

Passion to make it happen!

Issue 01/2005

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Our Graduates Made It !

Check out what they are doing now and how ASc has helped them.



UNSW PhD Student

"In ASc, I learnt to be independent. I acquired technical skills, knowledge and real life experience in various aspects of chemical engineering. Critical thinking and problem solving skills incorporated into the diploma will benefit me for life."

Name: Li Dan
 Diploma: Chemical Engineering (2001)
 Academic Pursuit: PhD, University of New South Wales, Sydney, Australia

Laboratory Biologist

"The Vet Science modules were conducted by very good and experienced lecturers. The practicals and lectures were lively and very interesting."



Name: Calvina Kek Huiling
 Diploma: Biotechnology (2004)
 Employer: Institute of Molecular and Cell Biology (IMCB)



UniSA Undergraduate

"TP's education builds a strong foundation for the modules I take in my university education."

Name: Shirley Ng
 Diploma: Biomedical Science (2004)
 Academic Pursuit: BSc. (Pharmacy), University of South Australia

Cytotechnologist Trainee

"Days at ASc were very memorable. Excellent lecturers nurtured us in all areas of life, bringing out the best in us, creating the confident, innovative, well taught and professional employees that employers love."



Name: Irene Kng Yin Ling
 Diploma: Biomedical Science (2004)
 Employer: Changi General Hospital



Researcher & Co-Author

Samuel Gan Ken En entered Temasek Applied Science School (ASc) with 16 points. Today, he is a final year undergraduate at the University College London (UCL) pursuing a degree in Molecular Cell Biology. Samuel is actively involved in research and has published his work in 2 scientific journals. He is also the proud author of a sci-fi novel.

Samuel Gan is proof that a polytechnic education, together with the right attitude and a determination to excel, can take you to extraordinary heights! Here is what Samuel has to say about:

His publications:

"My first research, done during my student internship in collaboration with the Institute of Molecular Cell Biology (NUS), was published in the Journal of Biological Chemistry. Then, during my national service, I aided in a clinical study on 'Hypertension in Young Adults'. This study was published in the Singapore Medical Journal (Sept 2003). My current research with the Windeyer Institute of Medical Sciences (UCL) is on HIV mutational resistance."

The value of an ASc diploma:

"The practical orientated curriculum beats even the curriculum in top universities. ASc is the best place to acquire hands-on, work related skills."

Pursuing a degree:

"The quality of my diploma was good enough to enable me to skip the first year of my university course and directly start the second year with considerable ease compared to my peers. The PBL methodology groomed me to think methodically and prepared me well for life in the university."

WE OFFER the following diplomas:

- Applied Food Science & Nutrition (AFSN)
- Biotechnology (BIO)
- Biomedical Science (BMS)
- Chemical Engineering (ChE)
- Consumer Science & Technology (CST)



Applications Technician

"As ASc adopted the problem-based learning approach, I developed skills important in researching and formulating to meet my customers' requirements. Under my company's sponsorship, I received training in UK and Holland. My work is fun and challenging."

Name: Ong Chee Foo
 Diploma: Chemical Engineering (2002)
 Employer: Stahi Asia Pte Ltd

R&D Manager

"The course helped me understand what I eat and how to choose food wisely. The knowledge learnt from subjects like Basic Nutrition & Food, Food Processing Technology and Food Product Development help me in my work especially when I advise clients on the development of innovative and nutritious products."



Name: Jasmine Ong Siok Leng
 Diploma: Applied Food Science & Nutrition (1999)
 Employer: Super Coffeemix

Chemical Engineering (ChE)



"Working life in Pfizer is fun, especially when I have nice colleagues to guide me along and teach me things that will enrich me. It is indeed a real taste of working life!"

Student: Sebastian Koh Jui Seng
Attachment: Pfizer Asia Pacific Pte Ltd

"ChE grooms students for the future working world, as modules taught throughout the course are applicable during Student Internship Programme (SIP). Besides knowledge gained from SIP, independence and interpersonal skills are developed too."

Student: Tay Wan Qing
Attachment: Mitsui Elastomers Singapore Pte Ltd



... employ high-tech processes!

Careers with ChE

- Process Technician, Technologist, Supervisor
- Assistant Engineer
- Sales Engineer
- Laboratory or QC/QA Technician/Officer
- Safety Officer
- Purchasing Officer/Executive
- ISO Coordinator
- Logistics Officer

(in petrochemical/specialty chemical/semiconductor/pharmaceutical companies)



Using the UF/RO Membrane Unit to purify water

Operating the refrigeration system to study thermodynamics

Careers with Related Degree:

- Chemical Engineer
- Chemist
- Materials Engineer
- Process Engineer
- Production Executive
- Technical Sales Executive
- Environmental Engineer

"The intern from your Diploma in Chemical Engineering is conscientious, hardworking and independent. She carries out her assignments under our Laboratory Supervisor with zeal and dedication. She is a role model for her fellow students to emulate."

Mr S K Chan
QC/HSE Manager
Mitsui Elastomers Singapore Pte Ltd

Biomedical Science (BMS)

Careers with BMS

Biomedical Technology Option

- Medical Laboratory Technologist in hospital/clinical laboratories, medical research and clinical trials
- Sales/Marketing personnel for clinical laboratory equipment, drugs

Pharmaceutical Science Option

- Pharmacy Technician in hospitals/retail pharmacies
- QA/QC Analyst in pharmaceutical manufacturing industries or research
- Assistant Executive for regulatory affairs involving pharmaceutical and related legislations
- Sales/Marketing personnel for pharmaceutical products

Pharmaceutical Technology Option

- Process Technologist in pharmaceutical/bio-pharmaceutical manufacturing companies
- QA/QC Analyst in pharmaceutical/bio-pharmaceutical manufacturing companies
- Assistant Executive for regulatory affairs involving GMP and related legislations
- Sales/Marketing Executive for pharmaceutical products

Careers with Related Degree

Pharmaceutical Science & Technology Option

- Life Science/Chemistry/Pharmaceutical Research Scientist
- Pharmacologist
- Pharmacist
- Pharmaceutical Engineer
- QA/QC Executive
- Chemist
- Biologist
- Sales/Marketing Executive
- Regulatory Officer
- Clinical Trials Associate/Executive

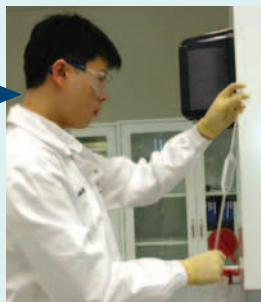


Using fluorescence microscopy to study blood cells

SCIENCE EXPERIENCE

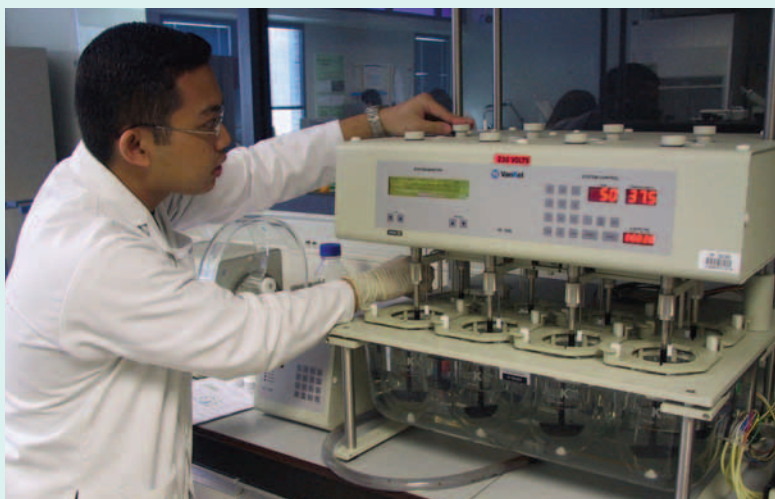
"This attachment broadened my outlook towards working life and taught me many new things that are not found in textbooks. The scientific theory and practical lessons learnt in ASc has helped me in trouble-shooting problems at work."

Student: Huang Debiao
Attachment: Wyeth Nutritional (Singapore) Pte Ltd



"Working in Schering-Plough Ltd has been an eye-opener for me. This well-known pharmaceutical company has provided me with a better understanding of working life. The School of Applied Science has enabled me to acquire the relevant knowledge and technical skills, such as Current Good Manufacturing Practice."

Student: Nur Sarina
Attachment: Schering-Plough Ltd



Running tests on tablets with a dissolution tester machine

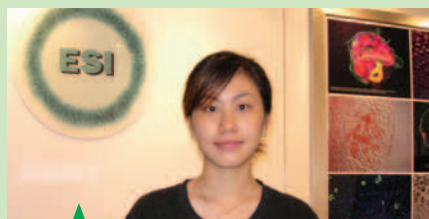
... advance with biomedicine and technology

"Our pharmacists are quite happy with the ASc graduates we recruited as pharmacy technicians. They show a positive working attitude, a willingness to take on challenges and are fast learners. They have great potential in what they are doing."

Ms Ng Mok Shiang
Pharmacy Operations Manager
National Health Group
Pharmacy



Heating and mixing ingredients for suppositories



"ASc prepared me well for this internship programme. I was assigned a project to create transgenic reporter lines of human embryonic stem (hES) cells. The making of plasmids constructs enabled me to gain familiarity with routine molecular techniques such as plasmid DNA isolation, DNA cloning and PCR amplification."

Student: Eve Nghoh Zi Xian
Attachment: Embryonic Stem Cell International Pte Ltd

Biotechnology (BIO)

Budding veterinary technologists at work



... explore new frontiers!

Careers with BIO

Biomolecular Science Option

Research/Laboratory Technologist in:

- research/tertiary institutions
- regulatory bodies eg. AVA
- biopharmaceutical R&D



Preparing for DNA analysis

Veterinary Science Option

Veterinary Technologist in:

- veterinary hospitals/clinics
- animal holding units in research organizations
- animal quarantine centres
- Singapore Zoological Gardens
- Jurong Bird Park

Careers with Related Degree

Scientific Officer
Research Assistant
Research Technologist

"We are quite pleased with the Biotechnology graduates we hired from TP. They are intelligent and show good work ethics. In fact, one of the students we hired as a medical technologist co-authored a paper with us!"

Dr Cheah Peh Yean
Senior Scientist
Department of Colorectal Surgery
Singapore General Hospital

Applied Food Science & Nutrition (AFSN)

"Having TP students at CGH is enriching as we are able to learn from each other and in the process work together in the area of nutrition research and development to further improve the quality of nutrition service in Singapore. TP students are generally well prepared, motivated and keen to learn and contribute. It is a pleasure to have them in the health care service."

Ms Magdalin Cheong
Chief Dietitian/Sr Manager
Dietetic & Catering Dept
Changi General Hospital



"I've learnt to relate the nutrition information learnt from school to the job scope given to me. This SIP has made me more determined to be a dietician because the job is very meaningful."

Student: Joyce Ng Sok Kian
Attachment: Mount Alvernia Hospital



"While working in the R&D department, I realised that ASc did well in giving us insight into the use of important equipment and teaching us about the importance of developing good personal relationships."

Student: Chua Wei Ling
Attachment: Gardenia Foods (S) Pte Ltd



Preparing for the pasteurization of soymilk

Careers with AFSN

- QC/Food Laboratory Technician
- R&D Technicians/Executive
- Food & Beverage Assistant
- Food Service Executive
- Health Promotion Executive
- Nutrition Educator
- Nutrition Executive
- Dietetic Technologist

Careers with Related Degree

- Food Scientist/Sensory Analyst
- Food Technologist
- Food Scientist /Nutritionist
- Nutritionist/Health Promotion Executive
- Dietician
- Food & Beverage Executive

... innovate with science for healthier food choices!



Designing a sensory evaluation session for a newly developed soft drink



Analyzing the texture of bread



Creating healthier food products



Learning about food

Further Studies & Accreditation

For AFSN Graduates

- Singapore - NUS
- Australia - Flinders University, University of New South Wales, RMIT
- United Kingdom - Reading University, King's College
- New Zealand - University of Otago

For BIO Graduates

- Singapore - NUS and NTU
- Australia - RMIT, University of Melbourne, University of Sydney, Murdoch University, University of New South Wales
- United Kingdom - University of Birmingham, Griffith University, Herriot-Watt University, University of Strathclyde

For BMS Graduates:

- Singapore- NUS and NTU
- Australia - RMIT, University of Melbourne, University of Queensland, Monash University, University of New South Wales
- United Kingdom - University of Manchester, University of Edinburgh

For ChE Graduates

- Singapore - NUS & NTU
- Australia - University of New South Wales, Queensland University of Technology, Curtin University, RMIT University
- United Kingdom - University College London, University of Birmingham

Note: Overseas universities grant 1 - 2 years of exemption for relevant degree programmes depending on academic performance.

Student Achievements (Competitions)

- 1) Champion, Novation Starch Product Development Challenge 2002
Organised by National Starch & Chemical (Singapore) Pte Ltd
- 2) 'Best Project' Award, Polytechnic Student Research Programme 2003
Organised by A*STAR
- 3) First Runner-Up, Student Symposium Competition 2003
Organised by Singapore Institute of Food Science & Technology
- 4) Second Runner-Up, Pharmacy Quiz 2003
Organised by National University of Singapore
- 5) Second Runner-Up, Singapore National Crystal Growing Challenge 2004
Organised by National University of Singapore
- 6) Merit Award, Green Wave Environment Competition 2004
Organised by Sembawang Shipyard

Academic Awards Received

Golden Jubilee Award

(full scholarship to pursue degree programme at the University of New South Wales):

- Elizabeth Tan (BIO/1999)
- Lee Huang Chun (AFSN/1999)
- Ow Siak Wei Dave (AFSN/2000)
- May Thandar Aung (BIO/2001)
- Li Dan (ChE/2001)
- Lim Ai Khim (BIO/2002)
- Mariati (BMS/2003)
- Mujorno (ChE/2004)

Lee Kuan Yew Step Scholarship:

- Angeline Liew (AFSN/2001)

Lee Kuan Yew Award:

- Li Dan (ChE/2001)
- Lim Ai Khim (BIO/2002)
- Mariati (BMS/2003)

Newwater sponsored by



Public Utilities Board



Mr Tharman speaking to our winners at the Green Wave Environment Competition 2004