

# Pineapple

## \* Graduation Day 2006 \*

At the commencement ceremony held on the 9<sup>th</sup> of July 2006 in the University Cultural Centre, our 5<sup>th</sup> batch of Bachelor of Applied Science graduates and 4<sup>th</sup> batch of Bachelor of Applied Science with Honours graduates were conferred. This time, there was a record high number of first class honours graduates - a total of 5. In addition, there were 4 PhD graduates, Jasinghe Viraj Janakakumara, Molamma P Prabhakaran, Soong Yean Yean and Tay Sok Li and 1 Master of Science graduate, Wong Shin Yee. Congratulations to all and best wishes for your future endeavours.

As of our custom, we had a lunch celebration for the graduates and their family members in the FST suite prior to the commencement ceremony.

We are very pleased that all our graduates either have found employment in the industry and



relevant government organisations; or pursuing further studies. However, the FST family ties would not end with the graduation and we certainly hope to see all again at events organised by our alumni or University, or simply drop by FST whenever you can.



### *Visit by His Excellency Dr. Anton Apriyantono, Minister of Agriculture, Indonesia*



On the 17<sup>th</sup> of November 2006, our long time friend Dr. Anton Apriyantono, Indonesia's current Minister of Agriculture visited Food Science and Technology Programme and other laboratories in the Faculty of Science.

Dr. Apriyantono and his companions were exploring future collaborations between NUS and Indonesian institutes. The first 2 batches of FST Honours graduates had a fond memory of him as the lecturer of the Flavour Science module.

## *Snapshots of the Year*

### **Sentosa Party**

On the 27<sup>th</sup> of May 2006, to coincide with a training course on Food Safety run by our former Programme Director Dr. Philip Barlow, a party was held at Sentosa. We had the pleasure of inviting him to be the guest-of-honour for the party. We had great fun and great time catching up with one another. Hope to see more of you joining us for other events organised by our programme.

### **New Borns**

In January 2006, A/P Stefan Kasapis' wife gave birth to a pretty baby girl, then in October, another pretty girl was born to Dr. David Popovich. In November, Dr. Lena Goh, our PhD graduate gave birth to a handsome boy.

Congratulations to all and may the new born bring joy to you!

### **Wedding Bells**

We would like to wish the following graduates a blissful marriage: Vania Octaviani Selomulyo (2000 batch), Lee Shu Peir (2000 batch), Eric See (1999 batch), Lydia Tan (2002 batch), Tan Ziling (2002 batch) and Eugene Lim (2002 batch).

(Please share your news with us by e-mailing either to Maria at [chmchb@nus.edu.sg](mailto:chmchb@nus.edu.sg) or Chooi Lan at [chmleecl@nus.edu.sg](mailto:chmleecl@nus.edu.sg) or Huey Lee at [chmlewhl@nus.edu.sg](mailto:chmlewhl@nus.edu.sg))

### **Award and Prize Winners**

A big 'Thank You' to all who made contribution to the P. J. Barlow Book Prize Fund in 2005. The first recipient of this award of \$500 was Tan Hui Shan, Grace, a first year student in AY 2005/2006.

Other prize and award winners for 2006 were:

Givaudan Food Excellence Prize -  
Guo Ren

Thong Siek Food Industry Prize -  
Ridwan N. Malaka

SIFST Best Student Award -  
Alvin Loo Eng Kiat

Firmenich Best Honours Student Award -  
Cheng Hsin Hui

Congratulations to all!

### **FST Collaborations with Cadbury Schweppes and Sinomen**

An agreement was signed on the 1<sup>st</sup> of March 2006 between NUS and Cadbury Schweppes Asia Pacific Pte. Ltd. on Knowledge Management in Food Science and Technology. Dr. Nga Been Hen joined FST in October 2006 as a research fellow working on this initiative.

Welcome on board, Dr. Nga!

A Memorandum of Understanding (MOU) was signed on the 22<sup>nd</sup> of March 2006 between the Department of Chemistry, NUS, Sinomen Technology Ltd and the Department of Food Science and Technology, Nanchang University. The MOU will promote research collaborations and education exchange programs for faculty members and students in Food Science and Technology and Applied Chemistry.

## *FST Experience!*

Amazing! That was my first impression when I entered FST 1101 class lectured by Prof. Barlow. Everything was new: new school, new lecturer, new friends, new language medium, etc. The most interesting thing was that my school seemed to switch from boys high school in Jakarta to girls school of FST in NUS. Imagine that in a class of 40 students, there were only 2 guys. Now, in the final year, I am even the only one among 14 girls. Every time I tell this to my friends, they say they want to come to NUS FST. But, I am still wondering why the number of guys is limited. Personally, I think this environment motivates me a lot to perform better and better.

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## *FST Experience! cont'd*

Four years studying around the girls is indeed enjoyable, especially because all my friends are really pleasant. They are very affable. Being girls, they love talking and gossiping as what they sometimes do in the class or lab. But it is fun. It is actually the time to know them better, to share some experiences as well as multi-cultural exchange. Small cohort sometimes enable us to share some food as well. Do not be surprised if food go around the class during lecture.

Another thing that I like in FST is that FST staff is really friendly and keen to help us. The lecturers are also qualified and gracious. They are always around and open for any queries. I would say they are dedicated persons in education. Furthermore, FST always organizes many internal events, such as the annual Chinese New Year Party. Such event is actually a gathering of all FST students from the first to the current batch. Being part of FST is like being part of a new family, 'FST Family'.

Ridwan Natakusuma Malaka  
2003/04 Cohort

### *1st FST Outing --- Kusu Island Reef Walk*

Our very first FST outing was organized by a group of marine conservation volunteers who seek to complement current research activities and increase awareness and understanding of local marine habitats such as coral reefs. They are known as the Blue Water Volunteers (BWV). Cool isn't it?! Daniel Chia, our FST Alumni vice-chairman happened to be one of the members of BWV. They organised reef walks at Kusu

Island for the public; hence the thought of the FST activity came about.

It was spring low tide on 11<sup>th</sup> of September 2006 (Sat) and everyone had to wake up in the wee hours in the morning. As Daniel

said: Time and Tide wait for no man. Meeting time and place was 4.30 am at Marina South Pier. We had to catch a ferry to Kusu island. It was dark and I was so sleepy. By the way, what is spring low tide? When the sun and the moon are in line, we will experience the lowest tide. The early hours in the morning is when we experience the lowest tide and it is a great time for reef walks as we would get to see plenty of sea creatures!

A 45 minute ferry ride was all we need to get to Kusu island. We were divided into 4 groups upon reaching the destination. Daniel was our tour leader. We were asked to put on covered shoes. As usual, before the commencement of practical, we would get a briefing. Daniel said: Walk in line, no touching of any sea creatures and so on..

Goby fish and shrimp are good friends. Both are usually spotted together as the former could see clearly while the latter possesses poor vision. Shrimps are good diggers though, therefore are always in pairs. These were our first encounter. We walked in one line

with Daniel as our 'Mother Goose'. Soon, some of us got 'wild' and we started to walk off trail in search of new creatures.

Seaweeds, sea grasses, sea fans were some of the greens we saw on the reef. Differences between seaweeds and sea grasses are that the latter is fern-like in structure with flower-like pods and is deeply rooted. Sea fans spread out like a fan to receive more sunlight.

Anemones was another creature we spotted. They are similar to jelly fish except that they do not possess tentacles. Clown fish and red egg crab were spotted as well.

We spotted some eggs of moon snails during the walk. Be very careful not to step on them. They are white-shelled with yellow meat and they look yummy. Hermit crab is another common sight. We saw them on the reef as well. Something new which I learnt: Crabs do change their shell at certain period in a year and during this process, they could become very aggressive when disturbed. Hence, beware!

Ghost crabs come out only at night and are 'stung' by light. It simply means that the crab would freeze the moment we shine a light source on it. Other interesting sights we spotted during the reef walk were the blue coral, sponge, cauliflower, soft coral and so on...

Well, that's quite a bit for Auntie Mei Mei who requires quantity and quality sleep. Stay tune for more activities from the FST Alumni Committee..

Chan Mei Mei  
2004 Graduate



## *IUFoST 13th World Congress of Food Science and Technology*



Photo 1: Vidu, Mabel, Yeting and Prof. Zhou during IUFoST 13<sup>th</sup> World Congress of Food Science & Technology “Food is Life”.

The 13th International Union of Food Science and Technology (IUFoST) World Congress, which is the largest international conference in the field of Food Science and Technology was held at the Cité Internationale des Congrès in Nantes, France, from the 17<sup>th</sup> to the 21<sup>st</sup> of September, 2006. The theme for this year’s congress was ‘Food is Life’ – an appropriate premise considering the fact that the objectives of food science and technology are currently being diverted towards the eradication of the extreme polarizations where scarcity of food

would result in hunger and famine, and excessive food consumption would result in obesity and food-related disease.

We were provided with the privilege of presenting posters on our research at this international conference (Mabel – ‘Thermal stability of tea catechins and their epimers in an aqueous system’, Yeting – ‘Glass transition and enthalpy relaxation of sucrose – glucose syrup solid system’, Vidu – ‘Extension of shelf life of fresh coconuts for milk extraction’). Prof. Zhou accompanied us on this excursion where he

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Photo 2: River View of Nantes City

presented at a round table discussion ('Glass transition and enthalpy relaxation of sucrose – glucose syrup solid system') and also gave an invited oral presentation ('Issues and challenges in utilizing natural antioxidants as food ingredients in functional food: a case study of bread).

To begin with, Nantes is a quaint city in western France, which was the hometown of the famous Queen Anne of France (i.e. Anne of Brittany), the wife of Charles VIII and thereafter his successor Louis XII of the 15<sup>th</sup> and 16<sup>th</sup> centuries. Some of the most illustrious monuments and landmarks of Nantes are the Cathedrals of St. Pierre and St. Paul, the museum and native house of the famous French author Jules Verne, the Musée des Beaux Arts (i.e. Arts Museum) and the Loire River which runs across the heart of the Nantes city.

The conference was of a spectacular nature with food scientists and technologists arriving from all corners of the world. With this being our first exposure to the realm of food science and technology at an international level, we made most of the given prospects first of all by making friends with at least one representative from each of the 7 continents of the world! It was motivating to exchange ideas and derive knowledge from connoisseurs who have been practically immersed in this area for almost two decades or more.

Moreover, we had the chance to experience the 'French Paradox', overindulgence of fatty food along with red and white wine! It was apparent from the delectable food that was provided at the congress that the French certainly knew how to be 'à la mode'. We looked forward every day to



Photo 3: Nantes Street



*Photo 4: Places of Interest in Nantes*

the lunch served at the congress simply to see the novel pattern in which it was presented.

We would like to take this opportunity to say 'merci très beaucoup' to our supervisors, Prof. Zhou, Prof. Perera and Prof. Barlow without whom we would not have been granted with this opportunity of coming up with substantial research to be presented in front of international academia and we would also like to extend our warmest gratitude to everyone in FST who were

with us and behind us in every step of our research.

To this day and forever we would carry many warm memories of our adventures at the 13<sup>th</sup> IUFoST World Congress, an experience beyond parallel and we are looking forward to the 14<sup>th</sup> IUFoST World Congress in Shanghai, China in the year 2008. As for Nantes we would like to say 'Voir-vous bientôt'!

Viduranga Y.Waisundara

Photos provided by Liu Yeting

### *Chinese New Year Reunion Dinner*

Calling for all alumni and current students!  
Our annual reunion dinner will be held on the 2nd of March 2007 in the FST suite and LT 20.  
Besides "Yu Sheng" and potluck, we will also vote for the best FST Decal Design.  
Do join us for an evening of fun and catching up!

## Old Hollywood Glam

When I was told by Maria that I had to get a few classmates to come together to organize a graduation party for my class (2003/04 cohort), my first reaction was how that could be possible as my class had always been pretty laid back when it came to such activities. Thankfully, three of them, Meiqi, Luyi and Jinghui gladly volunteered themselves to help with the organizing and the response from the class was overwhelming.

With one common goal in mind, the four of us got together and decided to have a yacht party, to make our class graduation night special and memorable.



On that night itself, there were lots of excitements and many of them turned up dressed according to the theme “Old Hollywood Glam”. Meiqi, who was dressed as a cowboy, was voted the winner for the best dressed.

Throughout the night, there were lots of mingling around and photo taking. Our wonderful emcees, Ridwan and Mabelyn together with the performances put up by our fellow classmates kept us all well-entertained. Samuel, Peixia and Mabelyn sang an English song while Hoang Oanh and Huan Nghiep did a Vietnamese love song. Although none of us could understand the Vietnamese song, we were all captivated by the beautiful voices of Hoang Oanh and Huan Nghiep. Just as we were all enjoying ourselves, time seemed to slip by and soon it was time to bid each other farewell. The night was rounded up with a mini lucky draw.

The “Old Hollywood Glam” night would have been less than perfect if not for my fantastic organizing committee members, fellow classmates, lecturers and staff of FST. I would like to thank Dr. Bosco for his generous contribution to the lucky draw prizes and also express my sincere thanks to everyone who has contributed in making this last and toughest journey (due to the choppy waters) that we took together as a class, the sweetest and most memorable.

Joycelyn Tan Puay San  
Graduate of 2005/06



## *Thai's and Ties!*

In May/June 2006 the FST Programme was pleased to welcome some 16 staff members of a university from Thailand to Singapore for a training course on Food Safety. The 10 day programme was organized by the FST Programme and also Dr. Philip Barlow was invited back to lead the day to day lecturing on the course. He was easily recognized each day by his own special selection of ties!

The leader of the Thailand delegates, Dr. Tosporn Namhong, from the Rajamangala University of Technology said how useful the course had been and the combination of lectures, laboratory practicals and industrial visits had increased her and her colleagues' knowledge in the food safety area greatly and allowed them to understand some of the complex relationships between various topics. In addition to the lectures by Dr. Philip Barlow, inputs were also made by Dr. Ho Shuit Hung from Asia Anti-Aging & Longevity Centre Pet. Ltd. and Carl Baptista, Hans Athaide and our alumnus Isabel Sampson from Origin Exterminators Pte. Ltd. (a local pest management Company).

The social side of the course was not ignored and included a special course dinner, held at the Yunnan Garden Restaurant and hosted by A/P Zhou Weibiao, Director of the FST Programme. A number of FST staff were also able to attend and meet with the delegates.

Dr. Barlow said how pleased he was to be back in Singapore and to meet up with all his past students. A special BBQ was held on Sentosa when some 90+ students and many FST staff came together to share an evening of fun and food.

The course was a great success and might have set the trend for the future whereby short courses make up part of the portfolio of FST. Such courses may be offered during the vacation time when lecture theatres and university accommodation are more likely to be free. Certainly the Thai delegates were keen to come to NUS again in 2007 and were asking already about possible courses on Food Processing and Nutrition.



## *My UK Experience*

Hi all FSTians!

It is an honour for me to have been invited to contribute an article to this issue of FST Alumni Newsletter. Honestly speaking, this is the first time I attempt to write an article – so pardon my lack of journalism skill!

I have been working at Singapore Food Industries (S.F.I.) as a Catering Executive since July 2004. My role in the company has been diverse: I have once run an Army camp cookhouse, once dealt with logistics, once been involved in making business tenders and proposals, once been involved in contract renewals and reviews, and once managed an overseas customer account.

Last year, in April 2006, I had an opportunity to be attached to Daniels Chilled Foods (<http://www.sdaniels.co.uk>), a UK subsidiary of S.F.I., for 6 months. I was stationed at their soup factory in Peterborough, which is 128 kilometres north of London and 64 kilometres northwest of Cambridge.

During the first three months, I was attached to the New Product Development (NPD) Department and the next three to the Marketing Department. I learned a lot over there, not only new skills in developing products that meet current customer demands and then marketing them effectively, but also how different UK market is compared to Singapore market. Over there, the whole consumer attitude towards food is completely different. For example, their recent concerns go towards ethical

food, i.e. organically grown and locally sourced, and also “Fair Trade” products. Ready meals, in chilled or frozen form, have also gotten increasingly popular since eating out costs too much and cooking from scratch is simply not an option for most working people. Having had high contents of calories and fat, ready meals are now partly blamed for the ever-increasing obesity level in the UK. On the other hand, in Singapore, eating out is part of our daily life since it is affordable and practical, thus I think ready meal concept won't work as successfully over here. Same goes with ethical food. I guess our cultural background makes us choose cheaper, good quality food rather than ethical food but at premium price. It is interesting to see how food can go down to a very personal level of preference, unlike any other consumer goods. And the slogan cannot be more true: We Are What We Eat!

In the Marketing Department, I learned about the development of artwork and labels which obey all labelling regulations. We participated in the annual Hampton Court Flower Show and Bakewell Show, where we sponsored the prize for award winners and also set up a booth to showcase and give free samples of our soups. We were also developing a product website: [www.johnsonsjuices.co.uk](http://www.johnsonsjuices.co.uk), now already up and running!

Work aside, I did enjoy myself over there. I saw the season changed from late winter when all the trees were bare, through spring and summer when leaves and colourful flowers flourished, and when the autumn leaves just started to peek out shyly. But the real highlight of my trip was, I twice visited our beloved Prof. Barlow and Jill in Lincoln, their lovely home town! They stay in a very cosy house with a pretty backyard. We chatted and had tea, ate lunch, walked around town, and visited the majestic Lincoln Cathedral where some parts of the Da Vinci Code movie were filmed. Thanks, Prof. Barlow, Jill, and Chris, for such great days!

Tessa Riandini  
Graduate of Year 2003



## *An Exciting Professional Placement Programme at UBC, Vancouver*

In order to fulfil my course requirements, I did an internship in the University of British Columbia from 4<sup>th</sup> Jan. 2006 to 30<sup>th</sup> Apr. 2006. I worked as an academic researcher under Prof. Kim Cheng from Animal Science, Faculty of Land and Food System. Later on I extended my internship and did some laboratory work under Prof. Eunice Li-Chan from Food Science Department. It was a very exciting and enriching experience for me and I found myself enjoy life at U.B.C. and Vancouver very much. I picked up lots of experimental skills and made lifelong friends during my 5-months' stint at U.B.C.. Please allow me to express my sincere thanks to



*Fig 1. Spanish Bank Beach near UBC.*



*Fig 2: The Japanese Garden Nitobe at UBC.*



*Fig 3. Botanical garden at UBC.*



*Fig 4: The legislature building of British Columbia, Victoria Island*



*Fig 5: Queen Elizabeth's park in Vancouver.*



*Fig 6: The Hot Spring resort at Agassiz, B.C.*

NUS, U.B.C., Lee Foundation and our Food Science and Technology Programme for offering me this great opportunity to study and work overseas.

Only 30 minutes from the heart of downtown Vancouver, the University of British Columbia (U.B.C.) holds an international reputation for excellence in advanced research and learning. The spectacular U.B.C. campus is a 'must-see' for any visitor to the city where snowcapped mountains meet the ocean (Fig 1) and breathtaking vistas greet people around every corner (Fig 2).

The University boasts some of the city's best attractions and recreation facilities, including the Museum of Anthropology, the Chan Centre for the Performing Arts, the U.B.C. Botanical Garden and Centre for Plant Research (Fig 3), and endless opportunities to explore forested trails in the adjoining 763-hectare Pacific Spirit Regional Park.

For my research, besides conducting sensory evaluation on campus, I also had loads of opportunities to visit local farms, local markets and provincial government laboratories. I discussed with people working at these places to collect more information on my project which dealt with an ethnic food product - "balut" eggs. So what exactly are these "balut" eggs? Although not available in Singapore, they are a delicacy in SE Asian countries especially the Philippines. To be more specific, "balut" eggs are partially-fertilized duck eggs which contain a half-formed baby duck inside the shell. You might think this is gross, but people from the Philippines believe that "balut" is a healthy and delicious snack and they love it. My research at U.B.C. aimed at comparing the sensory and microbiological quality of "balut" stored at different temperatures before consumption and this has significant impact on the production and marketing practice of this novel product as existing knowledge is very limited.

In U.B.C., I met wonderful people who have gradually become very good friends of mine. I stayed in the Fairview residence and my house mates were from North Canada, Equator and Mexico. As we all came from different cultural backgrounds, we chatted every night

and shared our lives back at home. It was very interesting to know how life is like in South America – a continent I have never been to. We took turns to cook different cuisines and I even had a chance to try the authentic delicious Mexican food.

## *An exciting Professional Placement Programme at UBC, Vancouver cont'd*

Although Canada seems to be a much colder country than Singapore, the weather in Vancouver is pretty mild in winter. Without being frozen, I travelled with my friends to Victoria – the capital city of the province British Columbia (Fig 4), Lynn Valley in North Vancouver and a brewery in Richmond city soon after I arrived in Canada.

Summer in Vancouver is absolutely beautiful. The weather is warm and flowers are in full blossom. If you like tulips, the following scenery at Queen Elizabeth's Park will definitely illustrate my point (Fig 5).

I did not see any snow in the city when I was there. Luckily my local friends brought me to several places located in the east of Great Vancouver. The following is my favourite place where you can enjoy a wonderful view of blue sky, white snow, green mountain and beautiful lake on a sunny day (Fig 6).

I have benefited a lot from my internship at UBC, Vancouver. My views were broadened and my personal growth was enhanced. I like the open and friendly culture in Canada, which enabled me to work hard as well as play hard. I had the chance of meeting international friends from all over the world, such as Europe, Australia and South America. Together, we learnt and enjoyed our life in the foreign country. We keep in touch even after we went back to our own home countries and I believe the friendship formed in UBC will last forever. My Mexican house-mate, Sri Lankan colleague and American friend are all coming to visit me in Singapore later this year. I miss all my friends in UBC and I look

forward to going back to Canada some day.

Tang Qian  
2004/05 Batch



*Fig 7: My best friends and I at the first Old Spaghetti Factory near downtown Vancouver*



## Editor's Say

February 2007 Issue 5

In 2006, the Singapore economy had a spectacular GDP growth of 7.9%. The manufacturing sector in particular had a whopping 11.5% growth, the highest among all sectors. Accompanying the strong GDP growth were some 173,000 new jobs created during the same period.

The food industry in Singapore also posted a significant growth. The latest statistics show that the turnover of the food manufacturing industry is more than \$4.74 billion now. Besides the strong growth of local SMEs, there have also been a number of large multinational food companies either relocating their regional headquarters or R&D centres to Singapore or opening new manufacturing sites here. All of these have or will have translated to more jobs and opportunities for our FST graduates and alumni.

Our FST Programme has certainly gone from strength to strength. In 2006, a collaboration agreement was established with Cadbury Schweppes Asian Pacific Ltd. and a MOU was signed with Sinomen Ltd. and Nanchang University of China. Both have signified the industrial relevance and international reputation of the Programme. Furthermore, in line with the growth of the food industry in Singapore, the freshman intake in 2007 will be increased to 45.

The Department of Chemistry has started preparation for celebrating the 80<sup>th</sup> Anniversary of Chemistry at NUS in the year 2009. As we all know, 2009 is also a special year for FST – she will turn to her first 10 then! I would like to invite all of you to contribute ideas or proposals on how we could best celebrate our 10<sup>th</sup> Anniversary.

Best wishes to all for a happy, healthy and prosperous Year of the Pig!

Dr. ZHOU Weibiao

Director, Food Science and Technology Programme

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