate a heavy object like train.

How can we achieve levitation?

One of the methods is superconductivity. The magnetically levitated trains (or in short, maglev) in Japan use superconductivity for levitation. The advantage of levitation is that there is no friction between the wheel and the track compared to ordinary trains because there is no contact between the train and the ground. The result is that it can "fly" in high speeds. The highest speed achieved by a maglev all over the world is 581 km/hour by the maglev train in Japan! The high speed bullet trains in Japan are now running at a speed of 250-270 km/hour.

What is superconductivity?

When certain metals (like tin, aluminum) and metallic alloys are cooled below a specific temperature, their electric resistance vanishes. This phenomenon is known as superconductivity. No electrical resistance means there is any electric loss. Once current is applied to a coil in a superconducting state (which can then be called as superconducting coil), this current continues to flow permanently without any loss, even without any applied voltage. Experiments have demonstrated that currents in superconducting coils can persist without applied voltage for at least 100,000 years without any measurable loss. We all know that electricity can generate magnetic field. If we run an electric current through a wire (by connecting the wire between the positive and negative terminals of a battery), electricity will be generated and at the same time, a small magnetic field will also be generated in the wire. If we pass a large amount of current through the wire and at the same time, there is no electrical loss in the wire (say, due to superconductivity), the magnetic field generated will be tremendous.

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Superconductivity was discovered in 1911 by Heike Kamerlingh Onnes, who was studying the resistivity of solid mercury at very low temperatures using a refrigerant. At the temperature of -269 degree Celsius, he observed that the resistivity abruptly disappeared. For this discovery, he was awarded the Nobel Prize in Physics in 1913. Why we need to cool the metals for superconductivity is a question not easy to answer in simple terms. It all related to vibration of electrons and their movement.

Thus, one of the major difficulties associated with the application of superconductivity for commercial use is the fact that the metal needs to be cooled to a very low temperature (of the order of -180 to -270 degree Celsius). Even in Antarctica, the lowest temperature attained was around -90 degree Celsius! We need special materials like liquid nitrogen or liquid helium to achieve such a low temperature. We might have seen superconductivity at room temperature in movies like Terminator. But such superconductivity is only in movies and science fictions so far!

We have seen that superconductive metals are highly magnetic. Therefore, if we can place a superconductor over a strong magnet, it will float above the magnet because of the repulsive forces between the two objects (the magnetic is having strong magnetic fields and the superconductor is also having strong magnetic fields). This phenomenon is called magnetic levitation. This is the principle behind magnetically levitated trains. Levitation of a superconductor in a magnetic field is displayed in the following link http://en.wikipedia.org/wiki/Superconductivity. You can also read more about superconductivity in the link.

It should be noted that superconductivity is one among the many techniques available for magnetic levitation. There are magnetically levitated trains which use other methods for levitation as explained. For more information please check the following web site. (http://en.wikipedia.org/wiki/Superconductivity). However maglev trains in Japan are the only magnetically levitated trains which use superconductivity for levitation.

How are these superconducting maglev trains flying?

There are superconductive magnets in the train. They will be cooled to a very low temperature and electricity will be passed through them so that strong magnetic fields are generated in them. Also electrical coils are placed on the two sides of the track. Electricity at high voltage will be passed through these coils so that strong magnetic fields are generated in them also. We know that the magnetic fields can attract and repel. This attraction and repulsion of the magnetic fields cause levitation (due to repulsion) and forward movement (due to attraction) of the maglev trains.

The superconductive magnets in the train and the electric coils on the sides of the tracks is together is called motor of the train. These are called motors because their purpose is just like any other motor-to move the train. Conventional motors are cylindrical in shape. However the motors here (superconducting magnets in the train and the electric coils in the track) are linear in shape (just imagine that a cylindrical motor is unrolled and made flat). Therefore, the motor of maglev train is called linear motor. The superconducting maglev trains run at ultra-high speeds after being levitated by 10 cm as a result of the magnetic force that lies between the superconducting magnets in the train and the electric coils on the sides of the train track.

You will get more information on how these trains "flying" by checking the following links http://www.pref.aichi.jp/kotsu/rinia/3_e.html and http://www.rtri.or.jp/rd/maglev/html/english/maglev_frame_E.html. You can see a Wikipaedia article on maglev trains (http://en.wikipedia.org/wiki/Magnetic_levitation_train) also explains the different means for levitation.

Maglev starts moving by using the wheels rolling over the ground. As it gains speed, it will slowly raise above the ground. Before stopping also it will land on the ground. These trains can be operated unmanned using a centralized control system. No driver is needed!

Japan is not the first country to experiment on maglev trains. There were maglev trains in Britain and Germany. One maglev train is making its commercial runs in Shanghai, China. It is alleged that China had copied Germany's maglev technology to build their maglev trains. USA is also planning maglev trains for commercial applications.

Will it be realistic?

Not sure. Japan has already spent a lot of money for the development of maglev trains and they are in an advanced state also. The estimated cost for building an operational maglev line between Tokyo and Osaka in Japan is around US$ 82 billion. The operational cost is expected to be 20% higher than that of the existing bullet train. However the running time between Tokyo and Osaka can be reduced from 2.5 hours to 1 hour if maglev is used. It is expected that the time advantage may attract more passengers to maglev.

There is a health concern also for such trains. It is not sure whether people with cardiac pacemakers can use maglev because of the presence of superconducting magnets in the train. Studies are also being conducted to analyze the effect of maglev running through highly populated areas because high speed may cause vibrations in houses and related problems. Also when a high speed maglev train enters a tunnel, there can be problems associated with high pressure air acting between the tunnel and the train (or vacuum? I am not sure).

In Tokyo, the test run of the maglev train is taking place in Yamanashi prefecture. With prior booking one can participate in the trial run and experience the 581 km/hour "flying". You can see how these trains are flying by checking the following link (http://video.google.com/videoplay?docid=2926400396387878713).

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My Approach to the JLPT

Yash Kunte

(S/O Dr. P.D. Kunte)

Age-15

I had completed my junior high school when I took a year off and went to Japan- the Land of the Rising Sun, along with my parents. I was just 15 years old then, and I was in the middle of my academic life. Thus it naturally meant that I had to prove to society that the year I had taken off had not gone waste. On a personal level, I wanted to do something significant in this one year.

This is precisely what inspired me to attempt the Japanese Language Proficiency Test. I had six months to prepare for the test; I did not attend any certified language school; and yet I aimed at appearing for the level 3 JLPT and pass with a good rank. I decided to take this up as a challenge.

In the next few paragraphs I shall relate what I did in the entire year along with studying for the exam and how it helped me to excel at the test and the language.

Most importantly I attended classes at the Chiba University. These classes were meant for the spouses and children of foreign researchers at the University. As the class was not run in a professional environment, there was ample scope for receiving personal attention and for the clearing of doubts. We also had lots of simple conversations in Japanese during the class. This helped us to gain confidence in speaking the language.

Apart from this I also attended a personalized one-to-one class conducted at the Chiba City International Association. Here, I was taught according to my needs by a Japanese volunteer. In this extremely friendly and pleasant environment learning Japanese was never uninteresting. In fact it was like having a chat with a good friend. My teacher and I used to talk about our own cultures, discuss the similarities and dissimilarities between our cultures. I used to gain information on a typical Jap's lifestyle etc. So along with learning the language it was like a cultural exchange. I strongly recommend the student to join such type of a class as it is student friendly in every possible way (you can choose the timing and day for your class- this centre is open on all days of the week except on a national holiday). It is also a great place for making new friends- local Japs as well as international people.

Making Japanese friends and mingling with the Japanese is also essential as it helps in understanding the minutest nuances of the language. This helps in picking up new words and the accent and also in getting used to the pace at which the language is generally spoken. This also helps in knowing and understanding expressions used by the people in casual conversation. And trust me this truly helps in the test especially the 'listening section' of the test wherein one has to answer questions based on a conversation.

Continue…

From the very first day of my stay in Japan I was in love with the country. I tried to imbibe every aspect of Japanese culture and lifestyle. This affection made me try out the food, and understand the people and their mindset. I also tried my hand at taiko (Japanese drums). Tried to understand and enjoy the tea ceremony. I also attended the celebrations of a number of Japanese festivals. I attempted to immerse myself into the Japanese realm and become like a nihonjin. This helped me with the test as I became used to the language within my stay in Japan and did not find any difficulty in appearing for the test. To sum up I would say, I strongly adhered to the saying- "when in Rome do like the Romans do". Though here I would like to modify the proverb to say- "When learning the Japanese language speak and act like the Japanese do".

Well, I did all of the above and secured 90% marks in the test. How about you trying next? Learning through fun and enjoying your stay in Japan. I shall surely cherish memories of my visit to "The Land of the Rising Sun". Following is some information related to the JLPT. Hope you find it useful!!

The Japanese Language Proficiency Test

The Japanese Language Proficiency Test (JLPT) is administered in Japan by the Japan Educational Exchanges and Services (JEES). It is held all over the world on December 3 every year. The objective of the test being- "to evaluate and certify the proficiency in Japanese of non native speakers". This test is conducted at 4 levels of proficiency- Level 1, 2, 3, and 4 (in decreasing order of difficulty), and the test at each level being of 400 points. One can answer this test privately as well as through an institution. I chose to answer the test privately. To initiate the process one has to buy the JLPT application guidebook and follow the steps as given in this book. This document is available at all major book stores.(For a list of stores please visit the JEES website). Once the application has been sent and accepted, one will receive a test voucher which contains important information such as the registration number, test site, etc.

Preparation for the test depends on an individual's choice of level of proficiency. As mentioned earlier, level 4 is the easiest while level 1 is the toughest. The content required to be known depends on the level one has chosen. Basically, the test at each level comprises of 3 sections- writing and vocabulary; listening; reading and grammar.

I had answered this test at level 3 (san kyu). For this I was needed to know 1500 words, 300 kanji and to have the ability to engage in basic everyday conversation. I made use of the textbook- Minna no nihongo (book 1 and 2, Japanese version). The exercises in this textbook are easy to understand and most importantly, they are based on the JLPT pattern. Therefore this book is recommended for students attempting the level 3 JLPT After completion of this text book I was able to engage in daily conversation and could read and write hiragana and katakana. Extensive use of the internet and paper is recommended for the kanji. There are numerous sites available on the net which have the JLPT kanji. Also there are lots of innovative methods of by-hearting them. To practice the kanji and for an intimate knowledge of the strokes in a kanji I suggest writing the kanji.

However this depends on one's choice of the method of learning by rote. The internet is also recommended as one can download past papers, conversations from the listening sections, and also for practice in reading.
As with every other exam you are also suggested to solve past papers and time yourself.
Finally I would like to wish you all the best and as they say, *GAMBATTE KUDASAI!!!!*

DISCLAIMER

Opinions expressed in the above article are merely suggestions made by the author. The author doesn't take responsibility or guarantees success in the test as success is solely dependant on an individual's ability, concentration, dedication and sincerity.

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JSPS fellowship: A fellowship that transforms you

SVRK Prabhakar
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Here are some of my memorable experiences of going through JSPS fellowship. One of the most prestigious fellowships available today, JSPS fellowship is certainly a feather anybody wants to have in their cap. I never thought I would be that lucky to have that feather in my cap, not until my mobile rang showing no number on that early morning. I was traveling in Rajasthan reviewing the Drought Prone Areas Program on the request of the Ministry of Agriculture. The tone said "Probhokor, congratulations!" I almost forgot that I applied for a fellowship; it was too high an achievement for me to have an expectation from. I was a bit confused on who must be calling and what great achievement I had to congratulate. It didn't occur to my mind that it was about JSPS. It was my Prof Rajib who was calling me. Understanding my dilemma, he went on saying "Probhokor you are selected for the JSPS fellowship." After a difficult task of collecting myself, I could only say "thanks a lot Rajib for the wonderful news that I got selected. I am eager to join you and let's work together on something good." Unaware about the screening procedures JSPS has, it made me to think on what would have made it happen. I almost gave-up trying for a postdoctoral fellowship after I missed an opportunity of joining a prestigious weed science laboratory in Israel and changing my focus from agriculture to natural resource management and disaster management.
Not wasting a moment, I immediately called my wife to inform her about the news that I got selected. Her response was more balanced. "Do you really think we need to go to Japan?" she said after some conversation. Such a response was expected from her as she is more attached to her parents and motherland. It is not that I am not attached, but I always felt free to take decisions related to career moves and place changes. They never boggled me as much as others and I always looked at them as a part of the life game.

It was also like a dream come true. I still remember the dreams me and my friend Shreekant had about what we do after finishing the studies. We still remember carrying a bag-full of self-addressed envelopes containing our CVs to be posted to various international organizations. I still remember the postman saying 'kiska shadi hai?" Working at international organizations had always been a desire that I nurtured throughout my life. My objective of completing a postdoctoral fellowship has more to do with adding the international experience to my CV than anything else. But I am a changed man after going through the JSPS fellowship. There is a different flavor in it that one can't easily grasp and explain in a short article like this. JSPS is the most flexible fellowship one can imagine. The flexibility built in the fellowship goes hand-in-hand with its objective of promoting quality research. True, the 2.6 million yen grant helped me to design my studies without any financial problem. This money could even be handy in a well established laboratory where you have all facilities. There is also lot of flexibility on how one can use these funds. JSPS researcher is more independent than any average research fellow in Japan, I learned. The fellows are highly respected for the expertise they bring and the contributions they make. Comparing with the stature of the fellowship, the reporting procedures are too simple to believe. Imagine, a fellowship that pays handsome money, both research grant and fellowship, asks only a 3-page interim research report. The end-of-the-term report is also no longer than 3 pages and you will be asked to submit it only after you are well settled in your next assignment.

Continue…

It should give a great relief for those who hate writing. It shouldn't be taken lightly, though. Though it is not a requirement, Fellows are expected to publish quality papers in international peer-reviewed journals. I could publish couple of papers and a book chapter while I still have couple of months to go. I have some more papers in pipeline which I plan to finish little after completing the fellowship. The only problem I had in the fellowship was with the 60-day limitation that JSPS puts on the travel one can make outside Japan. This could be a stumbling block for those who want to select study locations outside Japan that demands multiple travels for long durations. I would only say that I could have been happier with no limits.

There are certain factors to be kept in mind to make maximum out of the fellowship. Your relationship with your professor is the most important factor along with the stringent planning and execution of the research work as you only have 2 years at hand (and in some cases one year with possible extension). Remember, your boss is your second wife, always. The early you realize these facts the early you will be successful. JSPS expects that you build cooperative programs with the help of the fellowship. To this effect, one can see a column on 'International exchange achieved through the research' in the end-of-the-term report. It highlights the emphasis the Japanese government puts on promoting quality science through collaboration. A good scientist also needs to be a good manager and collaborator! You will also be successful if you are persistent and self driven. I could realize some of my personal limitations after coming to Japan. This is the beauty of countries such as Japan where limitations posed by the system are near to null and that brings out your innate potential. My two years of fellowship only made me realize that there is a lot to learn and evolve. As a result, I became more persistent and mature.

I want to say something about the Japanese language requirements. Though learning Japanese language helps in improving the quality of our daily social and research life, it is not always a stumbling block at work. I am not sure if it is true with those working with Japanese professors but at least true in the case of those professors who are well known in their fields as they communicate a lot with the outside world. This fact should encourage the potential future applicants to not to be worried about their research life in Japan. However, there could be some limitation when it comes to accessing the published literature. Being in Kyoto University, I should say I was not limited by this problem. Kyoto University subscribes to a number of electronic journals which can be browsed online sitting in laboratory. It helped me in writing quality review papers which otherwise would have been a difficult task. However, accessing published books could be a serious problem if you are not working in a well established laboratory or University. JSPS funds can be used to purchase books and you can even request your university library to get some for you.

Your laboratory life will be more joyful if you are not a teetotaler! Though there is no rule that makes you to drink alcoholic drinks, you may feel like alienated when all others are enjoying it in a party after weekly or monthly seminars. I could see some people changing their attitude towards alcoholic drinks only to mingle with the fellow researchers.

JSPS deposits your fellowship once in three months. This calls for a better financial management on your part else you may end-up in the end-of-the-quarter blues! You will almost be saved from this trouble if you are married as your wife can manage finances better than you.

I was counting my fellowship days while writing this article. I wonder if I can ever live without a 99 Yen shop, a Fresco vegetable store or even the wonderful public transport system that runs on dot! I will also miss people around me who stick to their time and words, who mean and do what they talk. The attention to details would always make me wonder if I ever would have an opportunity to eat that well carved sushi or that decorated obento. Nevertheless, time moves on and these memories should only make us better citizens.

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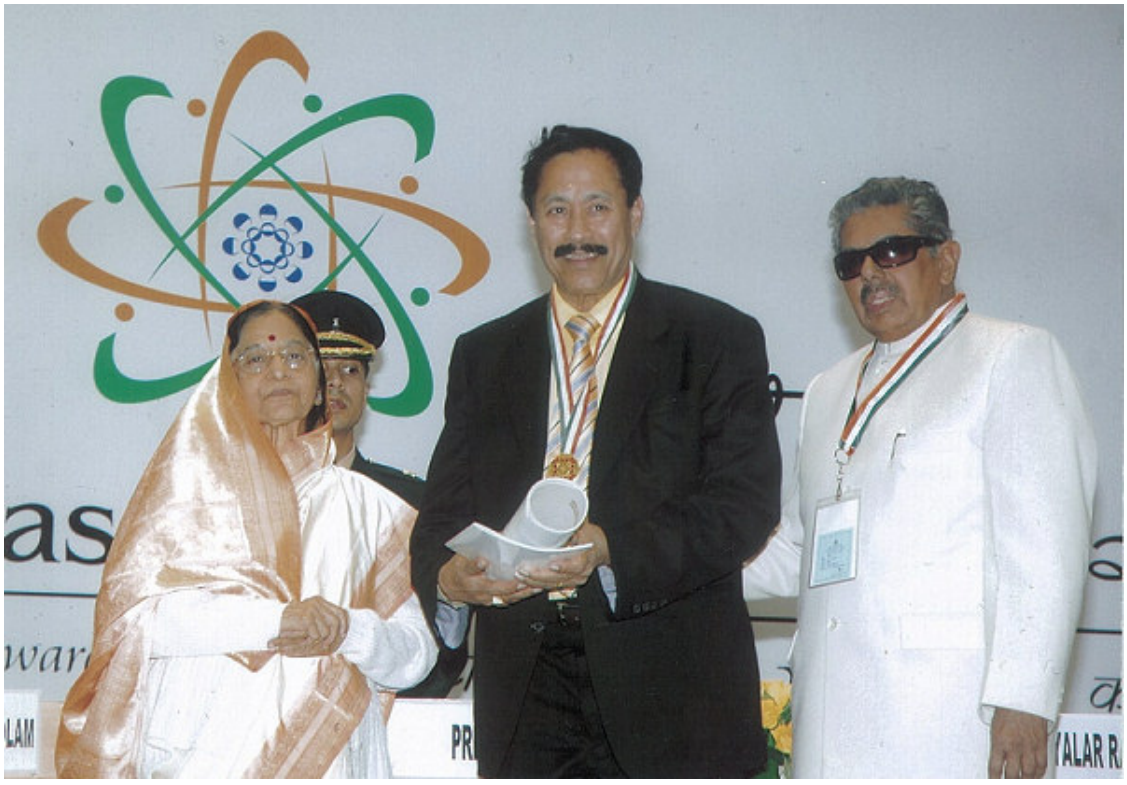
विद्या मित्रं प्रवासेष

Knowledge is the friend in a foreign land

Pravasi Bharatiya Samman to APS Mani

Mr APS Mani has been conferred the highest honour for a non-resident Indian by the Govt of India on 9th January at the Pravasi Bharatiya Samman Award function. The Award was conferred by the President of India. The photograph reflects Mr Mani being awarded the credentials in New Delhi. Her Excellency, the President of India, Mrs Pratibha Patil and Hon'ble Minister for Overseas Indians, Mr Vayalar Ravi and Mr Mani are seen at the Award function.



Source: http://www.manicat.org/main.html

Cover photo:
'Hatsuhinode'. First sunrise of the year 2008. Photograph taken by Dr. Kailash Manda from Chiba, Port Tower, Japan.

CONCORD

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Request for comments and articles

Dear Members,

Thank you very much for constant support. We always welcome your articles.

Please email your articles and suggestions to one of editors.

For further information and updates, please visit our website-

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