“Google my late-father?” or India, China and United States: What could/may happen in 21 century?
A speech delivered at the National Academy of Sciences
I am truly honored and a little embarrassed to participate in this meeting on issues that have profound implications for me personally, for United States and for the world.

I have to admit that today I am here under two “false pretenses.”

The first is because the organizers invited me some months ago to come as the Vice President for Research and Economic Development of the University of Texas at Dallas. Since September 1, three weeks ago, I became the Senior Executive Vice President of National Cheng Kung University in Tainan, Taiwan.

The second is that I stick out like a sore thumb in this august group of individuals. After all, I am not an economist, nor a political or social scientist, not even a philosopher. I am merely a theoretical physicist who happens to be born in India, received all my advanced education, from undergrad to grad to postdoc, in United States, and visited Asia Pacific region in the past quarter of a century well over a hundred and twenty times. So my view of this issue may be what the Chinese would refer to as 井底之蛙, or the view of the sky of a frog at the bottom of a well!

In October of 2005, at the Annual Convention of the Indian Institute of Technology North Texas Alumni Association, I was invited to give a keynote speech, which I entitled “India”, US and China: Tripartite or Trinity in the 21 Century? How pivotal these three nations will be for the world in 21 century will depend very much on the intertwined relations between them.

Allow me to share something with you that is deeply personal but I believe has profound implication in what we are discussing at this conference.

I mentioned earlier that I was born in New Delhi, India. Besides the obvious reason that my mother (an American educated pianist) was there at the time, the whole family was there because my father (an NYU JD in 1937 but never practiced law and only journalism) was the chief English editor of the Kuomintang’s Central News Agency. A few weeks after my speech in Dallas, my son amazingly was also admitted to NYU law school. When he went for his interview, he dug-up information about my father. Since my father died in 1950, he seldom entered my mind. My son's action actually surged my interest in my father.

A few days after my son's action, one Saturday morning, while I was net surfing, I suddenly had the urge to Google my father! I was not sure the precise English spelling of his name, so I just typed in “Paul Feng” and “India.”

What came out from the search startled me! Hooray for Google!

The result of Google’s search produced the following website: http://www.burmalibrary.org/reg_burma/archives/200101/msg00016.html. In it contains a mesmerizing article by an author named Manoj Das (I am hoping that maybe one of our distinguished Indian participants in this conference would know this gentleman) with the title “Forging an Asian identity.” It was published in The Hindu on January 7, 2001.

The entire article is worth reading by all but the passage that startled me was as follows, which I like to share it with you here.

“…We in India have debated as much as other Asian countries have, about issues like the desirability of Western influence on our culture, its inevitability or otherwise, and the relation between tradition and modernity. Like the May Fourth Movement in China which championed western values and ideals in the 1920s, we too had voices against our traditions and they were given a reasonable hearing. An exchange in experiences of this kind would no doubt be highly educative.

For quite some time, Indian literature for the common Englishman meant what Rudyard Kipling and the like wrote. For long, India’s window as well as that of the West on Chinese life has been Pearl S. Buck’s Good Earth. But when I read Lu Hsun, a number of his short stories and The True Story of Ah Q, I realised that despite the realism in the works of Pearl Buck and other gifted
writers, Lu Hsun’s work had an authenticity that could be expected only of a native of China. I do not propose to display my meagre knowledge of Chinese literature here, but what I propose is a strong and well-planned academy of Asian literatures to take care of the great need to know one another.

And who could take any effective step in that direction? For me, the answer came from the first Prime Minister of India, Jawaharlal Nehru. (Ladies and Gentleman, the following passage almost knocked me out of my chair!) Speaking to Mr. Paul Feng of the Central News Agency, he said on January 20, 1946, "If China and India hold together, the future of Asia is assured." This holding together need not be confined to diplomacy; it can, by all means, be a psychological force that can work wonders in the realms of creativity..."

I said in IIT speech in October 2005 that "...In preparing (this speech) I realized that it must have been my background that the organizers were zeroing in on. The more I thought about it, the more I am convinced. Indeed, I am a product of these three great nations and so I may have some unique personal perspectives about them..."

Having read the article about my father, I am even more convinced that that is why I was at that conference in Dallas, and why I am here today!

I should mention that all of you have heard much about these three nations on a daily basis. Someone once told me that "if not the constant claim in United States that China and India are taking all the jobs away from Americans, all the international news in this country would be on global terrorism." Is it not ironic, maybe even a little amusing that the "bad" news about China and India is bringing some mental relief to the general population in United States?

Still, there is no doubt that in the 21st century, United States interactions with India and China will continue to increase, in depth and in complexity. Also, unlike 20 century or the centuries before that, whenever you have two or three powerful nations, wars inevitably would break out. I cannot foresee the day when US, China and India will have wars. If nothing else, the way businesses and intellectual exchanges that will be discussed extensively in this Conference, would bind the nearly 3 billion people, or nearly half of the earth's population, wars would be unthinkable.

If there are no wars, then there must be peace. If there is peace, the people of these three nations must think of ways to not just co-exist (which English has a great word to describe such a co-existence; it's called tripartite) but exist together for the benefit not only for themselves, but humanity in general (another beautiful word: trinity.)

Let me tell you a very short form of my life story to try to convince you that India, US and China should and can be more a trinity than a tripartite!

I grew up in Singapore and my parents sent me to Chinese schools. That will explain why I absorbed so much traditional Chinese culture. In fact, the elementary school I went to was organized by the Kuomintang, and every morning before classes began, the entire faculty and students gathered in the athletic field to sing the national anthem of the Republic of China (which by then only had sovereignty in Taiwan, Quemoy and Matsu) and the traditional three bows to Sun Yat-Sen, the father in Taiwan, Quemoy and Matsu as the Republic.

Singapore was a British colony (making me a British subject!). For this reason, education in Singapore, even Chinese schools, would have English as a subject. It was in learning English that I had my first real exposure to India. My first teacher in English was a jovial gentleman of Tamil decent. I remembered that besides being a great teacher (he taught me the rudiments of this difficult language), he was also enormously proud of his heritage and culture.

In my 1st year senior high, something horrible happened: war broke out between India and China. While the conflict was quite remote from Singapore, I remembered there was a great deal of anxiety about its
outcome. Unfortunately and understandably, there was also demonstration of nationalisms, from both Chinese and Indian communities in Singapore. I am sure while Nehru was able to foresee the grand Asian picture, this war between these two Asian giants 'broke him' and soon after he died.

I came to the United States after high school and became thoroughly "Americanized". Several things happened in the past several decades that while on the one hand I became more and more an American, I also became more and more aware of China and India.

First, no sooner after I arrived in the US, China detonated an atomic bomb. As you may have noticed, I said nothing about China after I arrived in Singapore. The reason was simple: There was virtually no news about China in Singapore at that time. China was de facto a blackhole! Therefore, the fact that China was able to explode a sophisticated atomic device, which required a great deal of technical knowledge, was certainly an eye opening experience for me.

Second, throughout my graduate school days, many of my fellow students came from India. Outstanding institutions such as University of Delhi, Banaras Hindu University (don't you just love that name), University of Calcutta, Tata Institute for Fundamental Research and Saha Institute of Nuclear Physics (in Saltlake, outside of Calcutta) started to enter my psyche. I was both pleased and excited to learn about the fact that India, the country of my birth, has a large number of outstanding universities.

As I became more educated in physics, I began to learn about how great science flourished in India well before many other Asian countries. Perhaps the most remarkable Indian scientist, who was the first Asian in science to win the Nobel Prize (in 1930) was Sir Chandrasekhar Venkata Raman. I should mention that the next Asian who received this accolade was Hideki Yukawa of Japan 19 years later in 1949. The first two Chinese (and only after they received all their advanced training in the United States) were T D Lee and C N Yang in 1957, some 27 years after Raman.

*It is interesting to note that the byline of Raman’s prize is “for his work on the scattering of light and for the discovery of the effect named after him.”*

Nearly every scientist today would know Raman effect. Perhaps in my mind the most remarkable achievement of Raman was that he received his entire education, and did his ground breaking work in India. If you have not done so, I would urge you to read the Nobel acceptance speech of Raman which you can get from the Nobel website of “http://www.nobel.se”. It is the most heart warming scientific writing, and Raman did it without a single equation!

By the way, I was asked to review a proposal recently by one of the funding agencies in the US. I rejected it instantly because in the proposal, Raman Effect was spelled "Ramen Effect"! I said that anyone who could not tell the difference between great science and noodles should not be funded!

One should remember that while the accolade belongs to Raman and Raman only, it must be underscored
that great scientific achievements are seldom solo performances. Raman's achievement must imply that India's scientific conditions - while it may not have been as robust as Europe when Raman was doing his work - the culture of world-class scientific research must be quite prevalent for him to achieve greatness. Therefore, if one fast forward to today, it should not come as a surprise that India's technological prowess did not grow from vacuum. It stood on solid foundations.

Third, perhaps one of the most memorable moments in my life in the United States (before the morning of 9-11) was on a cold day in January of 1972 in Beijing. I watched on TV with awe when Nixon descended from his Air Force One, with his hands protruding in order to shake the hand of Zhou Enlai. Compare this with what happened in 1954 when US Secretary of State Dulles refused to shake Zhou's hand, and deeply insulted not just Zhou but all Chinese. This single gesture of Nixon was certainly one that initiated the thawing of icy relationship between these two nations.

As we all know, Chinese "open policy" began after the fall of the Gang of Four in 1977. In these 30 years, the world was totally transformed. Technology, especially information technology, profoundly and fundamentally transformed the world. In hindsight, having enormous populations in China (1.4 billion) and India (1.3 billion), how can one NOT expect that these two nations will not be transformed and impact the world.

1976 was a defining year for modern China. Mao died on Sept. 9, followed immediately by the spectacular collapse of the so-called "Gang of Four", thus bringing closure to ten painful and devastating years of "Cultural Revolution", and ushered China into a new era. I am sure historians will undoubtedly consider the new era as the "miracle of the world in the 20 century". In 1976, China was at the verge of a complete "meltdown", economically, technologically and intellectually. Having quarter humanity, and a land size spanning nearly half of Asia, such a meltdown would have horrifying global implications! Yet, no meltdown occurred.

One of the fundamental reasons, in my mind, as to why no meltdown occurred was due to Herculean contributions of tens of millions of Chinese intellectuals. In their darkest hours, enduring the hardest of hardships and suffering the deepest personal humiliations, they maintained palpable hope for themselves, their family, their professions and China. Indeed, even without personal liberty, both physical and mental, they remained important pillars of the nation, holding up its dignity and searching for dim light at the end of a long and dark tunnel. The current state of China, and its impact on Asia Pacific basin, is in no small part due to these brave individuals.

China of the 21 century is fundamentally a different country from the days when the Communists first took power in 1949. India in the past two decades also has transformed, or some would call it, reinvented. China of the 50's gave the perception of fear. Indeed, when I was growing up in Singapore, what we were constantly reminded was China's "Red menace." India in the 50's gave the perception of a desperately poor 3rd world country. Today, the perception of China and India are nations profoundly interested in becoming, and probably are, economically strong and intellectually robust.

As I see it, China and India in the 21 century have at least the following challenges which did not exist in the 50's.

First, there are unquestionably vast increases in international commercial activities. While there were none in the 50's and considerably less before the 90's, the amount ballooned significantly in the 90's and beyond. With a large internal market and large and reasonably well-trained workforce in the hundreds of millions, one would expect that there will be no slow-down of this trend.

Second, while the percentage is still small, but because Chinese and Indian populations are so large, in absolute number there are now sizable middleclasses, and they are growing rapidly. For example, for China, even if the middle class makes up as little as 10% of the population which I am sure would be an underestimation, in absolute number it is around 130 million, which is a third to a half of the US population. It is well known that the middle class will demand a better environment,
better health care, better education for their children, and a higher standard of living. All of these demands will place significant pressure on China’s and India’s soft and hard infrastructure. There is no doubt in my mind that this sector of the population will significantly impact both countries.

Third, for both nations, there is a growing private sector and it is undeniable that the wealth in the nation is slowly flowing into the hands of that sector. In India’s case, it is obvious. In China’s case, my interactions with China in the past decade, I find that the percentage of friends who work for and/or started private businesses are increasing quite rapidly. For example, I was told that as high as 80% to 85% of the wealth generated in Zhejiang Province now arises from private sectors. These are welcome signs not just for China and India, but for the world as a whole.

Fourth, fast and at times uncontrolled and unstructured economic growth can bring undesirable elements to the society, such as degradation of the environment, shortage of the necessary resources to propel the growth and worse, the tendency to cut corners. These issues can significantly lower the quality of life and could lead to conflicts, national or international.

Fifth, as in all modern nations in the 21 century, one should not rely on the inherent human instincts to be ethical. Mencius (孟子) said that “Ren Zhi Chu, Xing Ben Shan” (仁之出，性本善) or “Human at Birth is Ethical.” Whether this is true or not, I argue that we should not take this chance and see how each of us may turn out in real life. To this end, modern nations must be nations of law. Some recent spectacular examples in the corporate and academic worlds, which in the United States is the genesis of SOX, or Sarbanc-Oxley Compliance, clearly indicate to us “ethical indoctrination” should never be left to individuals.

Finally, I cannot help but think a little “blue-sky” at this point of my speech. If we look around the globe in the 20 century, perhaps the most interesting political and economic development is Europe. Before WWII, countries in Europe with profoundly different cultures, languages and political systems had major conflicts. Wars between these nations were bloody and protracted. Yet, after WWII, with Marshall Plan from the United States and with their recognition that “united we stand,” European Union, or EU (欧盟) was created.

So, can one think that in the 21 century, there could actually be an AU, or Asian Union (亞盟)? After the French and Germans, who were bitter enemies before WWII, decided to be proactive parts of EU, and with US closely aligned with the concept, EU was created! So, can one not have nations in Asia, encouraged by the two giants India and China, working closely with US, to form AU?

Imagine that perhaps one day in the future a person can actually hop on a bullet-train in Seoul, Korea for Mumbai without having to show once his/her passport to anyone! Imagine the economic explosions and expansions, for the region and the globe that can come from such a scenario. Imagine the improvement of the “quality-of-life” for all people in the world if Asia Pacific and South Asia, with more than half of the world’s population, propelled by India and China, and assisted by United States, become AU in the 21 century!

Imagine!

I hope I have given you my very personal, very limited and probably very bias view about these three great nations. I am upbeat about their futures because I think all three have deep intellectual strengths. From my personal experiences and perspectives, I believe that US, India and China have far more in common then not. All are powerful nations in their own right. However, if they can work together, with mutual respect as the underpinning, the world will show a sigh of relieve.

It is clear to me that the condition, which took entire 20 century to mature, is ripped for these three nations to regard themselves as a “trinity” and not a “tripartite.” Due to their individual successes, I believe that these three nations should and need to shoulder a major part of global responsibilities to ensure that the world can be a better place for all humanity in the 21 and beyond centuries.

Thank you.