

## INVESTIGATE THE SCIENCE BEHIND...

### Baking & Culinary Arts

“A fusion of traditional baking and culinary arts with modern science and technology.”

**Martin Tan**  
*Baking & Culinary Science*



### Animal Care

“We assist veterinarians in animal healthcare.”

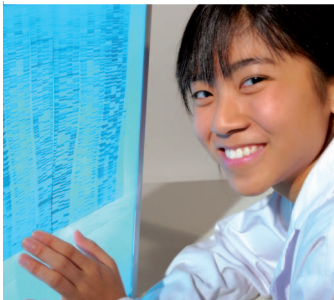
**Stacia Yeo**  
*Veterinary Technology*



### DNA

“We analyse and manipulate DNA to find novel solutions for cancer and genetic and infectious diseases.”

**Chloe Tan**  
*Biotechnology*



### Good Nutrition

“This course teaches students to create a safe food product with a healthier twist!”

**Cheryl Tan**  
*Applied Food Science & Nutrition*



### Saving Lives

“We develop novel ways to diagnose, treat and prevent diseases.”

**Calista Lye**  
*Biomedical Science*



### Come Join Our Diplomas!

- Applied Food Science & Nutrition
- Baking & Culinary Science
- Biotechnology
- Biomedical Science
- Chemical Engineering
- Consumer Science & Technology
- Veterinary Technology

### The Booming Chemical Industry

“We bring creations from the laboratory to the world!”

**Kuah Tong Hock**  
*Chemical Engineering*



# Projects *Ignite Our Passion To Succeed!*

## Represented ISPE Singapore in Las Vegas!



**CHAMPION @ ISPE SINGAPORE CONFERENCE 2007 POSTER COMPETITION**  
Project: Photocatalytic Disinfection of *Pseudomonas aeruginosa*  
Diploma in Chemical Engineering

Organised by International Society for Pharmaceutical Engineering

## Awarded Trip to 10<sup>th</sup> ASEAN Food Conference in KL!

**CHAMPION @ SIFST BIENNIAL STUDENT SYMPOSIUM**  
Project: Ice Popsicles with Fruit / Vegetable Juices / Extracts  
Diploma in Applied Food Science & Nutrition  
Organised by Singapore Institute of Food Science & Technology



## Voted Most Popular!



**MOST POPULAR PRODUCT AWARD**  
Project: Trans Fat-Free Pastry

**BEST PACKAGING AWARD @ SFMA FOOD PRODUCT CONCEPT COMPETITION 2007**

Project: Tea Flavoured (Rolled) Cookies  
Diploma in Applied Food Science & Nutrition  
Organised by Singapore Food Manufacturers' Association



## We Care for the Environment!



**FIRST PRIZE @ ENVIRONMENTAL RECYCLING COMPETITION**  
Project: Generating Electricity Using Industrial / Household Waste  
Diploma in Chemical Engineering  
Organised by Tampines GRC



**FIRST RUNNERS-UP @ YOUNG MARINE BIOLOGIST AWARD 2007**  
Theme: Global Warming & Its Impact on Marine Environment  
Diploma in Biotechnology  
Organised by Underwater World Singapore

## Recognised for TCM Effort!



**THIRD PRIZE @ SSBMB FINAL YEAR PROJECT MINI SYMPOSIUM**  
Project: Mechanism of Apoptosis Induced by *Scutellaria barbata* in Human Non-Small Lung Cancer Cells  
Diploma in Biomedical Science and Biotechnology  
Organised by Singapore Society for Biochemistry & Molecular Biology

**ENCOURAGEMENT AWARD @ GREEN WAVE ENVIRONMENTAL CARE COMPETITION**  
Project: Innovative Liquid Waste Treatment  
Diploma in Chemical Engineering  
Organised by Sembawang Shipyard



## Special R&D Projects



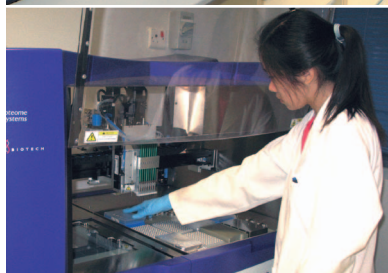
### Traditional Chinese Medicine (TCM)

*Analysis of anti-cancer properties of herbal extracts.*



### Fermentation

*Biogas production by anaerobic digestion of foodwaste.*



### Proteomics

*Identifying clinically-important proteins in pathogenic bacteria.*



### Nanotechnology

*Chemical synthesis of nanocatalyst for gas-to-liquid reaction.*



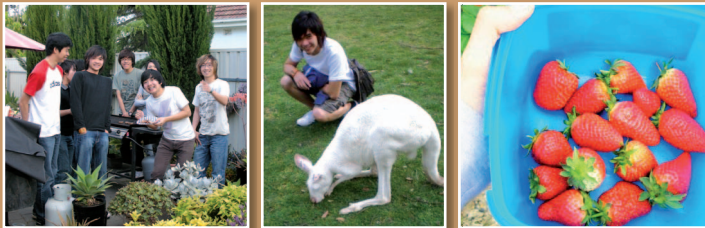
# We are GLOBAL CITIZENS!

## Australia

University of Adelaide

Chemical Engineering Projects:

- Optimisation of the Production of Recycled Mixed Plastic Materials
- Determination of Heat Capacity of Agal Slurries
- Modelling High Rate Agal Ponds with DYRESM-CAEDYM
- Modelling CO<sub>2</sub> Vibration Deactivation by Nuclear Dynamics
- Rheology of Liquid-Liquid Emulsions with Added Solid Particles



## Overseas Internship Projects!

## Thailand

US Wheat, Bangkok

Applied Food Science & Nutrition Project:

- To assist bakery consultants in a bakery course as well as carry out baking trials of various ingredients

*"Working with the professionals from US Wheat has motivated me to strive harder and someday become as successful as them."* Tan Yi Le



## China

Nanchang University

Biomedical Science Projects:

- To detect and quantify the water soluble vitamins in pomelo juice and seeds using HPLC
- To quantify sugar content of herbal decoction using IEC



## China

Nanchang University  
Chemical Engineering

Projects:

- The study of using graft starch copolymer in biodegradable plastics
- Investigation of maltose formation from corn starch



## China

Singapore Food Industries, Shanghai

Applied Food Science & Nutrition Project:

- To conduct quality assurance and quality control of products made on the premises

*"I was able to experience working life and learn the culture of another country."* Benjamin Ng



## China

Sichuan Province, China

Biotechnology Project:

- To collect and study data on eating patterns and gestation periods of wild bears in China



*"If you have the passion, you can make it happen!"* Dorothy Wong

## Overseas Community Projects!

## Cambodia

Baray & Phnom Penh

- To train locals to recycle resources to make soap to generate income
- To conduct workshops and cooking demonstrations to impart nutrition knowledge and promote good dietary practices



# CAREERS WITH AS<sub>c</sub> DIPLOMAS

With the relevant diploma, you may embark on a rewarding career in the following industries:

Applied Food Science & Nutrition (AFSN)	Baking & Culinary Science (BCS)	Biotechnology (BIO)	Biomedical Science (BMS)	Chemical Engineering (ChE)	Veterinary Technology (VeT)
<b>Nutrition / Healthcare</b>	<b>Food &amp; Beverage</b>	<b>Biomedical Research</b>	<b>Healthcare / Pharmaceutical</b>	<b>Chemical Processes</b>	<b>Veterinary Research</b>
<ul style="list-style-type: none"> <li>Health Promotion Executive</li> <li>Dietetic Technologist</li> <li>Nutrition Educator</li> <li>Sales &amp; Marketing Executive</li> </ul>	<ul style="list-style-type: none"> <li>Baking Technologist</li> <li>Junior Chef</li> <li>Food Safety Officer</li> <li>Sales &amp; Marketing Executive</li> <li>Entrepreneur</li> </ul>	<ul style="list-style-type: none"> <li>Research Technologist</li> <li>Laboratory Technologist</li> <li>Scientific Officer</li> <li>Laboratory Biologist</li> <li>Sales &amp; Marketing Executive</li> </ul>	<ul style="list-style-type: none"> <li>QA / QC Technologist</li> <li>Pharmacy Technician</li> <li>Sales &amp; Marketing Executive</li> <li>Entrepreneur</li> <li>Regulatory Affairs Executive</li> </ul>	<ul style="list-style-type: none"> <li>Process Technician / Assistant Engineer</li> <li>Quality Control Officer</li> <li>Safety Officer</li> <li>Technical Sales Executive</li> </ul>	<ul style="list-style-type: none"> <li>Laboratory Animal Technologist</li> <li>Medical Research Technologist</li> <li>Technical Support Officer</li> <li>Sales &amp; Marketing Executive</li> </ul>
<b>Food Technology</b>	<b>Food Consultancy</b>	<b>Agrotechnology</b> (eg plant and animal centres)	<b>Healthcare / Biomedical</b>	<b>Pharmaceutical Manufacturing</b>	<b>Veterinary Services</b> (eg AVA, zoos, animal hospitals and clinics)
<ul style="list-style-type: none"> <li>Food Technologist (specialising in food product development)</li> <li>QA / QC Executive</li> <li>Food Hygiene Officer</li> </ul>	<ul style="list-style-type: none"> <li>Development Chef</li> <li>R&amp;D Executive</li> </ul>	<ul style="list-style-type: none"> <li>Technical Support Officer</li> <li>Laboratory Technologist</li> </ul>	<ul style="list-style-type: none"> <li>Medical Technologist</li> <li>Sales &amp; Marketing Executive</li> </ul>	<ul style="list-style-type: none"> <li>Process Technician / Assistant Engineer</li> <li>QA / QC Executive</li> </ul>	<ul style="list-style-type: none"> <li>Veterinary Technologist</li> <li>Animal Welfare Educator</li> <li>AVA Officer (Technical)</li> <li>Sales &amp; Marketing Executive</li> </ul>
<h2>Refer to our website for information on further studies and accreditation!</h2>				<b>Laboratory / Research Institutes</b>	<b>Pet Care</b>
				<ul style="list-style-type: none"> <li>Laboratory Technician / Officer</li> <li>Research Assistant</li> </ul>	<ul style="list-style-type: none"> <li>Pet Product Retailer</li> <li>Pet Shop Support Officer</li> <li>Sales &amp; Marketing Executive</li> </ul>

## UNIVERSITIES FOR AS<sub>c</sub> GRADUATES

AFSN Graduates	BCS Graduates	BIO Graduates	BMS Graduates	ChE Graduates	VeT Graduates
<ul style="list-style-type: none"> <li><b>Singapore</b> NTU, NUS, SMU</li> <li><b>Australia</b> Curtin, Deakin, Flinders, Newcastle, New South Wales, RMIT, Sydney</li> <li><b>United Kingdom</b> King's College, Leeds, Reading, Surrey</li> <li><b>New Zealand</b> Massey, Otago</li> </ul>	<ul style="list-style-type: none"> <li>Discussions are underway to link up with Universities / Colleges that have strong expertise in baking and culinary science.</li> </ul>	<ul style="list-style-type: none"> <li><b>Singapore</b> NTU, NUS</li> <li><b>Australia</b> Australian National, La Trobe, Monash, Melbourne, Murdoch, New South Wales, Sydney</li> <li><b>United Kingdom</b> Birmingham, Griffith, Strathclyde, University College London</li> </ul>	<ul style="list-style-type: none"> <li><b>Singapore</b> NTU, NUS</li> <li><b>Australia</b> New South Wales, Queensland, RMIT, Western Australia</li> <li><b>United Kingdom</b> Birmingham, Manchester</li> </ul>	<ul style="list-style-type: none"> <li><b>Singapore</b> NTU, NUS, SMU</li> <li><b>Australia</b> Adelaide, Curtin, New South Wales, Queensland, RMIT, Technology, Western Australia</li> <li><b>United Kingdom</b> Birmingham, Newcastle, University College London</li> </ul>	<ul style="list-style-type: none"> <li><b>Australia</b> Massey, Melbourne, Murdoch, Queensland, Sydney</li> </ul>

**Note:** The above is by no means an exhaustive list. It only serves to give an indication of the institutions AS<sub>c</sub> graduates are pursuing further studies in.

## CALLING ALL SEC 3 & 4 STUDENTS!

Come explore the wonders of science with us!  
Programmes we have organised include:

- Science Enrichment Workshops
- Course & Career Talks
- Campus & Facility Tours
- Advanced Elective Module (Water Technology)

For more details, log on to <http://www-as.tp.edu.sg/>  
Teachers, do contact our Outreach Officer at [aschotline@tp.edu.sg](mailto:aschotline@tp.edu.sg) to enquire about how your students can participate in our programmes!

**COURSE ENQUIRIES:**  
Tel: 6780 5322  
Email: [aschotline@tp.edu.sg](mailto:aschotline@tp.edu.sg)  
Website: [www-as.tp.edu.sg](http://www-as.tp.edu.sg)

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