Thousands of dreams were ignited in a poignant moment when freshmen, in academic gowns and waving torches, turned a symbolic light-up session in the Nanyang Auditorium into their moment of conviction.

The President had just urged them to “go for the impossible, reach for the sky” – words they took to heart.

The President, Prof Su Guaning, had also told them in no uncertain terms that they were all equal members of the family, regardless of their academic history – with equal chances of success. “You are now all at the same starting line,” he said. “Each of you deserves our fullest attention.”

Shared vision
The welcome ceremony, NTU’s first for freshmen, was at once grand and refreshing, with uplifting speeches and student performances. It was an initiation into the NTU fraternity – and a shared vision – masterminded by university administrators and the President to give students a unique, meaningful, and memorable reception on the first day of the academic year.

The ceremony started on a solemn note with a stately academic procession and formal introduction of senior staff of the University. Inspiring words then came from the President of the Students’ Union, a Teacher of the Year, and an alumnus.

Defining period
Finally, the President of the University gave his welcome address. He said his four years as an undergraduate was “the defining period of intellectual and spiritual growth for life”, and urged the students to participate fully in campus life and extra-curricular activities for their intrinsic value.

At the post-ceremony buffet, freshmen and faculty mingled. Nanyang Business School student Hairul Borhan, 21, who chose NTU for “its proven track record”, said he was very inspired by the President’s speech. “He gave us insight into where we are headed as a University and student body. I will definitely make full use of the opportunities given to me.”

The New Undergraduate Experience: “You are now ready to fly. Together, let us make your dreams come true,” says Prof Su Guaning at the inspiring welcome ceremony for 4,400 freshmen
To communicate better, you need to study longer

No short cut to communications training, says the new Dean of the School of Communication and Information

Study longer and communicate better. In fact, study an extra year and get an honours degree in mass communication, as opposed to the normal three-year arts degree.

Four years at the School of Communication and Information (SCI) will turn students into more professional practitioners in journalism, public relations, film, and other communications fields.

It is a far cry from three decades ago when all one needed to work in mass communication was a basic secondary education and grit. Some senior newspaper editors still pride themselves as boh-tak-chek (literally “never read book” in Hokkien), with little tertiary education but who managed to pull themselves up by their bootstraps.

Best practice

On the four-year course, new Dean Assoc Prof Ang Peng Hwa said: “We want to align ourselves with best practice. Best practice in communications by and large is in the US and there the degree is a four-year programme.”

“Locally, a four-year honours degree signals communications as a ‘professional degree’ and helps us attract the good students we have. Currently, a number of programmes in the West that have three-year programmes are switching to a four-year one.”

Public relations

According to Assoc Prof Ang, most graduates pick a career in public relations. Hopefully, these SCI graduates, armed with good foundational theories about one-way, two-way, synchronous, and asynchronous communication, will transform PR into a more professional and predictable practice.

Looking ahead, he said: “A strong foundation has been laid to position the School for the next stage of growth – which is to become better known in Asia and around the world so that we will attract the best of faculty and students interested in doing the kind of work we do.”

Journalism was his first choice

“I was writing for The Sunday Times and the now-defunct Sunday Nation as an undergrad. So I was inclined to go into journalism,” said Assoc Prof Ang, an expert in media law and policy, who did his first of three degrees in law and is a qualified lawyer. “After graduation, just to be sure, I asked three senior lawyers if I should go into journalism or law. Without exception, all three said: journalism. Even today, you read many reports of people leaving the legal profession, enough so as to attract national-level attention. Yes, there are also journalists who quit the job. But it is often the case that they do not like the company. Often, these people return to journalism,” he explained.

Giving his first public lecture as the President of NTU on 26 July, Prof Su Guaning explored the story behind Nanyang University’s birth and transition to NTU.

First came the end of the Chinese-medium university (Nantah), then its rebirth as Nanyang Technological Institute, and finally its reconstruction as a full-fledged university. The new Nantah faces many challenges in the future.

Speaking in Mandarin to a crowd of 800 at the Meritus Mandarin, he said he hoped to see a revival of the “Nantah Spirit” – born of troubles, tribulations and idealism – in the new Nantah.

The lecture was organised by the Tan Kah Kee International Society and Tan Kah Kee Foundation.

Our picture shows (left to right) Prof Wang Gungwu, Director, East Asian Institute, who chaired the lecture; Dr K K Phua, Chairman, Tan Kah Kee Foundation; and Prof Su.
Shipping management for executives

Course teams NTU with top Norwegian institute

The Maritime Research Centre is collaborating with the prestigious Norwegian School of Management BI to offer a unique executive programme in global shipping management.

Underpinning the partnership is the belief that effective shipping management is a key strategic opportunity for the shipping industry in the 21st century.

The BI-Nanyang Executive Programme in Shipping Management, to be conducted in Singapore, draws on the latest research, business models, and industry experiences to update participants on cutting-edge developments in global shipping management. It also provides the tools and techniques for advanced information and decision technologies.

Some of the best experts in the field – from Norway and Singapore – will be invited to provide an overview of economic, regulatory, and regional issues affecting the shipping business. Other teaching faculty will be drawn from BI, NTU, and their industrial partners.

BI has been ranked among the top European business schools by Financial Times and Long Range Planning. It is also the first Norwegian educational and research institution to achieve international accreditation.

The maiden course runs from 11 to 22 August 2003 at the NTU Executive Centre, NTU’s downtown campus.

$4 million to bring in top shipping management expertise

The Maritime and Port Authority of Singapore (MPA) has donated $4 million for a new professorship that will help NTU steer its maritime curriculum and research efforts into unchartered waters.

The first programme to gain is the executive programme in shipping management run by BI and the Maritime Research Centre, a joint centre with MPA hosted by the School of Civil and Environmental Engineering. (See main article.)

The 17th professorship established at NTU, the MPA Professorship in Shipping Management will be used to fly in prominent practitioners and eminent academics specialising in Shipping Management and Finance, Strategic Planning, and International Shipping.

The MPA Visiting Professor, for example, will come for stints of up to five months to teach selected graduate and undergraduate modules and advise on specific R&D efforts. The MPA Distinguished Visitor will spend several weeks conducting public and in-house seminars, specialist workshops, and intensive courses.

One-stop centre for career planning

To better prepare students for their transition to the working world, the Office of Professional Attachments (OPA) has opened a new career centre.

Students can visit CareerHub, on Level 4 of the Administration Annexe, to enhance their career management and job search skills. Alumni are also welcome to use the services.

“CareerHub will be the focal point connecting NTU students, alumni, and employers through varied services and events,” said Charmaine Ng, Manager of Career Services at OPA.

For example, students can make appointments to see trained career coaches at the centre to discover their career interests, skills, and values. They can also ask to be mentored by alumni volunteers to find out more about the requirements and corporate cultures of particular firms or industries.

Whatever their inclination, students can drop by the centre whenever they like to browse through books and watch videos on career management, company profiles, and recruitment.

Free career guidebook

To help students manage their careers – even before graduation – OPA has published a free career guidebook.

Plans are afoot to organise regular networking sessions for students and graduates to meet with experienced Nantah alumni, many of whom are successful entrepreneurs.

NTU President Prof Su Guaning, who launched the centre on 25 July, said: “The setting up of CareerHub is timely as the good-old life-long employment situation no longer exists, and individuals are now expected to maintain their own employability.”

With the establishment of CareerHub, OPA has a complete suite of career management and planning services. The office has been conducting yearly graduate employment surveys, recruitment events, and career talks. In 2002, it started an online career portal – CareerMall@NTU – to link NTU students and alumni with potential employers and vice versa.

For more information, call 6790-6575 or email careerhub@ntu.edu.sg.
**Technopreneurship**

$1 million in seed funding to develop new ideas

*Tie-up with Singapore Technologies (ST) offers dough to start up, internship stints at young companies, and mentoring by ST staff*

Good news for NTU denizens harbouring dreams of starting a company. The University has partnered Singapore Technologies (ST), a technology-based multinational conglomerate, to nurture budding entrepreneurs.

Under the **NTU-ST Incubators@Work!** collaboration in technology entrepreneurship, students and staff with viable business plans will get a chance to go into joint ventures with ST employees as well as obtain seed funding to develop prototypes which can be commercialised. NTU and ST hope to produce two joint incubation ventures in the first year of collaboration.

**Industrial knowledge**
The partnership with ST also includes an industrial knowledge programme where senior management of ST will be appointed adjunct lecturers at NTU. Students from the Technopreneurship and Innovation Programme, a four-month graduate diploma course run by the Nanyang Technopreneurship Centre, will benefit first.

To enable students to suss out the business world, 50 ST staff will also act as mentors, and up to five students will be picked to do internships at start-ups – to learn the ropes first hand.

**Entrepreneurship Minister Raymond Lim and President Su talk about self-reliance**

“No” to easy money: Minister Lim

If you are serious about entrepreneurship, then show me the money!”

This seems to be a common refrain among new entrepreneurs, said Mr Raymond Lim, Minister of State in charge of Entrepreneurship, opening the 2003 Entrepreneurship Speaker Series organised by the Nanyang Technopreneurship Centre on 6 June.

But the Government “cannot simply hand out money to businesses,” he cautioned. “That which is given free in life is seldom valued.”

Mr Lim, who is also Minister of State for Foreign Affairs and Trade and Industry, then explained that in a world of finite financial resources, the primary provider of capital for businesses must be the financial markets. “The Government does not have the
Centre studying the needs of small enterprises

**Singapore’s SMEs could grow into MNCs if the issues are understood in greater depth**

Prof Cham Tao Soon, former President of NTU and a well-known director in the boardroom, is using his extensive business and leadership experience to help fledgling small and medium-sized enterprises (SMEs) become the new bedrock of the Singapore economy.

In addition to doing detailed studies and research on SMEs, Prof Cham, University Distinguished Professor, has set up a new virtual research centre at NTU to coordinate and stimulate research in the field.

**Facing special problems**

“We need to pay special attention to our SMEs, which form the majority of companies in Singapore. They are extremely diverse and face special problems,” said Prof Cham, who started the Centre for Research on Small Enterprise Development in May. “SMEs supply the greatest number of jobs and many of the vital goods and services,” he added.

The research centre – with links to the Nanyang Business School, College of Engineering, and Nanyang Technopreneurship Centre – currently pools together the resources and expertise of NTU academics with industry or research experience in the field.

**Issues being studied include the training and education requirements of staff and owner-entrepreneurs, human resource problems, information and marketing requirements, difficulties in venturing overseas, the role of incubators, and rating models for SMEs. The research involves analysing financial and other data of local SMEs.**

Earlier this year, Prof Cham spent some time at MIT studying the American enterprise system. He feels that in the long run, Singapore, like the US, should rely on its own enterprises for economic sustenance and growth. “These SMEs can become the MNCs of tomorrow,” he said. “We should find ways to help them make the transition from small fry to global corporate titan.”

**Are we mollycoddled?**

The Government has several schemes in place to help companies in the early stages – when financial markets tend to hold back – and more such initiatives are on the horizon.

Nonetheless, entrepreneurs have to compete for financing. “This is a necessary process of attrition and selection. We cannot avoid it if Singapore is to produce savvy entrepreneurs and strong companies,” he concluded.

Apart from being self-reliant, true entrepreneurs are also courageous and hardworking.

And this is the kind of person NTU, through *The New Undergraduate Experience*, hopes to develop, said Prof Su Guaning, who also spoke.

Reflecting on his student days in Canada, he said that many of his classmates worked as lumberjacks or construction workers to earn their school fees. “Hard labour was normal, certainly not a shame, and perhaps even a badge of pride.” He, too, joined a group of Singaporeans working on a farm.

**We have it easy**

Today, Singaporeans have it easy, even with the pressures of unemployment and the slow economic situation, continued Prof Su. “Here, we have the apocryphal story of the student who brought his Filipino maid to clean up his hostel room.

“How can Singaporeans who are so coddled and soft stand up to competition from Hong Kong, Taiwan, and China?” he wondered.

Prof Su hopes more students will be like the two NTU graduates who declined cushy jobs in engineering and business to slog it out over a stove of porridge. Far from being second-rate graduates who had to go into hawking for a living, the duo, fully educated and bred in NTU, “had a dream and were thinking big.”

He added that they showed tremendous courage in the face of criticism and hard work.

And they have done well, reaping good returns from their business.

The graduates, both alumni of NTU’s Technopreneurship and Innovation Programme (TIP), have been approached by potential venture partners from the food industry.
Alum’s invention nabs 16 awards

CamStudio, a free software translated into eight languages, has proven to be a hit with users around the world

It is currently the only screen recorder in the industry that is able to record sound from speakers. It is also user-friendly. "There is no learning curve. Just download, install, and viola!" enthused the 28-year-old.

Open source codes
Wai Leng said that being an open-sourced product has enabled CamStudio to reach its current popularity. "Since the source codes are released to the public, computer-literate people can programme additional functions themselves. This ensures that CamStudio can evolve further should we discontinue it one day," she said.

So popular is the product that it has been adopted worldwide and translated into eight languages – French, German, Chinese, Japanese, Dutch, Hungarian, Finnish, and Italian.

It has also garnered 16 awards so far, including PC Magazine Editor’s Choice Award, WebAttack Editor’s Choice Award (5 stars), Freeware Guide’s Program of the Month, ListSoft’s Cool Award, and a string of 5-star awards.

Wai Leng, who has also launched a Car Classifieds website, said that TIP training – and her TIP friends – helped her to strategise the development of CamStudio.

Intellectual property
So what’s next for this up-and-coming entrepreneur? “We are pursuing some patent processing as our future releases will include patented functions to strengthen our intellectual property. This point was also emphasised to me in TIP – that strengthening our IP base will result in a more sustainable business model.”

Nod for advergaming, voice authentication

Innovation is her business: Wai Leng, businesswoman and TIP graduate, with CamStudio

Technopreneurship and Innovation Programme (TIP) alumnus Chong Wai Leng has found a winning formula in CamStudio – a revolutionary e-learning tool that allows screen activity to be recorded, annotated, and streamed over the Internet.

“My partner and I faced some difficulty communicating via email,” said Wai Leng, explaining CamStudio’s genesis in 2001. “Visual explanations and illustrations work best for communication and we realised this was the limitation of emails and other textual communication tools, so we started to design CamStudio.”

CamStudio was developed by RenderSoft Software, the IT arm of Grandhill Technology, a company Wai Leng co-founded in 2001.
Singapore’s most celebrated multidisciplinary artist opened the Singapore Arts Festival 2003 Gala Performance, Instant is a Millennium, in grand style on 30 May.

Tan Swie Hian, a well-known poet, sculptor, artist, and calligrapher, who studied at Nanyang University (Nantah), was backed by the world-class Singapore Chinese Orchestra, and a phantasm-like choir of 188 singers.

He took time off that night to meet a group of officials from China undertaking NTU’s full-time MSc (Managerial Economics) programme.

East-meets-West
NTU President Prof Su Guaning had invited the 69 students to the Esplanade for the treat. The group included several mayors and deputy mayors of China’s municipalities.

And were they wowed by two hours of mesmerising craft – a sweeping musical conversation between the artist and the Singapore Chinese Orchestra, replete with poems, paintings, calligraphy, and music.

“I enjoyed myself tremendously,” enthused Mr Cui Zheng, a Vice Director from Jilin Province. “Every part of the East-meets-West performance was just great!”

What’s the link between this year’s ArtsFest and NTU? Nantah alumnus Tan Swie Hian

ViometriX and Imfinity from the School of Computer Engineering emerged finalists at Start-Up@Singapore, a national business plan competition organised by the NUS Entrepreneurship Centre and NUS Business School Alumni Association. The teams joined six other finalists picked from 218 entrants.

ViometriX (Mr Saurav Bhattacharyya, Dr Thambipillai Srikanthan, and Mr Ashish Panda) proposed marketing a low-cost voice-based identification technology. The team won $500 for producing the Best Executive Summary in the first round of the competition and another $2,000 for the Merit Prize in the finals.

Just a microphone
In biometrics, people are identified by their physiological or behavioural characteristics. Unlike other biometrics techniques using expensive fingerprint and iris scanners, a voice-based identity check can be done with just a microphone, ideal for mobile commerce.

“The motivation behind competing was to gauge the reaction and interest level of investors, venture capitalists, and business angels in the various judging panels,” said team leader Mr Saurav Bhattacharyya. “We wanted to see what they thought of the feasibility of our business proposal based on the voice authentication technology developed at the Centre for High Performance Embedded Systems.”

The second finalist team, aspiring start-up Imfinity (Dev Ramnane, Prashant Goela, Romil Gupta, Arun Jacob, and Nishith Prabhakar), presented a plan to develop leading-edge technologies for interactive gaming. In the US, advergaming has generated substantial advertising revenue while delighting gamers.

The team aims to be the first to evangelise mobile advergaming in Asia through the delivery of “seamless game play” across multiple platforms such as mobile phones, desktops, and PDAs.
The most “Kreative” team in the world

Their task: To come up with a new hair care range for Garnier, a brand under L’Oreal, and to develop a winning marketing strategy for it.

Final-year marketing students Grace Tan, Wendy Woo, and Heng Shwu Jiun did this with such flair that they beat 17 other teams from around the world to win the finals of the prestigious L’Oreal Marketing Award 2003. To cap off a great win, the trio from the Nanyang Business School (NBS) also took home the inaugural “Best Communication Award” for excellence in marketing and advertising.

“We really did not expect to win the first prize,” said Grace, “so to hear them call out ‘Singapore’ was almost surreal, and the feeling was incredible!”

Kreative Kalloni
Calling themselves “Kreative Kalloni”, they marketed the Garnier Younique Hair Care range, which offers customised hair care through a three-product range and essential oils, catering to both the physical and emotional needs of consumers. “Using essential oils was creative and feasible for our new hair care range,” said Grace of her team’s competitive edge.

“But our enthusiasm, energy, and passion for our product also helped us win.” In Paris, the team riveted the judges and audience with their lively talk show-style of presentation.

Putting “Kreative” differences aside, an NBS trio work their way up to a marketing grand slam, beating 17 teams from around the world in a glitzy Paris competition

But the journey to the top was not always easy. Apart from juggling a heavy school load – including a major final-year project – and meeting L’Oreal managers for market research, the girls had to overcome “Kreative” differences as they worked against tight deadlines.

First Asian win
“All three of us have diverse, strong opinions,” admitted Shwu Jiun. “We faced setbacks when there were deadlocks and we could not agree, and the project stalled. It was difficult to find a solution and move on.”

And yet, they went on to make history by becoming the first team from Asia to win the award since it was launched ten years ago.

Confident and bright, all three have set their sights on a career in marketing. Wendy wants to be a brand manager and Grace a marketing consultant. Shwu Jiun wants to work with fast moving consumer goods.

And off they fly, not just because they have each won an overseas trip for coming in tops, but also because they are now management trainees at L’Oreal Singapore!

World’s longest balloon chain
It looked as if preparations for a mega party were underway, but freshmen from all 15 halls of NTU were actually working hard to string together the world’s longest balloon chain, as part of freshmen orientation activities. United in effort, 600 freshmen eventually joined 5,239 balloons, forming a chain measuring 542.6 metres. They beat the previous Guinness World Record, set in Australia in 2001, of a 400-metre chain of 1,000 balloons. President Su Guaning, who witnessed the record-breaking activity at the Sports and Recreation Centre on 15 July, said he was pleased to see the students from the various halls working together as one, representing the University.
Continued from page 1

Equals on a unique journey: Prof Su

In his welcome address to freshmen, Prof Su Guaning said that NTU had a proud beginning as Nanyang University. He also expressed his hopes for the students. Here are excerpts from his speech.

“I want you to remember you are all equal members of the family. Whether you are a student with straight A’s or a student whose grades are shall I say, somewhat challenged, you are now all at the same starting line. Each of you deserves our fullest attention.”

“In March, I announced The New Undergraduate Experience. This is aimed at providing undergraduates with a broad curriculum, diversity, and flexibility of choice such that upon graduation, you acquire the knowledge and experience to take advantage of fleeting opportunities. Engineers could be entrepreneurs; business graduates could embark upon careers in media...”

“We expect of you diligence to your university education and camaraderie to your fellow university members... We shall be seeking your participation in running the University. Together, we can create a superior quality of campus life...”

“In America, every child grows up knowing he or she can be President of the United States. There are many paths to success. President Ronald Reagan was a B-movie actor, President Jimmy Carter was a nuclear engineer, and President George W Bush was just a C student at Yale. There is no reason any one of you cannot aspire to similar heights here in Singapore or your home country. Whatever your dreams are, go for the impossible, reach for the sky. Do not be limited by what others may say.”

First lesson at NTU: Nantah history!

NTU’s history can be traced to Nanyang Technological Institute, established in 1981, and further back to Nanyang University (Nantah), founded in 1955.

A large crowd of students, mostly freshmen, gathered outside the Chinese Heritage Centre on 24 July. For many, it was their first lesson at NTU – not physical education, as their choice of attire might have suggested, but a hands-on history lesson.

This took the form of The Heritage Walk and, after a flag-off by the President of NTU, the students were on their way, discovering the deepest secrets of the place many would be calling home for the next few years – secrets which could be traced to the illustrious era of Nanyang University (Nantah).

After visiting six landmarks on campus (including Yunnan Garden and Nanyang Lake), furiously jotting down answers to a quiz, enjoying performances, and collecting a host of freebies, the students enthused that they wanted more of such outdoor lessons!

Alumni and staff joined in to welcome the newbies, adding festive cheer, and making it a truly family affair.

New life: The cheerleading squad kickstarts the walk on a high note! Other student groups also performed in front of the Chinese Heritage Centre, the former Library (1955) and Administration Block (1966) of Nantah and now a national monument.

The NTU family walks together, tracing an illustrious genealogy.
Researchers from the School of Electrical and Electronic Engineering (EEE) have patented a technology that may be the key to cheaper and better flat-screen TVs

Want the best, but for less? Researchers at NTU are working on their dream television – a huge flat-screen that won’t burn a hole in your pocket.

Currently, a 42-inch plasma display panel (PDP) TV, such as the one at NTU’s Canteen A, can easily set you back by $15,000. The plasma TV is expensive to own and run at home because it is expensive to manufacture and guzzles power.

Enter the field emission display (FED) TV, a new type of flat panel display TV which can overcome many of the limitations of other flat panel displays, including the plasma, liquid-crystal, and electroluminescent displays. Besides guzzling less power, the FED offers superior brightness, an improved viewing angle, better colour, and a faster response time.

Recognising the superior properties of the FED, Assoc Prof Tay Beng Kang, Asst Prof Lau Shu Ping, and Dr Sun Zhuo from EEE worked on a technique to produce a key component of the FED – carbon nanotubes – more efficiently and cheaply. Better yet, their technique works well for large glass substrates, that is, bigger TV screens.

A patent was filed in November 2001. “Our process is highly tolerant of the environment and should be very suitable for large-area displays,” said Asst Prof Lau. “The next step is to license our patented technology to companies who are exploring FED technology as the next-generation large TV.”

Masking against deadly gas with oil palm shells

The mother of all gas masks can filter out deadly agents as small as three nanometres!

Chemical and biological agents being unleashed on humankind is a thought not too far from our minds.

Months leading up to the war in Iraq and now months after the war, the question remains: Does Iraq have chemical and biological weapons?

Assoc Prof Lua Aik Chong from the School of Mechanical and Production Engineering (MPE) may have just the answer the world needs. Not hard evidence of deadly weaponry, but a concrete defence against it – gas masks that can filter out poisonous agents through the use of activated carbons from discarded oil palm shells.

Activated carbons derived from oil palm last 30 percent longer than commercial carbons obtained from wood and other coal products.

The idea for the virus-proof mask came when Assoc Prof Lua used activated carbons from oil palm shells as air filters and purifiers to fight pollution, particularly in industries that release toxic gases. This technology won him an Asian Innovation Award from the Far Eastern Economic Review in 2001.

In a scenario of bioterrorism, having a gas mask filled with activated carbons from Assoc Prof Lua’s invention could mean the difference between life and death. A gas mask incorporating a HEPA (High-Efficiency Particulate Air) filter that is rated “99.97% efficient at 0.3 microns” is absolutely necessary to remove bacteria and some types of viruses. However, for tiny viruses as small as 0.003 microns or 3 nanometres – 30,000 times smaller than human hair – activated carbons must be used as the final filter.
Research

A new high-performance chip that allows speedy transmission of data in optical communications applications

“Few IC design companies have expressed interest in using it in their future products,” said Assoc Prof Yeo Kiat Seng, who worked with Prof Do Manh Anh and Assoc Prof Ma Jian-Guo to build this chip for use in wireless and optical communications networks.

The team from the Centre for Integrated Circuits and Systems, School of Electrical and Electronic Engineering, designed and fabricated the high-performance 10GHz voltage-control oscillator (VCO) using a cost-effective RF CMOS process developed by Chartered Semiconductor Manufacturing, one of the world’s top three dedicated semiconductor foundries.

An industry breakthrough
Their research achievement is considered an industry breakthrough in RF integrated circuit (IC) design as most VCOs are manufactured using more costly compound semiconductor or silicon germanium processes.

The VCO designed by NTU adopts a complementary cross-coupled structure for high-frequency low-phase noise oscillators. It is an important building block in transceiver designs for Synchronous Optical Network (SONET) and Synchronous Digital Hierarchy (SDH) applications.

Using Chartered’s 0.18micron RF CMOS technology, the NTU researchers were able to overcome the constant trade-off between signal speed and noise.

SARS drug in sight

Researchers from the School of Biological Sciences may have found a drug that can stop the SARS virus from infecting cells

Before SARS (Severe Acute Respiratory Syndrome) hit home, nobody really cared about the virus that made chickens cough and gave pigs diarrhea, said Prof James Tam, Dean of the School of Biological Sciences (SBS).

Then SARS wreaked havoc in Asia and Canada – and virologists, near and far, got cracking. But NTU researchers already had a six-month head start.

“We formed a SARS focus group in September 2002, six months before the SARS outbreak came to light,” said Prof Tam, an expert in protein chemistry, drug, and vaccine design. The SARS focus group – three professors and thirteen graduate students – still meet on Friday afternoons at the SARS “Super Lab” for heavy-duty discussions and to share findings.

Coronavirus expert
Assoc Prof Liu Ding Xiang, who has been studying coronaviruses for 15 years and is, perhaps, the only practising coronavirus expert in Singapore, is studying how the virus grows and replicates in cells. Dr Julien Lescar, who specialises in infectious diseases, is trying to model the shape of the bug.

With a better understanding of how the virus changes its shape and replicates, Prof Tam and his research team would then be able to design an entry inhibitor and vaccine for the virus. “All viruses have to enter cells in our body to replicate. Once they enter, they use our cellular machinery to help them multiply. If we know how the virus gets in, we can devise a drug or vaccine to stop it,” he explained.

He added that the race to find a drug was of vital importance, “as SARS could reemerge anytime, especially up north during the cold winter months.”

The group has already found success with a potent drug that seems to prevent the coronavirus (SARS-CoV) from entering cells. Next up: animal trials.

Crossed paths with SARS – twice
Prof Tam and the Vice-Dean (Research), Prof Alex Law, were in Hong Kong and China interviewing potential students for SBS in late February when SARS broke. “We crossed paths with the SARS virus for the first time during this trip,” said Prof Tam. “In Hong Kong, our hotel was about a mile away from the Metropole Hotel, where the first superspreader stayed.” Their next brush with SARS was in Guangzhou.

“We were at Zhongshan University, where the first superspreader, a doctor, had been treating SARS patients.” Unbeknown to the professors then, the university hospital was the epicentre of SARS!
Events

Security think tank reaches out to public, youths

Since the fall of the twin towers, the Institute of Defence and Strategic Studies (IDSS) – one of Asia’s leading security think tanks – has been actively promoting informed discussion of the global scourge of terrorism, with the participation of security and terrorism experts, scholars, and researchers from around the world.

The institute, at NTU, has hosted two workshops on terrorism and produced two books on the proceedings. The first, entitled The New Terrorism, was launched in January, while the second, The Threat of Terrorism in Southeast Asia, will be out later this year.

Lectures and forums
IDSS has also conducted several public lectures and forums on terrorist organisations and the US-led “war on terror” in Afghanistan and Iraq. One such lecture, on the implications of the second Gulf war, by Prof Eliot Cohen of John Hopkins University drew a full house at LT 2, including top students from junior colleges and local universities. Others, on the lessons of the Iraq war and the implications of the bomb attacks in Saudi Arabia last May, were also well attended.

Reaching out to youth, IDSS staff recently gave special presentations to students from ASEAN universities, the United World College of South East Asia, and the Catholic University of Parahyangan, Indonesia.

The discussions by the students showed their awareness of the major security issues facing the world and their grasp of strategic and international affairs.

World’s top debating event to be held here

NTU will be hosting the World Universities Debating Championships (Worlds 2004) in December. This is the first time the high-profile tournament is being held in Singapore. With participation from top universities such as Cambridge, Oxford, the Ivy League universities, Berkeley, Stanford, Sydney, Melbourne, and Monash, you can expect verbal wrangling of the highest order. Don’t miss the nine-day tournament, which starts on 27 December. Admission to all debates is free. See www.ntu.edu.sg/worlds for details.

Conference to tackle the foul stuff

Calling all scientists, engineers, and government officials interested in keeping our environment odour-free! The Institute of Environmental Science and Engineering at NTU and the International Water Association (IWA) are organising an international conference to share scientific, technical, economic, and regulatory information on odour and VOC emissions. The Second IWA International Conference on Odour & VOCs will be held at Raffles Town Club from 15 – 17 September 2003. Look out for over 80 oral and 20 poster presentations on topics such as measurement methodologies, control and treatment technologies, and the health effects of odour. There will also be a visit to the Bedok Water Reclamation Plant, a major odour treatment facility.

The conference kicks off with a one-day workshop on 14 September. For details and registration, see www.ondot.com.sg/IESE/odour.
Mr Robot, drive me to work... then tutor the kids

Tomorrow’s robots will enhance our lives in ways we never dreamed possible, says Assoc Prof Xie Ming in his new book, *Fundamentals of Robotics: Linking Perception to Action*. Imagine getting a humanoid robot to teach your children, drive you to and from work, and do your family shopping!

Amazing possibilities

No time to attend an important meeting? Dr Robot will represent you and make important decisions on your behalf. Not feeling well enough to go to the clinic? Ask Dr Robot to make a diagnosis and get you the necessary medication. These are just some possibilities to look for when vision-guided learning machines become a reality.

In his book, published by World Scientific, Assoc Prof Xie Ming explains how tomorrow’s robots will change the way we work, play, think, and live. The School of Mechanical and Production Engineering professor has written the book for students and researchers interested in robotics, artificial intelligence, and machine perception and vision. Those who want to understand, develop, and use robots to automate industrial processes or tasks will also find it an engaging read.

First comprehensive guide to global public relations

Assoc Prof Krishnamurthy Siriamesh from the School of Communication and Information has launched *The Global Public Relations Handbook*, the first comprehensive publication on international public relations.

The co-edited book provides a thorough conceptual framework for studying and practising public relations around the world, discussing the relationship between public relations practice and factors such as political ideology, societal and corporate culture, economic development, media systems, and activism.

The status of the business

Thirty-five academics and professionals from Asia, Australasia, Europe, North and South America, and Africa used the theoretical framework generated by Assoc Prof Siriamesh to present information on the status of the public relations industry in their countries. Areas covered include the status of public relations education, the level of professionalism, and ethics.

The book – with a foreword by Mr Koichiro Matsuura, Director-General of UNESCO – also describes and analyses the public relations operations of multinational corporations, multinational public relations agencies, UNESCO, NGOs, and governments. Published by Lawrence Erlbaum Associates Inc in the US, the book is available in hardcover and paperback from Amazon.com.
Golfers raise $300,000

Striking a pose at a fund-raising golf event on 4 July are (from left) Mr Ch’ng Jit Koon, Chairman, NTU 21st Century Fund-Raising Committee; NTU President Prof Su Guaning; the Guest-of-Honour, Dr Ng Eng Hen, Acting Minister for Manpower and Minister of State for Education; and Mr S Chandra Das, Chairman, NTUC Fairprice Co-operative Limited.

The quartet were part of 141 golfers, including corporate bigwigs, staff, and alumni, who put their golfing skills to good use at the Orchid Country Club, helping to raise over $300,000 – inclusive of a matching grant from the Government – for the NTU 21st Century Fund.

The Fund finances a range of innovative projects and programmes. The University is grateful to all donors and sponsors, including the main sponsor of the event, Singapore Pools.

Dissertation on deception is tops

Dr Lee Seow Ting from the School of Communication and Information (SCI) has won the University of Missouri-Columbia 2003 award for best doctoral dissertation with Lying to Tell the Truth: Journalism and the Ethics of Deception.

This is the first dissertation from the Missouri Journalism School to win the coveted campus-wide award since it began 30 years ago.

Dr Lee’s study, based on depth interviews and a Web survey, examines the attitudes of American journalists towards various forms of deception such as hidden cameras, impersonation, staging, and fabrication.

It also focuses on the predictors of deception tolerance as well as the motivations behind deception. It is a great honour indeed for Dr Lee, the Missouri School of Journalism, and the Division of Journalism and Publishing, SCI.

Recent visitors

During the period April to July 2003, the University received the following distinguished visitors:

1 Apr Prof Hu Dongcheng, Vice President, Tsinghua University, PRC
7 Apr His Excellency Franklin Lavin, US Ambassador to Singapore
29 Apr Mr Kwek Leng Joo, President, Chinese Chamber of Commerce and Industry, and Managing Director, City Developments Ltd

Other visitors

During this period, the University also received visitors from Erasmus University, Netherlands; Saigon Centre of Technique and Technology; and the Indian press.

Malaysian Nantah homecoming

Our picture shows a 12-member delegation of alumni from the Perak, Johore Bahru, Sarawak, Malacca, and Kuala Lumpur chapters of the Nanyang University Alumni Association, with their NTU hosts, at the President’s Lodge.

They visited NTU from 1 to 4 August. Not surprisingly, they made bee-lines for old friends and well-loved places such as the Chinese Heritage Centre, Yunnan Garden, Nanyang Lake, and Nanyang Hill.

They also enjoyed frank and fruitful discussions on a wide range of topics with President Su and senior officers from NTU.

Promotions

We congratulate our NIE colleagues on their recent promotion:

To Full Professor
Assoc Prof John Sydney Matthews, Visual and Performing Arts

To Senior Education Officer 1
Mr Chua Boon Liang, Mathematics and Mathematics Education; Miss Llw Pei Kien, Asian Languages and Cultures; Miss Low Siew Hsien, Science and Technology Education

To General Education Officer 1 (A2)
Mr Mohamad Ali Hanifiah B Abd, Special Training Programme (Mother Tongue); Mdm Rosnani Bte Suli, Asian Languages and Cultures; Mr Raymond Tan Soon Kian, Science and Technology Education

To General Education Officer 1 (A1)
Mr Mohd Pitchay Gani B M A Aziz, Special Training Programme (Mother Tongue)
The University welcomes the following new staff members:

**Nanyang Business School (NBS)**
Mr Wong Tong Lin, Robin - Senior Tutor
Mr Yeow Yong Kwang, Adrian - Senior Tutor
Prof Jay Rial Ritter - UOB Professor
Dr Linnea Van Dyne - Senior Fellow (Gr 3)

**School of Computer Engineering (SCE)**
Miss Fazilah Binte Mohamed Ismail - Lecturer
Miss Nimmie Agnes Jayathurai - Lecturer
Mdm Pang Xiaolin - Research Associate
Mr Chung Shin Yee - Project Officer
Miss Karen Ng Sen Har - Project Officer
Mr Kien Lieh - Project Officer
Mr Lai Swee Kim - Project Officer
Mr Yu Hai - Project Officer

**School of Materials Engineering (SME)**
Mdm Lee Chien Ching - Lecturer
Dr Xia Xulin - Research Fellow
Mdm Bini Thamburathy Balakrishnan - Research Associate
Mr Chen Yu - Research Associate
Mr Chia Ngeow Khing - Research Associate
Mdm Deepa Narayan - Research Associate
Mr Li Tao - Research Associate
Mr Zhang Tian Shu - Research Associate
Miss Teh Lay Yuan - Project Officer

**School of Civil and Environmental Engineering (CEE)**
Dr Selvakumar Pitchaiavelu - Research Scientist
Dr Sushanta Chakraborty - Research Fellow
Mdm Foo Yue Ying, Jasmine - Project Officer
Mr Geng Jianzeng - Project Officer
Mr Goh Kok Hui - Project Officer
Mdm Hou Li - Project Officer
Mr Jiao Lei - Project Officer
Mdm Ng Chiew Hong - Project Officer
Mr Wang Xikun - Project Officer
Mr Zhang Xin - Project Officer

**School of Electrical and Electronic Engineering (EEE)**
Dr Loh Poh Chiang, Andrew - Assistant Professor
Dr Pina Marziliano - Assistant Professor
Dr Sirajudeen S/o Gulum Razi - Assistant Professor
Dr Zhang Daming - Assistant Professor
Dr Eishi Igiata - Research Fellow
Dr Li He Ping - Research Fellow
Dr Ruil Irwan - Research Fellow
Dr Samarendra Dandapat - Research Fellow
Mr Anjan Kumar Dash - Research Associate
Mr He Minghua - Research Associate
Mr Lin Fei - Research Associate
Mr Muhammad Faeyz Karim - Research Associate
Mr Yu Xiaodong - Research Associate
Miss Cary Li Ka Yin - Project Officer
Mr Chin Soon Hwa - Project Officer
Mr Deepak Mohan - Project Officer
Mr Goh Keng Wee - Project Officer
Miss Li Hua - Project Officer
Mr Tan Thian Teck - Project Officer
Mr Wang Jinhua - Project Officer
Dr Li Erping - Adjunct Assoc Professor (R&D)
Dr Tan Boon Tiong, David - Adjunct Assoc Professor (R&D)
Mr Zhang Yankun - Senior Officer [Lab] (Gr 4)
Mr Soh Eng Hwa - Senior Officer [Lab] (Gr 5)
Mr Chew Hock Leng, Andrew - Technical Executive (Gr 1)

**School of Mechanical and Production Engineering (MPE)**
Dr Phee Soo Jay, Louis - Assistant Professor
Dr Gu Yanwei - Research Fellow
Dr Hoang Dinh Long - Research Fellow
Dr Theresa Komang Ralebisso - Research Fellow
Dr Zhang Hao - Research Fellow
Mr Yan Wei - Research Associate
Mr Khoo Hwa Seng - Project Officer
Mr Meenakshisundaram Maheshkumar - Project Officer
Mr Ng Hee Khiang - Project Officer
Mr Shannugusundaram Arunkumara - Project Officer
Miss Tricia Tan Chui Sun - Senior Officer (Gr 5)
Miss Goh Mei Chiat - Senior Officer (Gr 5A)

**School of Communication and Information (SCI)**
Dr Cheng Kiang Kuo - Assistant Professor

**School of Biological Sciences (SBS)**
Dr Chen Ken-Shiang - Associate Professor
Mdm Meng Shu - Project Officer

**Office of Deputy President 1**
Dr Casey Cheri Kwan-Ho - Project Consultant

**Student Affairs Office**
Mdm Voon Chuan Poh - Senior Officer (Gr SA)
Mr Lim Cheng Hwee - Hostel Management Officer (Gr IV)
Miss Tan Meow Kheng - Hostel Management Officer (Gr IV)

**Centre for IT Services**
Mr Oth Cheong Meng - Senior Officer [IT] (Gr 5)

**Singapore-MIT Alliance Programme**
Dr Zhao Zhuwen - Research Fellow

**Institute of Defence and Strategic Studies**
Dr Hiroshi Katsumata - Adjunct Fellow
Mr Chong Ja Jan - Visiting Fellow
Mr Chng Gue Yee - Adjunct Fellow
Mr Chen Kwang Wai, Jeffrey - Associate Research Fellow
Mr David Chiarucci Chi Lee - Project Officer
Ms Victoria Louise Giaever-Enger - Research Assistant

**National Institute of Education**

**Instructional Science**
Mr Lee Kiat Seng - Project Officer

**Mathematics and Mathematics Education**
Mdm N Meera - Teaching Fellow

**Natural Sciences**
Mdm Qin Lin - Project Officer

**Centre for Research in Pedagogy and Practice**
Prof John Gordon Hedberg - Professor

**English Language and Literature**
Ms Koh Guat Sheng - Lecturer
Ms Ng Chiew Hong - Lecturer

**Asian Languages and Cultures**
Dr Aw Guat Poh - Assistant Professor
Mdm Sa’eda Bte Buang - Lecturer
Ms Foo Wei Ching - Teaching Fellow

**Humanities and Social Studies Education**
Ms Koh Noi Keng - Lecturer

**Science and Technology Education**
Mr Tan Kok Siong - Lecturer

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**New Appointments**

**SCIE:** Prof Soh Chee Kiong, Head, Div of Structures and Mechanics; Prof Tay Joo Hwa, Head, Div of Environmental and Water Resources Engineering; Assoc Prof Teh Cee Ing, Head, Div of Geotechnical and Transportation Engineering; Assoc Prof Ting Sang Kiong, Head, Div of Construction Technology and Management; Assoc Prof Tan Soon Keat, Director, Maritime Research Centre

**MPE:** Assoc Prof Leong Kai Chooong, Vice-Dean; Assoc Prof Chan Weng Kong, Head, Div of Thermal and Fluids Engineering; Assoc Prof Chua Soo Kai, Head, Div of Systems and Engineering Management; Assoc Prof Khoi Li Phong, Head, Div of Mechatronics and Design; Assoc Prof Ong Ling Seng, Head, Div of Engineering Mechanics; Assoc Prof Tor Shu Beng, Head, Div of Manufacturing Engineering; Assoc Prof Quek Meng Yin, Deputy Director, Maritime Research Centre

**EEE:** Prof Choi San Shing, Head, Div of Power Engineering; Prof Do Manh Anh, Head, Div of Circuits and Systems; Prof Koh Soo Ngee, Head, Div of Control and Instrumentation; Assoc Prof Alex Kot Chichung, Head, Div of Information Engineering; Assoc Prof David Siew Chee Kheong, Head, Div of ICIS; Assoc Prof Tan Ooi Kiang, Head, Div of Microelectronics

**NBS:** Prof Ang Soon, Head, Div of Strategy, Management and Organisation; Prof Tan Hon Tong, Head, Div of Accounting; Assoc Prof Chen Kang, Head, Div of Applied Economics; Assoc Prof David Ding Kuan Yong, Head, Div of Banking & Finance; Assoc Prof Murali Krishna Erannilli, Head, Div of Marketing and International Business; Assoc Prof Christina Soh Wai Lin, Head, Div of Information Technology and Operations Management; Assoc Prof Victor Yeo Chuan Seng, Head, Div of Business Law

**SCE:** Prof Hsu Wen Jing, Deputy Director, Maritime Research Centre

**SBS:** Prof Lun Kwok Chan, Vice-Dean; Prof Alex Law Sai-Kiit, Vice-Dean; Prof Lars Nordenskiold, Head, Div of Structural and Computational Biology; Assoc Prof Peter Droge, Head, Div of Genomics and Genetics

**Biomedical Engineering Research Centre:** Assoc Prof S M Krishnan (EEE), Director; Assoc Prof Subbu S Venkatraman (SME), Deputy Director
The NTU dragon boat team recaptured the Prime Minister’s Challenge Trophy on 8 June. They were jubilant! The pictures say it all...

The story so far...
The Prime Minister’s Challenge Trophy Race is an annual dragon boat event between NTU and the National University of Singapore (NUS). NTU won the soft launch race in 1999 and the inaugural race in 2000, but lost in 2001 and 2002. When Prime Minister Goh Chok Tong initiated the race, he said he hoped to see it develop into a keenly followed tradition similar to that of the annual boat race between Oxford University and Cambridge University. This year’s race was held during the 2003 National Dragon Boat Championships.

NTU Spirit flies! The men’s dragon boat team, ahead of NUS by a convincing lead of 7 seconds. They finished the 1,000m race in four minutes and 8.55 seconds.

Girl power: The women’s team did well too, coming in second in the National Dragon Boat Championships (women’s category).

Splashin’ success!