

# 2015 APCBEES PARIS CONFERENCES ABSTRACT

2015 4th International Conference on Geological and Environmental Sciences (ICGES 2015)

2015 5th International Conference on Environmental and Agriculture Engineering (ICEAE  
2015)

2015 6th International Conference on Chemistry and Chemical Engineering (ICCCE 2015)

2015 3rd Journal Conference on Environmental Science and Development (JCESD 2015)

**Paris, France**

**August 5-6, 2015**

**Mercure Paris Vélizy**



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# 2015 APCBEES Paris Conferences Introduction

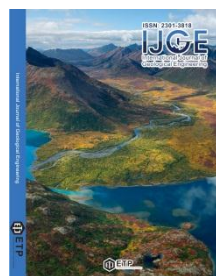
Welcome to CBEES 2015 conferences in Paris, France. The objective of the Paris, France conferences is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Geological, Environmental Science, Agriculture Engineering, Chemistry and Chemical Engineering.

## 2015 4th International Conference on Geological and Environmental Sciences (ICGES 2015)

\* **Paper publishing and index:** **ICGES 2015** papers will be published in one of the following journals:



\* **Journal of Environmental Science and Development (IJESD, ISSN:2010-0264)**, and all papers will be included in the Engineering & Technology Digital Library, and indexed by WorldCat, Google Scholar, Cross ref, ProQuest, CABI and sent to be reviewed by EI Compendex and ISI Proceedings.



\* **International Journal of Geological Engineering (IJGE, ISSN: 2301-3818)**, and all papers will be included in the Engineering & Technology Digital Library, and indexed by WorldCat, Google Scholar, Cross ref, ProQuest, CABI and sent to be reviewed by EI Compendex and ISI Proceedings.

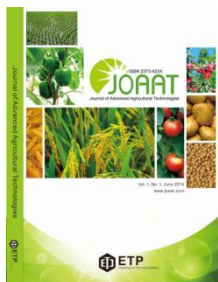
\* **Conference website and email:** <http://www.icges.org/>; [icges@cbees.org](mailto:icges@cbees.org)

## 2015 5th International Conference on Environmental and Agriculture Engineering (ICEAE 2015)

\* **Paper publishing and index:** **ICEAE 2015** papers will be published in one of the following journal:



\* **The Journal of Environmental Science and Development (IJESD, ISSN:2010-0264)**, and all papers will be included in the Engineering & Technology Digital Library, and indexed by WorldCat, Google Scholar, Cross ref, ProQuest, CABI and sent to be reviewed by EI Compendex and ISI Proceedings.



\* **Journal of Advanced Agricultural Technologies (JOAAT, ISSN: 2301-3737)**, and all papers will be included in Ulrich's Periodicals Directory, Google Scholar, Engineering & Technology Digital Library, Crossref and Electronic Journals Digital Library and sent to be reviewed by EI Compendex and ISI Proceedings.

\* **Conference website and email:** <http://www.iceae.org/>; [iceae@cbees.org](mailto:iceae@cbees.org)

**2015 6th International Conference on Chemistry and Chemical Engineering (ICCCE 2015)**

\* **Paper publishing and index:** **ICCCE 2015** papers will be published in one of the following journal:



\* **International Journal of Chemical Engineering and Applications (IJCEA, ISSN: 2010-0221)** as one volume, and will be included in Engineering & Technology Library, Ulrich's Periodicals Directory, BE Data, Google Scholar, Cross ref, ProQuest and sent to be reviewed by Ei Compendex and ISI Proceedings.

\* **Conference website and email:** <http://www.iccce.org/>; [iccce@cbees.org](mailto:iccce@cbees.org)

**2015 3rd Journal Conference on Environmental Science and Development (JCESD 2015)**

\* **Paper publishing and index:** **JCESD 2015** papers will be published in one of the following journal:



\* **All the registered papers will be published into International Journal of Environmental Science and Development. (IJESD, ISSN: 2010-0264)**, available at: <http://www.ijesd.org/list-6-1.html>), and indexed by Chemical Abstracts Services (CAS), CABI, DOAJ, Ulrich Periodicals Directory, Crossref, ProQuest.

\* **Conference website and email:** <http://www.ijesd.org/jcesd/3rd/index.htm>; [jcesd03@iacsitp.com](mailto:jcesd03@iacsitp.com)

# Presentation Instruction

## Instructions for Oral Presentations

### **Devices Provided by the Conference Organizer:**

Laptop Computer (MS Windows Operating System with MS PowerPoint and Adobe Acrobat Reader)

Digital Projectors and 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 Presentation: about **12** Minutes of Presentation and **3** Minutes of Question and Answer

Keynote Speech: 30 Minutes of Presentation and **5** Minutes of Question and Answer

## Instructions for Poster Presentation

### **Materials Provided by the Conference Organizer:**

The wall to put poster

### **Materials Provided by the Presenters:**

Home-made Posters

Maximum poster size is A1

Load Capacity: Holds up to 0.5 kg

## Best Paper Award

One best paper will be selected from each oral presentation sessions, and the Certificate for Best Papers will be awarded at the end of each session on August 6, 2015.

## Dress code

Please wear formal clothes or national representative of clothing.

# Keynote Speaker Introduction

## Keynote I



Prof. Khaled M. Bali

University of California, San Diego, USA

Topic: “Automation of Surface Irrigation Systems”

**K. M. Bali** is an Irrigation/Water Management Advisor and County Director at the University of California Desert Research and Extension Center in Holtville, California. He holds a Ph.D. Degree (1992) in Soil Science (soil physics) and MS Degree (1987) in Water Science (Irrigation and Drainage) from the University of California at Davis. He holds a Bachelor of Science Degree (1984) in soils and irrigation from the University of Jordan, Amman.

His main fields of scientific interest include water resources and management, water quality, irrigation systems, automation of surface irrigation, evapotranspiration, salinity, water quality, and reuse of wastewater for irrigation.

**Dr. Bali** a member of many professional societies as American Geophysical Union and United States Committee on Irrigation and Drainage. He is a U.S. Fulbright Scholar and served on a number of National and International Scientific Committees.

## Keynote II



Prof. Paulo Mendonça  
University of Minho, Portugal

Topic: “**Environmental benefits from the use of vegetable Materials in building construction: Case Study in the South of Portugal**”

**Paulo Mendonça** was born in Porto in 10th June. PhD in Civil Engineering by the University of Minho, with the thesis: “Living under a second skin”, acclaimed by unanimity (2005). As a PhD fellowship of FCT (Portuguese Foundation for Science and Technology) he got the “Advanced Studies Diploma” in Barcelona on the Technical Superior School of Architecture (ETSAB). He is Associate Professor in the Architecture School of the University of Minho, Portugal (EAUM). President of EAUM (2011-2012) and Vice-President (2010-2011). Architectural Graduate and Integrated Master Studies Director (2005-2009). He is an author of more than one hundred publications. The main research subjects includes lightweight and mixed weight buildings, low cost housing, local and global economic asymmetries, low-tech strategies, energy costs and sustainable development, new materials and technologies, recycling and reusing potentialities.

## Brief Schedule for Conferences

<p><b>August 5, 2015 (Wednesday) 10:00~17:00</b>                  Arrival and Registration  <b>Venue: Lobby</b></p>
<p><b>August 6, 2015 (Thursday) 8:30~18:30</b>                  Arrival and Registration, Keynote Speeches, and Conference Presentations</p>
<p><i>Morning</i>  <b>Venue: Washington</b>                  Opening Remarks (Prof. Khaled M. Bali) 8:30~8:40                  Keynote Speech I 8:40~9:15                  Keynote Speech II 9:15~9:50                  Coffee Break &amp; Photo Taking: 9:50~10:10</p>
<p><b>Session 1: 10:10~12:10</b>                  (9 presentations ---ICEAE&amp;ICGES 2015)</p>
<p><b>Lunch: 12:10~13:00</b>  <b>Venue: Hotel Restaurant</b></p>
<p><i>Afternoon</i>  <b>Venue: Washington</b>  <b>Session 2: 13:00~15:00</b>                  (9 presentations---ICEAE&amp;ICGES&amp;JCESD 2015)                  Coffee Break 15:00~15:10</p>
<p><b>Session 3: 15:10~17:00</b>                  (7 presentations --- ICCCE&amp;ICGES 2015)</p>
<p><b>Session 4: 17:00~18:50</b>                  (7 presentations --- ICEAE 2015)</p>
<p><b>Dinner: 19:00</b>  <b>Venue: Hotel Restaurant</b></p>
<p><b>August 7, 2015 (Friday) 9:00~17:00</b>                  One day tour</p>

**Tips:**

Please arrive at conference room around 10 minutes before the session beginning to copy the PPT into the conference laptop.

# Presentation Tracking Contents

SESSION-1 (ICEAE&ICGES 2015) Venue: Washington Session Chair: Prof. Khaled M. Bali Time: 10:10-12:10			SESSION-2 (ICEAE&ICGES&JCESD 2015) Venue: Washington Session Chair: Prof. Paulo Mendonça Time: 13:00-15:00		
PAGE	PAPER ID	PRESENTER	PAGE	PAPER ID	PRESENTER
11	S0009	Xue Bai	14	S1002	Selda TEKİN-ÖZAN
11	P0006	Zhanel R. Zhantuarova	15	P0019	Noraini Mahmad
11	P0013	Akiko T. Saito	15	CD0219	Manaporn Wongsoonthornchai
12	S3007	Paulo Mendonça	16	CD0222	Ayed A. Al-Fadhli
12	P2005	Akiko T. Saito	16	P0017	Noraini Mahmad
12	P0020	Noraini Mahmad	17	P3005	Hatice Kalfaoğlu Hatipoğlu
13	P0003	O. Enkhtsolmon	17	CD0220	S. Marzban
13	P0004	G. Delgermaa	17	S0004	Soomi Yang
14	S0007	Bing-Mu Hsu	18	CD0221	A. J. León-Luque
SESSION-3 (ICCE&ICGES 2015) Venue: Washington Session Chair: Prof. Time: 15:10-17:00			SESSION-4 (ICEAE 2015) Venue: Washington Session Chair: Prof. Hideki Nakagome Time: 17:00-18:50		
18	E0003	Chigozie Uzoh and Okechukwu Onukwuli	21	P0008	Soo Im Chung
19	E0004	Richie Agusta Iwan Chandra	21	P0012	Shinji KAWAKURA
19	E1001	Wijayati, N.	22	P0016	Hashimah Elias
20	E1004	Jin-Shun Lyu	22	P0024	Ali Parsa
20	E1006	Lusiana R. A	23	P3009	M. Shahbaz Akhtar
20	E0012	Chutima Ponchurdchai	23	P2004	Sayed Fakhreddin Afzali
21	S0003	Deqiang Chen	24	P0010	Sopid Sawangjit

## Attention Please:

1. Each presenter has about ten minutes (including question and answer time), please control your presentation time.
2. Please kindly prepare your PPT or poster according to your research and the time regulation before the conference and take it to the conference site.
3. Please arrive at the conference room when your session begins.  
Hoping you to have a good time during the conference.



## Detailed Schedule for Conferences

**Morning, August 5, 2015 (Wednesday)**

**Venue: Lobby**

<b>10:00-17:00</b>	<b>Arrival and Registration</b>
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- 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.  
(3) One best paper will be selected from each oral presentation sessions, and the certificate for best papers will be awarded at the end of each session on August 6, 2015.

Let's move to a new day!



**Morning, August 6, 2015 (Thursday)**

**Venue: Washington**

<p><b>8:30-8:40</b></p>	 <p><b>Opening Remarks</b> Prof. Khaled M. Bali University of California, San Diego, USA</p>
<p><b>8:40-9:15</b></p>	 <p><b>Keynote Speech I</b> Prof. Paulo Mendonça University of Minho, Portugal Topic: “Environmental benefits from the use of vegetable Materials in building construction: Case Study in the South of Portugal”</p>
<p><b>9:15-9:50</b></p>	 <p><b>Keynote Speech II</b> Prof. Khaled M. Bali University of California, San Diego, USA Topic: “Automation of Surface Irrigation Systems”</p>
<p><b>9:50-10:10</b></p>	<p><b>Coffee Break &amp; Photo Taking</b></p>

**Morning, August 6, 2015 (Thursday)**

**SESSION–1 (ICEAE&ICGES 2015)**

**Session Chair: Prof. Khaled M. Bali**

**Time: 10:10-12:10 (9 presentations)**

**Venue: Washington**

S0009	<p>Coimmobilized Microalgae and Nitrifying Bacteria for Ammonium Removal  <b>Xue Bai</b>, Haixin Gu and Yulong Li  Hohai University</p> <p><i>Abstract</i>—Coimmobilization of the freshwater microalgae in alginate beads with the microalgae bacterium under continuous synthetic wastewater culture conditions significantly removed ammonium ions efficiently. It is proposed that coimmobilization of a microalgae with microalgae bacteria can serve as a tool in devising novel wastewater treatments.</p>
P0006	<p>Comprehensive Assessment of Waste Water Pollution Rate in Almaty city, Kazakhstan  Nailya A. Ibragimova, Oleg V. Esyrev, <b>Zhanel R. Zhantuarova</b> and Zarema M. Biyasheva  The German-Kazakh University (GKU), Kazakhstan</p> <p><i>Abstract</i>—One of the constituent of the environmental safety concept in Kazakhstan is a problem of water resources depletion which is due to physiographic features such as intracontinental location, continental climate, character of relief and uneven distribution of water bodies. There are three large basins within the territory of Kazakhstan: the Caspian and Aral seas, and Lake Balkhash. The purpose of the study was assessing the quality of waste water in Almaty city (Kazakhstan) which flows to Sorbulak – the largest in the world lake-collector, from where it flows to Ili-Balkhash basin. In 2012 the southern shore of Lake Balkhash and bank of the Ili River were enrolled in the list of wetlands of global importance. A comprehensive assessment of the waste water quality in Almaty city (Kazakhstan) during the process of its complex purification: mechanical, physical-chemical and biological was made. Organoleptic, hydrochemical, microbiological and cytotoxicological methods were applied during the study. It was determined that the water inflowing to Sorbulak can be described as mild polluted at nitrogen dioxide, phosphates, lead and phenols level.</p>
P0013	<p>Environmentally Friendly Magnetic Refrigeration Technology using Ferromagnetic Gd Alloys  <b>Akiko T. Saito</b>, Tadahiko Kobayashi, Shiori Kaji, Jing Li and Hideki Nakagome  Chiba University, Japan</p> <p><i>Abstract</i>—We have developed magnetic refrigerants particles of ferromagnetic Gd-based alloys and a primitive magnetic refrigeration apparatus using permanent magnets to clarify its applicability to common refrigeration. Working temperature range of the magnetic refrigeration can be controlled with the Curie temperatures of the magnetic refrigerants. Several kind of Gd-based spherically-shaped magnetic refrigerant particles have fabricated by a rotating electrode process. Operation of an active magnetic regenerative (AMR) refrigeration cycle with Gd-based magnetic refrigerant particles enabled temperature spans of more than 40 °C to be obtained at room temperature. Optimization of multi-layered</p>

	<p>structures of magnetic refrigerant materials having different Curie temperatures allowed effective enlargement of the temperature span. We achieved a cold temperature of <math>-11\text{ }^{\circ}\text{C}</math> which is the lowest temperature generated by AMR cycle operation under a low magnetic field using permanent magnets. Our results show that magnetic refrigeration has application potential for new environmentally friendly refrigeration technology.</p>
S3007	<p>Environmental Benefits from the Use of Vegetable Materials in Building Construction: Case Study in the South of Portugal  <b>Paulo Mendonça</b> and Francisca Amorim  Lab2PT, School of Architecture, University of Minho</p> <p><i>Abstract</i>—This paper aims to show the environmental benefits from using vegetable materials, such as timber and straw, in alternative to conventional industrialized materials, such as brick, concrete and steel in building construction. Vegetable materials can present significant economic and environmental advantages, as they represent an abundant and renewable resource with very low embodied energy. To illustrate these benefits it is used as case study a traditional house dwelling from Carrasqueira, a Sado river coastal village in the south of Portugal. This dwelling, made with thatched straw and a timber structure in both walls and roofs, is compared with two dwellings of the same area and plan configuration: one using a traditional stone external wall aiming to characterize the most representative portuguese traditional constructive system for vernacular housing; and the other one using the conventional exterior wall solution in hollow brick with post and beam concrete structure aiming to characterize the contemporary constructive system commonly used in housing buildings construction in Portugal.</p>
P2005	<p>Cooling Properties of Gd alloys and <math>\text{La}(\text{Fe},\text{Si})_{13}</math>-based Compounds in Active Magnetic Refrigeration for Environmentally-Friendly Cooling systems  <b>Akiko T. Saito</b>, Yuuta Yamada, Tadahiko Kobayashi, Shiori Kaji, Hidehito Fukuda, Ryosuke Arai, and Hideki Nakagome  Chiba University, Japan</p> <p><i>Abstract</i>—There is currently a global demand for highly-efficient and environmentally-friendly refrigeration techniques. The new concept of active magnetic regenerative (AMR) refrigeration has received much attention as a potential alternative to conventional gas expansion cooling. In the present study, Gd alloys and <math>\text{La}(\text{Fe},\text{Si})_{13}</math>-based compounds, both of which have been considered as likely candidates for solid magnetic refrigerants, were investigated in terms of their cooling properties in an AMR-cycle system. As a results, feature of the cooling properties with both materials were clarified. The Gd alloys are evidently suitable for the generation of large temperature differences, in contrast to the <math>\text{La}(\text{Fe},\text{Si})_{13}</math>-based compounds, which exhibit good heat-load properties. Numerical calculations support these experimental results and indicate that multi-layered structures composed of the <math>\text{La}(\text{Fe},\text{Si})_{13}</math>-based compounds with gradually varying Curie temperatures are effective at increasing the temperature difference and also demonstrate good heat-load properties. The optimization of magnetic refrigerants such as these is expected to result in new environmentally-friendly cooling systems.</p>
P0020	<p>Assessment of Plant Materials Carbon Sequestration Rate for Horizontal and Vertical Landscape Design</p>

	<p>Rashidi Othman and Siti Zubaidah Abu Kasim (Presenter: <b>Noraini Mahmad</b>) International Islamic University Malaysia, Malaysia</p> <p><i>Abstract</i>—The excessive reliance of fossil fuels and carbon production from daily appliances especially in tourism accommodation premises could cause detrimental impact to the surrounding environment. This is due to the increase of carbon emissions which is one of the major contributors for greenhouse effect especially in urban area. In order to alleviate the carbon footprint by those premises, one of the promising method to reduce carbon dioxide emission to the atmosphere is by selecting an appropriate plant species as well as optimization of spatial organization of plant materials. Besides character of the plant materials, criteria such as locality, age, diameter and height are very much influenced the carbon sequestration rate. This study demonstrate that even with limited green space areas for tourism accommodation premises such as hotels and resorts, the carbon sequestration rate can be further increased with the right selection of plants, at the right place with the right landscape design. Therefore this study aimed to monitor, calculate and predict how much carbon can be absorbed by proposed plant species based on vertical and horizontal landscape design at certain period of time. The significance outcomes of this study will be green approach to monitor and sequester carbon toxicity using plant species also a novel landscape design approach to neutralize carbon emission which is cost effective and environmental friendly.</p>
P0003	<p>Cost Benefit Analysis of Air Pollution Abatement Options in the Ger Area, Ulaanbaatar, and Health Benefits Using Contingent Valuation <b>O. Enkhtsolmon</b>, T. Matsumoto and TS. Erkhembayar The University of Kitakyushu, Japan</p> <p><i>Abstract</i>—We conducted a cost-benefit analysis of air pollution abatement options that considered income level by region in a residential sector of a ger area in Ulaanbaatar, Mongolia. The study selected three feasible measures, taking into account direct benefits (fuel savings), health benefits and investment costs. The net present value of the abatement combined options and the reduction of total suspended particulate (TSP) emissions during the investment timeframe were estimated. We also conducted double-bounded dichotomous contingent (DBDC) valuation surveys with 373 respondents to gather data on air pollution awareness and willingness to pay (WTP) for protection of health from air pollution. To assess the unit costs of health benefits, we relied on the willingness-to-pay study carried out as part of the CVM study, which derived a value of WTP of US\$20.30, which is the value placed on protection of health from air pollution. As for the results, the air pollution abatement combined option can be seen to reduce emissions approximately 50 percent in Ulaanbaatar over 7 years.</p>
P0004	<p>A Study of Waste Management of Households in Ulaanbaatar Based on Questionnaire Surveys <b>G. Delgermaa</b> and T. Matsumoto The University of Kitakyushu, Japan</p> <p><i>Abstract</i>—As a result of the increasing Mongolian population, municipal solid waste, its kinds, the area affected, and environmental deterioration have also increased. The aim of this paper is to present an analysis and results of surveys and interviews used to gather information on municipal solid waste generation,</p>

	composition patterns and their distinctive features. Based on the gathered data, the authors analyzed the current municipal waste generation conditions in Ulaanbaatar City, the capital of Mongolia, and identified the recycling management difficulties. The result of the study shows that separating the recyclable garbage before transportation to dumping sites reduces the amount of garbage transported by 30-40%, lowering transportation costs and environmental pollution in Ulaanbaatar City.
S0007	<p>Surveillance and evaluation of the infection risk of free-living amoebae – Acanthamoeba in aquatic environments  <b>Bing-Mu Hsu</b>  National Chung Cheng University</p> <p>Abstract—Acanthamoeba is one kind of free-living amoebae (FLA) which ubiquitous in various aquatic environments. Several Acanthamoeba species are pathogenic and host other pathogens such as Legionella, but the presence of Acanthamoeba and its parasites as well as the related infection risk are not well known. In this study, the surveillance and evaluation of the infection risk of Acanthamoeba in different aquatic environments was investigated. Water samples were collected from a river, intake areas of drinking water treatment plants, and recreational hot spring complexes in Taiwan. A total of 140 water samples were tested for the presence of Acanthamoeba spp. In addition, phylogenetic characteristics and water quality parameters were also assessed. The pathogenic genotypes of Acanthamoeba T4 were abundant in the hot spring water. Taken together, Acanthamoeba contamination in recreational hot springs and drinking water source warrants more attention on potential legionellosis and amoebae infections.</p>

<b>12:10-13:00</b>	<b>Lunch</b>
<b>Hotel Restaurant</b>	

**Afternoon, August 6, 2015 (Thursday)**

**SESSION–2 (ICEAE&ICGES&JCESD 2015)**

**Session Chair: Prof. Paulo Mendonça**

**Time: 13:00-15:00 (9 presentations)**

**Venue: Conference room**

S1002	<p>THE DETERMINATION OF SOME HEAVY METALS IN WATER AND SEDIMENT FROM IŞIKLI LAKE (TURKEY) IN RELATION TO SOME PHYSICO-CHEMICAL PARAMETERS AND SEASONS  <b>Selda TEKİN-ÖZAN</b>, Belma GÜLCÜ GÜR  S üleyman Demirel University</p> <p><i>Abstract</i>—Heavy metals are the most common environmental pollutants and they are serious threat due to their toxicity, long persistence and bioaccumulation in the food chain. They disturb the natural balance of ecosystems. Işıklı Lake is an important freshwater lake and used for different purposes. Determination of the</p>
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	<p>water quality of the lake is important for region human health and sustainable usage of the lake.</p> <p>This study was carried out between October 2012 and July 2013 and the aim of the current study is to investigate the heavy metal levels in water and sediment from Işıklı Lake (Turkey) as seasonally and investigate relationships between physico-chemical parameters and levels of some heavy metals. Temperature, pH, dissolved oxygen and electrical conductivity were measured. DORM 3, DOLT 4 and HISS 1 reference material showed good accuracy.</p>
P0019	<p>Contamination Composition of Fe, Mn and Al at 8 Different Profiles of Solid Waste Disposal Areas in Malaysia</p> <p>Rashidi Othman, Qurratu Aini Mat Ali and Razanah Ramya (Presenter: <b>Noraini Mahmad</b>)</p> <p>International Islamic University Malaysia, Malaysia</p> <p><i>Abstract</i>—Solid waste is a major issue in environmental management as it was generated by almost every single person in the world. In Malaysia, it is estimated 0.8 kg solid waste dumped by one person in rural area and 1.5 kg by person in urban area in a day. Landfill as a final waste disposal point is currently in critical number where it keeps on increasing every year. The most serious issues is landfill may cause air, water and soil pollution as waste disposed at landfill may produce leachate through water runoff at the area. Hence, this research aimed to assess the contamination level of three types of heavy metal which are Iron, Manganese and Aluminum (Fe, Mn, Al) at 8 selected contaminated landfill areas in Selangor, Perak and Melaka. As a result, Fe exhibited highly contamination level ranged from 0.15 mg/L to 0.77 mg/L followed by Mn ranged from 0.06 mg/L to 0.57 mg/L and the lowest is Al ranged from 0.04 mg/L to 0.08 mg/L. Interestingly Perak solid waste disposal area was found to have the highest Fe content (0.77 mg/L), substantially higher than all other areas tested. In contrast Mn was detected highest (0.57 mg/L) in Selangor landfill area. There was positive relationship between type and total content of heavy metals and location of landfill area. Therefore, collaboration and concern from authority and public in managing solid waste may help to reduce the pollution as these types of heavy metal may cause bad impact to the environment and surely human health.</p>
CD0219	<p>Assessment of Mercury Flows through Fluorescent Lamps and Potential Reduction Scenarios in Thailand</p> <p><b>Manaporn Wongsoonthornchai</b>, Suphaphat Kwonpongsagoon, and Ruth Scheidegger Department of Sanitary Engineering, Faculty of Public Health, Mahidol University, Bangkok, Thailand</p> <p><i>Abstract</i>—Fluorescent lamps (FLs) have been widely used in Thailand due to the energy saving policy in the past. This has led to a large amount of mercury (Hg) flows and stock in Thailand. Mathematical Material Flow Analysis (MMFA) was applied to estimate the Hg flows and stock through FLs in Thailand, based on data in the year of 2010. The results showed that around 526 kg of Hg was imported for FL production and 43 kg of Hg was imported with FLs, whereas 7 kg was exported with FLs. Hg was stocked in use around 1,100 kg. The results also showed that about 474 kg of Hg in FL waste was sent to dispose of or to recycle. Hg was released in the environment from FL production, use and the disposal stage at around 562 kg, with 84% going to land, 12% to air, and 4% to water. The scenario analysis in this study showed that limiting the Hg content of FLs to 2.5 mg per lamp has a high potential for reduction of Hg emissions, and that the</p>

	<p>replacement all FLs with light-emitting diode (LED) is a feasible strategy to reach Hg zero emission.</p>
CD0222	<p>Assessment of Environmental Burdens of the Current Disposal Method of Municipal Solid Waste in Kuwait Vs. Waste-to-Energy using Life Cycle Assessment (LCA)  <b>Ayed A. Al-Fadhli</b>  Kuwait Petroleum Corporation</p> <p><i>Abstract</i>—Life Cycle Assessment (LCA) is gaining wider acceptance as a method that evaluates the environmental burdens associated with a product, process or activity by identifying and quantifying the energy, materials used and wastes released to the environment. It is also considered as one of the best environmental management tools that can be used to compare alternative eco-performances of recycling or disposal systems. In this study, life cycle assessment of municipal solid waste (MSW) is reviewed to protect global environment and to control waste in the state of Kuwait. As the incremental population in Kuwait results in a dramatic increase in the MSW and unfortunately, the waste management system in the region has not been properly managed, yet. The study aimed to analyze potential environmental burdens of different waste-to-energy technologies through LCA model. The results of an attributional life cycle assessment (LCA) study are presented for three scenarios reflecting the management of municipal solid waste (MSW). The first (baseline) scenario reflects the current treatment of MSW, where plastic solid waste (PSW) and organics are landfilled. Scenarios II and III encompass a low-temperature pyrolysis (LTP) and hydrocracker units, respectively.</p> <p>It was found that a reduction of 75% in global warming potential (GWP), acidification potential (AP), photochemical eutrophication potentials (EP) and ozone creation (POCP) due to re-routing the PSW and Organics also, Incineration units Combined Heat and Power (IU-CHP) were found as huge reduction contributor of the studied pollutants over and above the Thermo-Chemical Treatment (TCT) unit.</p>
P0017	<p>Encapsulated Embryogenic Callus of <i>Clitoria ternatea</i> L. for Regeneration and Conservation  <b>Noraini Mahmud</b>, Rosna Mat Taha, Rashidi Othman, Hashimah Elias and Azani Saleh  University of Malaya, Malaysia</p> <p><i>Abstract</i>—Encapsulated embryogenic callus of <i>Clitoria ternatea</i> L. were successfully created from leaf explants within 3 weeks after germination on Murashige and Skoog (MS) media. The seeds were initially washed with tap water and teepol, then the seeds were sterilised with 99% (v/v) sodium hypochlorite solution for 1 minute and rinsed with distilled water three times. In a laminar flow cabinet, the seeds were dipped in 70% (v/v) ethanol for 1 minute and blotted with sterilised tissue. The 3 mm<sup>2</sup> leaf explants were encapsulated with 3% alginate (w/v) which were supplemented with various concentrations (0.5-2.5 mg l<sup>-1</sup>) and combinations of NAA, BAP and adenine. The optimum concentration for the formation of encapsulation matrix was 3.0% sodium alginate (NaC<sub>6</sub>H<sub>7</sub>O<sub>6</sub>). Encapsulated beads were soaked in 100 mM calcium chloride dehydrate (CaCl<sub>2</sub>.2H<sub>2</sub>O) solution for 30 minutes. No suitable beads were formed with low concentration (1-2%) of sodium alginate. Within 10 minutes soaking in calcium chloride dehydrate, clear and bead formation with no definite shape was observed. While, within 20 minutes in calcium chloride dehydrate, clear beads, solid and</p>



	<p>round in shape was observed, however, inside the bead was still in liquid condition. In the present study, the rate of germination of synthetic seeds were slightly decreased from 100% to 77% after 60 days of storage at 4 °C. Embryogenic tissue from leaf explants of <i>Clitoria ternatea</i> was distinguished by double staining method with bright red of acetocarmine. This technology is an alternative and supplementary method for regeneration, mass propagation and conservation of this medicinal, attractive ornamental and also forage crop for future uses and exploitation.</p>
P3005	<p>Austrian Sustainable Building Policy: Lessons for Turkey  <b>Hatice Kalfaoğlu Hatipoğlu</b>          Technical University of Vienna, Austria</p> <p><i>Abstract</i>—This paper explores the progress of sustainable building in Austria and its applicability for Turkey. First it explains the need for sustainability and the transition phase to sustainable building practices in Austria from the 1970s, exploring how these accelerated environmental performance. The paper describes Austria's policy, actors and initiatives with important milestones and its success as a benchmark country in terms of approaches to sustainable building. Secondly it discusses the state of art in Turkey and the translation of a sustainable Austrian building development model for Turkey. At the end, the paper demonstrates lessons from Austria's sustainable building policy and describes guidelines to further develop the sustainable building sector in Turkey.</p>
CD0220	<p>Façade Optimization in a Wind-driven Ventilated Residential Building Targeting Thermal Comfort, IAQ and Energy Consumption  <b>S. Marzban</b>, L. Ding, V. Timchenko, M. Irger          University of New South Wales, Sydney, Australia</p> <p><i>Abstract</i>—Residential buildings are responsible for a significant percentage of energy use and a huge amount of this energy is used for heating and cooling. Efficient natural ventilation is known as method to reduce the cooling energy use. Almost all of the building in modern cities can only use single-sided natural ventilation and façade design is known as an effective factor in wind driven single-sided ventilation of modern buildings. This research aims to develop a methodology to optimize façade design options in order to gain enough single-sided natural ventilation for a residential block. By means of wind-driven single-sided ventilation we are going to gain our three performance objectives which are thermal comfort and indoor air quality for the occupants and minimizing cooling energy consumption. To achieve this, an integration of genetic algorithm (GA), artificial neural network (ANN) and computational fluid dynamics (CFD) is proposed.</p>
S0004	<p>Wide Area Ontology Integration Scheme for Reasoning Agents in Surveillance Networks  <b>Soomi Yang</b>, Heejung Byun          The University of Suwon</p> <p><i>Abstract</i>—In this paper an efficient and scalable surveillance network providing systematic collection and analysis of social security data based on distributed cooperative ontology framework is proposed. Upon ontology integration system, each reasoning agent can build and process ontology cooperatively. They share context ontology for cooperative combined inference. In the process of reasoning agents not only can get services from a region server but also can form and</p>

	generate a P2P(peer-to-peer) network to provide services to each other in wider bandwidth. For efficient ontology integration the data weighting and similarity measure is incorporated and shows better performance.
CD0221	<p>Determination of the Optimal Dosage of Aluminum Sulfate in the Coagulation-Flocculation process using an Artificial Neural Network  <b>A. J. León-Luque</b>, C. L. Barajas, C.A. Peña-Guzmán  The Faculty of Environmental Engineer, Santo Tomás University, Bogotá Colombia</p> <p><i>Abstract</i>—The process of coagulation and flocculation is one of the most important operations among the water purification process, but its effectiveness is affected due to the calculation of the coagulant dosage which is performed by the Jar tests or the use of the Streaming Current Detector (SCD), having as main disadvantage that it does not take into account the change of the physicochemical parameters of the water in real time and also the need to obtain an optimal operation point for the equipment. In this paper the optimal dosage of Aluminum Sulfate (<math>Al_2(SO_4)_3 \cdot 18H_2O</math>) is determined using a model of Artificial Neural Network (ANN) that, when faced with real time variations of turbidity is able to calculate an indicated dose of coagulant, with the aim of achieving effective coagulation in the trial water and avoid excessive or insufficient presence of coagulant, minimize the need to make jars test continuously and reduce economic losses due to inadequate spending of coagulant.</p> <p>The ANN created is able to calculate the dosage based on the value of initial turbidity of the fluid to be treated with a MSE 0 mg/L, achieving removal percentages greater than 93% for most cases.</p>

15:00-15:10

Coffee Break



**Afternoon, August 6, 2015 (Thursday)**

**SESSION-3 (ICCCE&ICGES 2015)**

**Session Chair: Prof.**

**Time: 15:10-17:00 (7 presentations)**

**Venue: Washington**

E0003	<p>Kinetics Study of Castor Monoglyceride Modified Alkyd Resin Polycondensation  <b>Chigozie Uzoh and Okechukwu Onukwuli</b>  BAGHDAD UNIVERSITY – COLLEGE OF EDUCATION FOR PURE</p>
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	<p>SCIENCE</p> <p><i>Abstract-</i> Polymer metal complexes of poly ethylene glycol acetal and Ag (I), Cu (II), Ni (II), Mn (II), Co (III) and Hg (II) were prepared from the reaction of PEG with aldehyde derived from Erythro-ascorbic acid (pentulosono-<math>\gamma</math>-lactone-2,3-enedianoate). All these compounds were characterized by Thin Layer Chromatography (TLC) and FTIR spectra and aldehyde was also characterized by (U.V-Vis), <sup>1</sup>HNMR, <sup>13</sup>CNMR, and mass spectra. It has been established that, the polymer and its metal complexes showed good activities against four pathogenic bacteria (Escherichia coli, Klebsiella pneumoniae, Staphylococcus aureus, Staphylococcus Albus) and two fungal (Aspergillus Niger, Yeast). The polymer metal complexes showed higher activity than the free polymer. The order of increasing activities was polymer &lt; pol-Mn &lt; pol-Ni &lt; pol-Co &lt; pol-Cu &lt; pol-Hg &lt; pol-Ag. The ability of these compounds to show antimicrobial and antifungal properties suggests that, they can be further evaluated for medicinal and/or environmental applications.</p>
E0004	<p>PRODUCTION OPTIMIZATION OF STARCH FROM INDONESIAN LOCAL CORN WITH CONCENTRATION VARIATION OF SODIUM METABISULPHITE AND DRYING TIME</p> <p><b>Richie Agusta Iwan Chandra</b>, Sriwidodo Sriwidodo, Aliya Nur Hasanah and Rahma Agustina Universitas Padjadjaran</p> <p><i>Abstract-</i> Local corn produce starch with high whiteness, but has not been developed in the Pharmaceutical Industry. Starch is one of the raw materials that are used as an excipient of tablet. This study aimed to obtain corn starch as an excipient meets the standards and determine the effect of concentration sodium metabisulfite and drying time on the quality of starch. The research method using a completely randomized design with two factors, the concentration of sodium metabisulfite (3000 ppm, 2500 ppm and 2000 ppm) and drying time (24 hours, 28 hours). Starch was isolated by the wet method and starch were analyzed qualitatively, tested physicochemical properties, and is characterized by instrument Fourier Transform Infrared (FTIR) and scanning electron microscope (SEM). Results of the analysis showed that the starch from the corn meet the standards as pharmaceutical excipients. Concentration Sodium metabisulfite has very significant effect on yield, moisture content, and sulfite residue while drying time significantly affect yield, moisture content, compressibility and sulfite residues. combined treatment of drying time and the concentration of sodium metabisulfite has significant effect on yield, pH and compressibility. 28-hour drying time and concentration of 2500 ppm Sodium metabisulfite give the best effect on the quality of corn starch.</p>
E1001	<p>NATURAL ZEOLITE CATALYST FOR CONVERSION OF <math>\alpha</math>-PINENE</p> <p><b>Wijayati. N</b> and Utomo B. U Department of Chemistry, State University of Semarang, Jl. Raya Sekaran Gunungpati Semarang Indonesi</p> <p><i>Abstract-</i> The Natural zeolite catalyst (Si/Al = 2.5) was prepared by calcination. The physico-chemical properties were investigated by XRD, <sup>29</sup>Si MAS NMR, SEM, GC-MS and FT-IR spectroscopy of pyridine adsorbed. The activity of test of these catalysts has been carried out over the liquid-phase conversion of <math>\alpha</math>-pinene. The conversion reaction with natural zeolite, the highest selectivity of terpin</p>

	compound was 59.08% with a conversion of 99.78% at 120 min.
E1004	<p>The flavone, total phenolic composition and antioxidant activity of extracts from bast of Citrus maxima and rind of Citrus maxima  <b>Jin-Shun Lyu</b>, Xiao-Yan Liu, Hui Xu, Lun-Yong Bian  School of Chemistry and Chemical Engineering, Huaiyin Normal University</p> <p><i>Abstract-</i> In this paper, two extracts were extracted from bast of Citrus maxima (BCM) and the rind of Citrus maxima (RCM) using ethanol and water respectively. Total flavonoids and phenolics of two extracts were detected by UV/visible spectrophotometer and their antioxidant activity were evaluated by scavenging three free radicals (O<sub>2</sub>•, DPPH • and •OH radical). The flavonoids in ethanol extracts of RCM were analyzed by HPLC. Results showed that all extracts of RCM contained more flavonoids and phenolics than BCM and scavenging free radicals effect of ethanol extract of RCM were stronger than water extract. The ethanol extracts of RCM included four flavonoids of catechins, rutin, naringin and hesperidin. The rind of Citrus maxima as a plant-based antioxidative resource and as raw materials to extract the flavonoid and phenol.</p>
E1006	<p>Urea permeability of crosslinked chitosan-poly (vinyl alcohol) membrane  <b>Lusiana R. A</b>, Siswanta, D. and Mudasir  Diponegoro University</p> <p><i>Abstract-</i> Chitosan-citric acid cross-linking reaction showed that group modification group was able to increase the number of carrier compound active groups which led to the increase of membrane transport capacity. Substitution of the carboxyl group was also shown to reduce the adsorption of proteins on the membrane surface. This was confirmed by SEM analysis of the surface both chitosan and CS.cl.CA after contact with albumin. CS.cl.CA membrane transport capacities for urea IS 287 mg/L, respectively. Vitamin B12 and albumin were not able to pass through the membrane as indicated by the absence of UV-Vis absorption of both compounds in the acceptor phase. The characterization using FTIR spectrometry showed that cross-linking reaction has occurred for chitosan.</p>
E0012	<p>The effect of different storage of cold-pressed rice bran oil  <b>Chutima Ponchurdchai</b> and Jirada Singkhonrat  Thammasat University</p> <p><i>Abstract-</i> This study investigated the effect of different storage conditions of cold-pressed rice bran oil from 2 different regions in Thailand (Lopburi province, LRBO and Yasothorn province, YRBO). All samples were stored at different temperature as opened and sealed bottle for 12 months. Fatty acid composition by nuclear magnetic resonance, NMR spectroscopy, chemical properties such as acid value, iodine value and peroxide value were reported. Also, the antioxidant content and its activity were evaluated, including FRAP assay (Ferric reducing antioxidant potential) and DPPH radical scavenging assay (1,1-diphenyl-2-picrylhydrazyl radical reducing power methods). Cold-pressed rice bran oils sealed bottles for 12 months and freshly opened bottles have shown no affect to acid value, iodine value and peroxide value (p&lt;0.05). Fatty acid composition of oil by 1H NMR technique obtained a good agreement with gas chromatography technique and observed mol% of unsaturated fatty acid was slightly decreased after year storage. After 12-month storage below 5 °C temperature, LRBO and YRBO showed good radical scavenging activities</p>

	compared to quercetin with DPPH IC <sub>50</sub> of 0.647±0.02 and 0.663±0.02 mg/mL and with FRAP assay of 0.42106± 0.002 and 0.37471± 0.002 g quercetin equivalents/g, respectively.
S0003	<p>Preparation and Photocatalytic Performance of TiO<sub>2</sub> Immobilized on Fiberglass Cloth</p> <p><b>Deqiang Chen</b> and Yiqun Chen Hohai University</p> <p><i>Abstract</i>—In this study, the TiO<sub>2</sub> immobilized on fiberglass cloth was prepared to improve the photocatalytic activity of TiO<sub>2</sub> and overcome the difficulty of reuse through painting followed by sol-gel process. The morphology and microstructure of TiO<sub>2</sub> loaded on FGC were characterized via XRD and SEM, respectively. The result revealed that (1)the crystalline structure of immobilized TiO<sub>2</sub> was nearly unchanged compared with pure P25 nanoparticles. (2)the TiO<sub>2</sub> loaded on FGC had larger specific surface area than that of P25.(3)the TiO<sub>2</sub>/FGC system displayed remarkable photocatalytic activity on decomposition of MC-LR.</p>

**Afternoon, August 6, 2015 (Thursday)**

**SESSION–4 (ICEAE 2015)**

**Session Chair: Prof. Hideki Nakagome**

**Time: 17:00-18:50 (7 presentations)**

**Venue: Washington**

P0008	<p>Antioxidant Capacity of Giant Embryo Rice Seonong 17 and Keunnunjami</p> <p><b>Soo Im Chung</b>, Lara Marie P. Lo, Su Jin Nam, Xingyue Jin and Mi Young Kang Department of Food Science and Nutrition, Brain Korea 21 Plus Kyungpook National University, South Korea</p> <p><i>Abstract</i>—The antioxidant capacity of giant embryo brown rice Seonong 17 and Keunnunjami, in comparison with that of the normal embryo brown rice, was investigated. The rice grains were extracted with 70% ethanol and their antioxidant activity and components were analyzed. Compared with the normal brown rice, the giant embryo rice samples showed higher free radical scavenging, reducing power, ferrous chelating, xanthine oxidase inhibitory, and superoxide dismutase-like activities. Between the two giant embryo rice samples, Keunnunjami rice exhibited greater antioxidant activity than Seonong 17 rice. The total phenolic and total flavonoid contents were highest in Keunnunjami and lowest in normal embryo rice, indicating that these functional components are related to the high antioxidant activity observed in Keunnunjami. These findings provide significant information on the antioxidant potential of Seonong 17 and Keunnunjami giant embryo rice cultivars. Keunnunjami, in particular, could be a good source of natural antioxidants and may be beneficial as a functional biomaterial in the development of food products with strong antioxidant capacity.</p>
P0012	<p>Detailed Analysis of Various Effects of Vocal Teachings Using Wearable Systems</p> <p><b>Shinji KAWAKURA</b> and Ryosuke SHIBASAKI Shanghai Jiao Tong University, China</p>

	<p><i>Abstract</i>—Detailed analysis of the physical motions of real agricultural workers is meaningful, especially in terms of passing on the traditional manual skills of experienced workers.</p> <p>By investigating the manual daily tasks of outdoor workers, we developed wearable sensing systems. Focusing on traditional skills, we established a system of providing vocal instructions to inexperienced workers to improve their motions and postures.</p> <p>Timeline acceleration and angular velocity data were recorded by sensors attached to the arms and waist of the users, and the hoe they used. Data were sent to original programs installed on a laptop computer carried in a knapsack. Data were logged and processed using various methods. Vocal instructions that we recorded previously were sent to the inexperienced workers through an earphone to improve their agricultural techniques.</p> <p>Furthermore, we visually observed the workers with a video camera and analyzed the images with software using Optical Flow. We obtained detailed data related to timeline analysis.</p> <p>The analyses not only confirm the usefulness of the system but also reveal subtle changes graphically and numerically. We thus demonstrated that the system can improve worker motions by sending vocal instructions.</p>
P0016	<p>Potential of Natural Pigments Extracted from Callus of <i>Echinocereus Cinerascens</i>  <b>Hashimah Elias</b>, Rosna Mat Taha, Nor Azlina Hasbullah, Noraini Mahmud and Azani Saleh  University of Malaya, Malaysia</p> <p><i>Abstract</i>—This research focus on detection and quantification of pigments presence in callus cultures of <i>Echinocereus cinerascens</i> extracted by various solvents extraction. <i>Echinocereus cinerascens</i>, commonly known as ‘hedgehog cacti’ is a member of the Cactaceae family. This cactus species was propagated <i>in vitro</i> and the callus was induced in Murashige and Skoog medium supplemented with combination of 0.5 mg/L BAP and 0.5 mg/L NAA maintained under photoperiod of 16 hours light and 8 hours dark. Fresh samples of one-year-old callus were collected and dissolved in various types and concentrations of solvents such as 100% Acetone, 80% Acetone, 95% Ethanol, 100% Methanol and 90% Methanol. Each of the mixture was directly centrifuged to get clear supernatant containing pigments of interest. Pigments were detected and determined via the simplest technique, via UV-Vis spectrophotometer and Thin Layer Chromatography (TLC). UV-Vis spectrophotometer detected two families of pigments present in callus including carotenoids and tetrapyrroles. Pigment contents in various solvents extraction were estimated according to spectroscopic quantification equations established. Through TLC, spots were seen on the plates and Rf value of each spot was assessed to indicate the possible existence of carotenoids and tetrapyrroles. The findings offer preliminary research on natural pigments from <i>Echinocereus cinerascens</i> which would provide profits in the future application especially in food industry, medicine, agriculture and so on.</p>
P0024	<p>Parasitic Sterility in <i>Alburnus mossulensis</i> Infected by <i>Ligula intestinalis</i>  <b>Ali Parsa</b>  Islamic Azad University, Sanandaj Branch, Aquatic Animal Health &amp; Diseases Department, Sanandaj, Iran</p> <p><i>Abstract</i>—<i>Alburnus mossulensis</i> from the <i>cyprinidae</i> family is one of the indigenous fish in Gheshlagh Lake of Kordestan, Iran. <i>Ligula intestinalis</i> is one of</p>

	<p>the infective parasites among various species of fish and causes gonads atrophy. In this study, after detection of species and age of samples, the effects of this parasite on gonads tissues and sexual maturation of <i>Alburnus mossulensis</i> were investigated. By seasonal sampling 144 samples were collected. After investigating gonad tissue samples, it was clear that, there is a significant difference between the means of male and female gonads maturation rate in infected and non infected samples (<math>p &lt; 0.05</math>). Infection by <i>Ligula intestinalis</i> can be the reason for lack of gonads maturation. In addition, the abnormal degenerative changes like, absorption follicle, hemorrhage and infiltration of inflammation cells in ovary tissues of infected fish were seen. In testicle tissue, dispersed hemorrhage, atrophy and MMC (melano-macrophage center) were seen as pathological signs. So the spread of this parasite in different water sources is important as the point the maintenance of native species and cultivated fish.</p>
P3009	<p>Differential P-acquisition and Growth Characteristics of Wheat Cultivars under Buffered P-stress Environment  <b>M. Shahbaz Akhtar</b>, Yoko Oki, and Yoshitaka Nakashima  Graduate School of Environmental &amp; Life Science, Okayama University, Okayama, Japan</p> <p><i>Abstract</i>—Phosphorus (P) is rapidly bound in many natural and agricultural ecosystems due to elusive biogeochemical characteristics of soils rendering this non-renewable natural resource the most immobile and inaccessible nutrient to many crop plants. Plants display a myriad of rescue responses to combat this P-starvation such as enhanced P-acquisition and P-use efficiency, differential adaptive growth responses and preferential allocation of resources under P-stress environment. To elucidate P-starvation induced differential growth response and P-acquisition from sparingly soluble tri-calcium phosphate (<math>(Ca_3(PO_4)_2)</math>); four genetically diverse wheat cultivars were grown in a solution culture in a climatically controlled growth chamber. Seven-day-old uniform sized pre-germinated uniform seedlings of cultivars were transplanted in 3-L capacity pots containing <math>NH_4H_2PO_4</math> (AP) @ <math>200 \mu M P L^{-1}</math> as an adequate (control) level and <math>(Ca_3(PO_4)_2)</math> (TCP) @ <math>0.2 g L^{-1}</math> in a bid to maintain deficiently buffered P-stress environment during entire growth period. Orthophosphate concentration ([P]) and uptake in plant parts, and P-absorption, transport and utilization rates were substantially different in wheat cultivars indicating considerable genetic variability in tested cultivars. Highly significant correlations were observed between P-concentration and contents and growth related parameters. Relative growth rate of root was correlated significantly with root and total dry biomass of plants. Mean P-transport rate increased about 1.95-fold with adequate P-supply compared to sparingly soluble P in the rooting medium. Under P-starvation, more biomass accumulation by class-I (low P-tolerant/P-efficient) cultivars than class-II (low P-sensitive/P-inefficient) cultivars might be due to their better acquisition and utilization of P from sparingly soluble P from the rooting medium.</p>
P2004	<p>Effect of Electrical conductivity of Water on Some Soil Properties and Estimate of the Salt Concentration Factor  <b>Sayed Fakhreddin Afzali</b>  Shiraz University, Iran</p> <p><i>Abstract</i>—Quantitative analysis of soluble salts in soils and/or groundwater is one of the key processes in studying soil salt dynamics and assessing soil salinity. The total salt content and electrical conductivity (EC) of a soil extract are the most</p>

	widely used parameters for describing soil salinity. The main objective of this study was survey of factors influencing the accumulation of salts in the soil, leaching and a new method suggestion for soil salinity potential estimation. Therefore, 10 land transects with different quality of irrigation was sampled at intervals of 6 (15 samples) meters. Parameters of Electrical conductivity, field moisture content and saturation water content were measured for each sample, and then the salt concentration factor (SCF) was evaluated. The results showed that there is a polynomial relationship between E <sub>Ce</sub> and E <sub>Cw</sub> , saturation water content and field moisture content in all of the lands. The results also showed there is a polynomial relationship between the SCF and saturation water content with high correlation in all of the lands that they were sampling by transect.
P0010	<p>Isolation and Characterization of Atrazine-Degrading <i>Xanthomonas</i> sp. ARB2 and Its Use in Bioremediation of Contaminated Soils</p> <p><b>Sopid Sawangjit</b> Sunandha Rajabhat University, Thailand</p> <p><i>Abstract</i>—Thai degrading-bacteria, strain ARB2, was isolated from sugarcane field soils in Ratchaburi province of Thailand. Strain ARB2 was gram-negative bacteria, rod shape in pair and a single cell. The genomic DNA was extracted following the standard protocol for bacterial genomic DNA preparations. The partial 16S rDNA genes were amplified by polymerase chain reaction (PCR) using the universal primers of 16S rDNA gene. Sequence analysis of the PCR product indicated that the 16S rRNA gene in strain ARB2 was ranging from 89-91% identical to the same region in <i>Xanthomonas</i> sp. and were named <i>Xanthomonas</i> sp. ARB2. <i>Xanthomonas</i> sp. ARB2 was capable of degrading 300 mg L<sup>-1</sup> and 1 00mg kg<sup>-1</sup> of atrazine in mineral salts liquid medium and soil at 81% and 62% in 7 days, respectively. GC-MS analysis detected the formation of two metabolites, deethylatrazine (DEA) and deisopropylatrazine (DIA) during the process of degradation of atrazine.</p>

<b>19:00</b>	<b>Dinner</b>
<b>Hotel Restaurant</b>	

*Conferences ending, thanks!*



# One day tour

August 7, 2015

9:00-17:00



## One day tour in Paris

- **1. Arc de triomphe de l'Étoile–Avenue des Champs-Élysées - Place de la Concorde - Musée de l'Armée - Pont Alexandre III**

The **Arc de Triomphe de l'Étoile** stands in the centre of the Place Charles de Gaulle at the western end of the **Champs-Élysées**. The **Avenue des Champs-Élysées** is arguably one of the world's most famous streets, and is one of the most expensive strips of real estate in the world. The **Pont Alexandre III** connects the Champs-Élysées quarter and the Invalides and Eiffel Tower quarter.
- **2. Musée du Louvre (Outside)**

**Louvre Museum** is nearly 35,000 objects from prehistory to the 21st century are exhibited over an area of 60,600 square metres (652,300 square feet). With more than 9.7 million visitors each year, the Louvre is the world's most visited museum.
- **3. Notre Dame de Paris (Having lunch)**

**Notre-Dame de Paris** is widely considered to be one of the finest examples of French Gothic architecture and among the largest and most well-known church buildings in the world.
- **4. La Tour Eiffel**

The **Eiffel Tower** is the tallest structure in Paris and the most-visited paid monument in the world; 6.98 million people ascended it in 2011. The tower received its 250 millionth visitor in 2010.
- **5. PinaultPrintempsRedoute (Shopping)**

**Kering** (previously known as Pinault-Printemps-Redoute and PPR until 18 June 2013) is a French multinational company which develops a worldwide brand portfolio (luxury, sport & lifestyle divisions) distributed in 120 countries.
- **6. Seine River (If you want to have tour by ship, you must pay for it by yourself)**

The **Seine** is a 776 km long river and an important commercial waterway within the Paris Basin in the north of France.

# Conference Venue

## Mercure Paris Vélizy

<http://mercure-paris-velizy-meetings.com/en>



The hotel has: 182 spacious rooms (30sqm) distributed over 7 floors. They have air conditioning, a mini bar, welcome tray, flat screen TV, Canal + and satellite channels, telephone with line and voice mail, internet access, bathroom with bath tub. 115 'Standard' rooms — 38 'Superior' rooms — 29 'Privilège' rooms.

800 sqm dedicated to your meetings. Our 12 rooms (3 of which are modular) enjoy natural daylight and can accommodate meetings and conferences, cocktails and reception events for up to 400 persons. The rooms offer multimedia equipment as well as Internet access. They include 3 plenary suites (modular) and 9 smaller conference rooms. The rooms are ideally arranged for meetings requiring workshops and side conferences.



Shopping, heritage, sports, leisure, culture: Mercure Paris Vélizy is ideally situated to enjoy the riches of Paris and its surroundings. The Capital, with its famous museums and monuments, is only 30 minutes from the hotel by car. But the City of Lights is not the only plus of a stay at our hotel. Other highlights include: the parks of Versailles, the Racing Club de France, lakes and forests at Saint-Quentin-en-Yvelines, surprising landscapes of Miniature France.

## Contact Method

Address: 22 Avenue de l'Europe - 78140 VELIZY VILLACOUBLAY - FRANCE –  
tel : +33 (0)1 39 46 96 98 –

Please contact **Ms. Lisa Beauvivre** if you have any questions about the reservation.

E-mail: [mercurevelizy@alliance-hospitality.com](mailto:mercurevelizy@alliance-hospitality.com); [lisa.beauvivre@alliance-hospitality.com](mailto:lisa.beauvivre@alliance-hospitality.com)

# APCBEES Forthcoming Conferences

<http://www.cbees.org/events/>

CONFERENCE INFORMATION		PUBLICATION
<b>Oct. 11-12, 2015, New York, USA</b>		
<b>ICSEA 2015</b>	2015 3rd International Conference on Sustainable Environment and Agriculture (ICSEA 2015) <a href="http://www.icsea.org/">http://www.icsea.org/</a>	Journal of Environmental Science and Development (IJESD, ISSN:2010-0264) or Journal of Advanced Agricultural Technologies (JOAAT ISSN: 2301-3737)
<b>ICFN 2015</b>	2015 International Conference on Food and Nutrition (ICFN 2015) <a href="http://www.icfn.org/">http://www.icfn.org/</a>	International Journal of Food Engineering (IJFE)
<b>ICBEC 2015</b>	2015 6th International Conference on Biology, Environment and Chemistry (ICBEC 2015) <a href="http://www.icbec.org/">http://www.icbec.org/</a>	Volume of International Proceedings of Chemical, Biological and Environmental Engineering Journal ( IPCBEE, ISSN: 2010-4618)
<b>Oct. 23-25, 2015, Beijing, China</b>		
<b>ICAFS 2015</b>	2015 2nd International Conference on Advances in Food Sciences (ICAFS 2015) <a href="http://www.icafs.org/">http://www.icafs.org/</a>	Volume of International Proceedings of Chemical, Biological and Environmental Engineering Journal ( IPCBEE, ISSN: 2010-4618)
<b>ICEBS 2015</b>	2015 5th International Conference on Environment and BioScience (ICEBS 2015) <a href="http://www.icebs.org/">http://www.icebs.org/</a>	International Journal of Pharma Medicine and Biological Sciences (IJPMBS, ISSN: 2278-5221)
<b>ICAAS 2015</b>	2015 6th International Conference on Agriculture and Animal Science (ICAAS 2015) <a href="http://www.icaas.net/">http://www.icaas.net/</a>	Journal of Advanced Agricultural Technologies (JOAAT, ISSN:2301-3737)
<b>Nov. 09-10, 2015, Jinju, South Korea</b>		
<b>ICCSE 2015</b>	2015 4th International Conference on Chemical Science and Engineering (ICCSE 2015) <a href="http://www.iccse.org/">http://www.iccse.org/</a>	International Journal of Chemical Engineering and Applications (IJCEA, ISSN:2010-0221)
<b>ICABT 2015</b>	2015 3rd International Conference on Agriculture and Biotechnology (ICABT 2015) <a href="http://www.icabt.org/">http://www.icabt.org/</a>	Journal of Advanced Agricultural Technologies (JOAAT, ISSN:2301-3737) Or International Journal of Life Sciences Biotechnology and Pharma Research (IJLBPR, ISSN:2250-3137)
<b>ICESB 2015</b>	2015 5th International Conference on Environment Science and Biotechnology (ICESB 2015) <a href="http://www.icesb.org/">http://www.icesb.org/</a>	the Volume of Journal (IPCBEE, ISSN: 2010-4618)
<b>Nov. 19-21, 2015, Auckland, New Zealand</b>		
<b>ICCEN 2015</b>	2015 4th International Conference on Civil Engineering (ICCEN 2015) <a href="http://www.iccen.org/">http://www.iccen.org/</a>	International Journal of Engineering and Technology (IJET, ISSN:1793-8236)
<b>ICFSH 2015</b>	2015 2nd International Conference on Food Sciences and Health (ICFSH 2015) <a href="http://www.icfsh.org/">http://www.icfsh.org/</a>	International Journal of Food Engineering (IJFE ISSN: 2301-3664) or Journal of Advanced Agricultural Technologies (JOAAT ISSN: 2301-3737)

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<b>ICECB 2015</b>	2015 4th International Conference on Environment, Chemistry and Biology (ICECB 2015) <a href="http://www.icecb.org/">http://www.icecb.org/</a>	Volume of International Proceedings of Chemical, Biological and Environmental Engineering Journal ( IPCBEE, ISSN: 2010-4618)
<b>Dec. 05-06, 2015, Dubai, UAE</b>		
<b>ICFAS 2015</b>	2015 3rd International Conference on Food and Agricultural Sciences (ICFAS 2015) <a href="http://www.icfas.org/">http://www.icfas.org/</a>	Journal of Advanced Agricultural Technologies (JOAAT, ISSN:2301-3737) Or International Journal of Food Engineering (IJFE, ISSN: 2301-3664)
<b>ICEPP 2015</b>	2015 3rd International Conference on Environment Pollution and Prevention (ICEPP 2015) <a href="http://www.icepp.org/">http://www.icepp.org/</a>	The Journal of Environmental Science and Development (IJESD, ISSN:2010-0264)
<b>ICMEB 2015</b>	2015 3rd International Conference on Medical, Environmental and Bio-technology (ICMEB 2015) <a href="http://www.icmeb.org/">http://www.icmeb.org/</a>	International Journal of Pharma Medicine and Biological Sciences (IJPMBS, ISSN: 2278-5221) Or Journal of Environmental Science and Development (IJESD, ISSN:2010-0264)
<b>Dec. 25-26, 2015, Phuket, Thailand</b>		
<b>ICESR 2015</b>	2015 2nd International Conference on Environmental Systems Research(ICESR 2015) <a href="http://www.icesr.org/">http://www.icesr.org/</a>	the Volume of Journal (IPCBEE, ISSN: 2010-4618)
<b>ICAMC 2015</b>	2015 International Conference on Architecture, Materials and Construction (ICAMC 2015) <a href="http://www.icamc.org/">http://www.icamc.org/</a>	International Journal of Structural and Civil Engineering Research (IJSCER, ISSN: 2319-6009) Or International Journal of Materials, Mechanics and Manufacturing (IJMMM, ISSN: 1793-8198)
<b>ICSAT 2015</b>	2015 International Conference on Sustainable Agriculture Technologies (ICSAT 2015) <a href="http://www.icsat.org/">http://www.icsat.org/</a>	Journal of Advanced Agricultural Technologies (JOAAT, ISSN:2301-3737)
<b>Jan. 12-13, 2016, Penang, Malaysia</b>		
<b>ICEBE 2016</b>	2016 2nd International Conference on Environment and Bio-Engineering (ICEBE 2016) <a href="http://www.icebe.org/">http://www.icebe.org/</a>	Journal of Environmental Science and Development (IJESD, ISSN:2010-0264) Or International Journal of Bioscience, Biochemistry and Bioinformatics (IJBBB, ISSN: 2010-3638)
<b>ICGCE 2016</b>	2016 3rd International Conference on Geological and Civil Engineering (ICGCE 2016) <a href="http://www.icgce.org/">http://www.icgce.org/</a>	International Journal of Structural and Civil Engineering Research (IJSCER, ISSN: 2319-6009)
<b>ICPPE 2016</b>	2016 3rd International Conference on Petroleum and Petrochemical Engineering (ICPPE 2016) <a href="http://www.icppe.org/">http://www.icppe.org/</a>	International Journal of Chemical Engineering and Applications (IJCEA ISSN: 2010-0221)
<b>Jan. 23-25, 2016, Pattaya, Thailand</b>		



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<p><b>ICBBB 2016</b></p>	<p>2016 6th International Conference on Bioscience, Biochemistry and Bioinformatics (ICBBB 2016)  <a href="http://www.icbbb.org/">http://www.icbbb.org/</a></p>	<p>International Journal of Life Sciences Biotechnology and Pharma Research (IJLBPR, ISSN:2250-3137)  Or  International Journal of Bioscience, Biochemistry and Bioinformatics (IJBBB, ISSN: 2010-3638)  Or  International Journal of Pharma Medicine and Biological Sciences (IJPMBS, ISSN: 2278-5221)</p>
<p><b>ICCCH 2016</b></p>	<p>2016 5th International Conference on Climate Change and Humanity (ICCCH 2016)  <a href="http://www.iccch.org/">http://www.iccch.org/</a></p>	<p>International Proceedings of Chemical, Biological and Environmental Engineering (IPCBEE)</p>

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