## Distinguished Science Alumni (DSA) Awards - Chemistry Alumni

## 2014

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Lawrence H.L. CHIA PhD 1969

Former Professor, Special Advisor (Alumni Relations), Faculty of Science, NUS

Dr Lawrence Chia's association with this University started with an Entrance Scholarship in 1955. He joined the Chemistry Department in 1964 following his Colombo Plan Scholarship, Demonstratorship and Teaching Fellowship in the University of Sydney. His teaching/research was encouraged/recognised by awards like the FRSC, FRACI, FSNIC, FRACI, FCMI and FSHRI. The Japanese Chamber of Commerce and Industry and the Singapore National Institute of Chemistry gave him their respective Education Awards in 1993 and 2014. His university service included the Senate, Board of Student Welfare, the Staff Association and the Faculty (Staff) Club. He served Dunearn Rd Hostels (DRH)/ Sheares Hall 2 years as Fellow and 33 years as Master. He also served as a volunteer in the Special Constabulary and the first chairman of the National Police Cadet Corps Council. Other areas included the inaugural Science Centre Board and Inter-Racial Community Council, PSC Selection Committees, IAEA Radiation Processing Committee, Science Council's S&I TV Quiz, Industrial Orientation, Youth Science Fortnight, SNIC Chemical Education Projects and the Educational Research Association.

He was seconded as the Inaugural Principal of ACS (Independent) and later as NUS Director, Alumni Affairs and Development Office. With others especially those from FoS, he helped establish exemplary and needy FUNDS/SCHOLARSHIPS in honour/memory of Science's, Kiang Ai Kim, Ang Kok Peng, Lucy & Alfred Wan and Tan Sau Fun. He also contributed in cash, blood and pledged organ donation and to community and church and in encouraging others to also do so. With his daughters and their spouses (all 5 are NUS alumni), a Bursary was given to Sheares Hall in memory of his mum who had also studied at our Raffles College. He has also received the PPA, BBM, Police Commissioner's High Commendation Certificate and an award from our NUS (Medical/Dental/Pharm) Alumni Association. Comparable if not more than these Fellowships and Awards have been the joy and satisfaction associated with the gratitude and relationships with former students who are now life-long friends and fellow alumni. In providing the quote below, he has adopted/adapted the words associated with the Cavendish Laboratories in the University of Cambridge.

# "I have sought and hoped that our endeavours and contributions will be for the Glory of God and the benefit of mankind."

In recognition of his accomplishments and contributions, we honour Dr Lawrence Chia with the 2014 Distinguished Science Alumnus Award.

NG Kee Choe BSc (Hons) 1966

Non-executive Chairman, CapitaLand Ltd and AusNet Services

Mr Ng Kee Choe has fond memories of his active student days in the Science Faculty and the Bukit Timah campus. Graduating with an Honours degree in chemistry in 1966, he devoted his entire career in the public sector and government-linked corporations where he served with dedication and distinction. His first 3 years were in the public sector before moving to DBS where he remained for the next 33 years. His commitment and capabilities could be seen in his appointments as Executive Vice-President in 1988, Deputy President in 1994, President and CEO in 1997 and Vice-Chairman of DBS Group Holdings in 2001. He was a key member of DBS that led its growth and transformation into a leading regional institution. He retired from DBS in 2003, after a 33-year career.

Following his retirement from DBS, Mr Ng devoted considerable time to Singapore Power and to NTUC Income Insurance Co-Operative. As the Chairman of Singapore Power (2000-2012), Mr Ng contributed to structural changes during the liberalization of Singapore's energy market ensuring continued provision of competitive and reliable electricity to consumers. Under his stewardship, Singapore Power grew substantially, with a significant presence in Australia. At NTUC Income (2004-2013), Mr Ng steered the Group through leadership transition, guided its transformation while focusing on sustainability through a volatile macro-environment. For his contribution to NTUC Income, Mr Ng was awarded the top May Day Honour in 2013: the Distinguished Service Award.

Mr Ng has also served on other Boards. More recently, he served on the Board of Singapore Exchange and SATS.

Currently, he is Chairman of CapitaLand, President Commissioner of Bank Danamon, Chairman of Ausnet Services and Director of Fullerton Financial Holdings. In addition, he is Chairman of Tanah Merah Country Club and a member of the International Advisory Council of China Development Bank. For his contributions to Singapore's progress, Mr Ng was awarded The Meritorious Service Medal in 2012. He is married with three children and continues with his friendships from his student days.

Many are able to identify and even resonate with the quote he has left us with.

"A University education helps to sharpen and discipline the mind. I am blessed by my stint at the Science Faculty at the then University of Singapore."

In recognition of his accomplishments and contributions, we honour Mr Ng Kee Choe with the 2014 Distinguished Science Alumnus Award.

Joanna WONG Quee Heng BSc (Hons) (1963) Former Registrar, NUS

Mrs Joanna Wong Quee Heng is chemistry and culture personified. Following her outstanding stint as Head Prefect, in her studies and the performing arts she read chemistry at our University on a Penang State Scholarship. She won a University of Singapore Students' Union Gold Medal for the Most Outstanding All-Round Student in 1962. She had also gained and given much to Eusoff College where she was Junior Common Room Committee (JCRC) President and later Senior Common Room Committee (SCRC) member.

Her career, commitment and contributions benefitted University administration for 38 years. Her roles range from Administrative Assistant and Assistant Registrar to Deputy, Acting and then Registrar. She served seven Vice-Chancellors and a student body that grew from 2,400 to over 26,000. She had also helped Nanyang University (NU) as Registrar on secondment (1977–1980). This undoubtedly was a vital factor in the historic and smooth merger of NU and University of Singapore (SU) to establish National University of Singapore (NUS).

Besides the University, Singapore and many beyond our shores benefitted from her time and talents, inputs and contributions. Whether as performer or promoter, actress or advocate, she brought the riches of Chinese culture and heritage espe- cially its opera to countless countries and cultures, homes and hearts. Together with husband Leslie (also a committed hall resident and SCRC of DRH-Sheares Hall), they recently produced and performed a historic and memorable Chinese Opera in English, premiered in NUS itself.

Her many other contributions in community service and leadership have been not only appreciated by the local and global community but also recognised through prestigious awards like the Public Service Award (BBM) in 1974, the Cultural Medallion in 1981, the highest national award for excellence in the Arts and her appointment as Justice of the Peace (JP) in 1998.

In Singapore where excellence and service are hallmarks of our great citizens and where family values are also promoted and treasured, Mrs Wong has also been exemplary as devoted wife and mother and where her two daughters as NUS alumni have also done their parents and their common alma mater proud.

# "Be steadfast in your service and persistent in your passion and pursuits."

In recognition of her accomplishments and contributions, we honour Mrs Joanna Wong with the 2014 Distinguished Science Alumnus Award.

Rayson HUANG
DSc 1956
Acclaimed Scientist and Scholar
Academic Leader and Legislator

Dr Rayson Huang completed primary and secondary education in Munsang College, Hong Kong of which his father was the founding principal and continued his studies with a scholarship at the University of Hong Kong until the Japanese invasion of Hong Kong in 1941 during which he served in the British auxiliary forces as a poison gas officer. He returned to China as a refugee in 1942 and was later awarded a Rhodes Trust Scholarship to pursue postgraduate study at Oxford. After getting the D.Phil degree he pursued post-doctoral research at the University of Chicago (1947-50).

In 1951, Dr Huang started teaching chemistry at the University of Malaya in Singapore (now the National University of Singapore) and in 1959 was transferred to University of Malaya's Kuala Lumpur campus. He became a tenured professor of chemistry and later acting Vice-Chancellor and Dean of the Faculty of Science. His research centred on the chemistry of free radicals and the resulting publications have earned him three doctor of science degrees, from the Universities of Malaya (Singapore), Oxford and Hong Kong.

In 1969 Dr Huang was appointed Vice-Chancellor at Nanyang University in Singapore. In 1972, he became the first Chinese Vice-Chancellor of The University of Hong Kong until his retirement in 1986. In addition, he served in various capacities including membership of the Legislative Council of Hong Kong from 1977 to 1983 and on the Basic Law Drafting Committee in drafting Hong Kong's post handover constitution to China in 1997. Dr Huang established the *Grace Wei Huang Memorial Fund* in 1999 and among books he has written is his autobiography, *A Lifetime in Academia*: proceeds from which are set aside for the fund. The "Rayson Huang Foundation" in Malaysia was established in 2001 in recognition of his pioneering work in free radicals research.

"... an outstanding academic, a sensible and perceptive administrator, and a talented man endowed with a sense of humour, a certain generosity of spirit and sensitivity to the needs of others." — J. Brian Heaton, China Quarterly, on the first edition of *A Lifetime in Academia* 

In recognition of his accomplishments and contributions, we honour Dr Rayson Huang with the 2011 Distinguished Science Alumnus Award.

ANG How Ghee BSc(Hons) 1961, MSc 1962, DSc 1985 Chemistry NUS Emeritus Professor, Former NTU Research Professor

Graduating with a first class honours from the University of Singapore, Emeritus Professor Ang How Ghee pursued his chemistry career with a passion that earned him three doctorates. His academic appointments and accolades included prestigious fellowships at Peterhouse, Cambridge and the Royal Commission for the Exhibition of 1851 in London. His illustrious attainments and achievements continued after he returned to his alma mater where he distinguished himself in teaching and research. He rose to and retired as Senior Professor, acquiring several Fellowships and Awards as part of his very impressive track record. This included his election as Fellow of the Third World Academy of Sciences. He was also the first local recipient of the Singapore Defence Technology Distinguished Fellowship.

Equally impressive is his long list of contributions and service outside the University. Although renowned in Inorganic and Organometallic Chemistry he has also made a name for himself in the field of education and environment, food, health, safety, manpower, science and technology issues and policies. He has served as Chairman and Consultant, Special Advisor, Editor and Board Member, Academic Assessor and Examiner of numerous nationally and internationally bodies including the United Nations. He was for example the Chairman of the former Science Council of Singapore, Chairman of the ASEAN Committee on Science and Technology and Member of the United Nations Advisory Council on Science and Technology for Development. His expertise and experience had been sought by or made available to several government agencies and ministries such as Education, Environment, Labour, Health, Trade and Industry, Defence and the then Ministry of Science and Technology.

Besides the satisfaction of enjoying a high international reputation, Prof Ang's contributions have also been recognised through such prestigious state awards like the Public Service Medal (PBM) and the Public Service Star (BBM), National Science Award, DSTA Team Excellence Award, MINDEF Scientific Award, the Friend of Labour Gold Medal and the ASEAN Meritorious Service Award.

Not resting on his laurels following his retirement from the National University of Singapore where he was conferred an Emeritus Professorship, Prof Ang presently holds the following positions: Director of the Energetics Research Institute (EnRI-NTU), Adjunct Scientific Advisor (DSTA), Special Advisor (DSO National Laboratories), Emeritus Professor (NUS), Research Professor (NTU), and a consultant to ATREC Pte Ltd – serving as Chairman of its Advisory International Panel. He serves as a Member of the Editorial Boards of the Chinese Journal of Energetic Materials in China and the Central European J Energetic Materials in Poland. He is also active on the Advisory Board of the journal 'Nanoscience & Technology' in the Singapore National Academy of Science and the Scientific Committee of the annual symposium on 'New Trends in Research on Energetic Materials' of The Czech Republic.

# "Science is an ever enriching resource that continues to change the way we understand and innovate."

In recognition of his accomplishments and contributions, the Faculty of Science honours Emeritus Professor Ang How Ghee with the 2009 Distinguished Science Alumni Award.

SEET Ai Mee
PhD 1969 Clinical Biochemistry
Director, Jade Technologies (S) Ltd
Former Minister of State for Education and Community Development
Former Acting Minister for Community Development and Sports

Under a Colombo Plan scholarship, Dr Seet Ai Mee graduated with First Class Honours in Biochemistry from the University of Adelaide in 1965 before taking a PhD programme in Clinical Biochemistry at University of Singapore. She went on to build up a successful career spanning 12 years in Singapore's Ministry of Health and the Singapore Institute of Standards and Research (SISIR), a predecessor to today's SPRING Singapore. During this period, she authored 24 scientific papers in refereed international and local journals in the areas of Biochemistry, Clinical Biochemistry and Food Chemistry before she moved on to establish a medical laboratory practice.

In 1988 Dr Seet stood for election and became Member of Parliament for Bukit Gombak constituency. Later that year, she was appointed Minister of State, with oversight for the Community Development and Education Ministries. She moved on to become the Acting Minister for Community Development in 1991 before stepping down from the political area to take on an appointment as a Senior Visiting Fellow in NUS Institute of South-East Asian Studies. In 1992 she co-founded Dover Park Hospice, an institution for which she has remained in close association with since.

Dr Seet continued her successful career with additional board-level and directorship appointments in many charity and public organizations. These include the Singapore Hospice Council, the Hospice Care Association and AM Laboratories Pte Ltd. She was equally in demand on the corporate front, holding independent directorship positions in a number of household name companies like Courts (Singapore) Ltd, Noel Gifts International Ltd, Datacraft Asia Ltd, Jade Technologies Singapore Ltd, and others.

On a personal level, Dr Seet has written 6 articles on Primary School Science Education, and undertakes research, development and authoring work on Creative and Interactive Science programmes for Discovery Vacation Camps. She also continues to pursue her passions in Science education and Hospice leadership. For her contributions to society, Dr Seet received the Public Service Star Award in 1997 and was appointed a Justice of the Peace the following year.

"Don't just love Science -- be passionate in your love, for it is people with passion who are not only the great achievers but also the ones who pass their love to those around."

In recognition of her accomplishments and contributions, the Faculty of Science honours Dr Seet Ai Mee with the 2009 Distinguished Science Alumni Award.

John YIP Soon Kwong BSc 1959, BSc(Hons) 1960 Director of Education, Ministry of Education (1987-1996) Executive Director/CEO, Singapore Institute of Management (1997-2003)

John YIP Soon Kwong received his Bachelor of Science (Honours) degree in Chemistry from the then University of Malaya in Singapore in 1960. On graduation, Dr YIP joined the Education Service and served in various portfolios till his retirement in 1996. His last appointment was Director of Education of the Ministry of Education, a position he held for 10 years. During his tenure at the Ministry, he pursued relentlessly the development of educational excellence in both the Singapore and global context. He received several National Day awards, including the Meritorious Service Medal (PJG) in 1991. The French Government also honoured him with the award of Officier dans l'Ordre des Palmes Academiques in 1993.

Dr YIP has done extensive research in education policies and practices. Of particular significance is the six-country collaborative research project on the nexus between education and economic development spearheaded with the University of Pennsylvania Graduate School of Education. He co-authored two books on Reflections and Renewal in Education in Singapore, one tracing the Evolution of Educational Excellence and the other the Development of Technical Education up to the tertiary level. His passion for education prompted him to move on to the Singapore Institute of Management as the Executive Director and CEO upon his retirement from the Ministry. In this position, he played a major role in conceptualizing the Singapore Management University (SMU) as well as the SIM University (UniSIM), the latter providing working adults with a "second chance" to obtain a university degree. In 1997, he was conferred an Honorary DSc by Loughborough University, an accolade shared by several well-known personalities including NUS President Prof Shih Choon Fong. And in 2003, he received an Honorary Doctorate from the Open University of the UK.

Dr YIP is an Honorary Fellow of the Singapore National Institute of Chemistry and the Singapore Institute of Management. He was on the Board of a number of statutory and other organizations tasked with teacher education, technical and vocational education, educational management, promotion of science, the arts and the environment, among others. He was also active in several international professional bodies. A contribution he is especially proud of is bringing to realization the Government-funded Singapore International School in Hong Kong, which is among the top international schools in the SAR.

"Education empowers one to seek the truth and science illuminates the way."

Augustine ONG Soon Hock BSc 1957, BSc(Hons) 1958, MSc 1959 President, Malaysia Oil Scientists' and Technologies' Association

Tan Sri Datuk Dr Augustine ONG Soon Hock is a graduate of the University of Malaya --BSc(Hons), MSc -- and University of London King's College -- PhD in Organic Chemistry. He has had extensive experience in teaching, research and administration at University level. He was serving as Dean, School of Chemical Sciences and University Science Malaysia before joining the private sector where he was the former Director-General of the Palm Oil Research Institute of Malaysia (PORIM) from 1987 to 1989 and former Director in Science and Technology, Malaysian Palm Oil Promotion Council (MPOPC) from 1990 to 1996. He is recognized both nationally and internationally in the field of lipid Chemistry being elected as the Chairman, International Society for Fat Research (ISF) in 1997 and the President, Malaysian Oil Scientists' and Technologists' Association, Senior Fellow of the Academy of Sciences, Malaysia, Fellow of the Royal Society of Chemistry London, and Fellow of the Third World Academy of Sciences. He has acquired extensive networking in the oils and fats industry as well as in the academic world both locally and overseas. He was the Fulbright-Hays Fellow at the Massachusetts Institute of Technology (MIT) 1966 to 1967. He spent a sabbatical year in the University of Oxford as the Visiting Professor at the Dyson Perrins Laboratory, 1976 to 1977.

He has been active in Research and Development for more than 45 years since 1959 and this experience includes the Chemistry and Technology of Palm Oil in which he had more than 25 years' involvement since 1974. He has 14 patents in the technology of palm oil to his credit and published more than 380 articles. He was the Founder Editor-in-Chief of *Elaeis-International Journal of Oil Palm Research and Development* and is still a member of the Editorial Board. He played a significant role in the programme to counter the Anti-Palm Oil Campaign from 1987 to 1989 which came to a favourable conclusion in 1989. He has been invited to serve as a member of Research Advisory Panels on Cocoa, Forestry, Rubber and Petroleum as well as a member, International Advisory Council, University Tunku Abdul Rahman. He is Founder President of the Malaysian Invention and Design Society (MINDS) since 1986. He is also President of the Confederation of Scientific and Technology Associations in Malaysia (COSTAM) and Malaysian Oil Scientists and Technologists' Association (MOSTA). He serves on the Board of several corporate organizations including University of Malaya, Malaysian-American Commission on Educational Exchange (MACEE), Country Heights Holdings Berhad. He had served as Director, HSBC (Malaysia) since its incorporation till 2004.

"Seeking for scientific truths is fascinating and this could be a magnificent obsession."

TAN Eng Liang BSc 1960, BSc(Hons) 1961

Dr Tan Eng Liang was the first local Rhodes scholar, earning his doctorate from Oxford University. Dr Tan held a meritorious career in the civil service. He was a Member of Parliament of Singapore from 1972 to 1980, during which he served as the Senior Minister of State (National Development) from 1975 to 1978 and Senior Minister of State (Finance) from 1979 to 1980.

Other key positions held included the Chairman of Urban Redevelopment Authority, Singapore Quality and Reliability Association and Singapore Sports Council. In particular, he has made pioneering contributions in developing sports in Singapore. He took charge of Singapore Sports Council for 16 years from 1975 to 1991 and still contributes as the Vice President of the Singapore National Olympic Council and Chairman of its Special Training and Assistance Committee.

He sits on the Boards of many companies, including public listed companies, namely, Hartawan Holding Limited, HG Metal Manufacturing Limited, Progen Holdings Ltd, Sapphire Corporation Limited, Sunmoon Food Company Limited, Tung Lok Restaurants (2000) Ltd and UE E&C Ltd. He has been awarded the Public Service Star (BBM), Public Service Star (BBM -BAR) and Meritorious Service Medal by the Singapore Government as a recognition for his services to the country. In 1995, the IOC Olympic Movement Unity Trophy was presented to Dr Tan for his invaluable services to Olympism.

Dr Tan is also a recipient of the Faculty of Science Outstanding Science Alumni Award in 2005.

LEE Kum Tatt BSc(Hons) 1952; PhD 1955

Founder Chairman, SISIR, Science Council and RISIS Co Pte Ltd

Dr LEE Kum Tatt was one of the first doctorate graduate in Chemistry from University of Malaya in 1955. Evident from his wide ranging and outstanding achievements particularly in the aspects of medical and industrial research and quality development, Dr LEE has left many of his imprints on the pioneering development of many scientific and technological organizations. These organizations include the Singapore Institute of Standards and Industrial Research (SISIR), Science Council of Singapore, Singapore Standards Council and Singapore Polytechnic. These organizations have paved the way for the implementation of many new institutions, projects and schemes such as the Science Centre, Science Park, Singapore Quality Movement, Technical Education and Industrial Orientation Schemes. They have played a highly contributive role and formed the essential foundation towards the moulding of Singapore into the success of today, through the application of science and technology and the networking among the important segments of the country. The success embeds the tireless and devoted efforts of Dr LEE.

In terms of industrial research, one of the most notable accomplishments of Dr LEE was the creation of the gold-plated RISIS orchid in SISIR in 1976 through a patented process developed by Dr LEE. It aroused much excitement among Singaporeans as an answer to finding Singapore's national gift and souvenir. The name RISIS evolved into a well-known brand recognized both locally and internationally. Dr LEE has always been very interested in the activities and initiatives organized by the Department of Chemistry and the National University of Singapore in general, lending his utmost support whenever possible.

Dr LEE has received several honours from professional bodies and the Singapore Government as a tribute for his achievements and contributions. The Singapore Government awarded Dr LEE in:

1967 -- Public Administration Medal (Silver) for his contributions to the National Health Service 1973 -- Public Administration Medal (Gold) for his contribution to Singapore's Industrialization

1979 -- Public Service Star for his contribution to Polytechnic and technical education in Singapore 1980 -- Gold Medal for Applied Research by the Singapore Science Council for his research work in the applied field

Dr LEE was also elected Honorary Fellow and member of the following professional bodies for his exemplary contributions:

1975 -- Honorary Fellow of the Singapore Institute of Food Science and Technology

1993 -- Honorary Fellow of Singapore National Institute of Chemistry

1995 -- Honorary Fellow of Singapore Professional Centre

2003 -- Honorary Member of the Singapore Quality Institute

"The world does not care for what we lack; It's interested only in what we can offer."

Olivia LUM Ooi Lin BSc 1985; BSc(Hons) 1986

Group Chief Executive Officer and President, Hyflux Ltd

Despite her humble background, Ms Olivia LUM strived her way through a top junior college and thereafter the National University of Singapore, where she earned a BSc(Hons) degree in Chemistry.

Upon graduation in 1986, she started out as a chemist in the multinational corporation Glaxo Pharmaceutical. In 1989, she set up a small water treatment company Hydrochem (S) Pte Ltd, the precursor of Hyflux, and competed against large MNCs. The company has since grown to pursue a wide range of water-related ventures in Asia, from waste-water treatment in China to desalination plants in Singapore. As the Group Chief Executive Officer and President, Ms LUM is the driving force behind Hyflux's growth and expansion, holding fort in strategy formulation and corporate direction. Today, Hyflux is one of the fastest-growing firms in Asian water market with market capitalization of more than S\$1 billion. It has scored a number of breakthroughs under Ms LUM's personal headship of its Research and Development function, breaking new ground as one of the most innovative and impressive water treatment companies in the region. In particular, the company's pioneering development of ultrafine membrane filters is applied on all its major products. It has also begun the manufacture of a condensing device called Dragonfly that produces potable moisture from air and aims to be the possible answer to the water needs of water-scarce countries. Recently, Hyflux has been awarded the NEWater tender in Singapore to supply the republic with its own water supply from recycled waste water. As recognition of its success, Hyflux was named the Enterprise of the Year in the 2004 Singapore Business Awards. It also made into the Forbes magazine's list of the world's 200 best small companies in 2002.

Ms LUM plays a highly active role in public and community service. She serves as a Nominated Member of Parliament of Singapore, contributing to national policies. She is a board member of SPRING Singapore, the National University of Singapore Council and the Singapore Exchange Ltd. She also holds membership to the UNESCAO Business Advisory Council and Singapore Green Plan 2012 Coordinating Committee. In addition, she acts as the President of the Singapore Water Association.

Ms LUM is widely hailed as one of Asia's leading female entrepreneurs. Her outstanding achievements have earned her numerous personal accolades, which include:

- · Businessman of the Year 2005
- · Global Women Inventors and Innovators Network (GWIIN) Award 2004
- · Singapore's "Most Creative Entrepreneur" 2003, voted by Business Times readers
- · International Management Action (IMAA) Award 2003, by SPRING Singapore and Chartered Management Institute
- · Ernst and Young Entrepreneur of the Year 2003
- · Woman of the Year 2003, by Her World magazine

<sup>&</sup>quot;Knowledge in science has provided me with a key to open the door of boundless opportunities."

WONG Ah Long BSc(Hons) 1969 Chairman, Pacific Star Investment and Development Deputy Chairman, NUS Council

Mr WONG Ah Long graduated from the University of Singapore with an Honours degree in Applied Chemistry in 1969, followed by a Masters degree in Business Administration in 1972.

Mr WONG was the Chief Executive Officer for a township development in Surabaya from 1974 to 1981. Thereafter, he was engaged in partnership in the construction and development business in Singapore and Indonesia till 1987. Between 1987 and 1991, he was the General Manager of the construction arm of Singapore Technologies, before serving as the General Manager of DBS Land up to 1996. In 1996, he joined Suntec City Development Pte Ltd-Singapore's largest private development (of about 7 million sq ft built-up area) as its Chief Executive Officer and successfully transformed Suntec City into the premier business and retail shopping centre in Singapore. Under his astute leadership, Suntec City won several international awards, including the FIABCI Prix d' Excellence in 1999 for the most successful project in the office and retail sector.

He is currently the Chairman of Pacific Star Investment and Development, a member of an international group specializing in large-scale real estate investments in Asia, overseeing and directing the investments and developments of the Group. He also holds directorships in several other real estate and development companies.

Despite his hectic schedule, Mr WONG has put in a lot of time and energy to actively support NUS in its education and alumni initiatives. He serves as the Deputy Chairman of the NUS Council and the Institute of South East Asian Studies Board of Trustees. He is a member in the Advisory Board of the NUS Business School and the International Resource Panel of the Business Alumni Association and the past Vice-President of the NUS Business School Alumni Association. In addition, he chaired the fund raising committee for the Kiang Ai Kim Scholarship Fund for the Department of Chemistry. The above-mentioned are a few of his many efforts in promoting stronger ties between the alumni and university. Notwithstanding, his service to the public and business community at large should also be highlighted. He is a member of the Hong Kong-Singapore Business Association and president of Singapore Chapter of FIABCI. In addition, he undertakes the role as the treasurer of the Garden City Fund management committee and member of the National Council of Drug Abuse. In recognition of his devoted and sustained contributions to NUS and the alumni community, Mr WONG was awarded the inaugural NUS Distinguished Alumni Service Award. Furthermore, he was awarded the Eminent Alumni Award from the NUS Business School.

"We must embrace a 'Jump out of the Box' mindset to remain relevant."

KIANG Ai Kim DipScience 1938 Scholar, Teacher, Public Servant

Emeritus Professor Kiang Ai Kim is well-known as the most senior Professor of Chemistry in Singapore and this region. Born in Singapore on 8 November 1915, Professor Kiang graduated from Raffles College with a First Class Diploma in Science in 1938. He then became the first Singaporean scientist to join the Department of Chemistry of Raffles College, and played a crucial role in re-establishing the Department immediately after the Second World War.

He obtained from the University of London the external degrees of BSc in 1939 and BSc Special in Chemistry in 1948. In 1949, he was awarded the Queen's Fellowship for postgraduate study at Cambridge University. After obtaining his PhD in 1952, he was appointed a lecturer in the University of Malaya, Singapore. In 1960, he became the first Singaporean to be the Professor and Head of the Department of Chemistry. Professor Kiang was very much an integral part of the University throughout his years of service. With great enthusiasm and drive, he threw himself whole-heartedly into building up the Department into one of the best not only in the University, but also in the region.

The 10-storey Science Tower built at the Bukit Timah campus to accommodate the Department of Chemistry stands as a constant reminder of Professor Kiang's devotion to the cause of scientific education in Singapore. From 1968 to 1971, Professor Kiang served as Dean of the Faculty of Science in the University of Singapore. His able leadership of the Faculty ensured its smooth and steady development. He also served as the Master of Raffles Hall from 1959 to 1960 and is fondly remembered by the former resident students as their mentor and friend. In recognition of his distinguished scholarship and outstanding service to the University for more than 30 years, he was conferred the title of Emeritus Professor when he retired in 1971.

In 1975, Professor Kiang was invited to head the Department of Chemistry at Nanyang University. He gave much support and encouragement to the staff and students and helped bring about a smooth merger of the two Departments of Chemistry when the National University of Singapore was formed in 1980. He finally retired from academic life in 1980 at the age of 65.

By dint of hard work and determination, and endowed with a brilliant mind, Emeritus Professor Kiang Ai Kim has made his mark in Singapore and in the scientific world. He has given unreservedly of himself in 33 years of devoted service to Raffles College and later to the University. It is appropriate that the Distinguished Science Alumni Award be bestowed on Emeritus Professor Kiang Ai Kim. His very person and extensive contributions will continue to be a source of inspiration to many generations of future scholars and leaders of Singapore.

"The basic laws of nature's forces are instant, but the changes in the lives and environments of man are inevitable. Happy is the man who can adapt to the changes."

## **HUANG Hsing Hua** BSc(Hons) 1955, MSc 1957

Emeritus Professor HUANG Hsing Hua is renowned for his research in the field of physical organic chemistry and spectroscopy, and his career is as distinguished as the awards he has won: the Queen's Scholarship, the University Council Fellowship tenable at the University of Cambridge, the Gold Medal for Public Administration, the NSTB Science Award among them.

He has published over 140 papers in refereed international journals and he has supervised some 9 PhD students and 21 MSc students, among them another fellow recipient of this award, Dr YEO Ning Hong.

Professor HUANG Hsing Hua graduated from the University of Malaya (Singapore) with an Honours degree in Chemistry in 1955 followed by a Master's degree in 1957. After obtaining a PhD degree from Oxford University he returned to the University of Malaya (Singapore) as an Assistant Lecturer in the Department of Chemistry.

When he was President of the Singapore National Institute of Chemistry from 1976 to 1992, the institute organised and was actively involved in programmes that helped promote chemistry in Singapore as well as the international scene. Professor HUANG started scholarships for 'O' and 'A' level pupils to encourage and reward achievements in the subject. He also played an active role in the affairs of the Federation of Asian Chemical Societies (FACS), in which he served as President from 1985 to 1987.

As Deputy Vice-Chancellor at the National University of Singapore from 1981 to 1994 he worked with Professor LIM Pin to oversee a sharp rise in student enrolment, in research activity and funding, as well as an increase in the number of staff. He was a driving force in the promotion of multidisciplinary research and the setting up of such centres. His work has certainly contributed to lifting the image of NUS among global tertiary institutions.

We are honoured to have had such a talent study in and serve our Faculty and University, and now, with pride present Dr HUANG Hsing Hua the Distinguished Science Alumni Award 2000.

YEO Ning Hong BSc 1965, BSc(Hons) 1966, MSc 1968 Chairman, PSA Corporation Limited

Over the past 30 years, Dr YEO Ning Hong has contributed much to Singapore's academic, communications, defence and industrial scenes. After serving as the Minister for Communications and Information and Second Minister for National Development, and then as the Minister for Defence, he went on to become the Executive Chairman of the Singapore Technologies Group, where he was chiefly responsible for its reorganisation, the synergistic diversification of its products and the extension of its business globally. Then as the Chairman of the Port of Singapore Authority, managing the busiest port in the world, he saw to its corporatisation and pioneered PSA's rapid growth internationally.

Dr YEO, the next recipient of the Distinguished Science Alumni Award, received his academic training at the Faculty of Science, University of Singapore. He obtained his Bachelor's degree in 1965, Honours in 1966, and Master's in 1968. He received his MA and PhD from Cambridge University in 1970. After a year of post-doctoral research at Stanford University, he returned to Singapore to become a chemistry lecturer at the University of Singapore from 1971 to 1974. Over the years, he published over 25 research papers in international journals, and refereed for international chemistry journals as well.

Between 1970 and 1973, Dr YEO was also a Fellow of Christ's College, Cambridge University. Twenty five years later, in recognition of his achievements, Christ's College honoured him by electing him Honorary Fellow of the College in 1998. Career-wise, after assuming several senior managerial positions in an international pharmaceutical company, Dr YEO became a Member of Parliament in 1980, and served as a Cabinet Minister for 14 years until 1994. Today, Dr Yeo continues his ties with academia by chairing the International Academic Advisory Panel of distinguished international academics and thinkers for Singapore's universities, with the objective of bringing our universities to world class standards. He also serves as Chairman of PSA Corporation Limited, the Singapore Totalisator Board, the Singapore Symphony Orchestra Trust, and the Keppel Golf Club.

For all these outstanding contributions to the nation, to industry and to science, we are honoured to present the Distinguished Science Alumni Award 2000 to Dr YEO Ning Hong.