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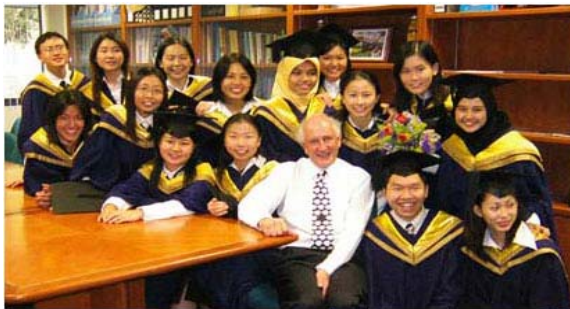
Pineapple

The commencement ceremony was held on 23rd July 2003 at the University Cultural Centre. We witnessed with pride, the graduation of our first batch of Honours students and our second batch of non-honours students. We have our very own two first class honours students, Jorry Dharmawan and Liu Mei Hui, out of the cohort of 17 students. Three of the students, Jorry Dharmawan, Liu Mei Hui and Wong Shin Yee, are staying on for research and one of the students, Liu Mei Hui, was awarded an A* Scholarship.

After the commencement ceremony, we organised an after awards ceremony tea for the students and their parents in an effort to maintain the students commitment and support of the programme.

We are pleased that majority of our graduates have found a job in the industry. Below are their most recent employment records:

For the honours graduates: Poh Leong is now working as a Research and Development Technologist in F & N Foods Pte Ltd, Dewi is working as an Executive Officer in Islamic Religious Council of S'pore (MUIS), Wee Ping is working as a Management Executive in Agri-food & Veterinary Authority, Juli is working as a Food Technologist



in Chop Hup Chong Food Industries Ltd, Kin Har is working as a Scientific Officer in Health Sciences Authority, Joey is working as a Merchandiser in Newco Holdings Pte Ltd, Cheng Wan is a Teacher, Jia Yi is working as a Financial Planner in AIA Insurance Pte Ltd and Kah Ai is working as an Environmental Health Executive at National Environment Agency.

For the non-honours graduates; Daniel is working as Executive Trainee at Asia Pacific Breweries, Lian Ying is working as an Applications Specialist at Degussa Texurant Systems (S) Pte Ltd., Angela Pan is a Nutritionist at New Health Nutraceutical Supplements, Chiew Sia is working as a Laboratory Technician at SGS Testing & Control Services S'pore Pte Ltd, Chee Hoo is working as a Nutritionist at Forever Living, Joyce Tan is working as a Quality Assurance Executive at NTUC FairPrice Co-operative Ltd, Yan Yan is going to be a Teacher, Yee Soon is working as a Management Trainee at Nestle Singapore (PTE) Ltd, Oliver Ting is working as a Production Executive at Malaysia Dairy Industries Pte Ltd and Yin Hui is currently pursuing a media tech course.

Lab reports. New product development. Projects. IA. Lab reports



(again!). Projects (not again!). Honours thesis. Exams. Never ending late nights. Now imagine the exhilaration when all of these ended the moment we completed the final exam paper of our entire undergraduate life! Yet, for the Foodies of Hons Class 02/03, these four unforgettable and rewarding years would definitely not end with a whimper just like that. Instead, it ended with a loud bang, of decibels no less than this rowdy bunch can generate on a typical lab session, as we set off to Melbourne for our graduation tour and industrial visits. Though we were supposed to spend only five days in



* FST TRIP TO OZ ! *



Melbourne, the whole lot of us set off for Australia (which is roughly 16,776 km from Chooi Lan's office ☺) much earlier so that we had more time to explore the city and to spend more time together. In just a week's time, we were



already used to the Aussie way of life!

Days were spent exploring the street markets and parks, sitting by the sidewalks cafes at Queen Victoria Market sipping a latte, eating beef noodles from Swanston Street and driving along the long, winding Great Ocean Road. In an entourage of three rented cars, we spent two days on the road, visiting the Twelve Apostles and enjoying the sun, the sea and the breeze that came with it. We soaked in the spectacular scenery of rolling green plains and little hills dotted with grazing sheep and cows as we drove along the country roads while we made our way back to the



city to meet up with Prof Barlow for the start of our industrial visits. Let the good times roll!!



Visiting Korean Scientist

From the start of the Semester in August for six weeks, Prof Kim Kong-Hwan has been a visiting Professor to the Food Science and Technology Programme in the Department of Chemistry. He has been involved in teaching a block programme to the Honours students and has focused on the areas of supercritical Fluid Extraction and micro-encapsulation techniques for food flavours and other sensitive components of complex food systems. Prof Kim obtained his PhD from the University of Massachusetts, Amherst, USA and is currently a member of the American Institute of Food Technologists, the American Institute of Chemical Engineers, the American Society of Agricultural Engineers and the American Oil Chemists Society. His present full time appointment is as a full professor in the Division of Biotechnology and Nanotechnology at the Ajou University in Korea.

During his stay in the Department he has also had discussions with Department of Pharmacy about possible future research applications. In addition he was invited to address the Singapore Institute of Food Science and Technology where he presented a paper on “ Measurement of Ultrasonic Properties and their applications to Food Systems”.

Whilst working in the Department, Prof Kim had a birthday celebration and the picture shows him with the FST Honours students celebrating the event.



Visiting Professor from Cornell University

The Food Science and Technology Programme was very pleased to welcome Professor Mentreddi Anandha Rao (but Andy to his friends!) from Cornell University as a visiting Professor to the programme during Semester 2 of the 2002/3 academic year.

Professor Rao is an internationally known expert in the area of food rheology. He is an elected Fellow of the Institute of Food Technologists and currently he is Professor of Food Engineering at Cornell University and has special research interest in rheological properties of food and thermal processing of foodstuffs. He is also the editor of the Journal of Food Science.

During his time in the Department, he ran an Honours level course on food rheology and also presented a Departmental Seminar on “ Rheological Behaviour of Acid-Converted Waxy Maize Starch in Water and DMSO” which was attended by staff and students from across the Faculty. Also Prof Rao was invited to address the Institute of Food Science and Technology where he gave a lecture on ‘Viscosity of Starch Dispersion Heated in Excess Water: The Role of Granules’.

Prof Rao and his wife made full use of their stay in Singapore by meeting up with some old students from Cornell who now live and work in Singapore and also visiting Thailand to meet up with colleagues there.

Prof Rao has agreed to co-supervise some of the FST Honours level projects so we shall hope to welcome him back to the department in the not too distant future.



Vinny the Menance - Our Very First FST Baby

When I was first requested to provide little Vincent's photograph in the next Pineapple Publication, I was wondering how I can make this addition more appealing to our readers. After some thoughts, perhaps my breastfeeding experience would be of interest to many as we pledge to provide good food to the public, I would certainly like to provide the best food for my baby – mother's milk. Believe me, my breastfeeding experience was a lot more challenging than I thought it would be.



On the first two days, when I was still in the hospital, Vinny was quite happy with the colostrums he was getting. However when I brought him home from the hospital, he cried a lot more and always seemed to want more milk. I had to feed him almost around the clock - every 1.5 hr and 30 min to 60 min each time. For that I only had 30 to 60 min rest in between. Everyone around me was suggesting that I did not have enough milk. How was that possible considering that I am a healthy person and had received good nutrition all my life? The only support I received was from the parent craft advisor from the hospital whom I only managed to speak to on the phone and never immediately. At least one out of ten people in Singapore and Malaysia believe that modern living has contributed to the inability of mothers to breastfeed their children. I don't believe this

and began to read about breastfeeding in books. I tried to learn all the techniques and identify the problems in relation to breastfeeding. I realised that most failures were due to the mother giving up because of exhaustion and decided to give the baby one or two formulated feedings in between breastfeeding at a very early stage. Introduction of the pacifier also makes things worse. Thank goodness I was aware of these problems early and stubbornly insisted that Vinny should not get the bottle without my permission. Breastfeeding is a very accurate example of the supply and demand theory. The



less one put the baby on the breast, the less milk one would produce. Being a biochemist by training, I hold strongly to my faith where our body will response appropriately to events.

The amount of brainwashing I received on formula feeding made me very depressed and desperate to come back to Singapore (on top of the mosquito bites I was getting) - I went to KL when Vinny was 1 week old. I also had problems with block duct and breast infection which could only be solved by hot compression and Vinny constantly sucking on the breast. Soon enough after 5 weeks I was producing a lot of milk due to Vinny sucking frantically every time I put him on the breast. All I could say now is that I am glad I persevered.



Vinny is now a healthy and happy little boy as you can see in the photographs.

P/S – Vinny is now four months old and still getting breastmilk. I especially would like to thank all for their support and understanding when I returned to work and allowing me to pump milk out for him at appropriate times during the day.

Dr Leong Lai Peng

cheers! *

After a hearty meal at the Eastland Shopping Centre (pardon me, there are nice things here to shop...) we head for the winery – Chandon – where quality sparkling wines are produced. Chandon is located in the world-renowned grape growing region of the Yarra Valley.

Being a typical tourist, we took lots of posed pictures and ran around the vineyard till it's our turn to tour around the winery. As winter is approaching, we could only see dried grapes. Preparations for the next season begin in winter. An amazing fact!



Their vines are spur prune by hand after a “pre-pruner” machine removes the bulk of the previous season’s growth. We were told that an experienced hand-pruner is able to spur pruned about 800 vines a day!

As we walked along the estate, we saw large barrels of grapes juices being left to ferment to produce base wine. Seasonal harvest and different varieties affect the type of wines produce. It was highlighted to us that blending is a crucial part in their creation of sparkling wines and this means the combination of different base wines.

We were brought to a dark room where the blend wines were left to age to produce vintage wines. Gee, there were so many other processes that I can’t elaborate further due to space constrains (though I would really love to!). Well, the best part was that we get to do some wine tasting and from here, we know who the drunkards in our class are..



Simplot Australia was located in Kensington, some distance from The Melbourne City. Mr Alvin Lee, from Food Science Australia, was the host for our Australian Tour and this is our first stop. We had the most interesting tour around the Orchard whereby we sat in a huge crater box and was driven around using a tractor. It was extremely fun! The size of the Orchard was about 3- 4 football fields and it

was an amazing sight. Well, at least for someone who had her first trip overseas

(that’s me!) Oh yes! There was “Sharny” – the dog! She likes us so much that she kept us company throughout the tour. We get to pick and eat fresh delicious apples right off the conveyer belt back in their packing room. All their produce are stored in -8 to -10°C in order to

Provide enough supply during winter season. These special rooms had its atmosphere altered, such as increasing the concentration of carbon dioxide so that produce would not ripen that fast. We were also served with fruit juice that is incredibly refreshing and fresh and we get to taste different variety of apples. Sad to say, I can’t tell much difference between the apples but I enjoyed every tasting sessions.



* an apple a day

At 4.30am on 15th May 2003, 13 individuals fall in front of the Marriott Hotel waiting for our Chief-of-Commander: Prof Barlow. You must have bet that we complained about this unearthly time; sorry to disappoint you, we were in fact jolly excited to visit the wholesale market! Before we started our visit, we have to wear a luminous vest and received a briefing on safety precautions and measures. We were not allowed to jump off the tram at any time.



There were 3 main sections of visit – the fruits section, the seafood section and the flora section.



I saw tons of fruits and vegetables! Our tour guide introduced us to a chirpy young Asian man who is a banana seller. He proudly and interestingly described to us his stall where there are special conditions to store his crates of bananas. He is the 4th generation owner and he started to run the family business as young as eight years old. He told us that this



market operates through relationships – for example, the owner next door could just borrow or take goods without signing any requisition forms or IOU. Basically,

they rely on a simple amazing and judging there, it seems pretty “trust” and I am sure uncleared debts lying



Next we visited the were many huge fishes,



ones I saw back home, lying neatly in a row. I spotted something interesting; there was this churner that contains squid (see inset) and fluid leaking out from it. I haven't got a chance to ask the fisherman as I was already lacking behind the group. What a pity...

We visited the flora section lastly and I fall in love with a cactus. I decided to bare all consequences at the airport for bringing “my love” home. See the inset, there are many beautiful flowers! Guess what flowers the lady is holding?

word - TRUST. It was from the number of stalls unbelievable to rely on that there are some around.

seafood wet market. It was huge! There much bigger than the



to market, to market *

Staying just a street away from QVM, some of us visited this market 6 times in 12 days!! I love to visit QVM! There are so many things to buy and I hate to admit that, like most other women, I love to shop. Besides, getting the necessary goodies to bring home, we had an interesting encounter at the market. We met with Jack Neo and his co-host who were doing their filming for a variety show. They did a short film on us and I can't imagine that all of us get to appear on National TV! If I could have known earlier, I would have put on my Sunday's Best. In case, you are

interested to know the TV program, it's called “WOW WOW WORLD”. Hope you did catch us on TV!

tea with her majesty *

My Vietnam Trip

On 5th October, Jiayi, Annie and I went to Hanoi, Vietnam for the 8th ASEAN Food Conference 2003. This trip to Vietnam was really a good eye-opener for us and was full of fun. We were filled with excitement when we attended the conference. We presented our honours projects: Jiayi presented her work on edible coating; Annie presented her findings on colour development in bread, while I presented my work on optimisation of drying conditions.

For us, this was the first time so many pairs of experienced country. It was also a challenge answers to the least expected field. It is also through this people from different countries, impressed by the friendliness showed us.

In addition, we had our share the ancient capital. We were



statues and temples that they have. Though not as developed as Singapore, we could sense vividly the richness in their culture and the many façade of the lifestyle of the Vietnamese. And also, not to forget the cheap, delicious (or maybe not so hygienic – as our stomachs can testify!) street food, eating on kid's size tables and chairs is really exciting!

Though short, this is definitely one trip which I will never forget.

we presented our work in front of eyes and furthermore, in a foreign to come out with impromptu questions from the experts in our conference that we got to meet especially the locals. We were and kindness that the Vietnamese

of enjoyment through exploring mesmerized by the many historic

Shin Yee

Food Innovation Project

The Food Innovation Project is a group project for level 3 students undertaking Sensory Evaluation & Food Innovation module. It has been our emphasis to provide students the opportunity to refine their skills through practice under realistic constraints. Therefore appropriate companies were approached and asked to collaborate with the students in a realistic new product development exercise.

The module is provided by Dr Leong Lai Peng, A/P Conrad O Perera and A/P Zhou Weibiao. 3 projects were created this year, these were Bak Kwa Croquette, Otah Ball and Bak Kwa love letter. The two Bak Kwa projects were supported by Chop Hup Chong Food Industries Pte Ltd and the Otah project was supported by Lim Luan Seng Food Industries Pte Ltd. The projects were designed to include a physical prototype development, characterization and market research to allow for practical concerns such as reliability and feasibility for commercialization.

A presentation on the findings of each project was held on the 8/11/03 and the company representatives were invited to attend. Each group had approached their project in a unique way and fully utilized their diversified backgrounds and interests for the new product. The companies' personnel were delighted and most impressed with the innovative ideas and efforts contributed with the great details and dept given over the 3 months project time.

Apparently, the Bak Kwa Love letter and Otah Ball are all being considered for commercialization. The two companies are currently planning and preparing for launching these products. We are also glad to announce that the Otah ball group was rewarded a prize of \$1000 cash by Lim Luan Seng Food Industries Pte Ltd.

At the end, through the participation of "real life" study, the incentive is more than a monetary gain for the students and as for the company the scientific findings has enabled them to move knowledgeably toward their objectives and shown to them the capability of the FST students. This can only aid their future job seeking opportunities.

Congratulations to all!

Our Very First Honours Year Poster Presentations

In line with our belief in bringing the students and industry together and help students to be more aware of the job prospects in addition to the Industrial attachment. On the 26th February 2003, our programme organised an Industry Day for prospective employers to meet our honours graduates. Our first Honours graduates presented and discussed their Honours project in the form of posters with people from the industry. About 75 senior people from Industry attended and the students also had copies of their CV available. The outcome was the fixing up of a number of interviews and subsequently two of the students have positions in the companies attending. We felt that this was a good event to help raise the profile of the programme and the individual students and it was good to stand back and see the students give a good account of themselves and the work that they had done. We hope to make this an annual event.



Fortcoming Events

Calling all FST Students and alumni,
How time flies. To mark the beginning of the New Year 2004. We will be holding a buffet gathering at our very own FST processing lab.
This will be a great time for gathering.
Date: 2nd January 2004
Time: 6pm
Venue: Food Processing Lab
Cost: \$12 per person
Please contact Huey Lee (chmlewhl@nus.edu.sg) or Chooi Lan (dbsleecl@nus.edu.sg) by 26th December 2003.

We had the chance to visit our 'host', Food Science Australia (FSA) on the 3rd day of our trip. It was located at the Werribee, about 27 km south-west of Melbourne. There were presentations by few persons, including Alvin from FSA and George from Australian Seafood Connection who was 'indescribable' 😊. We also had the opportunity to visit the whole plant that I thought was almost similar to that of PSB Singapore (now Spring Singapore). On that day, we had our 'special' lunch at FSA with some of the FSA staff. The menu mainly consisted of breads, pastries and fruits, exclusive of rice or noodle that we normally had at FST for our luncheon 😊. Nonetheless, we really want to express our appreciation to FSA, especially to Alvin who had organized this trip for us. THANK YOU!

Being located in Dandenong, around 36 km from Melbourne, IFF Melbourne comprises of the sales office, factory plant as well as the creative laboratory. Before starting the factory tour, we had to 'surrender' all accessories on our bodies to prevent any unwanted items being found in their products. However, we had a great time of visiting the whole plant to see how they manufactured the flavours and fragrances, and to experience the 'odour' of the factory at various sections. While we were there, we were also given a privilege to do sensory tasting of potato chips. Although most of us did not get the answers correct, at least we could have free chips over there 😊. Moreover, the short presentation by the company was also breathtaking despite the fact that some of us had to stand due to lack of

some serious networking sessions *

After leaving IFF, we headed to Phillip Island so that it would be just in time for the sun to set when we reached there. Just 26 km long and 9 km wide, Phillip Island is a short stretch of land just over an hour south-east of Melbourne. We wanted to catch one of Australia's most popular wildlife attractions in the island, the Penguin Parade 😊. As we were

sitting down besides the beach, getting ready with our warm clothing and paying attention to the beach; all of a sudden there was a group of three Little Penguins walking timidly with their typical



'moves' to their burrows. Subsequently, we saw more and more Little Penguins returning ashore after a day's fishing. The 'body shake' of some 'witty' ones was really amusing to the audiences. Once returning to their burrows, we could see the world's smallest penguins from viewing stands and boardwalks built around the burrows. These '33 cm-tall creatures' were singing, playing, shouting and teasing one another while some were mating 😊 (ups!). We ended our trip that night with a great smile after being entertained by those once-called 'Fairy Penguins'.

*
Penguin parade



chairs. After all, the visit to IFF was memorable and it also increased the passion of at least one of us to be a Flavourist (who's that? 😊).

Bonlac Foods Limited is Australia's fourth largest dairy company and a leading producer of quality cheese, butter, milk powder and specialty dairy ingredients. We visited one of its plants located at Darnum, approximately 1.5 hours from Melbourne. During the visit, we were often 'amazed' by how automated and advanced the process control in the company was. We hardly saw any workers there but mostly computerized equipments. We spent almost the whole day in the plant by attending slide presentation about the company as well as visiting the huge 270-hectare factory plant.



Although we were not allowed to take the pictures of the plant, one of us managed to capture it. This actually shows how 'skillful' FST students are 😊. On the whole, the visit to Bonlac was really enriching and informative.

Shanghai

Come May 7, 2003! After months of preparation, our one and only FST Graduation Dinner and Dance 2003 finally arrived at the OCBC Building. Breathtaking views of the Singapore River and the romancing lights of the Esplanade and the Fullerton Hotel.

The sparkling night began with a performance by the Miss Pineapple 2003 group. Mr Tee Chee Hoo (class president) and the organising committee presented the Miss Pineapple 2003 award. The night was filled with music and dancing, with many couples dancing to the rhythm of the night.

Opting out of the traditional graduation dinner, we chose a sumptuous spread of food and a per-table setting. The dinner had to be a must say, spiced up by a slide show of the three wonderful years we spent at FST. Games and lucky draws (plus a raffle) kept our spirits high. Mr Liu Yeting and Miss Vania presented the Miss Pineapple 2003 award. The night was filled with group photo-taking and cheering, with spirits soaring even higher. What a night, to be remembered.

The days of auld lang syne. FST memories were missed!
Emmeline Seah



arrived. Themed “Shanghai Night”, the event was held at the OCBC Executives’ Club, located on the 33rd story of the
ton Hotel gave our theme the extra “Oomph!” What a superb place to be on our special Night!



speeches from A/P Conrad Perera,
representative) and Mr Daniel Chia
chairperson). Following a certificate
a cheeky skit performed by the
1930s Shanghai night, the
theme songs complete with gangsters
was undoubtedly the highlight event
Chinese or Western set cuisine, we
international buffet in a cosy 4-pax-

Shangha



presentation down the memory lane
had spent in the Programme.
free flow of beer) filled our after-
high. Best dressed awards went to
Octavani, who were crowned Mr
respectively. Then came the finale: a
session that saw our emotions
what a class! It was a definitely a night
Class of 2000, you’ll be dearly

Editor's Say

December 2003 Issue 2

I am very pleased to be writing this editorial for the second edition of the "Pineapple". First of all, congratulations to our new batch of graduates and I wish you all the best for the future. It is good to hear that even in these difficult economic times, many of the FST graduates have secured good and interesting jobs and on their way to high profile positions.

The FST Programme continues to grow and the new academic year saw 40 students and we look forward early in the new year to at least 2 Ph.D. awards.

FST, now being 4.5 years old, has really begun to establish itself as part of the Faculty of Science portfolio. It is always likely to remain a small integrated science programme but definitely a boutique specialist programme that remains the only degree qualification in the food area in Singapore – this makes you unique, so capitalize on this for your future career development.

As the Programme has grown, we are currently looking for two new members of staff. A position has already been offered and we await confirmation of acceptance. So look out for new faces next year. The M.Sc. in Food and Beverage Science is still under discussion and more about that in the next "Pineapple".

As Hari Raya Puasa, Christmas season and the Lunar New Year approach, I wish you all the best for the coming seasons.

Best regards.

Dr PHILIP J BARLOW

Director

Food Science and Technology Programme

EDITOR

Food Science & Technology Programme

c/o Department of Chemistry

National University of Singapore

S3 Level 6 Science Drive 4

Singapore 117543

Tel: +65-6874 8990

Fax: +65-67757895

Webpage: <http://www.fst.nus.edu.sg>

Special Thanks to Mr Wong Shih Peng for designing the FST Alumni Logo.

First Day at Work

Hi Friends!

For those who have recently left our great FST family, I guess you will immediately get the picture...and for those who will soon be on the job market..hehe..please don't get scared!

First week at work!! Well, an experience we all have to go through whether we like it or not! Actually, for those who have given it a first try already, I am very sure that many of you have felt totally overwhelmed by so many things happening at the same time! Until that 'first week', I thought that after NUS exams, I could surely face it all. but well, my beginnings as a product specialist taught me that I was wrong about exams! And if there is precisely one thing that my boss actually taught me is that during university time, we only have exams at the end of the semester, whereas in real working life, we have exams everyday!! And I can swear that it's true!

Okie let me tell you the reasons why huhh! To begin, for those who might wonder whether we can do a sales job despite the fact that we have no academic training in that field let me tell you that it is possible! Whether you will succeed or not depends on your drive, personality, commitment and stamina. But, to me, the greatest challenges that I encountered were to build my product knowledge, develop business skills, and learn how the business is actually run! Indeed, so many things to learn at a time and in such a short time! Working for a small company, there was no time for long training sessions and I was expected to start performing soon after I joined the company. Sometimes, I had this funny feeling in front of my customers, still not very comfortable with the new role I was playing in the society!

The first few days opened my eyes on several aspects of the sales job, and let me realize how skillful you need to be so as to leave a professional impression on your customer and specially win the latter's trust in you and your product And my dear friends, for those who are foreigners like me, well. let me share with you that my biggest nightmare was to remember my customers' names !!! Yet again, everything is possible if you put the best of yourself. It's been almost a month that I have started this job and I can tell that with sustained motivation and perseverance, we can all perform really well in our job. I wish my fellow friends who have just started work all the best in the career path they have chosen. May we all be happy with what we have chosen to do, since it is in fact what matters most after all!

Isabel Sampson

