

# THE WIZARD & HIS INSPIRING LIFE STORY!

BY: MITU BISHT



Dr. Narayan S. Hosmane in lab

"The miracle, or the power, that elevates the few is to be found in their industry, application, and perseverance under the prompting of a brave, determined spirit."

— MARK TWAIN

*A supremely industrious man, Narayan S Hosmane has strived and succeeds in achieving all his dreams so far. He's a performer par excellence in his professional field and has some highly worthy aspirations guiding him in his life ahead. Though, what's notable is the manner in which he's chiseled his success despite a humble background and hardships, which only the extraordinary can overcome. His is the story that will fill you with inspiration and will amaze you with the incredible!*





Receiving Pride of India Award from Raminder Singh Jassal in Washington DC

**A**mong the human race, only few though are blessed with a brave and determined spirit and these are individuals who become winners and role models for many others. These are the people whose stories inspire, intrigue and influence in such a way that they become unforgettable. Their names get immortalized in the history of achievers and their saga whether told or untold... remains always the most meaningful. Here's the story of one such individual, whose brave and determined spirit has fought everything... be it abject poverty, grave uncertainty or even the challenges of basic survival. A man who never quite allowed the numerous limitations of his early life to impact his vision, his dreams and his determination... rather... he took the odds as an inspiration that had its own virtues, that made one perform and deliver better and that compelled one to reach and explore the unthinkable, the unexpected and the impossible. That miracles aren't just heaven sent ...they are even performed on earth and by mortals...is something that his story so beautifully reveals!

“When all hopes and dreams are slowly turning into realities, the poverty and uncertainty in early years appear not weaknesses but strengths that made me what I am today. The friendliness, respect, care for each other, modesty, and many more characteristics found among Indians are God-given gifts and that could never be found anywhere else in the world.”

– NARAYAN S. HOSMANE

George Bernard Shaw had once said, “People are always blaming their circumstances for what they are. I don't believe in circumstances. The people who get on in this world are the people who get up and look for the circumstances they want, and, if they can't find them, make them.” Indeed, how remarkably does Dr. Narayan Hosmane prove Bernard Shaw right! How stupendously does his life and his achievements prove to the world that ideal circumstances are either found or made, there's no other way around! How else would you describe the rising of a young Brahmin boy from a small coastal town of India called Gokarn (60-70Kms from Goa), born in poverty and struggle and in an environment which couldn't offer much to choose from ...who is today, America's top notch research professor and a commendable scientist?

Today, Narayan S Hosmane, post many degrees, prestigious appointments and awards... is with the Northern Illinois University as a distinguished Research Professor of Chemistry and Biochemistry. Though, the ever positive and fervent professor never quite fails to fondly recall his days spent in India where he spent a complete 23years of his life...fighting extremities, lack of opportunities and choices and the worst of them by way of battling poverty all through. Mention the same to him and his optimistic self discards some notions. Says he, “Every moment of my journey in India was through poverty, but nothing can beat those 23 years that were full of energy, uncertainty, dreams and hopes for future, the same ingredients found in most of the Indian Art Movies of Sathyajith Ray, GV Iyer, Girish Karnad, Meera Nair, Rajat Kapoor, TS Nagabharana, Mani Ratnam, and in many more of NFDC financed movies.” Ask him to reason his unusual belief and he's prompt to explain, “When all hopes and dreams are slowly turning into realities, the poverty and uncertainty in early years appear not weaknesses but strengths that made me what I am today. The friendliness, respect, care for each other, modesty, and many more characteristics found among Indians are God-given gifts and that could never be found anywhere else in the world.” He continues by stating, “Although, I was one of them with those gifts but never understood why those existed until I left India.” Hosmane's dreams may have met realization in the United States of America but he's thankful to India for making him capable of reaching his goals. His trials in India, he sums up are the reason why he enjoys triumph today and so, his gratitude for his motherland ever remains profound



Narayan S. Hosmane in his office.2002





With Members of British Consulate at University of Hyderabad.2004

and almost overflows. Says he, on being quizzed about his love for India, "Thanu (body), Mana (mind) has already been transferred to India, but Dhana (wealth) transfer has just begun and that will be completed after my retirement."

As a young man in the US, Hosmane's stay in the country was first just for survival, later it turned into challenges for staying on top and then he reveals, "Nothing else mattered." Narayan Hosmane, before leaving India, did all of his elementary, middle and high school education at Gokarn. He earned his high school diploma (SSLC) with top grades and soon after, went to Kanara College in Kumta (only 12 miles away from Gokarn) for his college studies, where he earned in top class his B.Sc. degree in chemistry with Botany as minor from Karnatak University in Dharwar. This is where he also continued his postgraduate studies towards M.Sc. non-thesis degree and completed it in two years. Hosmane was a brilliant student all through and it was because of his top rankings in academic performances, that he immediately received Junior Research Fellowship from CSIR (Council of Scientific and Industrial Research) to continue his Ph.D. degree at Karnatak University. This eventually sealed his fate and became the defining moment of his life and profession. He recalls fondly, "While I was seriously involved in my first year research under the supervision of Professor N.S. Biradar at the Chemistry Department of Karnatak University, Professor Evelyn Ebsworth of Edinburgh University in Scotland was very keen in getting me into his research laboratory with the Edinburgh University Scholarship where I finished my Ph.D. degree in two and a half years. After a year of postdoctoral research training in Professor Frank Glockling's laboratory at the Queen's University of Belfast and a year of employment as a Deputy Head of the Pollution Control at the Lambeg Industrial Research Institute (LIRA)



Lecture visit to Stuttgart, Germany.1999

"In early stages of my career, my determination to be successful in whatever the task I chose, kept me going in the right direction despite several obstacles such as skin-color, national origin and the accent in which I communicated. Once I reached at a stage where only accomplishments or credentials mattered, I found no barriers at all!"

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With Prof & Mrs CNR Rao. JNC-ASR,Bangalore.2003

in Northern Ireland, I moved to the USA to study the organometallic chemistry of carboranes and metallacarboranes." After a short postdoctoral research at Auburn University, Alabama, and at the University of Virginia, in 1979, Hosmane joined the faculty at the Virginia Polytechnic Institute and State University (Virginia Tech). In 1982 he then joined the faculty at Southern Methodist University, where he rose to the rank of Full Professor of Chemistry in the year 1989.

In 1998, he made a further move to Northern Illinois University near Chicago, where currently he's placed. "In early stages of my career," he reminisces, "my determination to be successful in whatever the task I chose, kept me going in the right direction despite several obstacles such as skin-color, national origin and the accent in which I communicated. Once I reached at a stage where only accomplishments or credentials mattered, I found no barriers at all!" Difficulties though, there were aplenty that beset his path but Narayan Hosmane had the will to pass through their test at almost all times. He recalls one such tough instance of his life and reveals, "Although I superficially had most basic theoretical chemistry knowledge at Karnatak University, Dharwar, for whatever the reasons, I was very embarrassed when the undergraduate students at Edinburgh University knew a lot more chemistry theory than I, despite my given not earned M.Sc. degree in India. So, I sat in many undergraduate classes at Edinburgh University without any shame but on my own initiative just to learn it properly. For the first time I realized," he confesses, "the difference between given and earned grades or degrees." Taking lessons from his own life, Hosmane asserts that a forceful memorization of knowledge has no room in learning, and that is what he says he best avoided later in his career.

Life is all about the choices we make and the chances we take! Something that so wonderfully got proven in the case of this great achiever! There came some decisive moments in his career when



things could have gone either way, in case the choice made was incorrect or the imperative risks weren't taken. First, at a time when he really wanted to obtain a research position in one of the top scientific institutes in India soon after his Ph.D. degree from Edinburgh University in 1974 and the second, at a time where traditional chemistry research started becoming obsolete. "Unavoidable circumstances kept me out of India," he explains, "and I changed the direction of my boron chemistry research into more popular and fundable Cancer research, combined with nanotechnology." Of course, the rest is all history and the reason that made Narayan Hosmane one of the most promising and esteemed research scientists in the United States of America.

Hosmane's industrious approach, his inexhaustible perseverance and his gifted intelligence, enabled him pave his way to excellence and as he combated the several hardships in reaching his goals and in shaping his destiny, he never quite forgot the most important lesson of his life ... humility. For despite the stupendous education and the enormous amount of recognitions, Narayan Hosmane continues to remain humble. He is the only Indian-borne living in the USA, who has twice received the highly prestigious Alexander von Humboldt Research Prize, which is a research prize awarded to Senior US Scientists. Hosmane shares his moment of

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ecstasy this way – "I was very happy to be recognized by the Humboldt Foundation, the second time around really stunned me as it happens very rarely, and especially, for those of Indian origin. It reminded me of what Mother Teresa told me," he reveals, repeating her words, spoken to him personally, - "don't look down son, but look up for those, who can give you hands to come up." Relating this to his moment of honour in getting the most coveted award he says, "So true! The two-word answer is that it made me 'more humble'."

Narayan Hosmane is a highly decorated professional and his awards and recognitions galore go like this. For scientific achievements, he won the Gauss Professorship from Göttingen Academy of Sciences. Then the Presidential Research Professorship from Northern Illinois University, then Boron in the USA (BUSA) award; and Sigma Xi Outstanding Research Award from the American Organizations. Another one is a Teaching Excellence Award from the Virginia Tech Academy of Teaching Excellence and of course, the list is endless. The mentioned however, are the ones that he recalls fondly and cherishes particularly.

Talking of the awards that are close to his heart, Hosmane says, "Nothing can beat the appreciation and recognition from your own country of birth. In that regard, NRI Institute's Awards are on top of the list of my achievements." Recognition of his work from Indian Scientific Institutes (IIT's, NCL, IISc, IICT, BARC, AIChemie, UGC & CSIR-affiliated Universities, etc), brought multiple invitations to India for his lecture visits after 1992. Soon after, in 1994, he received



*In Anthalya, Turkey, 2001*



*With Neurosurgeon Dr. Takagaki in Japan, 2003*

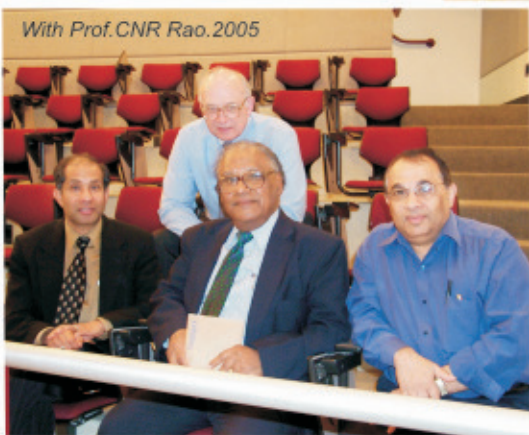


the NRI Institute's "Mother India" and "India International Gold" Awards for Education and Scientific Research and also had an opportunity in the same year to be blessed by Mother Teresa in Calcutta. The two events he describes as the turning points of his life and career as they revitalized his pride in being an Indian. Then, it was meeting the revered mother, he recalls as an event that sure made him miss his motherland as much as his own parents; who he informs would visit him in the US for every 2-3 years. Connecting with Mother Teresa, he thus recalls as the most incredible of all feelings. Says he in recollection, "The most memorable moment for me was when my 8-year old son and I were the recipients of Mother Teresa's blessings."

Amid the blessings and awards, amid the degrees and fellowships... what comes across quite evidently is Narayan Hosmane's love for the subject Chemistry. Question him about it and he's quick to confess – "My love affair with chemistry was just like a traditional Indian marriage - first marry and then love! Since there was only one major subject at Kanara College in Kumta, I had no choice but to take Chemistry as my major subject. Just like most Indian traditional marriages last till death do them apart, mine too is that way." This of course being purely circumstantial, there are other reasons as well that Hosmane cites in favour of the subject being his chosen one and this time, he speaks a bit seriously. Says he, "Chemistry is the center of science and all branches of science is revolving around chemistry and we, the living things, are products of chemical reactions. It is considered unnatural if chemistry does not exist in things that our living body does automatically. Chemistry is life, life is nature, nature is God, and I love God and that is the reason why chemistry has dominated my academic and professional life!" And the branches of chemistry where he particularly excels he says are Organo – Organometallic – Bio - and Nano-Boron Chemistry. Hosmane explains, "More than 200 of my peer-reviewed journal publications are in Organo - Organometallic- Bio - and Nano-Boron Chemistry and my maximum enjoyment comes from instilling my research thoughts into American and International students with respect to building nano - to macro-molecular boron cage structures in laboratories for their potential applications in Cancer Treatment via Boron Neutron Capture Therapy (BNCT) and Gadolinium Neutron Capture Therapy

"There is nothing called "luck", "fate" or "fortune", one needs to make all of these with hard work, sincerity, enthusiasm, and dedication and these are my attitudes in life."

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With Prof. CNR Rao.2005



Ph.D. Examiner & Lecturer at Barcelona University.2002



In Traditional Kodagu Costume.2004



(GdNCT)." In favour of his passion for the subject, Hosmane has still more to say. Claims he, "Because chemistry is the central science, it was and is mandatory to learn chemistry for every discipline in the schools of sciences and engineering. However, the likes and dislikes of chemistry are mainly because of traditional teaching methodologies and lack of enthusiasm among teachers, parents, friends and relatives." Things though he assesses have changed in recent years "as more technology has been introduced in classroom teaching," he says, "and the textbooks are more relevant to what we do in our daily lives."

Today of course, Biochemistry is being immensely enjoyed and pursued by young students both in India and overseas and how does the accomplished Professor perceive this change? Says he, "Today, the younger generation sees connections between biochemistry and health sciences, leading to attractive jobs in pharmaceutical industries, academia and medical fields with ample



With Late Prof. FA Cotton.2005

"A challenge (a rather difficult one I might add!)  
in curing cancer, is my motto in life."

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research funding from private, public and government sources. I see this as a welcome change as long as the fundamental knowledge of chemistry is still intact." However, Hosmane offers a precious advice to all the young kids of this generation, who're looking to pursue a career in either Chemistry or Biochemistry. He suggests, "In the chaos of pursuing higher studies in India and abroad, the younger generations are trying to reach the core of the chemistry and biochemistry knowledge through the applications points of view (similar to eating deserts first at the dinner table!). Rather, I would like to see them build a strong core of fundamental knowledge before reaching applications," he emphasizes. To achieve success in pursuit of knowledge, a proper foundation he professes, is a must! Then, on the number of Indians overseas, engrossed in the field of research, the esteemed Professor has a sharp observation to make. "Although," he suggests, "there are not many Indians overseas conducting research in Boron Chemistry that I do, I find many productive researchers of Indian origin conducting various aspects of chemistry and biochemistry and the number is increasing rapidly." He further says, "Research is for mankind, and it does not matter where it is done. I have ongoing collaborations with professors at Indian Institute of Science in Bangalore and Cochin University of Science And Technology."

After all these years of serious dedication to the subject, Hosmane claims that his forte essentially is... synthetic boron chemistry and their extensions in developing boron-containing drugs for use in Cancer treatment via boron neutron capture therapy

(BNCT) and his core competency he assesses, is in this area. His motto in life is somewhat similar, as he says, "A challenge (a rather difficult one I might add!) in curing cancer, is my motto in life." Hosmane believes that if there can be success achieved in making a unique boron-containing drug that could cure all kinds of cancer, then he would consider it a real accomplishment of his life. Throwing light on his endeavours to fulfill his dreams, Hosmane claims, "Although our research led to one or two of effective boron drugs for brain and liver tumor treatments; people still die of complications arising from the original tumor, spreading to other parts of the body. Therefore, there is still need for continued research in this area with ample funding." And research Hosmane says, is one field where his initiatives will ever continue. "I am professionally married to research, and education," he confesses heartily, "till death do us apart!" Hosmane's goals however, are all etched clearly in his mind. And in his unmistakably intense way, he'd rather describe them as his far reaching "dreams" than goals. He asserts that he will be very satisfied if complete cure for cancer is found and if he is a part of that success story which cracks the elusive cure. Then he also claims that his dream is to see himself elected as a member of the American National Academy of Sciences that consists of some elite group of American scientists. And the third and final one or say a truly distinct one, he puts forth rather unassumingly. Says he, "What if one of a kind International Academy of Film Arts, Sciences



Receiving Presidential Research Prof. Medal & N.L.Prof. Brown NIU Honorary Doct

and Technology is instituted in India that could attract students from all over the world and if this Academy's Awards top the Oscars? What if I am the person behind this happening as part of Diaspora?" Well, if he could think it ...then sure...he could do it too!! After all, given his passion behind all his achievements, his insuperable will to do things and his remarkable sense of self conviction...there looks nothing impossible for Narayan Hosmane! And not to forget...his definition of success is also a typical one ...explains he... "When I find the definitive answer, why the performance failed or did not go the way we planned, then I see the success!" So, who knows, when Narayan Hosmane would surprise all and sundry, with an array of trailblazing success in the fulfillment of all the three incredible dreams, he nourishes today with the sincerity of his efforts.

Incidentally, Narayan Hosmane has strong views about the Diaspora. One can sense, when he pledges his unwavering support to create a stronger Diaspora with the gravity of his ideas. He says, "The Diaspora is very beneficial to both the people of Indian origin abroad and in India, by allowing mutual interactions and their participation in India's economic development. All countries, particularly in the third world, must encourage relationship of this kind in order to accomplish steady economic growth, by eliminating poverty." The great scientist may also be accredited with several publications in the *Journal of the American Chemical Society* that





With mother, family & delegates in Bombay, 2003

described the simplest methods of making key starting materials in the production of many boron-containing cancer drugs in any part of the globe, with existing modest facilities; and also in building boron cage-appended single-wall carbon nanotubes as effective vehicles for boron-drug delivery to the tumors. This has come along with many American Chemical Society publications, including *Organometallics*, describing the metallocarborane-based catalysts in producing superior plastics, which have earned him great acclaim as one of the most productive boron chemists in the world.

Teaching indeed is one of the noblest professions and Narayan Hosmane takes great pride in being in it. Looking at the profession's more special angle, he says, "Since I am teaching to and dealing with younger kids of ages between 18-26; years after years, I feel very young and energetic all of the time and that is the best thing about being a Professor."

Memory... they say is the personal diary that we all carry about with us all the time...and Narayan Hosmane's diary is sure all full with some precious ones and all, mostly pertaining to his university experiences. He recalls, "My real learning process began at Edinburgh University in the United Kingdom, my first boron chemistry (the bread-winner!), training was at the University of Virginia; my first independent research began at Southern Methodist University (SMU) in Dallas, Texas; and the first international recognition of my research, based on what I accomplished at SMU, was at Northern Illinois University." It is no wonder then, that all his memories of these places are both "happy and contented."

Narayan Hosmane, like many great achievers followed some role models closely. He confesses to being a great admirer of his scientific (Boron Chemistry) role model... Nobel Laureate Professor William N. Lipscomb, Jr. of Harvard University; of his spiritual role model Mother Teresa; and of his personality role model his father, from whom he says, he inherited his strength of wisdom and mind that could endure all challenges. Though of course, Hosmane's

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Lecture Visit to Czech Republic, 2005

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Receiving Humboldt Award, 2002

inspiration comes from those who have accomplished a lot more than him. "Believe me," he confesses in sheer modesty, "there are many more above me." Words ...that one can expect only from a man who's both humble and honourable and a true achiever... in every sense of that word!

Just in the case of almost every one, some words or advices often leave an indelible impression in our minds and sometimes, they even guide us towards

our most significant achievements. In Narayan Hosmane's life too, there was a man whose words did some magic. Years later, when Hosmane looks back, he attributes the possibility of his phenomenal success to an advice given to him by his Ph.D. advisor, Professor Evelyn Ebsworth. The achiever scientist recalls those treasured words and says, "During his final advise before my leaving United Kingdom, he said, 'since that you will be in a land of opportunity (that is USA), you must never consider equal, if you perform equally well. If the performance is better, then you will be equal but it is your outstanding performance that will take you to the top'." "So true, as I found it," avers Hosmane in fond recollection of his mentor's precious words. But mentor's apart, there are some other important people, who form an integral part of his life and have contributed to his attainment of success. Hosmane remembers, "My wife's constant nagging (later turned into a great support) for my presence at workplace, especially during my early career; then gift from my father's challenging mind, my mother's affection and compassion; also, Mother Teresa's blessings and Nobel Laureate Professor



With wife, son and daughter, 2005



Lipscomb's consistent encouragement by becoming a research collaborator are the ones that immediately come to my mind."

There are many other factors however, that have motivated Hosmane to higher goals and bigger deeds in life. One is his passion for hard work and commitment to all his works till the very end... leaving nothing to chance or destiny. He says, "There is nothing called 'luck', 'fate' or 'fortune', one needs to make all of these with hard work, sincerity, enthusiasm, and dedication and these are my attitudes in life." Though that's not all, there's more to what made Hosmane scale the heights of success in his professional sphere. His attitude is one of them. One; that remains ever positive and one; that enabled him identify and then take up tough tasks, and accomplish them with hard work & determination. But Hosmane claims that success never comes easy. And the most important, single thing that he sees for success in life is "positive" thinking. "The past is over," he suggests, "the present is happening, but the future is yet to begin, why not make the future with a positive attitude and by asking oneself - 'what did I learn from the past, and how much have I applied that in the present and how can I change it to better for future' - these are the key points of self evaluation towards success," he explains.

As an individual, there's never a dull moment in his life. For as a human, he posses the ability to always see the glass half full and is friendly with an outgoing personality. Hosmane holds and shows respect for people in all sorts of professions, from janitor to Nobel laureates. He believes in treating them as equals and as human beings. Even with his students, he claims to share a similar relationship, something that obviously contributes to his popularity greatly. "I laugh and make my students, friends," he says, "I make them and my relatives laugh with a good sense of humor, entertain friends and relatives alike." Hosmane loves to listen to Indian and Western classical music of all kinds, watch Indian and other international classic movies in any language; and although, he use to play racket ball regularly until his back surgery in 1997, he hasn't forgotten to exercise regularly on a thread-mill even today, do bicycling during summer months, and swim occasionally in free-style in University and public swimming pools. Hosmane shares his love for novels and short stories in English and Kannada and this love, he confesses, even extends to a visit to Indian temples in Chicago and in other towns and also to eating Indian foods from all regions in India. Hosmane tells that he has made many lecture visits

"Achievement, is just a word that gives temporary satisfaction!"

— NARAYAN S. HOSMANE



Conference in Moscow.2002



With President Humboldt Foundation & wife.Berlin.2003

to almost every part of the globe except the African Continent. "Science is my profession," he explains, "but participation or appreciation of music, arts, films, dance and many other cultural events along with photography, making home videos are my hobbies." And he says, "Chemists are good cooks too, but after my wife's not so encouraging comments on my cooking (after she gave birth to our children), made me lose interest in that arena." However, that did not stop him from giving a cooking demonstration during his classroom teaching of flavor chemistry to non-science major students...something he confesses to with special exuberance.

Narayan Hosmane, still has miles to go. What he has achieved is indubitably beyond the ordinary. What he has as the might or the prowess to achieve is infinite. Though, what he eventually does achieve till the very end is something that remains short of description. For Hosmane is one man who has the surprise element in him deeply embedded. He could in the final analysis, surprise not just the world but even himself. For he's a complete doer, a real performer and in a bid to outdo his own very best, Hosmane is likely going to astound everyone with superlative and rare success. Success that will be hard to confine to the definition of words, success that will benefit and encompass all humanity and success that will do India and Indians around the world... immense proud! For Hosmane is one man, who believes and always bears in mind the simple truth that your own resolution to succeed is more important than any one thing in the universe. Mark his words below and they will hint at bigger achievements on their way and into his life...

"When you set your goals very high in seeking knowledge and wisdom, the awards/rewards are just encouragements and motivations," says the great research professor. He continues by stating, "The highest degree (Ph.D.) that I received was not in chemistry, but is a Doctorate in Philosophy." "Naturally," he explains, "when we realize, as philosophers, that nothing is superior to 'Nature,' that cannot be conquered, then, we are set to unfold the secrets of nature and that is a very slow and never ending process. As long as my brain is still alive and working fine," he sums up, "the search will continue. 'Achievement', is just a word that gives temporary satisfaction!"

It is this hunger, this passion and this unrelenting desire to achieve more and more and even more... that makes any man invincible in his sphere. It is this attitude of caring little about what is and paying more heed to what can be that brings eternal success and makes a complete achiever. And it is this surrender to ones obsession of deeds and efforts that make one man achieve what no other can. Narayan Hosmane, quite convincingly, has that fantastic ability and the strength of character that can enable him be that one man, who will surpass and triumph over everyone else on the road to discovery. The roads could differ; then be it philosophy, science or even arts; Hosmane, with his outstanding abilities commands the power to shine with distinctions in any field...also because he has the penchant to excel in whatever he attempts and is someone who will not give up until he's successful! At least his life so far is a pure reflection of this and only this!