2014 APCBEES SHANGHAI CONFERENCES SCHEDULE

2014 International Conference on Food Security and Nutrition (ICFSN 2014)
2014 International Conference on Biological and Chemical Sciences (ICBCS 2014)
2014 International Conference on Civil and Urban Engineering (ICCUE 2014)
2014 1st Journal Conference on Bioscience, Biochemistry and Bioinformatics (JCBBB 2014 1st)

March 29-30, 2014

Shanghai

Golden River-View Hotel

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2014 APCBEES SHANGHAI CONFERENCES INTRODUCTION

Welcome to CBEES 2014 conferences in SHANGHAI. The objective of the SHANGHAI conferences are to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Food Security and Nutrition, Biological and Chemical Sciences, Civil and Urban Engineering.

2014 International Conference on Food Security and Nutrition (ICFSN 2014)

- **The Publication and Index Information: All papers of ICFSN 2014 will be published in the Volume of Journal (IPCBEE, ISSN: 2010-4618), and all papers will be included in the Engineering & Technology Digital Library, and indexed by Ei Geobase(Elsevier), CABI, Ulrich's Periodicals Directory, EBSCO, CNKI(中国知网), WorldCat, Google Scholar, Cross ref and sent to be reviewed by Compendex and ISI Proceedings.**
- **Conference Website and Email: http://www.icfsn.org/;icfsn@cbees.net**

2014 International Conference on Biological and Chemical Sciences (ICBCS 2014)

- **The Publication and Index Information: All ICBCS 2014 papers will be published in the International Journal of Chemical Engineering and Applications (IJCEA, ISSN:2010-0221), and all papers will be included in the Engineering & Technology Digital Library, and indexed by EBSCO, WorldCat, Google Scholar, Cross ref, ProQuest , CABI and sent to be reviewed by EI Compendex and ISI Proceedings.**
- **Conference Website and Email: http://www.icbcs.net/; icbcs@cbees.net**

2014 International Conference on Civil and Urban Engineering (ICCUE 2014)

- **The Publication and Index Information: All ICCUE 2014 papers will be published in the International Journal of Engineering and Technology (IJET, ISSN:1793-8236), and all papers will be included in the Engineering & Technology Digital Library, and indexed by Google Scholar, Ulrich Periodicals Directory, Crossref, ProQuest and sent to be reviewed by EI Compendex and ISI Proceedings.**
- **Conference Website and Email:** http://www.iccue.org/;iccue@cbees.net

2014 1st Journal Conference on Bioscience, Biochemistry and Bioinformatics (JCBBB 2014 1st)

- **The Publication and Index Information: All the registered papers will be published into International Journal of Bioscience, Biochemistry and Bioinformatics (IJBBB, ISSN: 2010-3638, available at: http://www.ijbbb.org/list-6-1.html) by IACSIT Publishing, and distributed at the conference. The journal will be indexed by DOAJ, Electronic Journals Library, Chemical Abstracts Services(CAS), Google Scholar, Crossref, and Engineering & Technology Digital Library.**
- **Conference Website and Email: http://www.ijbbb.org/jcbbb/1st/index.htm; jcbbb01@stpress.net**

Instructions for Oral Presentations

◆Devices Provided by the Conference Organizer:

Laptops (with MS-Office & Adobe Reader)
Projectors & Screen
Laser Sticks

◆Materials Provided by the Presenters:

PowerPoint or PDF files (Files shall be copied to the Conference Computer at the beginning of each Session)

Duration of each Presentation (Tentatively):

Regular Oral Session: about 10 Minutes of Presentation 2 Minutes of Q&A

Keynote Speech: One Hour of Presentation 5 Minutes of Q&A

Schedule for Conferences

March 29, 2014 Saturday

Golden River-View Hotel

10: 00 – 12: 30 13: 30 – 17: 00	Arrival and Registration

Note: (1) You can also register at any time during the conference.

(2) The organizer doesn't provide accommodation, and we suggest you make an early reservation.

March 30, 2014 Sunday

Golden River-View Hotel

Conference Name	**Time**		**Place**
Opening Remark	9:10am–9:30am		四楼郁金香厅(on the 4th floor)
Keynote Speech I	9:30am–10:30am		四楼郁金香厅(on the 4th floor)
Coffee & Break	10:30am–10:50am		
Keynote Speech II	10:50am–11:50am		四楼郁金香厅(on the 4th floor)
Lunch	12:00–13:30		一楼蒂凡妮西餐厅(on the 1st floor)
ICFSN 2014 & JCBBB 2014 1st	Session 1	13:30 – 15:40	四楼郁金香厅(on the 4th floor)
ICCUE 2014& ICBCS 2014	Session 2		四楼牡丹厅(on the 4th floor)
Coffee & Break	15:40–15:50		
ICFSN 2014	Session 3	15:50– 18:00	四楼郁金香厅(on the 4th floor)
ICCUE 2014	Session 4		四楼牡丹厅(on the 4th floor)
Dinner	19:00		二楼海陆坊大厅(on the 2nd floor)

One Excellent Paper will be selected from each oral session and the news will be uploaded on the internet after conference. The Certificate and the gift for Excellent Papers will be awarded at the end of each session on March 30, 2014.

The Detailed Schedule for March 30

Morning, March 30, 2014(Sunday)

Venue: 郁金香厅

09:10-09:30am Opening Remarks	Zaid Saleh  Department of Chemical and Materials Engineering, the University of Auckland New Zealand
09:30-10:30am Keynote Speaker I	Prof. Keimei Oh  Department of Biotechnology, Akita Prefectural University, Japan Topic: "Specific Inhibitors of Jasmonates Biosynthesis: Molecular Design, SAR and Inhibition Mechanism"
10:30–10:50am Take Photo& Coffee Break	
10:50 – 11:50 Keynote Speaker II	Prof. Zaid Saleh  Department of Chemical and Materials Engineering, the University of Auckland New Zealand Topic: "Novel Enabling Technologies to Recover Health Beneficial Ingredients from Horticultural Waste"

12:00 – 13:30 一楼蒂凡妮西餐厅	**Lunch**

◆Warm Prompt

Please arrive on time at conference Room before 13:20 to copy your PPT and prepare your presentation.

Thank you for your cooperation!

Afternoon, March 30, 2014 (Sunday)

SESSION – 1 (ICFSN 2014& JCBBB 2014 1st)
Venue: 郁金香厅
Session Chair: **Prof. John David**
Time: 13:30 – 15:40

CB049	Computational Fluid Dynamic Analysis of Coronary Artery Stenting **Feng Gao**, Gang Li, Rui Hu, and Hiroshi Okada Tokyo University of Science *Abstract*—Coronary artery disease is the most prevalent form of cardiovascular disease and is the largest subset of this mortality. Stent implantation becomes a common interventional procedure for treatment of coronary artery disease. In this study, fluid dynamics factors in patient specific three dimensional coronary artery models before and after stenting were studied. The three dimensional models of the coronary artery were constructed from CT image of the patient. Commercial software Adina was used for computational fluid dynamics simulation. The wall shear stress and blood velocity were greater at the region of stenosis before stenting. The fluid dynamics values have come back near to normal values in the coronary artery model fitted with stent. The technique can be employed to estimate the relevant quantities and to optimize the design of intravascular stents.
CB050	In Search of Autism Biomarkers: Possible Autism Bio-Markers Discovery at Autism Research and Treatment Center, King Saud University, KSA **Dost M Halepoto** and Laila Y. Al-Ayadhi Autism Research Center (99), King Saud University, Riyadh, KSA *Abstract*—Autism is a neurodevelopmental disorder, currently affecting as many as 1 out of 91 individuals in the United States; and Saudi Arabia is no exception. Autism is characterized by impairments in social interaction, difficulty with communication, and restrictive and repetitive behaviors. Although there is no known unique cause of autism, there is growing evidence that autism can be caused by a variety of factors, however its exact pathophysiology is unknown. The use of potential biomarkers that point to specific mechanism of autism disorder will help to diagnosis and tailor treatment or prevention strategies for autism rather than solely to a symptom category. The aim of this article is to provide an overview of the various potential autism biomarkers reported in literature for Saudi autistic children, particularly at Autism research and treatment center, King Saud University, KSA and consider the future development of this area of research.
CB051	Interference of Honey with Protein's Intrinsic Fluorescence and Honey-Induced Protein Stabilization Wong Yin How and **Saad Tayyab** University of Malaya

	Abstract—Presence of high sugar content in honey has rendered it to be a suitable subject in protein stabilization studies. However, presence of other components such as flavonoids and polyphenolic compounds in honey has shown interference with protein's intrinsic fluorescence. Titration of a model protein, bovine serum albumin (BSA) with increasing honey concentrations produced gradual quenching in protein's intrinsic fluorescence, being completely quenched in the presence of 5% (w/v) honey. Use of higher protein concentration did not revert this effect. Therefore, fluorescence spectral probe cannot be used in protein stabilization studies in the presence of honey. Interestingly, honey did not interfere with the far-UV CD spectral signal of the protein. Hence, CD spectral signal at 222 nm was used to study protein denaturation / stabilization in the presence of honey. The two-step, three-state transition, obtained in urea denaturation studies of BSA became single-step, two-state transition and the transition curve was shifted towards higher urea concentrations in the presence of 10% (w/v) honey. Both these results suggested honey-induced protein stabilization. A comparison of the urea denaturation results of BSA, obtained in the presence of honey with those obtained with simulated honey sugar cocktail (SHSC) suggested greater protein stabilizing potential of honey than SHSC.
N0003	Evaluation of the Content of Cd and Pb in the Extruded Products with the Addition of Broad Bean Post-Fermentation Meal and Herbs **HALINA STANIEK**, Ewelina Król, Zbigniew Krejpcio, Małgorzata Gummienna and Małgorzta Lasik Poznan University of Life Sciences *Abstract*—The aim of this study was to evaluate the content of Cd and Pb in the novel food products (NFPs) obtained by extrusion of maize corn with the addition of broad bean post-fermentation meal and herbs, such as: control based on ground maize (C) and with the addition of 25% broad bean post-fermentation meal (B), with the addition of broad bean post-fermentation meal and lovage herb (B+L), as well as with the addition of broad bean post-fermentation meal and thyme herb (B+T). The content of Cd and Pb were determined after dry ashing of samples by the GF-AAS method. The content of Cd and Pb were relatively low and did not exceed the permitted levels specified by the EU Commission Regulation. The highest content of Cd was found in the extruded product (B+L): 0.0179±0.0009 mg/kg, lower in the extruded product (B) 0.0168±0.0014 mg/kg and (B+T) 0.0146±0.0002 mg/kg, while the lowest in the control extruded product (C) (0.0061±0.0010 mg/kg). The content of Pb ranged from 0.020±0.002 mg/kg in the extruded product (B), to 0.042±0.001 mg/kg in the extruded product (B+T), while the levels of this metal in the extruded products control (C) and (B+L) were: 0.039±0.001 mg/kg and 0.024±0.004 mg/kg, respectively.
N0005	Is Food Insecurity Associated with Weight Status in Saudi Women? **Hala Hazam Al Otaibi** King Faisal University, Saudi Arabia *Abstract*—Food insecurity is positively associated with overweight and obesity especially among women. The objectives of our study were to measure the prevalence of food insecurity among low-income women, and to assess the association between food insecurity and weight status, and socioeconomic status. Across-sectional study, conducted in Al-Ahsa among 147 low-income women were interviewed to collect data about socioeconomic and anthropometric measurement and indicator. Fifty seven percent of the women reported as food insecure and majority of them were married, unemployed and housewife. Mean BMI was 26.5(kg/m2) for all women which is in overweight category with significant difference between groups. The multinomial regression models shows overweight women were significantly more likely to be

	housewife (odds ratio= 1.43, *P* = 0.05) and food insecure (odds ratio=2.19, *P* = 0.02), and no significant association with obesity. This study demonstrated that problem of food insecurity is present in Saudi Arabia and associated with weight status and some socioeconomic factor, more effort should be directed to decreasing the level of food insecurity in the community.
N0006	Bovine Beta Casein Variants: Implications to Human Nutrition and Health **ANDREW CLARKE** A2 CORPORATION, Auckland, NEW ZEALAND *Abstract*—Milk is a whole-food with numerous nutritive components; especially for infants, as milk/milk-based formulas are the only source of nutrition. However, casein free diet is recommended for infants with immunological sensitivities; yet the reason is unknown. It is hard to eliminate milk from diet of sensitive individuals. Several variants of β-casein (~25-30% of cows' milk-proteins) are genetically determined; A1, A2, A3, B, C etc. A2 is the original form of bovine β-casein and is similar to other β-casein in mammals. Additionally, A1 and A2 differ by a single amino acid, resulting in differential secondary structure and enzymatic hydrolysis, i.e. A1 but not A2 β-casein liberates the heptapeptide β-casomorphin-7 (YPFPGPL; BCM7), which acts ~morphine, and is implicated in digestive, immune and brain development changes. Biochemical reports show excess BCM7 in blood and urine samples of patients with neurological defects. Additionally, strong correlation between consumption of BCM7 containing A1 milk and incidences of type-1 diabetes mellitus, autoimmune and cardiovascular diseases is also reported. Anecdotal evidence suggests symptomatic relief in patients with neurological, gastric and immunological problems, after consuming A2 β-casein containing milk. Hence, completely eliminating milk can be avoided by consuming milk containing A2 β-casein, especially for infants' growth and development.
N0008	The Safety of Food Supplemented in Iron with Sprouted in Abiotic Stress Legumes Seeds - Heavy Metal Pollution Magdalena Zielińska-Dawidziak, Dorota Piasecka-Kwiatkowska, **Ewelina Król**, Halina Staniek and Zbigniew Krejpcio Poznan University of Life Sciences *Abstract*—The objective of presented experiment was to examine how intense is the accumulation of metals contaminating culture media (lead, cadmium and chromium) from concentrated solutions of Fe^{2+}. Sprouting lupine seeds tolerate the presence in the medium 25 mM of Fe^{2+}, 25 mM Pb^{2+} and 35 mM Cr^{3+}. The tolerance for Cd^{2+} is very low (below 2.5 mM). The high overexpression of plant ferritin is observed in sprouted seeds, during their growth in the concentrated solutions of Fe^{2+} (20 mM). The obtained total iron content was ~975 mg/100 g of their dry matter. After the introduction of 1 mM Pb^{2+} ions into the medium, the difference in the iron content was not observed, but the content of lead increased 130-fold. The introduction of 5 mM Cr^{3+} into the medium resulted in almost 50-fold increase of its content and more than 45% decrease in iron content. Industrial production of bioactive food enriched in ferritin-iron from sprouted legumes seeds requires the use of solutions with a high chemical purity to prevent accumulation in plants other toxic metals.
N0014	Precipitation of Aluminum in the Digestion Solution of Fried Bread Sticks by Mixed with Drinks: A Quantitative Analysis **Zhong Wensi**, Ren Ting and Zhao Lijiao Beijing University of Technology, China *Abstract*—Excessive exposure to aluminum (Al) can result in some serious health risks. Diet is considered

	to be a main source of oral Al intake. Chinese fried bread sticks (FBS), a popular breakfast food in China, usually contain relatively high level of Al because of the use of Al-containing food additives in its processing. In this work, the Al level was determined in the FBS samples purchased from breakfast dealer in China. The precipitation of Al in the digestion solution of FBS mixed with various beverages was also investigated. The determination was performed by high-resolution continuum source atomic absorption spectrometry (HRCS-AAS). The methods used for sample preparation, digestion and quantification were established, generating satisfactory analytical precisions (represented by relative standard deviations ranging from 1.7% to 4.3%) and recoveries (98.7% to 103.0%). Precipitations were observed in the mixtures of the FBS digestion solution with coffee, herbal tea and jasmine tea, in which the amount of precipitation in the mixture with coffee was much more than the others. The results indicated that Al levels were higher than 1000 mg/kg in the FBS digestion solution, while was significantly reduced to 168 mg/kg in the filtrate of the mixture with coffee. It was speculated that coffee reduced the Al contents in the FBS digestion solution due to the effect of precipitation. The quantitative method established in this work lays a foundation for preventing Al toxicity in human from diet and will help establish more healthy style of food combination for the traditional Chinese food.
N0019	Food Analysis to Check Quality, Safety and Authenticity by Full-Automated ^{1}H-NMR **Markus Link**, Manfred Spraul, Hartmut Schaefer, Fang Fang, Birk Schuetz Bruker BioSpin GmbH, Germany *Abstract*—Full-automated high resolution ^{1}H-NMR spectroscopy offers unique screening capabilities for food quality and safety by combining non-targeted and targeted screening in one analysis (15 - 20 minutes from acquisition to report). Full-automated high resolution ^{1}H-NMR (400 MHz) has found its way into the quality control of food and beverages over the last years. NMR reproducibility allows statistical investigations e.g. for detection of variety, mixing of varieties, geographical origin and adulterations, where smallest changes of many ingredients at the same time must be recorded. The non-targeted approach to the data allows detecting even unknown deviations, if they are visible in the ^{1}H-NMR spectra of e.g. fruit juice, wine, edible oils or honey. The same data acqui3) red in high throughput mode are also subjected to quantification of multiple compounds. Reproducibility and transferability of the solutions shown are user-, instrument- and laboratory-independent. The method has been proven on fruit juices and wine, where so far unknown frauds could be detected. In addition conventional targeted parameters are obtained in the same analysis. This technology has additionally the advantage that NMR is completely quantitative and concentration calibration only has to be done once for all compounds.
N0021	Detecting Bovine Tuberculosis (bTB) at an Exporter Slaughterhouse: Improving Food Security and Preserving Sovereignty **Jose Amoril**, Ervaldo Sena and Laerte Baldani Ministry of Agriculture, Livestock and Food Supply, Brasil *Abstract*—Bovine tuberculosis (bTB) persists as a serious public health problem in a world where food security is decisive as a global issue. We detected five bTB suspect carcasses during routine meat inspection procedures at an exporter Brazilian abattoir located in the State of Goias, Central-Western part of the country. We collected samples and sent them to be processed by a quantitative polymerase chain reaction (qPCR) at the laboratory of Molecular Biology of the Food Research Center (CPA) of Goias Federal University, Goiania, and by histopathology and Ziehl-Neelsen staining (ZNS) at Lapavet - Laboratory of Veterinary Pathology, Santo Andre, to confirm the suspicion. After laboratory processing, all five samples

	were positive to bTB and in two of them ZNS detected acid-alcohol resistant bacillus (BAAR). We conclude that laboratory confirmation of bTB is very important and that food security will not work properly without food safety.

Afternoon, March 30, 2014 (Sunday)

SESSION – 2 (ICCUE 2014&ICBCS 2014)
Venue: 牡丹厅
Session Chair: **Prof. Keimei Oh**
Time: 13:30 – 15:40

U0015	Time-Series Data Mining in Transportation: A Case Study on Singapore Public Train Commuter Travel Patterns **Roy Ka-Wei Lee** and Tin Seong Kam Singapore Management University *Abstract*—The adoption of smart cards technologies and automated data collection systems (ADCS) in transportation domain had provided public transport planners opportunities to amass a huge and continuously increasing amount of time-series data about the behaviors and travel patterns of commuters. However the explosive growth of temporal related databases has far outpaced the transport planners' ability to interpret these data using conventional statistical techniques, creating an urgent need for new techniques to support the analyst in transforming the data into actionable information and knowledge. This research study thus explores and discusses the potential use of time-series data mining, a relatively new framework by integrating conventional time-series analysis and data mining techniques, to discover actionable insights and knowledge from the transportation temporal data. A case study on the Singapore public train transit will also be used to demonstrate the time-series data-mining framework and methodology.
U0022	Modeling Migration of Cs-137 in Sewer System of Fukushima City Using Model for Radionuclide Migration in Urban Environment and Drainage System (MUD) **Mochamad Adhiraga Pratama**, Minoru Yoneda, Yosuke Yamashiki, Yoko Shimada, Yasuto Matsui *Abstract*—Following Fukushima Daiichi Nuclear Power Plant accident, Cs-137 has entered sewer system of Fukushima City which was confirmed by detection of the radionuclide in dewatered sludge of waste water treatment plant (WWTP). Consequently, the sludge could not be transported to landfill facility due to radioactive content. Conducting simulation on migration of Cs-137 from urban area into WWTP becomes the objective of this study. MUD, a compartment model consisted of urban and WWTP sub model was used in this study. Migration process is simulated based on natural process and decontamination activities. Value of the parameters used in this study are combination between default general value and site specific value. The result of the model showed an agreement with observed data with 85% of the data in range of 10-90 percentiles of observed data. Value of R^2 between modeled and observed data about 0.84 shows the model could explain the seasonal variation occurred in real condition.
U0003	Changing Architectures and Evolving Urbanism in Modern Japanese Urban Environment **Raffaele Pernice** XJTLU - Xi'an Jiaotong Liverpool University, Department of Urban Planning and Design

	Abstract—The paper introduces some broad considerations on the relation between the process of urban growth and architectural development in modern Japan, which unfolded since the middle of the 20th century and heavily relied on new architectural ideas and models, and the progress of building technologies and infrastructure development staged during the year of rapid economic growth (1950s-1960s). It investigates how the urban environment which resulted was shaped according to the social, historical and cultural context of the country at the time, and was linked to some fundamental ideas derived from Western urban and architectural theories. The fragmentation of the Japanese cites, which entered modernity earlier than other East Asian countries and witnessed first-hand the phase of surge and criticism of Modernism, have been influenced by the formation of a large extension of interconnected conurbations forming an intricate and dense urban structure, the so-called Tokaido Megalopolis, a continuous and integrated urban corridor stretching from Tokyo region to Fukuoka city.
U0010	Broadband Dielectric Measurement Methods for Soft Geomaterials: Coaxial Transmission Line Cell and Open-ended Coaxial Probe **Z. Chen**, M. Schwing, J. Karlovšek, N. Wagner, and A. Scheuermann The University of Queensland *Abstract*—Broadband dielectric measurement methods based on vector network analyzer coupled with coaxial transmission line cell (CC) and open-ended coaxial probe (OC) are simply reviewed, by which the dielectric behaviors in the frequency range of 1 MHz to 3 GHz of two practical geomaterials are investigated. Kaolin after modified compaction with different water contents is measured by using CC. The results are consistent with previous study on standardized compacted kaolin and suggest that the dielectric properties at frequencies below 100 MHz are not only a function of water content but also functions of other soil state parameters including dry density. The hydration process of a commercial grout is monitored in real time by using OC. It is found that the time dependent dielectric properties can accurately reveal the different stages of the hydration process. These measurement results demonstrate the practicability of the introduced methods in determining dielectric properties of soft geomaterials.
U0011	The Causes which Influence the Change of Spatial Development Pattern in Taipei Metropolitan Area **Kuo-Cheng Hsu**, Tsung-Yu Lai, and Chin-Han Lee Department of Urban Affairs & Environment Planning, Chinese Culture University, Taipei, Taiwan *Abstract*—Taipei metropolitan area has taken on a frog-leap and scattered landscape structure during the recent twenty years. Therefore, this study shall establish an evaluation system about the factors influencing the spatial development pattern in metropolitan area, through fuzzy deliph method to screen out possible 17 factors that influence the spatial development pattern of Taipei metropolitan area, and furthermore through multiple regression model to confirm 7 factors which have obvious significance. Among the 7 factors, some have positive impacts on the spatial sprawl trend, such as change rate of average housing price, growth rate of acreage in non-metropolitan land change cases deliberated by local government, distance from the development centre of the metropolitan area, quantity of railway stations, growth rate of the quantity of expressway or motorway interchanges, growth rate of the quantity of universities and colleges; but quantity of MRT stations has negative impact on the spatial sprawl trend.
B0003	Influence of Temperature on Gamma-Oryzanol Stability of Edible Rice Bran Oil during Heating

Anakhaorn Srisaipet
Maejo University

Abstract—Rice bran oil (RBO) presents a large amount of nutraceutical compounds such as gamma-oryzanol, a complex mixture of ferulate esters with sterol. It shows high ability to reduce cholesterol absorption and inhibition oxidation reaction. This research evaluates the stability of γ-oryzanol present in refined RBO by heating the oil under different temperatures. From the data, the concentration of γ-oryzanol are slightly changing at temperature of the oil higher than 120 °c for isopropanol, butanol and ethyl acetate as dissolve solvent. While hexane showed balanced of γ-oryzanol trend in all of studying temperature which is affected by the interference of the oil matrix. Thus isopropanol had been suggested for accuracy solvent for γ-oryzanol determination. Further, we found that that the acid value of RBO depends on temperature of heated oil and γ-oryzanol content.

B0004

Pore Wetting and Its Effect on Breakthrough Pressure in Water-Wet and Oil-Wet Pores

Xingxun LI, Xianfeng FAN
The University of Edinburgh

Abstract—Pore wetting plays an important role on enhanced oil recovery because of its effects on fluid saturation, flow behavior and displacement breakthrough pressure of reservoir fluids in porous medium. This paper aims towards measuring contact angles of alcohol aqueous solutions and breakthrough pressures required for air displacing alcohol aqueous solutions in a single micro-size water-wet pore and oil-wet pore. The liquids used are methanol, ethanol, 1-propanol aqueous solutions which could represent the fundamental components of surfactant solutions used in surfactant flooding process. The pores used are silica pores and PMMA pores, which simulate water-wet pores and oil-wet pores in the oil reservoirs. Our results indicate that the contact angle of alcohol aqueous solutions in a silica pore and PMMA pore decreases when the concentration of alcohol increases before reaching CMC. The contact angle decreases more dramatically with the alcohol concentration in an oil-wet pore than in a water-wet pore. The breakthrough pressure increases linearly with the surface tension in the water-wet pore. However, in the oil-wet pore, the breakthrough pressure stops increasing with surface tension when the surface tension is larger than around 35 mN/m.

B0005

DNA Damaging Potential of Single-Walled Carbon Nanotubes Via Reactive Oxygen Species Generation in Human Liver Cancer Cells

Saud Alarifi and Ali Daoud
KING SAUD UNIVERSITY

Abstract—Carbon nanotubes are extensively used in various areas including drug delivery, nanomedicine, biosensors and electronics. The current study designed to explore the DNA damage and cytotoxicity due to single-walled carbon nanotubes (SWCNTs) on human liver cancer cells (HepG2). Cytotoxicity assay showed the SWCNTs induce a significant cell death in a dose and time dependent manner. However, SWCNTs produced significant intracellular reactive oxygen species (ROS) generation and elevated lipid peroxidation, catalase and superoxide dismutase in the HepG2 cells. SWCNTs also induced significant decrease in GSH and the generation in caspase-3 activity in HepG2 cells. DNA fragmentation analysis using the alkaline single cell gel electrophoresis showed that the SWCNTs cause genotoxicity in a concentration and time dependent manner. Therefore the study points towards the capability of the SWCNTs to induce oxidative stress resulting apoptosis and genomic instability. This study warrants more careful assessment of SWCNTs before their industrial applications.

B0013	Dried Siam Weed (Chromolaena odorata) as Rice Weevils' (Sitophilus oryza) Eradicant **Liwayway H. Acero** SAN BEDA COLLEGE, MENDIOLA MANILA, PHILIPPINES *Abstract*—this research was undertaken to tap the beneficial use of Dried Leaves of Siam weed to eradicate rice weevils in storage area. It also seeks to find out what best proportion in weight of dried Siam weed leaves and rice grain would get rid the rice weevils. Experimental research method with five treatments was utilized. Gathered data was analyzed using ANOVA single factorial. Findings of the study revealed that highest percentage of mortality after seven days, was obtained from treatment 5 with 40 percent (20 grams dried Siam weed: 50 grams of rice grain) dried leaves of Siam weed. Based on this study rice farmers and rice traders could use dried leaves of Siam weed to eradicate rice weevils in their storage area, to demand for higher price for good quality rice.
B1002	Evaluation of the Effects of Aluminum Phosphate and Calcium Phosphate Nanoparticles as Adjuvants in Vaccinated Mice **Aliaa M. Issa**, Mohamed S. Salim, Hamdallah Zidan, Aly F. Mohamed, and Abdel-Razik H. Farrag Cairo University- Faculty of Science *Abstract*—The present study aim at studying the histological effects of both aluminum phosphate (Alum) and calcium phosphate (CAP) nanoparticles adjuvant in parallel with their potentials as adjuvant and the related immune response to tetanus toxoid vaccine adsorbed on both of them. Ninety Swiss albino mice were used in the experiment (50% adults and 50% juveniles). Mice were immunized intramuscularly with 0.125 ml adjuvanted tetanus toxoid vaccine. For alum adjuvant study, 27 adult mice and 27 juvenile ones were injected with alum adjuvanted vaccine and sacrificed weekly as triplects for 9 weeks. For calcium phosphate adjuvant study, 15 adult mice and 15 juvenile ones were injected with calcium phosphate adjuvanted vaccine and sacrificed weekly as triplects for 5 weeks. The effect of alum and calcium phosphate nanoparticles adjuvants in enhancing the immune response of tetanus toxoid vaccine were monitored through measurement of antibody titer in sera of mice. The pathological effect of both adjuvants were monitored through histological study of liver, brain, kidney and injected muscle of sacrificed animals. Recorded data revealed that both adjuvanted vaccine caused histopathological changes in tissues of liver, kidney, brain and injected muscle. On the other hand alum adjuvanted tetanus toxoid vaccine was more potent and showed higher antibody level than CAP adjuvanted vaccines.
B3002	Synthesis of New Brassinosteroid Biosynthesis Inhibitor with Coumarin Moiety as a Fluorescent Probe Tomoki Hoshi, Tadashi Matsumoto, Kazuhiro Yamada, Yuko Yoshizawa, **Keimei OH** Akita Prefectural University *Abstract*—Plants responses to internal signals and environmental stimuli are regulated by a complex mechanism of signal transduction networks. Brassinosteroids (BRs) are important signal mediators which play significant role in plant development and defense responses to environmental stress. To explore the biological functions of BRs biosynthetic pathways, we conducted a systematic search for specific inhibitors of BRs biosynthesis. In the present work, we report the synthesis of a novel triazole derivative with coumarin moiety (YCZ-FL) as a fluorescent probe. The fluorescence properties and the biological activity of YCZ-FL on BRs biosynthesis inhibition were investigated. We found that YCZ-FL exhibits highly fluorescence intensity with a maximum excitation wavelength at 336 nm, and maximum emission

	wavelength at 442 nm, respectively. YCZ-FL inhibits stem elongation of *Arabidopsis* seedlings grown in the darkness with an IC_{50} approximately 1.56 ± 0.05 μM. To distinguish the primary site of actions on biosynthesis of GA and BRs, effect of co-application of GA (1 μM) and/or BL (10 nM) on YCZ-FL treated *Arabidopsis* seedlings were evaluated. We found that co-application of BL reversed the inhibition of stem elongation treated by while GA did not.

15:40 - 15:50	**Coffee Break**

Afternoon, March 30, 2014 (Sunday)

SESSION – 3 (ICFSN 2014)
Venue: 郁金香厅
Session Chair: **Prof. Zaid Saleh**
Time: 15:50 – 18:00

N0027	Consumption of Mixed Spices & Herbs and General Well-Being Observed in Case Controlled Type 2 Diabetes Mellitus (T2DM) **Tahir Mahmood**, Muhammad Muzaffar Ali Khan Khattak, Nor Azwani Mohd Shukri, Hidayatul Hafidzah Zulkifli, and Siti Amirah Azam International Islamic Medical University Malaysia *Abstract*—Herbs and spices are believed to possess hypoglycemic effects in Type 2 Diabetes Mellitus (T2DM) patients. Twenty patients were recruited from the Medical Outpatient Department of Hospital Tengku Ampuan Afzan(HTAA)Kuantan Pahang, Malaysia. Informed consent was obtained and the study protocol was approved by the International Islamic University Malaysia Research Ethical Committee (IREC) & Clinical Research Committee (CRC) Ministry of Health Malaysia. Ten patients were provided with placebo while the other 10 patients received 4 gram of mixed herbs and spices. The total duration of the trial was 30 days. Blood samples were collected before and at the end of the - placebo and mixed herbs & spices feeding period. These were analyzed for parameters namely fasting glucose, glycosylated haemoglobin(HbA1c) and lipid (profile) concentrations.The result shows that there was significant reduction ($p<0.05$) in the fasting blood glucose and HbA1c.There were no changes in the blood lipid profile. The present study indicates that the mixed herbs & spices tested in this clinical trial have some efficacy for hyperglycemia control and general well-being, as during the feeding period, the patients felt more energetic.
N0029	Foaming Properties of Soy Protein Isolates and Concentrates **Yi-Yuan Shao** and Yu-Ju Kao Shih Chien University, Taiwan *Abstract*—Soy protein isolates (China 980A, China 880, ISP 974, and ADM 974) and soy protein concentrates (SPC 700 and ARCON S) were used to examine the foaming properties including foaming capacity, liquid percentage, foam maximum density and foaming stability. The effects of whipping time (10-30 min) on the foaming properties were also evaluated. The results showed that the foams soy protein made had foam capacity at 164-1503 mL, maximum density at 0.13-0.44, liquid percentage at 0-85%, and foam stability ranged 1-90%. Whipping time had various effects on foaming parameters. Longer whipping

	time improved foam capacity by 3-101%, but had no influence on foam stability. However, it decreased liquid percentages of most soy protein foams by 37-88%. Among them, China 980A had the lowest foam maximum density, the best foam capacity and foaming stability.
N1008	Prospects and Challenges in Promoting Organic Agriculture in the Upland Communities in the Philippines: Implications to Food Security and Nutrition **Leila D. Landicho**, Roselyn F. Paelmo, Rowena D. Cabahug, Roberto G. Visco and Maryanne G. Abadillos Institute of Agroforestry, University of the Philippines Los Banos, Philippine *Abstract*—This paper highlights the status of organic farming in the upland areas in the Philippines. Using semi-structured interviews, focus group discussions and biophysical characterization, results revealed that majority of the farmers are now moving from conventional agriculture to organic farming practices. The shift was attributed to farmers' concern on health and food safety, cheaper inputs, and the preservation of their local agricultural practices. Similarly, the consumers appreciate the health and environmental contributions of organic farming, thus, the growing demand for organic food products. Despite these prospects, the adoption of organic agriculture is faced with challenges such as the lack of financial and technical capacity of the smallholder farmers; problem on the marketing and product labelling of organic food products; and, the quality of the organically produced agricultural products. These findings, therefore, suggest the need to review the institutional support system for the adoption of organic agriculture; and, enhance smallholder farmers' capacities.
N1009	Studies on Antioxidant Properties of Muffins Developed by Mango Dietary Fibre **John David** SHIATS UNIVERSITY, INDIA *Abstract*—Consumption of natural bioactive compounds such as polyphenols, carotenoids and dietary fibre offers health benefits including protection against cardiovascular diseases, cancer and other degenerative diseases. The present study was made with an attempt to develop a fibre rich muffin with antioxidant properties. Thus, mango was chosen as the basic ingredient. From the literature cited mango contains a variety of phyto-chemicals and nutrients. Mango pulp is high in prebiotic dietary fibre, vitamin C, polyphenols and pro-vitamin. It contained 51.2% of total dietary fibre, 96 mg GAE/g of polyphenols and 3092 mg/g of carotenoids. Hence mango dietary fibre (MDF) was extracted and powdered. The muffins was prepared at different treatment (T_1 5%, T_2 10%, T_3 15%) of MDF and physiochemical, microbial, and sensory characteristic were evaluated. The total dietary fibre content increased from 3.44 to 9.07% with incorporation of 15% MDF. The antioxidant activity increased from 52.45 to 98.83 mg/g of muffin with incorporation of 15% of MDF. As far as sensory attributes are concerned, T_1 sample, MDF incorporated 10% was found to be more favourable. Thus, the results indicated that all purpose flour incorporated with MDF yielded dietary fibre enriched muffin with improved antioxidant properties.
N1011	Dietary Assessment on Selected Hypertensive Government Employees in the Southeast Coast Province of the Philippines: A Case Study Series **Juvy Lyn P. Torreno** Davao Oriental State College of Science and Technology, Philippines *Abstract*—This study assessed the dietary practices of five selected hypertensive government personnel in Southeast Coast Province of Philippines as compared with the Philippine standard Required Energy Nutrient Intake (RENI). These hypertensive personnel with dietary restriction were purposively selected.

	Their dietary intake was determined using 24-hour dietary recall for three consecutive days. Data were calculated using the USDA National Nutrient Database for Standard Reference. All cases had first or second degree relatives with hypertension, engaged in light physical daily activities (clerical, administrative or classroom teaching work). All had a prescribed anti-hypertensive maintenance medication but only two were compliant. They were on self-modified diet without professional prescription. The hypertensive personnel had inadequate intake of calorie, Ca (276.20 mg), K (1,155.40 mg) and Na (787.60mg). These were much lower than the prescribed RENI of 500, 2000 and 5000 mg respectively. Their self-imposed dietary restrictions may have influenced the inadequacy of the essential mineral nutrients. The study confirms the common concept of dieting which is often self-prescribed, and practiced to mean, "abstaining food" which leads to malnutrition and complicates rather than manages hypertension, even among better schooled employees.
N1012	The Using of Ionic Gelation Method Based on Polysaccharides for Encapsulating the Macromolecules–A Review **Sri Usmiati** , Nur Richana, Djumali Mangunwidjaja, Erliza Noor, and Endang Prangdimurti Indonesian Center for Agricultural Postharvest Research and Development, Indonesia *Abstract*—Recently, there has been a considerable research interest in the area of bioactives delivery system using polysaccharides as non toxic biodegradable encapsulates materials. The methode to obtain encapsulates particle from those materials was using ionic gelation that has some benefits i.e. very mild conditions and avoiding harmful organic solvents or high shear forces. The materials have been used to protect the bioavailability and functionality of bioactive from harsh condition of digestive system and to deliver on target site at controlled and sustained rate to the site action. Various biopolymer have been used in research on formulation of encapsulates particle to increase therapeutic benefit, while minimised the disadvantage. We review the using of ionic gelation methods on various formulations of materials and its characteristics, and their application in encapsulation of some important macromolecules.
N2003	Barriers Hindering the Development and Implementation of Verification Programmes at Some Selected Pineapple Juice Processing Companies in Ghana **Nina Bernice Ackah**, Geoffrey Hagelaar, Klementina Krum Kirezieva, Margaret Ottah Atikpo and Anthonia H. Andoh Council for Scientific and Industrial Research – Food Research Institute, Ghana *Abstract*—Quality assurance measures during fruit juice production include verification of hygiene and temperature control to assure that microbiological contamination and proliferation are limited. However, most food companies in Ghana do not have adequate quality assurance systems. Bottlenecks that served as barriers to the development and implementation of verification programs in some selected pineapple juice processing companies were identified. Personal interviews and structured questionnaires used in data collection for four case studies revealed barriers as lack of high management commitment, lack of adequate resources and lack of adequate technical and scientific information.
N2007	Nutritional Status of Rural Pregnant Women in Beed District of Maharashtrastate of India **Maya Khandat** Dr. Babasaheb Ambedkar University Aurangabad Marathwada State, India *Abstract*—Indian women have very high prevalence of anemia as well as malnutrition in the world. Hemoglobin (Hb) level in their blood is reported below the normal value i. e 11-14gm According to

	National Family health survey of India -3,prevalence of anemia among women of 15-49 years age group is found to be 55.3 %, in pregnant women it was 58% and in children less than three years of age it was 80 %. It is underlying cause for 20 -40 % maternal death, thus anemia is the most frequently observed nutritional diseases in the world. In India, anemia is the second most common cause of maternal death, accounting for 20% total maternal deaths. This study aims to determine the prevalence of anemia and to explore factors associated with anemia in rural Indian pregnant population, in Beed district of Maharashtra state. A total of 200 rural pregnant women, from 20 villages in Beed district were selected randomly. Data on socioeconomic status, pregnancy, nutritional status and food consumption were collected. Hemoglobin estimation of the samples was done. Observed data were analyzed statistically. It was investigated in the present study, that prevalence of anemia was significantly higher. The contributing factors found were: literacy, occupation and low standard of living of the study women; their awareness about anemia and its prevention by regular consumption of iron foliate tablets and increase in food intake. Age of marriage, parity and fetal loss also contributed to hemoglobin level. The antenatal services in the first trimester along with availability and consumption of iron foliate tablets over 3 months influenced hemoglobin levels.
N2008	Biochemical Changes of Salt-Fermented Tuna Viscera (Dayok) and Its Effect on Histamine Content During Fermentation **Jesebel R. Besas** and Erlinda I. Dizon Southern Philippines Agribusiness and Marine and Aquatic School of Technology, Philippines *Abstract—Dayok* is a mixture of tuna viscera, salt and small amount of spices (garlic and ginger) fermented at ambient room temperature for 7 days and has not been subjected for heat treatment. The effect of varying salt concentration (10%, 17.5% and 25%), fermentation temperature (30-35 ^{o}C and 40^{o}C) and fermentation period (3 and 7 days) on microbial, chemical and biochemical changes of tuna viscera during fermentation were investigated. Effect of the different fermentation conditions on microbial, chemical and biochemical changes on tuna viscera were monitored. The results demonstrated that the levels of pH, lactic acid, amino nitrogen and TVB-N increased during fermentation. The formation of histamine during fermentation is affected by pH, lactic acid, amino nitrogen, TVB-N, total plate count and LAB count. An increase in pH with a corresponding decrease in lactic acid, increase in amino nitrogen, TVB-N, total plate count and LAB count produces a corresponding increase in histamine. Furthermore, formation of histamine during *dayok* fermentation was found to be influenced by salt concentration and fermentation period and not by fermentation temperature.
N2009	The Unique Composition of a2® Branded Products and Associated Quality Systems **Dandan Chen** A2 Corporation Ltd *Abstract*—The digestion of A1 beta-casein can yield 7aa protein fragment or peptide termed beta casomophrin-7, or BCM-7; whereas the digestion of A2 beta-casein does not. BCM-7 is established and widely reported as an exorphin, or food derived fragment with the ability to bind opiate receptors. Therefore dairy products based on the A2 protein, excluding A1, more closely mimic mothers milk in terms of structure and breakdown, avoiding the chance of BCM-7 interrupting the body's natural processes and building towards improved long term health. A unique quality system has been designed to capture the benefit of A2 beta-casein and guarantee the delivery of foods containing only A2 beta-casein.
N3005	Consumer Knowledge and Attitudes towards Food Traceability: A Comparison between the European Union, China and North America **Francesca Valeria Hansstein**

	School of Public Economics and Administration, Shanghai, China *Abstract*—The objective of this paper is to investigate recent findings on consumer knowledge and attitudes towards food traceability across the European Union (EU), China, and North America. A critical review of academic articles published between 2003 and 2013 was performed and a total of sixteen studies were selected. Results indicated that consumers are paying increasingly attention to food safety and quality but they are still unfamiliar with the concept of traceability, especially in China. Willingness to pay (WTP) for food safety differs across countries and segments of population. Age, education, income and food safety concerns are the factors that mostly influence consumer acceptance of traceability and its attributes. Both producers and policy makers should work together to increase consumer awareness about the benefits offered by Food Traceability Systems.

Afternoon, March 30, 2014 (Sunday)

SESSION – 4 (ICCUE 2014)
Venue: 牡丹厅
Session Chair: **Raffaele Pernice**
Time: 15:50 – 18:00

U0021	Development of Public Transport System Strategies to Control Urban Sprawl **Lasmini Ambarwati**, Robert Verhaeghe, Adam J.Pel, Bart van Arem Brawijaya Universiy and Delft University of Technology *Abstract*—The phenomenon of urban sprawl has been a huge issue since the beginning of 20th century and is characterized by rapid and unbalanced settlement development, with transportation network, particularly in the suburban areas. Academic researches have explained the linkage strategy between transportation network and urban planning. However, insufficient empirical verification has been carried out to reduce this phenomenon by using the integrated approach of space-transport development. This paper focuses on analyzing the improvement of public transport (PT) system strategies. The research is analyzed by using microscopic data and by distributing questionnaires in order to assess the impact of settlement development in the suburbs. The impact of PT improvement has an effect on the settlement. The conclusions reveal that the requirement to improve PT-system should be facilitated together with the expanding settlement development. The combination of PT-system has to be involved to reduce 35% in travel time and to increase doubling of the use of public transport.
U0024	Features and Problems of Function Conservation Project in Fishing Port Facilities **Takayasu Fujita**, Takahiro Okano, Yasuhiro Yoshizuka, Takuya Kaneda, Masayuki Fudo Fisheries Infrastructure Development Center *Abstract*—A lot of municipalities in Japan have various fishery facilities to be maintained. However, they are facing the problem that the budget and the expert of maintenance are insufficient. In such a background, it is indispensable to understand points of concern at the beginning of planning, to do efficient maintenance management. In this study, to extract necessary points of concern, both existing management plans and results were analyzed. In consequence, 1) the mooring facilities and the transportation facilities were tendencies

	maintained by priority. 2) As for the facilities except steel structure were being managed by not preventive maintenance based on the deterioration forecast but conventional corrective maintenance. As the result, it seemed that the procedure of the determination of priority of maintenance and the method of deterioration forecast for not steel structure are desired to be developed.
U0025	Optimum Cost Design of Reinforced Concrete Retaining Walls Using Hybrid Firefly Algorithm R. Sheikholeslami , **B. Gholipour Khalili** , S.M. Zahrai University of Tehran *Abstract*—This paper develops a novel optimization method namely hybrid firefly algorithm with harmony search technique (IFA–HS), to obtain the optimal cost of the reinforced concrete retaining walls satisfying the stability criteria. The hybrid IFA–HS is utilized to find the economical design adhering to provisions of *ACI 318-05*. Also Coulomb lateral earth pressure theory is used to derive the lateral total thrust on the wall. Some design examples are tested using the new method. The results carried out on these examples confirm the validity of the proposed algorithm. The IFA–HS method can be considered as an improvement of the recently developed firefly algorithm. The improvements include the utilizing of a memory that contains some information extracted online during the search, adding of pitch adjustment operation in harmony search serving as mutation operator during the process of the firefly updating, and modifying the movement phase of firefly algorithm. The detailed implementation procedure for this improved meta–heuristic method is also described.
U0037	Prediction of In-situ CBR of Subgrade Cohesive Soils from Dynamic Cone Penetrometer and Soil Properties **Magdi M. E. Zumrawi** University of Khartoum *Abstract*—The aim of this paper is to predict the field CBR of different types of soils. Since CBR can't be easily measured in the field, prediction of CBR from other simple tests such as Dynamic Cone Penetrometer (DCP) and soil properties is a valuable alternative. Various soils have been compacted at different initial state conditions (i.e. water content and dry density) then using laboratory and field equipment to enable the measurement of unsoaked CBR and DCP of these soils. Analysis of the experimental data indicated that there is a very good linear relationship of the measured soil strength (i.e. unsoaked CBR and DCP) with the soil initial state factor as described by the combination of initial dry density, water content and void ratio. Comparison of the measured and predicted values of unsoaked CBR and DCP using the developed equation clearly indicates the validity of this equation.
U0038	Simulation of Thailand Flood 2011 **S. Wongsa** King Mongkut's University of Technology Thonburi (KMUTT) *Abstract*—In the 2011, severe flooding occurred in Chao Phraya River Basin during monsoon season was the worst flooding in seventy-two years. The accumulated rainfall from January to October 2011 was approximately 35% higher than the average years. The overall damage from the floods amounted to THB 1.44 trillion, which ranked as the world's fourth costliest natural disaster. The iRIC (International River Interface Cooperative) model has been used to investigate the Thailand Central Region Flood 2011. Some simulation results compared with field measured flood depth and satellite data are presented to demonstrate applicability of the model. Good performances of simulated results were observed in both flow fields and

	flood propagations.
U1004	Differential Settlement at Bridge Approaches' in Bangladesh Md. Firoz Mahmood Ovi, Md. Ridwan Bin Alam, Abontee Barua, Sanchari Halder, and **Md. Waliur Rahman** Ahsanullah University of Science & Technology *Abstract*—Differential settlement at the roadway/bridge interface typically results in an abrupt grade change, causing driver discomfort, impairing driver safety, and exerting a potentially excessive impact traffic loading on the abutment. Bridge approach slabs are used to keep the effects of this differential settlement within tolerable limits. In many cases, the final magnitude of settlement exceeds the working range of an approach slab, necessitating costly roadway and slab repairs. The potential causes for this problem purely site specific. Hence this settlement problem may not have a unique solution. The purpose of this study was to investigate differential settlement at bridge approaches and give possible solutions of this problem using available materials and manpower in the context of Bangladesh. In most cases the differential settlement occurs at mid portion. This can be said to be the most critical location.
U1007	Apply Space Syntax to Design a TOD land use plan **Chia-Nung Li**, Yi-Kai Hsieh Chinese Culture University *Abstract*—TOD-related studies have mostly come with empirical models and urban design concepts, lacking theoretical basis and perched on pending assessment about whether regional planning is in line with the TOD ideas and orientation. Therefore, how to alter the current TOD patterns by, instead, taking the walking environment as the main appeal in order to shape up friendly living surroundings has become the top issue in the development of Taiwan's TOD cities. In the discussions, this paper tries to explain how to rearrange the land use around MRT stations in order to get people attracted to walking. The main results of this study include proposed integration of TOD land development with the walking environment and, based on the analytical findings, bringing in TOD ideas and concepts for future land development.
U1008	A Conceptual Framework for Developing Indoor Spatial Choice Model Seung Hyun Cha and **Tae Wan Kim** City University of Hong Kong *Abstract*—Detailed space use analysis for a building is needed in the near future for building energy efficiency and effective space planning. In this regard, the development of an indoor spatial choice model is indispensable for better space use prediction. However, research efforts into the model are still insufficient in this area. As an initial study, this paper reviews spatial choice behavior, and proposes a conceptual framework that displays the necessary development steps, behavioral rules, and required data for developing indoor spatial choice model. Finally, future opportunities and challenges are discussed.
U2006	Sustainable Infrastructure and Conservation Ideas on Homestay Modification; Owners' Motivation and Tourists' Satisfaction in Amphawa, Thailand. **Naphasinee Suebsuk**, Osamu Nakagawa Graduate School of Design and Technology, Department of Architecture and Design , Kyoto Institute of Technology. *Abstract*—In 2001 the conservation and restoration campaign along the Amphawa Canal begans. Many development projects launched by the public and private sectors bring a large number of tourists. However

	this can have a negative impact on many traditional sites. According to the campaign, people in the community revive traditional water-based tourism by stimulating the use of traditional buildings along the canal and modifying them into commercial and tourist accommodation. This paper mainly focuses on how private individuals modify historical structures, the users' and tourists' (guests') points of view on modification of traditional houses to homestays in Amphawa. Motivational factors in user scales from the community (village) and identification and satisfaction from tourists' (guests) in accordance with sustainable tourism concepts are presented through the ideas of cultural conservation of traditional building design, cultural activities, traditional celebrations, and the local way of life along the Amphawa Canal.
U2008	Ground-penetrating radar Applied to the gas station house underground emptied tilt **Ming-Chih Lin**, Yu-Ming Kang,. Kun-Fa Lee Feng Chia University Doctoral students Program in Civil and Hydraulic Engineering *Abstract*—Using non-destructive Ground-Penetrating Radar(GPR) to New Taipei City Wulai Xindian river water source protection area gas station house tilted surveying the situation, reference drilling report compared the results. Ground-Penetrating Radar detection station house tilt results accurately identify the reasons. Because of that station house tilted backward about 3~5 degrees and 3/4 station house is located in a dense rock, so it does not affect the station house collapsed.

19:00 二楼海陆坊大厅	**Dinner**

Conference Venue

金水湾大酒店 (Golden River-View Hotel)

http://www.goldenriverviewhotel.com/cn/index.html

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APCBEES FORTHCOMING CONFERENCES

June 09-11, 2014, Bangkok, Thailand	
Conference	2014 3rd International Conference on Environment, Energy and Biotechnology (ICEEB 2014) http://www.iceeb.org/
Important Dates	http://www.iceeb.org/date.html
Contact	iceeb@cbees.org
Publication	**IPCBEE, ISSN: 2010-4618 (indexed by Ei Geobase(Elsevier))**

Conference	2014 4th International Conference on Asia Agriculture and Animal (ICAAA 2014) http://www.icaaa.org/
Important Dates	http://www.icaaa.org/date.html
Contact	icaaa@cbees.org
Publication	Journal of Advanced Agricultural Technologies (JOAAT, ISSN: 2301-3737)

Conference	2014 3rd International Conference on Chemical and Process Engineering (ICCPE 2014) http://www.iccpe.org/
Important Dates	http://www.iccpe.org/date.html
Contact	iccpe@cbees.org
Publication	International Journal of Chemical Engineering and Applications (IJCEA, ISSN:2010-0221)

June 18-20, 2014, Copenhagen, Demark

Conference	2014 3rd International Conference on Nutrition and Food Sciences(ICNFS 2014) http://www.icnfs.org/
Important Dates	http://www.icnfs.org/date.html
Contact	icnfs@cbees.org
Publication	**IPCBEE, ISSN: 2010-4618 (indexed by Ei Geobase(Elsevier))**

Conference	2014 3rd International Conference on Bioinformatics and Biomedical Science (ICBBS 2014) http://www.icbbs.org/
Important Dates	http://www.icbbs.org/date.html
Contact	icbbs@cbees.org
Publication	International Journal of Bioscience, Biochemistry and Bioinformatics (IJBBB, ISSN: 2010-3638)

Conference	2014International Conference on Environmental and Engineering Geoscience (ICEEG 2014)
Important Dates	http://www.iceeg.org/date.html
Contact	iceeg@cbees.net
Publication	Journal of Environmental Science and Development (IJESD, ISSN:2010-0264)

July 4-5, 2014, Nottingham, UK

Conference	2014 5th International Conference on Environmental Engineering and Applications (ICEEA 2014) http://www.iceea.org/
Important Dates	http://www.iceea.org/date.htm
Contact	iceea@cbees.org
Publication	JOCET (ISSN: 1793-821X)

Conference	2014 3rd International Conference on Environmental, Biomedical and Biotechnology (ICEBB 2014) http://www.icebb.org/
Important Dates	http://www.icebb.org/date.htm
Contact	icebb@cbees.org
Publication	International Journal of Bioscience, Biochemistry and Bioinformatics (IJBBB, ISSN: 2010-3638)

Conference	2014 3rd International Conference on Biotechnology and Food Engineering (ICBFE 2014) http://www.icbfe.org/
Important Dates	http://www.icbfe.org/date.htm
Contact	icbfe@cbees.org
Publication	Journal of Medical and Bioengineering (JOMB, ISSN: 2301-3796)

July 29-30, 2014, Hong Kong

Conference	2014 International Conference on Food and Nutrition Technology (ICFNT 2014) http://www.icfnt.org/
Important Dates	http://www.icfnt.org/date.htm
Contact	icfnt@cbees.net
Publication	**IPCBEE, ISSN: 2010-4618) (indexed by Ei Geobase(Elsevier))**

Conference	2014 International Conference on Advances in Biology and Chemistry (ICABC 2014) http://www.icabc.org/
Important Dates	http://www.icabc.org/date.htm
Contact	icabc@cbees.net
Publication	International Journal of Chemical Engineering and Applications (IJCEA, ISSN:2010-0221)

Conference	2014 International Conference on Environment and Natural Resources (ICENR 2014) http://www.icenr.net/
Important Dates	http://www.icenr.net/date.htm
Contact	icenr@cbees.net
Publication	Journal of Environmental Science and Development (IJESD, ISSN:2010-0264)

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