

# The Man Who SAVED Malaysia

*Tan Sri Dr. B.C. Sekhar, the  
father of Malaysian rubber*

**I**n a time and age when the least amount of achievement usually brings on a disproportionate amount of celebrity, it is vital to place our priorities in order and focus on those who really matter. Focus on those who have actually contributed to changing things for the better. For **PASSIONS**, one man to whom enough praise cannot be meted is the late, great Tan Sri Dr. Balachandra Chakkingal Sekhar. Better known as Tan Sri Dr. B.C. Sekhar, or more affectionately Mr. Natural Rubber. In Malaysia today, we enjoy a livelihood that many of our neighbours would be envious of. We enjoy this because the fundamentals were and are strong. And the fundamental on which Malaysia's wealth was built was rubber. Humble and simple rubber which had a champion in the person of Tan Sri B.C. Sekhar. If not for his hard-work, dedication and commitment, the rubber industry in Malaysia would have collapsed sparking off a domino effect of economic disaster from which we would have been hard-pressed to get out of. In the following pages, we salute the man who, without any doubt at all, saved Malaysia.





## Born into rubber

Malaysia in 1929, the year Tan Sri B.C. Sekhar was born, was vastly different from the country that we know today. There was no Malaysia at all to start with, but rather a loose coalition of British colonies, dependencies and protectorates. There were no cities, precious little urban life at all, and definitely none of the luxuries that we are used to today.

But there was rubber, the one constant that links the Malaya of the past with the Malaysia today. Such has been the all-pervasive influence of rubber in the economy that it is easy to forget that the plant was not natural in the land. Rather, the initiative to introduce rubber into Malaya was taken by a certain Henry Wickham who collected 70,000 seeds from a tree in Brazil and took them to Kew Gardens in London. And from which, 22 seedlings were sent to the Botanical Gardens in Singapore, out of which seven reached the gardens of the British Resident in Kuala Kangsar, Perak. That happened in 1878, and the magnificent seven were the “parents” of all subsequent rubber trees in the land.

The British realised the potential of Malaya as a planting ground for rubber and the development of rubber estates. Of course, the estates had to be manned and the rubber had to be tapped. Thus the sprouting of rubber estates also saw an influx of indentured labourers - mostly from India - who moved to Malaya to work in what would prove to be a hard and thankless task.

And among the many rubber estates that came up, there was one in the Sungei Buloh area of the state of Selangor, known as the Ulu Buluh Estate. One of the key persons responsible for the creation of this particular estate was an immigrant from Kerala, India by the name of Achath Sekhar Nair, who moved to Malaya at the age of 17. Achath Sekhar contributed to the clearing of the forest and the planting of nearly 14,000 acres of rubber trees, and he and his wife Sitalakshmi Ammal literally lived in the estate. And on the 17th of November, 1929, they welcomed their third child to the world - a baby boy to whom they gave the name Balachandra Chakkingal.

Tan Sri Dr. B.C. Sekhar was thus born amongst rubber. And in a delicious twist of fate, his place of birth was a mere four miles



away from the experimental station run by the Rubber Research Institute of Malaya (RRIM), the very same institution that he would later head when it was known as the Rubber Research Institute of Malaysia. But that would be decades later in the 1970s. In the 1930s, when he was growing up, for an Asian to be even an estate manager was unthinkable. Such lofty positions were the preserve of the Europeans, and no matter how hard they worked, Asians could never move past that barrier.

As such, A.S. Nair soon tired of the lack of opportunities that he experienced in the rubber estates, when he was prevented from rising any higher after reaching the position of an estate assistant. He had risked life and limb to help clear the forest and plant the trees. He had dedicated his working life to seeing the estate succeed. And at the end of the day, he had to contend with a policy that reflected the racist nature of imperialism. There was only so much a man could take. And A.S. Nair had reached his tipping point. Furthermore, as with any good parent, he was determined to give his children the education that he was unable to enjoy, so that they could control their own destinies.

As such, he moved his family out of the estate and left his job there. But even though the young B.C. Sekhar grew up away from the rubber estates where he would later make his name and fame, it would not be wrong to say that he was inundated from a young age with an important skill. The ability to see the human factor behind the rubber industry. Where others saw just business, Dr. Sekhar saw people. And it was because of that that he was so dedicated to the cause.

## At the crossroads of life

We meet B.C. Sekhar again after he had turned 19. By then, a strapping young man on the crossroads of life, he was armed with knowledge in the form of a Bachelor's Degree in Chemistry from the University of Delhi. Up till then, a vocation in rubber research was not the foremost thing in his mind. Rather, his ambitions laid more towards the world of chemical engineering, and so it was that he applied to the then University of Malaya in Singapore for a place in its chemical engineering course. He was of course accepted, but it so happened that along the way, something came by that will change his life forever.

Fate, as many would say, is a funny thing. While waiting for the semester to begin, he applied for a position at the RRIM but was told there were no vacancies available. That might have been the end of B.C. Sekhar's involvement with the prestigious research centre, but for a slight addendum in the rejection message. It was an invitation for him to visit the institution.

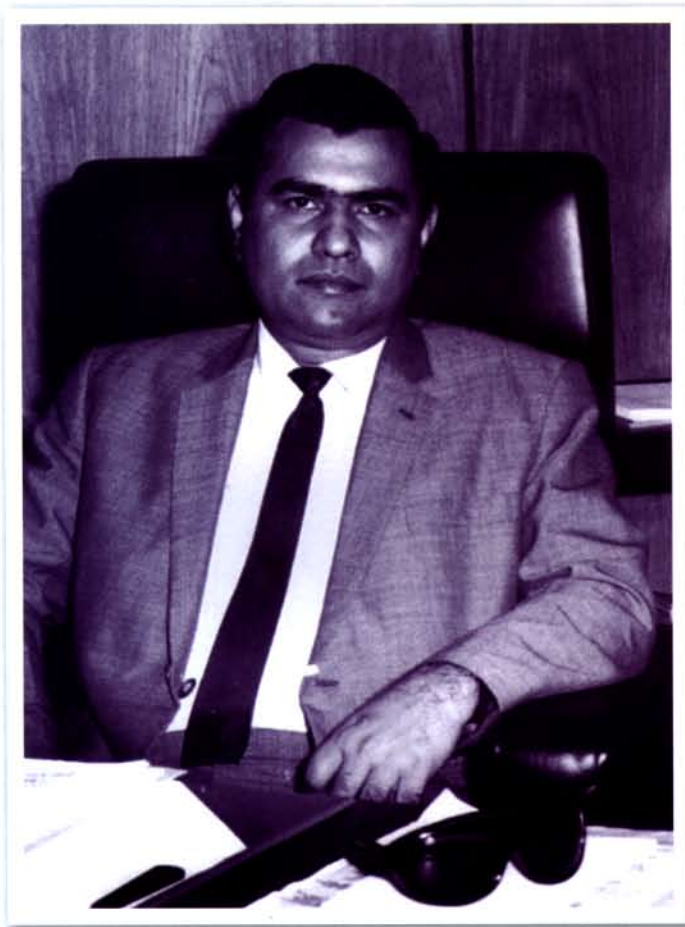
He could have said "no". He could have ignored the invitation and went on to his studies in chemical engineering. And on hindsight, with what we know of B.C. Sekhar's scientific prowess, there is no doubt that he would have made waves in that field.

He accepted the invitation and what a momentous decision it proved to be. Because during his visit there, he so impressed the people at the Institute that they offered him a position as an Assistant Chemist. It was to be the start of a lifelong association with the commodity. Chemical engineering's loss was undoubtedly rubber's gain, and ultimately it was Malaysia that won.

Because what would have been a temporary position quickly turned into a permanent vocation. Why did Tan Sri Dr. B.C. Sekhar decide to move from chemical engineering to the world of rubber? The answer lies in the following words, "I felt I must contribute something worthwhile to the rubber industry on which the Malayan economy depended. I felt I could do something for this country." These words reflected the strong sense of patriotism that was inherent in the man.

## Malaya's white gold

For almost one century, since the rubber seedlings were introduced to the local ecosystem by the British, rubber had proved to be the livelihood of many Malaysians. It would not be wrong to say that the latex which flowed from the tapped rubber trees was equivalent to white gold for Malaya. To understand just how important rubber was for the Malayan and later Malaysian economy, we only need to consider these facts - that as far ahead as 1972, 60% of all arable land in Malaysia was dedicated to rubber plantations. Rubber made up the bulk of Malaysian exports at around US\$508 million. One-third of the population depended directly or indirectly on the health of the rubber industry.



Tan Sri Dr. B.C. Sekhar at his desk in his office.

With 90% of the world rubber supply coming from South East Asia, as long as demand is there for the commodity, the economies of the nations in the region - Malaysia not exempting - will be healthy. And in the age of industrialisation, mechanisation, and motorisation; the demand for rubber was high. But along with high demand came the problem of supply, and the question - "What if the supply of natural rubber was stopped or threatened?"

And the supply was cut off in 1942 when the Japanese Imperial Army occupied South East Asia, effectively starving the Allied nations of access to natural rubber. With necessity being the mother of invention, Allied



Tan Sri Sekhar in his element, examining methods on how to improve rubber tree growth.

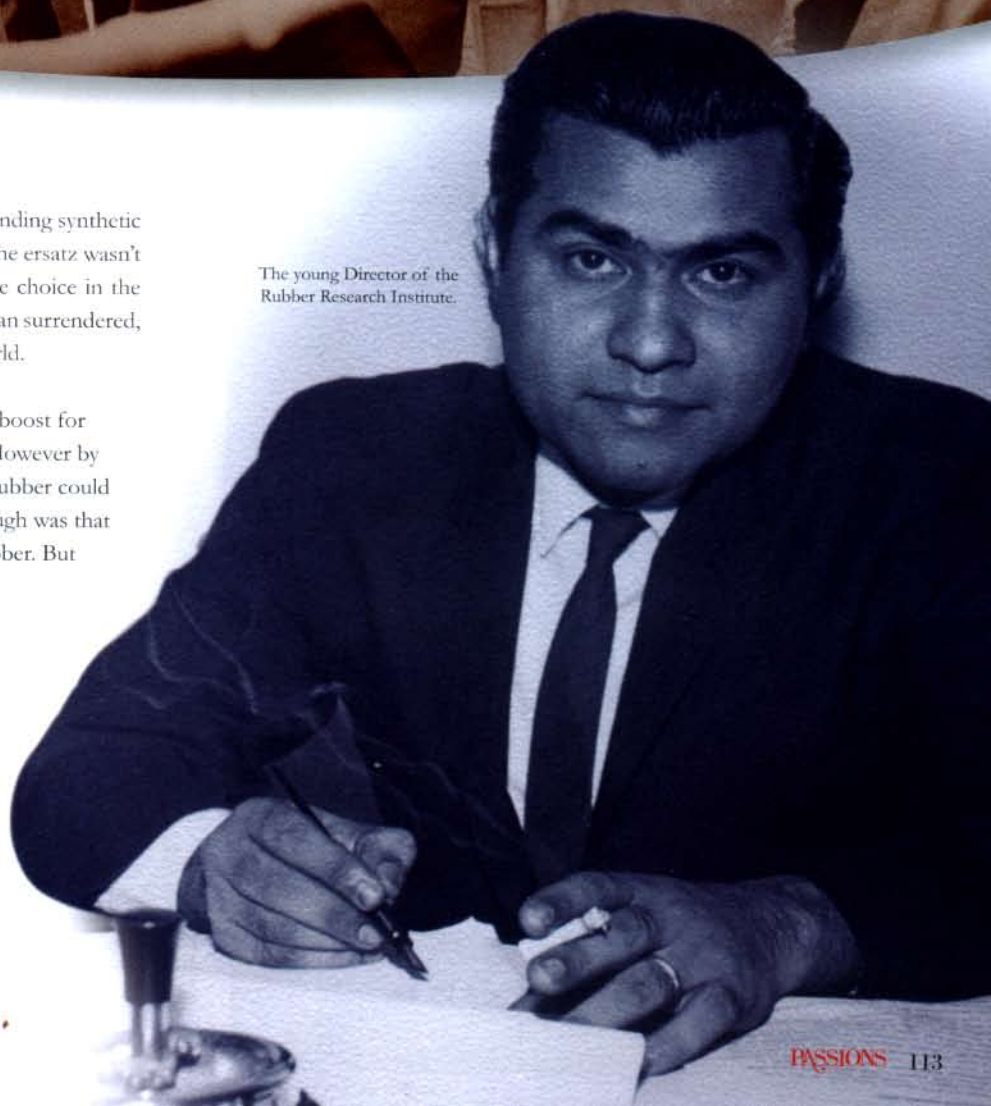


scientists in the United States began concentrating on finding synthetic substitutes for rubber by using petroleum. Admittedly the ersatz wasn't as good as the natural product, but the Allies had little choice in the matter. Thus for three years from 1942 to 1945 when Japan surrendered, synthetic rubber was dominant in the industrialised world.

The Japanese surrender was expected to have been the boost for natural rubber to claim back its position in the world. However by then, efforts to create the perfect substitute to natural rubber could not be stopped. The main problem with synthetics though was that they lacked the precise molecular pattern of natural rubber. But that was only a temporary reprieve.

The stay of execution was lifted in 1953 when two scientists - Ziegler and Natta - managed to discover the family of catalysts that will allow the molecules to organise themselves in the order found in natural rubber leading to the production of Cis-1,4-polyisoprene. Thus a viable substitute to natural rubber was finally found. It may have been a great scientific discovery, but to many in South East Asia - and in Malaya especially - it was as if someone had signed a death warrant.

The young Director of the Rubber Research Institute.





## Synthetics seductive lure

Like a siren rising out of the waves, synthetic rubber was extremely seductive for many industrialised nations. Firstly, there was the issue of supply. As the Second World War had proved, there are times when the supply of natural rubber would be threatened. Then there was the issue of quality, with synthetics then proving to have far superior qualities than what could be achieved with natural rubber. Last but not least, there was the issue of demand, with the demand for rubber exceeding what natural crop yields could produce.

In strict Darwinism, the introduction of synthetic rubber as the 'better' alternative to natural rubber would have led to the demise of the natural rubber industry. For the industrialised nations, synthetic rubber may have been the more viable economic choice. But the switch to synthetics would have left most of Malaya destitute as their rice bowls would have been affected. For Dr. Sekhar, the challenge was thus not a scientific or economic one, but a human one as well. Natural rubber was the livelihood of his people and as such it was imperative for him to promote its qualities to the world.

A firm advocate of the superiority of natural rubber, he went about this in two ways. The first was to find ways to improve the quality of natural rubber so that it could be empirically proven that it was indeed the better choice. The other was to convince others that the wiser techno-economic-social decision was to hedge their bets on natural rubber. And he did these by using the powers of science.

Years later, in 1973, when he was awarded the prestigious Ramon Magsaysay Award, he eloquently vocalised his philosophy in his acceptance speech, where he said "The natural rubber industry is the economic life blood of many countries in Southeast Asia, and certainly of my country. In a fast changing world the requirements imposed on an agricultural commodity in competition with a sophisticated industrial product must be met if it is to survive. For success in this struggle for survival two essential conditions must be fulfilled. First, modern science and technology must be brought to bear in all their manifestations in formulating solutions to meet changing industrial and economic requirements. Second, such solutions must be actively translated into practice for the benefit of the entire industry. In fulfilling the first condition, a team of dedicated scientists and technologists—with a clear understanding of the problems and with a depth of knowledge and a vision relentlessly to pursue the solutions—must be available. The second condition demands that the affected countries must consciously, concertedly, and urgently attack the problem of implementing the improvements"

## Becoming Mr. Natural Rubber

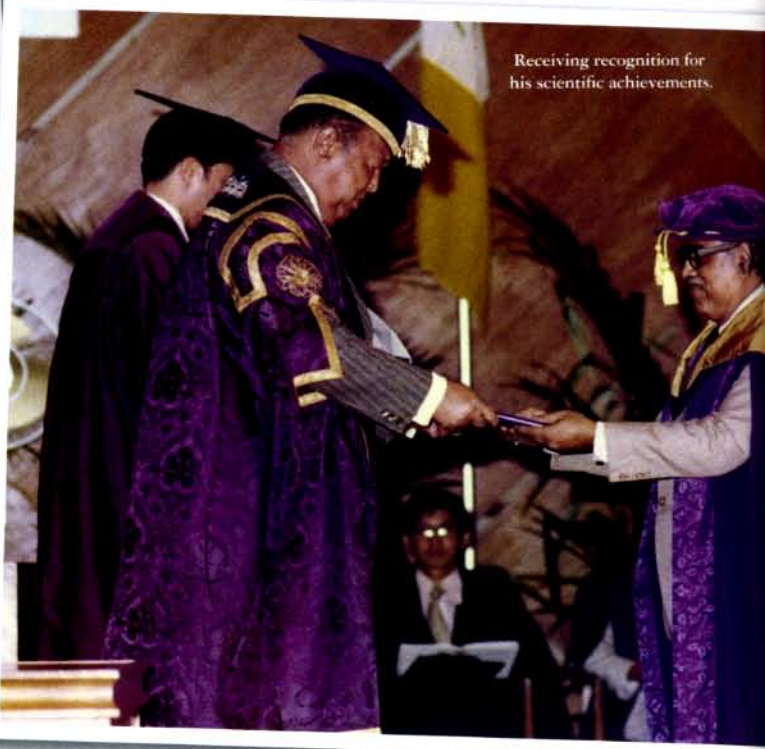
His first involvement in the study of rubber polymers came in 1954 during a stint at the University of Michigan under a United States government fellowship, where he received his Master of Science degree. Then it was off to the UK, where he spent six months at the Welwyn Laboratory of the then British (later Malaysian) Rubber Producers' Research Association.

Promoted to Research Officer upon his return in 1955, he set about his tasks in earnest. His main field of research dealt with the techniques to 'graft' latex, in order to deal with challenges caused by oxidation and storage-hardening. A dedicated scientist and academician, Dr. Sekhar realised that scientific progress cannot be divorced from the demands of the industries. If natural rubber were to be accepted, then it was vital to find out what the industrial consumer wanted, and he did that by meeting with manufacturers to find out their needs and wants.

The years from 1959 (when he was named Senior Polymer Chemist at the RRIM) to 1964 (when he was appointed the first Malaysian head of the



Receiving the title of Tan Sri from the Yang di-Pertuan Agong.



Receiving recognition for his scientific achievements.



The headquarters of the Rubber Research Institute - Tan Sri B.C. Sekhar's spiritual home for more than three decades.



Showing Queen Elizabeth II a rubber plantation in Malaysia.

Chemical Division of the RRIM) were a halcyon period of scientific achievement for Dr. Sekhar. No major international conference on the aspects of rubber would be complete without him present as a speaker. He released a number of research papers during those years, and also took out eight patents. These patents dealt with improving the processing of natural rubber by means of stabilisation, masterbatching, oil extension, and polymerisation.

These discoveries went some way in helping to solve some of the problems associated with natural rubber. As far as natural rubber was concerned, there was no other person with more knowledge of it than B.C. Sekhar. It was thus fitting that in 1966 - at the age of 36 - he became not just the first Malaysian, but also the first Asia and the youngest Director of the Rubber Research Institute of Malaya.

One wonders what A.S. Nair would have thought of that. There is of course something deliciously ironic in what happened. A.S. Nair had of course, as mentioned above, left the rubber plantation because he was unable to progress in it owing to colonialism. And now his son - the son who was born in a rubber estate - was heading the country's foremost research institute on rubber.

### In the years of Sekhar

The years of B.C. Sekhar at the RRIM especially the 60s and 70s were marked by revolutionary scientific progress in rubber botany and production. It also helped establish Malaysia as the nerve centre of rubber research and production.







As mentioned above, synthetics posed a huge challenge to natural rubber - in terms of supply, price and quality. Dr. Sekhar - as the Director of the RRIM - thus led a three-prong effort to address these imbalances. The goal was to increase yield per acre thus leading to lower overheads and more attractive natural rubber prices. Then, quality had to be improved, so that natural rubber can truly compete with synthetic rubber. Granted that millions of lives were dependent on natural rubber, Dr. Sekhar knew that the industries would not be concerned about that. In cold-blooded business decision making, synthetics would have been a more viable choice.

The RRIM during the Sekhar years pioneered several methods to improve yield. These included genetic manipulation to reduce the size of the rubber tree from 50 feet to 20 feet and accelerating the maturity process so that the trees will grow faster. Genetic manipulation also allowed for the creation of shoots that had desirable properties in them. Last but not least, the RRIM also came up with the concept of tree grafting where a high-latex yielding trunk is grafted on a vigorous root seedling, while a wind and disease resistant crown is grafted on the trunk.

Furthermore, under his scientific leadership, the RRIM also helped rubber smallholders improve their yield by introducing new methods for tapping where Ethrel is painted on the tree, thus resulting in clotting occurring within six to ten hours rather than the usual three hours. This allowed them to double their yield and save on labour and replanting costs.

But of course, improving yield and price was but one step in gaining back the crown for natural rubber. Next was quality improvement. This was achieved through the creation of the Heavecrumb process, which enabled latex to be reduced to crumbs for cleaning, drying and shipping resulting in a uniform, technically gradable rubber. Furthermore, unlike normal sheet rubber, which takes around seven to ten days for shipping, Heavecrumb can be shipped within eight to 24 hours.

By 1965, Malaysian natural rubber had reached such a stage that the Standard Malaysian Rubber (SMR) Scheme was introduced, which revolutionised

processing and presentation of Malaysian rubber. Through the SMR grading scheme, Malaysian rubber could be properly graded with the guarantee of the Malaysian Government. The innovations introduced by Dr. Sekhar enabled natural rubber to be more attractive than synthetics owing to the following factors - technical grading, uniformity, cleanliness, quality and ease in handling.

## The scientist as a humanitarian

Tan Sri Dr. B.C. Sekhar saw his task, not from the dispassionate eyes of an academician, but from a pair that was able to see the human factor behind the crisis affecting natural rubber. This could be seen from his words while accepting the Ramon Magsaysay Award for Government Service in 1973, "Natural rubber once reigned as the single, supreme sovereign in the empire of elastomers. But scientific progress, pushed ahead by political and economic forces, not only produced pretenders to the throne but also heirs who claimed rightful control in specific areas. In the midst of this claim for supremacy, the future role of natural rubber was challenged and the livelihood of millions in the developing countries of Southeast Asia was threatened. In fact, it was even prophesied that natural rubber would be forced to abdicate, and would suffer a fate similar to so many raw, primary products that have been ousted by superior, synthetic substitutes.

By research and development programs concerned with production economics, presentation standards, and consumer technology, we have proved that the future of so many in our developing countries, which is riveted to the natural rubber industry, need not be impaired. Indeed, the use of science and technology allows us to assure these same people a future which can be stronger, safer and sunnier."

A stronger, safer, and sunnier future through the use of science and technology. If there are words that best sum up the man, then those would be it. In everything he did, as a scientist and an administrator, it was the people who mattered the most to him. Little wonder then that he was instrumental in the setting up of RISDA (Rubber Industry Smallholders Development Authority) to help solve the economic challenges faced by Malaysian rubber smallholders who in the 1960s collectively owned 60% of all rubber land but only produced 45% of the total yield. Under his leadership, the RRIM also introduced training courses for smallholders and the rural youth, while the Advisory Services Division began to offer their services to everyone involved in the rubber industry and not just large estates as was the norm previously.

It is also apt, considering his background as the son of an estate worker, that he was so passionately involved with the welfare of the workers on the RRIM's plantations. In 1983, he led the efforts to introduce a monthly salary for the RRIM's estate workers - a revolutionary concept in an industry where people were paid per diem. Sad to say, these efforts were not emulated by other plantations and till now, many estate workers in non-RRIM estates are still paid on a daily scale. But because of Tan Sri B.C., RRIM's estate workers are able to enjoy not just a monthly wage but also a pension and gratuity benefits.

Recognising the importance of holistic development, Tan Sri B.C. - a sports enthusiast to boot - was at the forefront in the creation of the Rubber Research Institute Recreation Club. Thus not only was the RRIM involved in scientific, economic, and social change - it also helped bring great pride to the Malaysian people, especially so in 1975 when the National Men's Hockey



Team - boasting four players from the RRIM - reached an unprecedented fourth place in the World Cup.

Later on, he was a firm voice in calling for the Malaysian Government to recognise the efforts of rubber estate workers in the development of the Malaysian economy. In 2005, he made an impassioned plea for an acre of land to be granted to the second and third generation descendants of RRIM plantation pioneers.

## The international man of substance

In the world of science, there are few, if any, Malaysian scientists who have been as honoured as Tan Sri Dr. B.C. Sekhar both locally and abroad. The revolutionary work he undertook with natural rubber won him copious and deserved praised from all quarters. Not only because he was the originator behind so many new discoveries, but also because his discoveries had great practical benefit to improving the socio-economic situation of people.


He was thus honoured by the Malaysian Institute of Chemistry with the first Chemistry Gold Medal, and garnered other national accolades such as the Tun Razak Award and the Ridley Gold Medal. He also won recognition from the highest level of Malaysian society - namely the King - who honoured Dr. Sekhar with the title of Tan Sri - one of the highest titles of chivalry in the Malaysian Federation.

As mentioned above, Dr. Sekhar was not a mere hometown hero, and it showed in the respect that the international community had for him. Respect

and admiration, which manifested themselves in the shape of the Colwyn Medal - the most prestigious award of the Institution of the Rubber Industry for "conspicuous services of a scientific and technical character having an important bearing on the rubber industry." He was at the time of receipt in 1969 - the youngest (being just 39 years of age) and the first Asian to be so duly honoured. That he is so far, the only Asian to have received the Medal, does make one wonder at times about rubber research in Malaysia in the post-Sekhar years. But perhaps such thoughts are unkind. After all, men like Tan Sri B.C. Sekhar do not come around everyday, but thank goodness he did at the time when he was needed the most.

Perhaps the shining moment would have been when he received the aforementioned Ramon Magsaysay Award for Government Service in 1973. Considered to be the Nobel Prize of Asia, it honours individuals and organisations who have, through extraordinary efforts and without regard for self-promotion, have exemplified the ideals of the late Filipino president after whom it is named - courageous service to the people, integrity, and pragmatic idealism in a democratic society. In the words of the citation, Tan Sri. B.C. Selhar through his "leadership of scientific and technical advances that assure a more prosperous and stable future for rubber growers, large and small, in South and South East Asia" was a most deserving recipient.

By the time he received the Ramon Magsaysay Award, it had been 20 years since the Ziegler and Natta discovery, where the initial threat to natural rubber was launched. Thanks to Dr. Sekhar's efforts, the natural rubber industry had grown stronger and improved in quantity and quality. And because of



Watching  
Princess Margaret  
tap a rubber tree.



that, Malaysia with only rubber and tin then as viable commodities could stay economically stable in what was then a highly dangerous two decades. One should not forget that the 60s and 70s were marked by coups in Thailand, martial law in the Philippines and Indonesia, civil war in Vietnam, Laos, Cambodia. Economic instability breeds dissatisfaction and dissatisfaction breeds unrest. If natural rubber had collapsed, then so too would the lives of many Malaysians who would then have played right into the hands of the Communist insurgents.

## The scientist as a progressive

By now we would have established that Tan Sri Dr. B.C. Sekhar was a man for whom scientific achievement was not the end but the means to the end. And the end product was progress - social and economic - that could be enjoyed by all strata of society. This is reflected in his own words when he said, "In the natural rubber industry the impact of science has been felt. And arising from this, our ordinary people are beginning to harvest the economic returns. But equally important is the fact that the implementation of scientific research cultivates the scientific mind and spirit. This cannot be otherwise; for to utilise the fruits of research, the mind, the intellect, must be receptive. I can sense the positive social transformation that will take place - where obsolete, old ideas give way to new, strong and progressive views. And so I see the progress of our natural rubber industry as one not merely contributing to the material welfare of rubber growers but also, importantly, moulding the scientific mind and outlook so vital for our development."

Such was his dedication to science and to rubber research in particular that he became a vocal critic of the Malaysian Government's plans to turn the Tun Abdul Razak Research Centre (TARRC) in Brickendonbury, England from a rubber research centre to a sports centre. To him, the TARRC was sacrosanct - the leading institute of natural rubber research in the world and to turn it to any use other than that of rubber research would have been a violation of the spirit and make-up of the Centre. The recent announcement that the plan had been scrapped would surely have been music to his ears.

Although many of us will always associate Dr. Sekhar with rubber, he was also a key player in the development of Malaysia's other great natural commodity - palm oil. He was the founder and Chairman of the Palm Oil Research Institute of Malaysia, and under his leadership the Institute became the definitive leader in oil and fats research. When we consider how much rubber and palm oil had done for Malaysia, it would only be proper for us to bear in mind that this is so because of the involvement of Malaysia's greatest agricultural scientist in their research and development.

## A life dedicated to service

To their eternal discredit, the decision makers in Malaysia never found a way to tap into Dr. Sekhar's brilliant mind and ideas after his retirement from the RRIM in 1984. Such lack of thought was a great shame because as he showed - even after his retirement - Tan Sri B.C.'s thoughts were always on the development of natural rubber and how it can be improved to bring more benefits to humanity.

It was during his retirement years - when he was serving as the Advisor to Petra Group (the company founded by his youngest son Datuk Vinod Sekhar) - that he came up with what may be his most awe-inspiring discovery. And when we consider all that he had achieved, such a claim would not be made lightly.

Datuk Vinod Sekhar is a friend of many leaders such as Malaysian Prime Minister Dato' Seri Abdullah Ahmad Badawi and former US President Bill Clinton.





What he discovered was a chemical method to effectively recycle vulcanised rubber by effectively de-linking the chains of the polymers. From the time of Charles Goodyear in the 19th century, vulcanised rubber was thought to have been impossible to recycle as the bonds could not be broken in a way that would make it possible to be reused effectively. People thought it was impossible but he proved them wrong. Just like how he proved the doomsayers of natural rubber wrong all those years ago.

The effects of this discovery on the world cannot be underestimated. Vulcanised rubber waste - especially those from tyres - is considered to be one of the greatest environmental threats in the world. They are crumbed for use, or turned into swings, or (through a highly polluting process) turned into fuel. Or they are just dumped into landfills to lay there to decompose for hundreds of years. Through Tan Sri B.C.'s work, there is now a viable, environmentally sound alternative.

The great man passed away at the age of 77 during a visit to India on the 6th of September 2006. It is said that at the time of his death, he was working on new research into rubber. Dedication to the end indeed. He left behind his widow Puan Sri Sukumari, four children - Jayan, Gopi, Sujatha and Datuk Vinod - as well as eight grandchildren.

### The son also rises

The passing of Tan Sri Dr. B.C. Sekhar in 2006 was a great loss to Malaysia and the world at large, as we knew him not just as a great scientist, a great technologist, but most of all a great humanitarian and patriot. All things considered, what drove Tan Sri Sekhar on in his work was the overwhelming desire to do good for people and to find solutions for the problems afflicting the world. That same zeal and passion is now reflected in Datuk Vinod Sekhar who has demonstrated that he is indeed his father's



Datuk Vinod embracing the future  
- his daughter Petra, after whom he  
named the company.



son through his efforts in the fields of science, technology, business, education, and philanthropy. A business leader, innovator, thought leader, and entrepreneur, Datuk Vinod has taken over Tan Sri Dr. B.C. Sekhar's mantle of finding solutions for humanity - which incidentally is also the tagline for the Petra Group, which Datuk Vinod founded and heads. The main difference between the two men is that whereas Tan Sri B.C. was more recognised for his scientific and technological prowess, Datuk Vinod is seen as one of the most dynamic and innovative business leaders of his generation.=

And though he is still relatively young - having yet to reach 40 years of age - Datuk Vinod Sekhar is a man with his finger on the pulse of business and technology. He was the man who started South East Asia's first Internet company during a time when most people did not know the difference between bytes and bites. He also was the man behind the creation of the world's smallest optic engine.

The two most exciting offerings from the Petra Group today are the aforementioned Green Rubber technology and SCALAR. The former is the promise of a solution to the great environmental problem caused by waste tyres, while the latter offers hope to those afflicted with HIV. Clinical trials on SCALAR will soon be commencing, while production of Green Rubber has started at a plant in Calhoun, Georgia.

One other project that Petra Group is also involved in is that of using the jatropha plant to create biofuels. This is a project worth noting especially in the wake of rising food prices owing to the use of food crops such as soybean and corn for biofuels. The jatropha option can thus be said to be a solution to this problem. Datuk Vinod is also using the project as a template for poverty eradication using his fathers "smallholders" model in the rubber industry as a model. Petra Biofuels is planning to role out in Laos, the Carribean and Central Africa. Datuk Vinod's friend, former President Bill Clinton is a strong supporter of both the BioFuel and Green Rubber projects.

## The Legacy of Tan Sri Dr. B.C. Sekhar

*Apart from his biological family, Tan Sri Dr B.C. Sekhar also left behind another sort of family. There was the RRIM and PORIM, which he served with such excellence. There was the international community of science of whom he was a distinguished member.*

*There were the rubber smallholders and estate workers whose livelihoods he helped save through his research. And most of all, there were ordinary Malaysians. We now reap the benefits of a historically strong economy that has progressively improved over the years..*

*But what a different story it would have been had Dr. Sekhar not been around during those crucial years when the economic stability of the nation was threatened. Rubber was the lifeblood of the nation and Tan Sri Dr. B.C. Sekhar was the doctor who ensured that the blood will flow and bring about a better, stronger, and brighter life for all, and as such our title "The Man Who Saved Malaysia".*

Through the Sekhar Foundation, Datuk Vinod has been at the forefront of encouraging educational efforts. The Foundation had already made substantial contributions to educational institutions in Malaysia, and in March 2008, it also contributed a Pounds8 million grant to St. Andrew's University in Scotland, which is considered among the top three universities in the UK. This has led to the new state of the art RM300m medical school at the university being named after Tan Sri Dr. B.C. Sekhar, and will be known as the B.C. Sekhar School of Medicine and The Sciences. There is no doubt that Datuk Vinod Sekhar is a true Malaysian and a true citizen of the world. One only needs to look at the advertisements placed by the Sekhar Foundation in the newspapers and magazines in Malaysia to see that. Advertisements that highlight the fact that despite differences in skin colour and creed, the people here are essentially the same.

He is the epitome of the new generation of business leaders - someone who believes that being a businessman does not mean that one has to be divorced from the socio-economic realities and problems that people face. It would be a mistake though to think of Datuk Vinod Sekhar as a person who does not understand business reality. In fact, he knows and understands it very well. As he unabashedly told PASSIONS, he is a capitalist, and he firmly believes that capitalism is the best way forward. As such, his efforts to help improve the well-being of people is ultimately beneficial because it ensures that people will be able to afford to progress. He does not believe in blind charity though, but in setting certain basic standards of living that all should have, after which talent and ability dictates how far they can go.

We can see that Datuk Vinod Sekhar is a man with vision. But when his when his insight and vision were praised, he responded with modesty; stating that his venture into these areas were a matter of logic. Such humility is quite impressive, but at the end of the day, we would do well to consider that although the solutions may seem logical, only those with extraordinary vision, courage and leadership can bring them to fruition. Men like Tan Sri Dr. B.C. Sekhar and Datuk Vinod Sekhar.

