

14th International Conference on Heavy Metals in the Environment

Program



Department of Agricultural Chemistry

National Taiwan University

Taipei, Taiwan, November 16-23, 2008

14th ICHMET

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Conference Date

16-23 November 2008

Conference Venue

GIS Convention Center at National Taiwan University
B1, No.85, Roosevelt Road, Section 4, Taipei, Taiwan

Organizing and Steering Committees

Organizers

Department of Agricultural Chemistry, National Taiwan University

Department of Safety, Health, and Environmental Engineering, National United University, Taiwan, ROC

Taiwan Association of Soil and Groundwater Environmental Protection

Sponsors

National Science Council, Taiwan, ROC

Council of Agriculture, Taiwan, ROC

College of Bioresources and Agriculture, National Taiwan University, Taiwan, ROC

Environmental Analysis Laboratory, Environmental Protection Administration, Taiwan, ROC

Institute of Occupational Safety and Health, Taiwan, ROC

Taiwan Power Company, Taiwan, ROC

Conference Chairman

Zueng-Sang Chen

College of Bioresources and Agriculture, National Taiwan University

Conference Secretary General

Dar-Yuan Lee

Department of Agricultural Chemistry, National Taiwan University

Tser-Sheng Lin

Department of Safety, Health and Environmental Engineering, National United University

Local Organizing Committee

Chan, C. C.

Institute of Occupational Medicine and Industrial Hygiene, National Taiwan University

Chang, Su-San.

Department of International Affairs. Council of Agriculture, Executive Yuan

Chen, J. H.

Department of Soil and Environmental Science, National Chung Hsing University

Lin, J. G.

Graduate Institute of Environmental Engineering, National Chiao Tung Univ.

Lin, Tsai-Fu

Graduate Institute of Environmental Engineering, National Chung Kung University

Liou, Saou-Hsing

School of Public Health, National Defense Medical Center

Chen, Wen-Te

Agriculture and Food Agency, Council of
Agriculture, Executive Yuan

Chiou, Hung-Yi

School of Public Health, Taipei Medical
University

Chung, Ren-Shih

Department of Agricultural Chemistry, National
Taiwan University

Hseu, Zeng-Yei

Department of Environmental Science and
Engineering, National Ping-Tung University of
Science and Technology

Hsieh, Dennis

Division of Environmental Health and
Occupational Medicine, National Health
Research Institute

Hsu, Ming-Hsi

College of engineering and science, National
United University

Huang, Chih-Ping

Graduate Institute of Environmental
Engineering, National Chiao Tung Univ.

Tsai, Horng-Der

Soil and Groundwater Pollution and Remediation
Foundation, Environmental Protection
Administration

Huang, Y. Star

Taiwan Forest Research Institute

Kao, M. M.

Graduate Institute of Environmental
Engineering, National Cheng Kung Univ.

Liu, Chen-Wuing

Department of Bioenvironmental System
Engineering, National Taiwan University

Liu, Jhy-Chern

Department of Chemical Engineering, National
Taiwan University of Science and Technology

Lo, Shang-Lien

Graduate Institute of Environmental
Engineering, National Taiwan University

Shih, Tung-Sheng

Institute of Occupational Safety and Health

Wang, J. D.

Institute of Occupational Medicine and Industrial
Hygiene, National Taiwan University

Wang, Pih

Environmental Analysis Laboratory,
Environmental Protection Administration

Wang, Shu-Li

Division of Environmental Health and
Occupational Medicine, National Health
Research Institute

Wu, Shian-Chee

Graduate Institute of Environmental
Engineering, National Taiwan University

Yang, Mo-Hsiung

Department of Biomedical Engineering and
Environmental Science, National Tsing Hua
University

Yang, Shang-Shyng

Institute of Microbiology and Biochemistry,
National Taiwan University

International Steering Committee

Chairman:

Jerome Nriagu (USA)

Committee members:

Boutron, Claude (France)	Horowitz, Arthur (USA)	Munthe, John (Sweden)
Chang, Louis W. (Taiwan)	Hu, Howard (USA)	Mushak, Paul (USA)
Chen, Chien-Jen (Taiwan)	Hutchison, Tom (Canada)	Pacyna, Josef (Norway)
Chen, Zueng-Sang (Taiwan)	Jardim, Wilson (Brazil)	Pirrone, Nicola (Italy)
Flegal, Russ (USA)	Lee, Dar-Yuan (Taiwan)	Ryaboshapko, Alexey (Russia)
Fowler, Bruce (USA)	Levin, Leonard (USA)	Shotyk, Bill (Germany)
Grandjean, Philip (Denmark)	Lin, Tser-Sheng (Taiwan)	Silbergeld, Ellen (USA)
Gulson, Brian (Australia)	MacDonald, Rob (Canada)	Sobral, Luis (Brazil)
Harrison, Roy (UK)	Malm, Olaf (Brazil)	Yang, Mo-Hsiung (Taiwan)

International Scientific Committee

Boutron, Claude

University of Grenoble, France

Chen, Zueng-Sang

National Taiwan University, Taiwan

Farmer, John

University of Edinburgh, Scotland

Fowler, Bruce

University of Maryland, USA

Grandjean, Philip

University of Odense, Denmark

Gulson, Bryan

Macquarie University, Australia

Gustin, Mae

University of Nevada-Reno, USA

Harrison, Roy

University of Birmingham, UK

Horowitz, Arthur

US Geological Survey, USA

Horvat, Milena

Josef Stefan Institute, Slovenia

Hu, Howard

University of Michigan, USA

Mason, Robert

University of Connecticut, USA

Melamed, Ricardo

CETEM, Brazil

Mukherjee, Arum

University of Helsinki, Finland

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PB Associates, USA

Pacyna, Jozef

NILU, Norway

Pignata, Maria

University of Cordoba, Argentinian

Pirrone, Nicola

CNR-Institute for Atmospheric Pollution, Italy

Poissant, Laurier

Environment Canada

Purvis, O. Williams

Natural History Museum, UK

Reimann, Clemens

Geological Survey of Norway

Shotyk, William

University of Heidelberg, Germany

Hutchinson, Thomas

Trent University, Canada

Lacerda, Luis

Federal University of Fluminense, Brazil

Lalor, Gerald

University of the West Indies, Jamaica

Lee, Dar-Yuan

National Taiwan University, Taiwan

Li, Xiangdong

Polytechnical University, Hong Kong

Lin, Tser-Sheng

National United University, Taiwan

Ma, Lena

University of Florida, USA

Mahaffey, Katheryn

US Environmental Protection Agency

Silbergeld, Ellen

Johns Hopkins University, USA

Sobral, Luiz Gonzaga Santos

CETEM, Brazil

Steinnes, Eileev

Norwegian University of Sci & Technology

Szefer, Piotr

Medical University of Gdansk, Poland

Tessier, Andre

University of Quebec, Canada

Veiga, Marcelo

University of British Columbia, Canada

Ward, Neil

University of Surrey, UK

Program at a Glance

Sunday 16-Nov	Monday 17-Nov	Tuesday 18-Nov	Wednesday 19-Nov	Thursday 20-Nov	Friday 21-Nov	Saturday 22-Nov
	Opening Ceremony 0900 - 0920					
	Keynote Speech 0920 - 1020	Concurrent Session 4 0840 - 1000	Concurrent Session 8 0900 - 1000			
	Morning Tea 1020 - 1050	Morning Tea 1000 - 1030	Morning Tea 1000 - 1030			
	Concurrent Session 1 1050 - 1230	Concurrent Session 5 1030 - 1210	Concurrent Session 9 1030 - 1230			
	Lunch 1230 - 1300	Lunch 1210 - 1300	Lunch 1230 - 1300			
Registration 1300 - 1800	Poster Social 1300 - 1400	Poster Social 1300 - 1400	Poster Social 1300 - 1400			Post-Conference Tour
	Concurrent Session 2 1400 - 1500	Concurrent Session 6 1400 - 1500	Keynote Speech 1400 - 1500			
	Afternoon Tea 1500 - 1530	Afternoon Tea 1500 - 1530	Closing Ceremony 1500 - 1530			
	Concurrent Session 3 1530 - 1650	Concurrent Session 7 1530 - 1650				
Welcome Reception 1800 - 2100		Banquet 1830 - 2100				

14th ICHMET Detailed Program - Monday Nov. 17, 2008

08:30-09:00	Speaker Preparation	
09:00-09:20	Opening Ceremony [Alexander Hall]	
09:20-10:20	<p style="text-align: center;">Keynote speech</p> <p style="text-align: center;">The use of soil amendments for the remediation of heavy metal-contaminated sites</p> <p style="text-align: center;"><i>Gary Michael Pierzynski</i> [Alexander Hall]</p>	
10:20-10:50	Morning Tea and Coffee	
Concurrent Session 1		
10:50-12:30	Measurement and exposure assessment to heavy metals [Socrates Hall]	Crop and food safety related to heavy metals [Locke Hall]
12:30-13:00	Lunch	
13:00-14:00	Poster Social [Plato Hall]	
Concurrent Session 2		
14:00-15:00	Measurement and exposure assessment to heavy metals [Socrates Hall]	Crop and food safety related to heavy metals [Locke Hall]
15:00-15:30	Afternoon Tea and Coffee	
Concurrent Session 3		
15:30-16:50	Measurement and exposure assessment to heavy metals [Socrates Hall]	Crop and food safety related to heavy metals [Locke Hall]
		Risk assessment and risk management pertaining to toxic metals in the environment [Archimedes Hall]

Monday 17 November- Detailed Program

0900-0920	Opening Ceremony				
Alexander Hall	Opening Remarks:				
	Conference Chairman			Zueng-Sang Chen	
	Dean of College of Bioresources and Agriculture, NTU			Bao-Ji Chen	
	Chairman, International Steering Committee			Jerome O. Nriagu	
0920-1020	Keynote Speech				
Alexander Hall	Session Chair: Dar-Yuan Lee				
	The use of soil amendments for the remediation of heavy metal-contaminated sites				
	<i>G. M. Pierzynski, L. R. Baker, G. M. Hettiarachchi, and K. G. Scheckel</i>				
1020-1050		Morning Tea			
1050-1230	Concurrent Session 1				
Socrates Hall	Measurement and exposure assessment to heavy metals				
	Session Chairs: William Shotyk, Yaw-Huei Hwang				
1050-1130	What goes up must come down: 15,000 years of atmospheric Pb and Sb deposition recorded by ombrotrophic peat bogs and arctic ice, their accumulation in soils, and natural removal from precipitation, surface waters and groundwaters				
	<i>W. Shotyk, M. Krachler, and A. Cheburkin</i>				
1130-1150	Characterization of free tropospheric atmospheric mercury in East Asia				
	<i>G. R. Sheu, N. H. Lin, and C. H. Lee</i>				
1150-1210	Total mercury in Great Cormorant (<i>Phalacrocorax Carbo</i>) and fish in polish sector of Vistula Lagoon				
	<i>M. Misztal-Szkudlińska, P. Konieczka, J. Namieśnik, and P. Szefer</i>				
1210-1230	Quantification and characterization of total mercury concentrations in cloud water collected on Mt. Bamboo, Taiwan				
	<i>C. H. Lee, G. R. Sheu, and N. H. Lin</i>				
Locke Hall	Crop and food safety related to heavy metals				
	Session Chairs: Andrew C. Chang, Horng-Yuh Guo				
1050-1130	A new approach to assess availability of soil-borne heavy metals for plant uptake				
	<i>A. C. Chang, A. L. Page, B. Koo, W. Chen, and G. Marchi</i>				
1130-1150	Effect of Cl^- , SO_4^{2-} , and fulvate anions on Cd^{2+} free ion concentrations in soil and associated solutions				
	<i>S. W. Chang-Chien, J. H. Liao, M. C. Wang, and M. M. Rao</i>				
1150-1210	Uptake of metals and nutrients by barley forage fertilized with manure from cattle fed dried distiller's grain with solubles (DDGS)				
	<i>X. Hao, P. R. Caffyn, H. H. Janzen, and T. A. McAllister</i>				
1210-1230	Impacts of arsenic contaminated soils on agroecosystems on Guandu plain, Taipei: assessment by As fractionation				
	<i>S. W. Su and Z. S. Chen</i>				

Archimedes Hall	Risk assessment and risk management pertaining to toxic metals in the environment Session Chairs: Jerome O. Nriagu, Ming-Hung Wong
1050-1130	Risk assessment and risk management pertaining to toxic metals in the environment – the case of mercury <i>M. H. Wong</i>
1130-1150	Health risk assessment related to mercury exposure from the consumption of fish from a proposed hydroelectric complex <i>R. Schetagne, M. Plante, G. Vaillancourt, and D. Dumont</i>
1150-1210	Risk assessment of the mercury footprint in selected rivers of South Africa <i>J. J. Leaner, M. Binedell, R. Oosthuizen, M. Matookane, R. P. Mason, and P. MacMillan</i>
1210-1230	Mercury contamination in the vicinity of a chlor-alkali plant in Olt river (Romania): sediment, fish and hair <i>A. G. Bravo, J. L. Loizeau, B. Ferrari, S. Bouchet, V. Ungureanu, D. Amouroux, and J. Dominik</i>
1230-1300	Lunch
1300-1400	Plato Hall Poster Social
1400-1500	Concurrent Session 2
Socrates Hall	Measurement and exposure assessment to heavy metals Session Chairs: Brian L. Gulson, Guey-Rong Sheu
1400-1420	Progress towards undertaking a national survey of mercury levels in South African water resources <i>C. Williams, J. J. Leaner, C. Petersen, V. Somerset, R. P. Mason, and G. Bernier</i>
1420-1440	The preliminary study of total mercury in drinking and river water in Taiwan by cold vapor atomic fluorescence spectrometry <i>M. N. Chen, K. L. Tsai, R. S. Lee, and S. C. Chuang</i>
1440-1500	Toxicokinetic models as predictive tools in biomonitoring of metals in marine amphipod and decapod crustaceans <i>G. P. Zauke</i>
Locke Hall	Crop and food safety related to heavy metals Session Chairs: Pavel Tlustos, Min-Chao Wang
1400-1420	Zinc in dietary supplements: an assessment of health risk <i>S. Kozanecki and J. Nriagu</i>
1420-1440	Characteristic of heavy metals contents and distribution in red soil with steel slug amendment- plot experiment <i>T. L. Chung, C. J. Liao, C. C. Cheng, and H. S. Tai</i>
1440-1500	Prediction of cadmium uptake of different rice varieties in paddy soils of Taiwan <i>H. Y. Guo, T. S. Liu, C. L. Chu, C. F. Chiang, C. M. Chiang, and P. F. Römken</i>
Archimedes Hall	Risk assessment and risk management pertaining to toxic metals in the environment Session Chairs: Roger Schetagne, Tser-Sheng Lin
1400-1420	Distribution of trace metals in waters and sediments of the MaeTang reservoir, Northern Thailand <i>S. Grellier, M. P. Bonnet, J. L. Janeau, W. Thothong, and P. Seyler</i>

1420-1440	The accumulation of Pb, Cd, Zn and Cu in earthworm (<i>Lumbricus terrestris</i>) living near and zinc smelter "Trepça" in Mitrovica-Republic of Kosova <i>K. Rr. Letaj, I. R. Elezaj, and Q. I. Selimi</i>
1440-1500	Evaluation the toxic heavy metal species in electroplating industrial sludge using BCR sequential extraction leaching procedure <i>S. Vellaichamy, K. Thanasekaran, and K. Palanivelu</i>
1500-1530	Afternoon Tea
1530-1650	Concurrent Session 3
Socrates Hall	Measurement and exposure assessment to heavy metals Session Chairs: Brian L. Gulson, Guey-Rong Sheu
1530-1550	Influence of atmospheric deposition on the concentration of some trace elements in natural surface soil <i>A. Fejzo, E. Steinnes, and S. Lierhagen</i>
1550-1610	Low level blood lead and hearing loss among steel workers <i>Y. H. Hwang, H. Y. Chiang, and M. C. Yen-Chien</i>
1610-1630	Airborne lead carbonate as the main source of lead in blood of children from a seaside community <i>B. Gulson, M. Korsch, M. Matison, C. Douglas, L. Gillam, and V. McLaughlin</i>
1630-1650	Toxicological principles of heavy metal carcinogenesis with special emphasis on cadmium <i>T. Westermarck, V. M. Abdulla, T. Tallberg, E. Antila, H. Mussalo-Rauhamaa, M. Kantola, and F. Atroshi</i>
Locke Hall	Crop and food safety related to heavy metals Session Chairs: Pavel Tlustos, Min-Chao Wang
1530-1550	Feasibility of phosphate materials to immobilize cadmium in arable soil <i>C. O. Hong and P. J. Kim</i>
1550-1610	Assessing the phytotoxicity of Cr in Cr(VI)-contaminated soils by XANES and resin extraction <i>C. P. Chen, K. W. Juang, T. H. Lin, and D. Y. Lee</i>
1610-1630	Heavy metal concentration in greenhouse vegetables: impact on human health <i>A. S. Ostovar, F. Aghili, and A. H. Khoshgoftarmanesh</i>
1630-1650	Heavy metal concentrations and mineral grains in soils and sands of Hindu Kush Ranges, Asian Plate, Northern Pakistan <i>A. Khaliq, S. Khan, C. J. Moon, and J. Ahmad</i>
Archimedes Hall	Risk assessment and risk management pertaining to toxic metals in the environment Session Chairs: Roger Schetagne, Tser-Sheng Lin
1530-1550	Rice husk Fe-MCM-41 as an adsorbent for arsenic removal <i>W. Tong-on, S. Sthiannopkao, K. W. Kim, and S. Chiarakorn</i>
1550-1610	Heavy metals distribution and seasonal variation of dissolved metal concentrations in surface waters and sediments of the Poopó Basin (Central Bolivian Highland) <i>M. E. Garcia, L. Bengtsson, O. Ramos, and J. Quintanilla</i>
1610-1630	An assessment of mercury sources in selected solid waste streams of South Africa <i>K. E. Masekoameng, J. J. Leaner, L. Godfrey, J. Pacyna, and E. Pacyna</i>

1630-1650 Risk assessment of lead, cadmium, chrome, and nickel for human health through consumption of greenhouse cucumber and bell pepper
F. Aghili, A. H. Khoshgoftarmanesh, M. Afyuni, and R. Schulin

14th ICHMET Detailed Program - Tuesday Nov. 18, 2008

Speaker Preparation		
Concurrent Session 4		
08:10-08:40		
08:40-10:00	Soil remediation and soil quality criteria [Socrates Hall]	Measurement and exposure assessment to heavy metals [Locke Hall]
10:00-10:30	Morning Tea and Coffee	
Concurrent Session 5		
10:30-12:10	Soil remediation and soil quality criteria [Socrates Hall]	Measurement and exposure assessment to heavy metals [Locke Hall]
12:10-13:00	Lunch	
13:00-14:00	Poster Social [Plato Hall]	
Concurrent Session 6		
14:00-15:00	Soil remediation and soil quality criteria [Socrates Hall]	Trend Analysis – spatial and temporal [Locke Hall]
15:00-15:30	Afternoon Tea and Coffee	
Concurrent Session 7		
15:30-16:50	Soil remediation and soil quality criteria [Socrates Hall]	Trend Analysis – spatial and temporal [Locke Hall]
18:30-21:00	Banquet (Howard International House Taipei, 2F)	

Tuesday 18 November - Detailed Program

0840-1000	Concurrent Session 4
Socrates Hall	Soil remediation and soil quality criteria Session Chairs: Gary Michael Pierzynski, Chao-Ming Lai
0840-0920	Remediation of heavy metal-contaminated soils using soil amendments and layer management method <i>J. E. Yang, Y. S. Ok, W. I. Kim, and J. S. Lee</i>
0920-0940	Decreasing soil resin-extractable Cr(VI) in Cr(VI)-spiked alkaline soils by using ferrous iron and sodium dithionite <i>C. J. Cheng, T. H. Lin, C. P. Chen, K. W. Juang, and D. Y. Lee</i>
0940-1000	Remediation of cadmium-contaminated paddy soils by washing with ferric chloride 1: on-site washing and verification of the washing effects <i>T. Makino, Y. Maejima, I. Akahane, T. Kamiya, H. Takano, K. Kondo, and N. Sekiya</i>
Locke Hall	Measurement and exposure assessment to heavy metals Session Chairs: Ole William Purvis, Shang-Lien Lo
0840-0900	20 years investigating lichen biodiversity under globally changing atmospheric conditions <i>O. W. Purvis, L. González-Miqueo, C. Unsworth, W. Dubbin, B. Spiro, P. D. J. Chimonides, R. Mackie, and H. Read</i>
0900-0920	Heavy metals in drinking water with different hardness <i>S. L. Lo, S. C. Weng, and L. A. Phan</i>
0920-0940	Determination of skin penetration of zinc oxide nanoparticles with stable isotopes <i>H. Wong, B. Gulson, J. Trotter, M. McCulloch, P. Casey, G. Greenoak, M. McCall, J. Stauber, and L. Gomez</i>
0940-1000	Determination and distribution of methylmercury in sediments of Korea using purge and trap GC-MS <i>Y. H. Kim, J. S. Lee, J. S. Park, J. S. Cha, H. G. Kang, E. J. Hong, J. S. Cho, G. T. Jung and K. Y. Jung</i>
Archimedes Hall	Biomarkers of exposure and effects of heavy metals & Gene-environment-metal interactions Session Chairs: Ellen Silbergeld, Mohamed Abdulla
0840-0920	Lead neurotoxicity: a behavioral, molecular and therapeutic perspective <i>T. R. Guilarte</i>
0920-0940	The effects of combined Cu and Ni contamination on growth and reproduction of earthworm <i>Eisenia fetida</i> <i>J. H. Chen and C. S. Wang</i>
0940-1000	Examination of kidney of the local population of feral pigeon (<i>Columba Livia</i>) living near lead and zinc smelter "Trepca" in Kosova <i>Q. I. Selimi, I. R. Elezaj, and K. Rr. Letaj</i>
1000-1030	Morning Tea

1030-1210 Concurrent Session 5	
Socrates Hall	Soil remediation and soil quality criteria Session Chairs: Gary Michael Pierzynski, Chao-Ming Lai
1030-1050	Electrokinetic removal of lead from saturated powder activated carbon: effects of processing fluid <i>C. H. Weng and M. C. Hsu</i>
1050-1110	Comparison of pot and field growing conditions for the cadmium and zinc accumulation by plants grown at contaminated soils <i>P. Tlustos, J. Szakova, J. Habart, D. Pavlikova, M. Puncochar, and J. Najmanova</i>
1110-1130	French marigold and impatiens as Cd super-accumulators for Cd-contaminated soils <i>C. C. Lin, H. Y. Lai, and Z. S. Chen</i>
1130-1150	Sorption and reductive transformation of hexavalent chromium on coconut-shell-derived black carbon <i>Y. S. Shen and S. L. Wang</i>
1150-1210	Removal of hexavalent chromium by a column packed with lithium intercalated gibbsite (LIG) <i>L. C. Hsu, S. L. Wang, and Y. M. Tzou</i>
Locke Hall	Measurement and exposure assessment to heavy metals Session Chairs: Ole William Purvis, Shang-Lien Lo
1030-1050	Investigation of the biochemical effects of metal contamination in seaweeds <i>O. O'Donovan, P. McLoughlin, and S. Ryan</i>
1050-1110	Cadmium pollution in soil-rice systems and its exposure to local residents in Shangba Village, Guangdong, China <i>N. C. Chen, J. M. Zhou, D. Bi, S. G. Xu, and Y. G. Zhu</i>
1110-1130	Concentrations of 46 elements in natural vegetation in southern Norway: seasonal trends <i>M. Nordløy, E. Steinnes, and A. Brekken</i>
1130-1150	Heavy metal source-tracing through direct determination and chemical extraction techniques: the Seine River study case <i>C. Priadi, S. Ayrault, E. Robin, P. Bonté, and G. Morin</i>
1150-1210	Lead uptake by wheat and corn as affected by application of Pb(NO ₃) ₂ and Pb-enriched cow manure and sewage sludge <i>A. H. Baghaie, A. H. Khoshgoftarmanesh, M. Afyuni, and R. L. Chaney</i>
Archimedes Hall	Biomarkers of exposure and effects of heavy metals & Gene-environment-metal interactions Session Chairs: Ellen Silbergeld, Mohamed Abdulla
1030-1050	Tissue accumulation of Pb δ-aminolevulinic acid dehydratase, hematocrit and hemoglobin amount in blood of Feral Pigeons (<i>Columba livia</i>) living in Prishtina the capital of Kosova (four year study) <i>Q. I. Selimi, I. R. Elezaj, and K. Rr. Letaj</i>
1050-1110	Speciation of low levels of arsenic in urine samples by high performance liquid chromatography-inductively coupled plasma-mass spectrometry (HPLC-ICP-MS) <i>A. M. Linder, Z. Rivera-Núñez, J. O. Nriagu, and B. Chen</i>
1110-1130	Arsenic and renal dysfunction in an industrial area of Taiwan <i>S. L. Wang, J. W. Chen, H. Y. Chen, J. H. Wu, C. P. Wen, and S. H. Liou</i>

1130-1150	Erythrocyte δ -aminolevulinic acid dehydratase (ALA-D) activity and blood lead level (PbB) of Tortoise (<i>Testudo hermanni</i> , Gmel.) of vicinity of lead and zinc smelter "Trepca"-Republic of Kosova <i>I. R. Elezaj, D. A. Rozhaja, Q. I. Selimi, K. Rr. Letaj, and M. I. Jakupaj</i>
1150-1210	The accumulation of Pb, δ -aminolevulinic acid dehydratase, hematocrit and hemoglobin amount of Feral Pigeons (<i>Columba livia</i>) living near lead and zinc smelter "Trepça" in Mitrovica-Kosova-four year study <i>I. R. Elezaj, Q. I. Selimi, and K. Rr. Letaj</i>
1210-1300	Lunch
1300-1400	Plato Hall Poster Social
1400-1500	Concurrent Session 6
Socrates Hall	Soil remediation and soil quality criteria Session Chairs: Jae Eui Yang, Chih-Huang Weng
1400-1420	Catalytic reduction of chromate on Al metal in the presence of POM <i>C. J. Lin and Y. M. Tzou</i>
1420-1440	Peculiarities of mercury distribution in soil, plants, and ambient air near an organic chemical factory in China <i>A. Yasutake, J. P. Cheng, M. Kiyono, S. Uraguchi, L. Xiaojie, K. Miura, Y. Yasuda, and N. R. Mashyanov</i>
1440-1500	Effects of phytoremediation by twelve plant species on soil functional diversity in the heavy metal-contaminated site of central Taiwan <i>G. R. Ke, C. C. Lee, C. M. Lai, H. Y. Lai, and Z. S. Chen</i>
Locke Hall	Trend Analysis-spatial and temporal Session Chairs: Claude F. Boutron, Laurier Poissant
1400-1440	Natural and anthropogenic heavy metals in Antarctic and Greenland snow and ice cores <i>C. Boutron, C. Barbante, S. Hong, K. Rosman, M. Bolshov, F. Adams, P. Gabrielli, J. Plane, S. D. Hur, C. Ferrari, and P. Cescon</i>
1440-1500	Study on airborne suspended particulates and heavy metals in different traffic density areas, metropolitan Taipei <i>P. H. Tsai, I. F. Mao, C. H. Lin, F. C. Sung, S. W. Tsai, and M. L. Chen</i>
Archimedes Hall	Biomarkers of exposure and effects of heavy metals & Gene-environment-metal interactions Session Chairs: Tomas R. Guilarte, Shu-Li Wang
1400-1440	Gene: environment interactions in metal toxicity <i>E. K. Silbergeld</i>
1440-1500	Prenatal and postnatal exposure to lead and intelligence quotient in children from the general population: a five-year follow-up study <i>K. H. Chang, S. L. Wang, B. H. Su, J. W. Chen, H. Y. Chen, and J. L. Tsai</i>
1500-1530	Afternoon Tea

1530-1650	Concurrent Session 7			
Socrates Hall	Soil remediation and soil quality criteria			
	Session Chairs: Jae Eui Yang, Chih-Huang Weng			
1530-1550	Distributions of arsenic and mercury in soils of the good agriculture practice base station on the traditional chinese medical materials in Dujiangyan City, China <i>T. L. Deng and M. X. Liao</i>			
1550-1610	Cr(III) oxidation by soils with high amounts of Fe-Mn nodules as affected by various factors <i>Y. C. Chen, T. H. Lin, C. J. Cheng, and D. Y. Lee</i>			
1610-1630	Effect of iron slag on arsenic immobilization as soil amendment <i>J. M. Gutierrez, C. H. Hong, and P. J. Kim</i>			
1630-1650	Contribution of Fe ⁺³ -reducing bacteria to mobilization and transformation of arsenic in groundwater <i>S. W. Wang, K. L. Lu, V. H. C. Liao, C. M. Liao, F. J. Chang, and C. W. Liu</i>			
Locke Hall	Trend Analysis-spatial and temporal			
	Session Chairs: Claude F. Boutron, Laurier Poissant			
1530-1550	Multi-year total gaseous mercury concentrations along a south to north transect in Québec (Canada) <i>L. Poissant</i>			
1550-1610	Spatial distribution of trace element concentrations in Beppu Bay, Southwest Japan <i>A. Amano, M. Kuwae, T. Agusa, K. Omori, H. Takeoka, and T. Sugimoto</i>			
1610-1630	Atmospheric trace metal deposition on French forest Canopy influence and controlling parameters <i>L. Gandois, A. Probst, J. Aparicio, and C. Dumat</i>			
1630-1650	Tellurium species analysis in aquatic environment using flowing injection hydride generation atomic fluorescence spectrometry <i>T. L. Deng, M. X. Liaol, Y. H. Guo, and N. Zhang</i>			
Archimedes Hall	Biomarkers of exposure and effects of heavy metals & Gene-environment-metal interactions			
	Session Chairs: Tomas R. Guilarte, Shu-Li Wang			
1530-1550	Interaction of glutathione S-transferase and arsenic on metabolic syndrome in arseniasis endemic area of southwestern Taiwan <i>J. W. Chen, C. J. Chen, W. F. Li, Y. L. Huang, K. H. Chang, and S. L. Wang</i>			
1550-1610	Natural variation in arsenic and cadmium concentrations in diverse rice germplasm <i>S. Ishikawa, A. Kawasaki, M. Kuramata, Y. Kobayashi, K. Baba, and T. Arao</i>			
1610-1630	Use of human fingernails as biomarkers of heavy metals environmental exposure among school-age children in urban and rural areas in Kenya <i>F. H. Were, W. Njue, J. Murungi, and R. Wanjau</i>			
1630-1650	Mitochondria as an important target in environmental metals cytotoxicity <i>J. Pourahmad and M. R. Eskandari</i>			
1830-2100	Howard International House Taipei (2F)	Banquet		

14th ICHMET Detailed Program - Wednesday Nov. 19, 2008

08:30-09:00	Speaker Preparation		
Concurrent Session 8			
09:00-10:00	Soil remediation and soil quality criteria [Socrates Hall]	Trend Analysis – spatial and temporal [Locke Hall]	Biomarkers of exposure and effects of heavy metals & gene-environment-metal interactions [Archimedes Hall]
10:00-10:30	Morning Tea and Coffee		
Concurrent Session 9			
10:30-12:30	Soil remediation and soil quality criteria [Socrates Hall]	Trend Analysis – spatial and temporal [Locke Hall]	Control strategies for heavy metal emissions and deposition [Archimedes Hall]
12:30-13:00	Lunch		
13:00-14:00	Poster Social [Plato Hall]		
14:00-15:00	Keynote Speech <i>Chien-Jen Chen</i> [Socrates Hall]		
Health hazards and risk management of arsenic in drinking water: from scientific research to environmental regulation			
15:00-15:30	Closing Ceremony [Socrates Hall]		

Wednesday 19 November - Detailed Program

0900-1000	Concurrent Session 8
Socrates Hall	Soil remediation and soil quality criteria Session Chairs: Shian-Chee Wu, Zeng-Yei Hseu
0900-0920	Can trace metal extractability be predicted by simple models in forest soils? <i>L. Gandois, A. Probst, and C Dumat</i>
0920-0940	Competitive sorption of chromium and copper on wine processing waste sludge in aqueous solution <i>C. C. Liu, M. K. Wang, and Y. A. Lin</i>
0940-1000	Removal of heavy metals by activated carbon prepared from <i>Phaseolus aureus</i> hulls, an agricultural waste <i>M. M. Rao, D. K. Ramana, K. Sessaiah, M. C. Wang, and S. W. Chang-Chien</i>
Locke Hall	Trend Analysis-spatial and temporal Session Chairs: Eiliv Steinnes, Nicola Pirrone
0900-0920	Three decades of atmospheric metal deposition in Norway studied by moss analysis <i>E. Steinnes and T. Berg</i>
0920-0940	Global mercury emissions to the atmosphere from natural and anthropogenic sources <i>N. Pirrone, S. Cinnirella, D. G. Streets, X. Feng, A. B. Mukherjee, J. Leaner, K.n Telmer, R. Mason, H. R. Friedli, R. B. Finkelman, and G. Stracher</i>
0940-1000	Distribution of 28 elements in podzol profiles studied by fractional extractions and multivariate statistics <i>C. Donisa, M. François, S. Sauvé, and E. Steinnes</i>
Archimedes Hall	Biomarkers of exposure and effects of heavy metals & Gene-environment-metal interactions Session Chairs: Tomas R. Guilarte, Shu-Li Wang
0900-0940	Health and environmental aspects of heavy metals in fast growing countries <i>M. Abdulla, G. Chazot, S. Gamon, M. Bost, S. Shukla, F. Atroshi, and T. Westermarck</i>
0940-1000	Relationship between cadmium exposure and erythrocyte parameters of central Taiwan residents <i>H. Y. Chen, J. W. Chen, and S. L. Wang</i>
1000-1030	Morning Tea
1030-1230	Concurrent Session 9
Socrates Hall	Soil remediation and soil quality criteria Session Chairs: Shian-Chee Wu, Zeng-Yei Hseu
1030-1050	Removal of hexavalent chromium from an aqueous solution by the dead fungal biomass of <i>Neurospora crassa</i> <i>Y. C. Lin, Y. M. Tzou, and W. C. Shen</i>
1050-1110	Effect of heavy metals on growth and Cr(VI) reduction by chromate resistant <i>Leucobacter</i> sp. KCH ₄ <i>A. Sarangi and C. Krishnan</i>
1110-1130	Effects of Cd and Pb on soil microbial characteristics <i>S. Khan, A. L. Hesham, and J. He</i>

Locke Hall	Trend Analysis-spatial and temporal Session Chairs: Eiliv Steinnes, Nicola Pirrone
1030-1050	Historical study of the lead sources in the Paris area, France <i>S. Ayrault , M. Roy-Barman, P. Bonté, M. F. Le-Cloarec , M. C. Leroy, and C. Priadi</i>
1050-1110	Heavy metal levels in Ultisols from an abandoned battery industry environment in Essien Udim local government area of Akwa Ibom state, Nigeria <i>C. I. Ekong, E. D. Udosen, and N. Benson</i>
Archimedes Hall	Control strategies for heavy metal emissions and deposition Session Chairs: Jozef M. Pacyna, Hsing-Cheng Hsi
1030-1050	Influence of flue gas components on mercury removal from coal-combustion gas streams using sulfur-treated adsorbents <i>H. C. Hsi and C. T. Chen</i>
1050-1110	The reclamation of the Almadén mine main dump: consequences on local mercury emissions <i>P. Higuera, J. M. Esbrí, M. A. López-Berdonces, E. M. García-Noguero, and W. R. Llanos</i>
1110-1130	Global emissions of mercury to the atmosphere in 2005 and their 2020 scenarios <i>J. Pacyna, E. Pacyna, K. Sundseth, J. Munthe, S. Wilson, and J. Leaner</i>
1130-1150	Removal of arsenate using iron-oxide-coated diatomite <i>Y. F. Pan and T. F. Lin</i>
1150-1210	Adsorption of copper (Cu ²⁺) ions by chitosan coated clay beads <i>C. C. Kan, M. W. Wan, A. F. V. Mariano, and M. L. P. Dalida</i>
1210-1230	Adsorption of copper and lead by chitosan immobilized on sand <i>M. W. Wan, C. C. Kan, B. D. Rogel, and M. L. P. Dalida</i>
1230-1300	Lunch
1300-1400	Plato Hall Poster Social
1400-1500	Keynote Speech
Socrates Hall	Session Chair: Zueng-Sang Chen Health hazards and risk management of arsenic in drinking water: from scientific research to environmental regulation <i>C. J. Chen</i>
1500-1530	Socrates Hall Closing Ceremony

Poster Displays

Poster Allocation

Posters are displayed in the room “Plato”, GIS Convention Center. Posters will be displayed on Nov. 17 to Nov. 19. Each poster has been assigned a poster board number. Please see the session of poster paper of this program for your poster board number. These numbers are also posted in the upper left-hand corner of each board.

Poster Set-Up and Take Down

Posters must be set up **by AM 10:30 on Nov. 17, 2008** (morning tea time) and can be remained on display until PM 4:00 on Nov. 19, 2008. Dedicated poster viewing times have been scheduled during PM 1:00-2:00 on Nov. 17-19, 2008. Authors will be expected to stand by the posters during these poster session time to answer questions. All posters should be removed by PM 4:00 on Nov. 19, 2008. **Any posters remaining in place after PM 4:00 on Nov. 19, 2008 will be removed by the organizers who accept no responsibility for loss or damage.**

Fixing

Thumbtacks will be available in the poster area. Poster panels are also suitable for Velcro fixing, but please ensure that you bring a sufficient amount of materials with you. Adhesive tape or twin adhesive is not allowed.

Poster Number:	P-015
Human exposure to heavy metals via consumption of cereal products <i>M. Grembecka, A. Kusiuk, and P. Szefer</i>	
Poster Number:	P-016
Environmental effects and potential risk index assessment of metallic sulfide deposit in Dabaoshan of northern Guangdong, China <i>S. M. Fu, X. Y. Chang, and Y. Z. Zhou</i>	
Poster Number:	P-017
Determination of trace metals in seawater by fully automated on-line preconcentration and inductively coupled plasma mass spectrometry <i>C. H. Kuo, Z. S. Liu, and S. C. Chuang</i>	
Poster Number:	P-018
Elevated blood selenium in male glass manufacturing workers <i>C. C. Wu, C. J. Chen, and T. S. Lin</i>	
Poster Number:	P-019
Effects of metals and of metals polluted wastes and soils on the Collembola <i>Folsomia candida</i> <i>Y. Crouau, L. Cazes, and L. Gandois</i>	
Poster Number:	P-020
Arsenic pollution in groundwater and human of Vietnam and Cambodia <i>T. Agusa, T. Kunito, R. Kubota, T. B. Minh, P. T. K. Trang, C. Chamnan, H. Iwata, P. H. Viet, T. S. Tana, and S. Tanabe</i>	
Poster Number:	P-021
Prenatal and postnatal exposure to lead in early childhood <i>I. Uhnakova, M. Ursinyova, V. Masanova, E. Sovcikova, and L. Wsolova</i>	
Poster Number:	P-022
Analysis and evaluation of selected PM10 pollution episodes at a coastal site in southern Italy <i>F. Sprovieri and N. Pirrone</i>	
Poster Number:	P-023
Sources apportionment of selected trace elements in the fine and coarse fractions <i>F. Sprovieri and N. Pirrone</i>	
Poster Number:	P-024
Characterization of nickel exposure in nickel-related manufacturing plants in Taiwan <i>S. Y. Yang, S. J. Chang, L. H. Leei, S. Y. Gong, and T. S. Shih</i>	
Poster Number:	P-025
The neurobehavioral effects of occupational mercury vapor exposure in fluorescent lamps factories workers. <i>S. Y. Tsai, Y. P. Wang, C. M. Hsieh, T. S. Shih, and S. H. Liou</i>	
Poster Number:	P-026
Influence of soil properties on copper concentrations in vineyard soils in Changhua, Taiwan <i>K. W. Juang, H. Y. Lai, and B. C. Chen</i>	

Poster Number:	P-027
Heavy metals in soil applied with composted and raw paper mill sludge <i>A. Rosazlin, K. W. Rasidah, C. I. Fauziah, A. Rozita, and I. W. Asma</i>	
Poster Number:	P-028
Cadmium critical concentration in soils: collembolan reproduction as an indicator <i>T. Bur, A. Bianco, Y. Crouau, L. Gandois, and A. Probst</i>	
Poster Number:	P-029
Atmospheric mercury species over the Adriatic Sea: anthropogenic vs natural influences <i>F. Sprovieri and N. Pirrone</i>	
Poster Number:	P-030
Arsenic species in groundwater in paddy fields with high soil arsenic content <i>H. T. Lin, S. W. Chen, C. J. Shen, and C. Chu</i>	
Poster Number:	P-032
Different sources and effects of lead <i>E. A. Alhebshi and A. Hamid</i>	
Poster Number:	P-033
Mineralization in rust-coloured <i>Acarospora</i> <i>O. W. Purvis, A. Kearsley, G. Cressey, L. C. Batty, D. A. Jenkins, A. T. Crewe, and M. Wedin</i>	
Poster Number:	P-035
Relationship between blood cadmium, lead and mercury and thyroid hormones in mothers and infants <i>M. Ursinyova, I. Uhnakova, V. Masanova, L. Wsolova, B. Drobna, and A. Fabisikova</i>	
Poster Number:	P-036
The effects of blood lead and HFE polymorphism on serum iron and RBC mean corpuscular volume <i>T. Y. Lin and H. Y. Chuang</i>	
Poster Number:	P-037
Kinetic analysis of recovery from acute lead poisoning and relationship with DNA damage in a swine model <i>W. T. Wu, Y. H. Wang, C. C. Wu, S. H. Liou, F. C. Sung, and T. N. Wu</i>	
Poster Number:	P-038
Trends of trace elements in wet deposition in Finland during 1998-2007 <i>K. Kyllönen (f. Pyy), V. Karlsson, and T. Ruoho-Airola</i>	
Poster Number:	P-039
Mineralogical factors controlling metal and metalloid dispersion in watersheds hosting epithermal and porphyry copper deposits: a case study from semiarid northern Chile <i>R. Oyarzun, J. Lillo, P. Higuera, J. Oyarzún, and H. Maturana</i>	
Poster Number:	P-040
Seasonal variation of methylmercury concentrations in sediment cores in a freshwater lake (Lake St. Louis, Québec, Canada) <i>J. Canário, L. Poissant, M. Pilote, M. Nogueira, P. Constant, and A. Noirbusson</i>	

Poster Number:	P-041
The importance of mercury emissions to the atmosphere from biomass burning <i>S. Cinnirella, N. Pirrone, H. R. Friedli, and A. F. Arellano</i>	
Poster Number:	P-042
The reference values of blood lead among young adults in Taiwan <i>C. C. Chang, C. Y. Chen, W. T. Wu, W. H. Chang, F. C. Sung, and T. N. Wu</i>	
Poster Number:	P-043
Researches concerning the pollution effect and the ecological reconstruction of polluted soils from Zlatna area, Romania <i>T. Rusu, P. Gus, I. Bogdan, A. Pop, P. I. Moraru, I. Oroian, L. Paulette, and I. Pacurar</i>	
Poster Number:	P-044
Application of Pb isotope and Tl as tracer to the soil profiles from Yunfu Tl-rich pyrite mine, Guangdong Province <i>X. Y. Chang, J. Y. Liu, X. L. Tu, Y. H. Chen, N. Chen, and S. M. Fu</i>	
Poster Number:	P-045
Modeling acid characteristics and heavy metal sorption in compost-derived dissolve organic matter solution and clay suspension <i>C. H. Lee, A. K. Gupta, and Z. S. Chen</i>	
Poster Number:	P-046
Chemical speciation of Cu and Zn in mine soil as affected by organic chelating agents with different C/N ratio <i>H. J. Choi, H. M. Ro, S. I. Yun, and M. J. Lee</i>	
Poster Number:	P-047
Remediation of cadmium-contaminated paddy soils by washing with ferric chloride 2 :effect of soil washing on cadmium uptake by soybean <i>Y. Maejima, T. Makino, I. Akahane, H. Takano, T. Kamiya, T. Itou, N. Sekiya, and K. Kondo</i>	
Poster Number:	P-048
Remediation of cadmium-contaminated paddy soils by washing with ferric chloride 3: verification of soil washing on cadmium concentration in soil solution and cadmium absorption of Spinach <i>I. Akahane, T. Makino, Y. Maejima, T. Kamiya, H. Takano, N. Kuroyanagi, and M. Inahara</i>	
Poster Number:	P-049
Phytoextraction by a high-Cd-accumulating rice: Cd reduction in soybean seeds <i>M. Murakami, N. Ae, S. Ishikawa, T. Ibaraki, and M. Ito</i>	
Poster Number:	P-050
Uptake and translocation of cadmium in Switchgrass growing on Cd-spiked soils <i>B. C. Chen, H. Y. Lai, and K. W. Juang</i>	
Poster Number:	P-051
Postharvest processes of biomass contaminated by heavy metals <i>M. Punčochář, M. Šyc, M. Pohořelý, J. Habart, and P. Tlustoš</i>	
Poster Number:	P-052
Effect of oyster shell as a liming material on reducing cadmium phytoavailability in arable soil <i>S. Y. Kim, C. O. Hong, J. M. Gutierrez, and P. J. Kim</i>	

Poster Number:	P-053
Transformation of heavy metal compounds in soils of Chernozem	
<i>T. M. Minkina, G. V. Motuzova, O. G. Nazarenko, and S. S. Mandzhieva</i>	
Poster Number:	P-054
Evaluation of FPXRF detections to organize an optimal remediation plan in a zinc contaminated site	
<i>K. S. Chang, H. T. Kuo, W. C. Hsu, C. T. Tseng, C. H. Hsiao, I. M. Wei, and S. Y. Chen</i>	
Poster Number:	P-055
Chemical fractions and bioavailability of nickel in serpentine soils in eastern Taiwan	
<i>S. H. Jien, Y. S. Chang, and Z. Y. Hseu</i>	
Poster Number:	P-056
Could be cropped eggplants as a safe crop in a mercury mining area	
<i>M. J. Sierra, E. Esteban, and R. Millán</i>	
Poster Number:	P-057
Study of <i>Vicia sativa</i> as a safe cultivation for livestock feeding in an area with high natural mercury levels background	
<i>R. Millán, M. J. Sierra, E. Esteban, and S. Carrasco</i>	
Poster Number:	P-058
Prediction of soil Cd bioavailability to green onion in the mining affected areas in Korea	
<i>J. E. Yang, Y. S. Ok, and W. I. Kim</i>	
Poster Number:	P-059
Environmental concerns related with the presence of mercury in soils and vegetation from the Almadén mercury mining district: a health risk for the population?	
<i>R. Millan, P. Higuera, M. J. Sierra, J. M. Esbrí, M. A. Lopez-Berdonces, T. Schmid, S. Carrasco, A. I. Cardona, E. M. García-Noguero, and W. Llanos</i>	
Poster Number:	P-060
Uptake and translocation of aromatic arsenicals by rice from soil and nutrient solution amended with aromatic arsenicals	
<i>T. Arao, Y. Maejima, and K. Baba</i>	
Poster Number:	P-061
Mercury speciation in sediments and vegetation of an uncontaminated salt-marsh (Tagus Estuary, Portugal)	
<i>J. Canário, L. Poissant, M. Pilote, M. Nogueira, and V. Branco</i>	
Poster Number:	P-062
Co-utilization of red gypsum and sewage sludge: phytoavailability of selected macro- and microelements	
<i>C. I. Fauziah, M. N. Hanani, A. W. Samsuri, and S. Zaayah</i>	
Poster Number:	P-064
ICP-OES determination of trace metals in natural water sample using Amberlite XAD-4/8-Hydroxyquinoline system	
<i>A. Ghorbani, M. Rabbani, F. Aflaki, and F. Tadayon</i>	
Poster Number:	P-066
Assessment on the cultivation of soybean as energy crop on cadmium-contaminated farmland in Taiwan	
<i>C. L. Chen, C. L. Chu, N. W. Yu, W. J. Yeh, Y. H. Su, and W. T. Huang</i>	

Poster Number:	P-067
Comparison of zinc to cadmium levels between prostate carcinoma and benign prostatic hyperplasia <i>Y. C. Chen, Y. S. Pu, and F. C. Sung</i>	
Poster Number:	P-068
Neurological effects in welding workers exposed to manganese fume <i>Y. L. Tsai, S. H. Liou, H. I. Chen, C. H. Loh, C. H. Lai, C. C. Wu, S. Y. Tsai, C. M. Hsieh, and T. S. Shih</i>	
Poster Number:	P-069
Role of EDTA and NTA in the phytoextraction of Cd, Pb and Zn by <i>Chenopodium album</i> L. from artificially contaminated soil <i>A. K. Gupta and Z. S. Chen</i>	
Poster Number:	P-070
Study of density and activity of native VAM under levels of phosphorus in some farmlands of Marand <i>P. A. Oskuie and S. B. Cirous</i>	
Poster Number:	P-071
Effects of nitrogen, phosphorus and boron on some growing characteristics of <i>polianthus tuberosa</i> L. <i>S. B. Cirous and P. A. Oskuie</i>	
Poster Number:	P-072
An investigation into the mechanisms of bioaccumulation of chromium by seaweed <i>C. Murphy, P. McLoughlin, O. O'Donovan, H. Hughes, and J. O'Mahony</i>	
Poster Number:	P-073
Development of a biosorption column utilising seaweed based biosorbents for the removal of metals from industrial waste streams <i>A. Bakir, E. Fitzgerald, and C. Murphy</i>	
Poster Number:	P-074
Cancer treatment, based on active nutritional bio-modulation, hormonal therapy and specific autologous immunotherapy <i>T. Tallberg, T. Westermarck, and F. Atroshi</i>	
Poster Number:	P-075
Trace elements in health and diseases: cancer/inflammation <i>T. Westermarck, T. Tallberg, V. M. Abdulla, and F. Atroshi</i>	
Poster Number:	P-076
Translocation of Cd to rice from two closed mine tailings under paddy soil condition <i>W. I. Kim, S. W. Park, J. K. Kim, B. J. Park, O. K. Kwon, G. B. Jung, Y. S. Ok, and J. E. Yang</i>	
Poster Number:	P-077
Risk assessment of As, Cd, Cu and Pb in different rice varieties grown on the contaminated paddy soil <i>J. K. Kim, W. I. Kim, S. W. Park, B. J. Park, O. K. Kwon, G. B. Jung, Y. S. Ok, and J. E. Yang</i>	
Poster Number:	P-078
Bacterial diversity and heavy metal resistance in a contaminated site in northern Portugal <i>C. Pires, N. Magan, and P. M. L. Castro</i>	

Poster Number: **P-079**

A study of the arsenic levels in well water in Ilan county, Taiwan

S. H. Chang, C. Y. Horng, and S. C. Chuang

Poster Number: **P-080**

ICP-MS for specific detection in capillary electrophoresis

S. Y. Lin, G. R. Wang, S. S. Yang, and C. Y. Liu

Conference Information

Conference Venue

GIS Convention Center at National Taiwan University

B1, No.85, Roosevelt Road, Section 4, Taipei

台大集思會議中心(位於台灣大學第二學生活動中心內)

地址：台北市羅斯福路四段 85 號地下室一樓

Registration

Registration Time	Place	
13:00-18:00, Nov. 16, 2008	Lobby, the Leader Hotel Taipei	For participants staying in the Leader Hotel Taipei and the Lu-Ming Guest House, NTU
13:00-18:00, Nov. 16, 2008	Lobby, the Howard International House Taipei	For participants staying in the Howard International House Taipei and the rest of participants
8:00-17:00, Nov. 17, 2008	B1, GIS Convention Center (Venue)	For all participants

Name Badges

Each delegate registered for the congress will received a name badge at the registration desk. This badge will be your official pass and must be worn to obtain entry to all sessions of GIS convention center.

Speaker Supporting Center

- ▲ The speaker supporting center is located in Alexander VIP service room.
- ▲ Speakers can preview your ppt file on computers.
- ▲ Some computers will be provided for checking webmail.
- ▲ Other information about conference can be inquired.

Operating Hours:

Monday Nov. 17, 2008: 0830-1650
Tuesday Nov. 18, 2008: 0810-1650
Wednesday Nov. 19, 2008: 0830-Conference Close

Welcome Reception

November 16, 2008, 18:00-21:00

Venue: Howard International House Taipei (2F)

Banquet

November 18, 2008, 18:30-21:00

Venue: Howard International House Taipei (2F)

Currency

The local currency is the New Taiwan Dollar (NT\$). The current exchange rate is 33.5 NT\$: 1.0 US\$ (Oct, 2008). Foreign currencies can be exchanged at hotels, airports and a number of government-designated banks. Major credit cards are widely accepted, and traveler's checks may be accepted by a number of tourist-oriented shops and at most international tourist hotels and banks.

Electricity

110 Volts A.C.

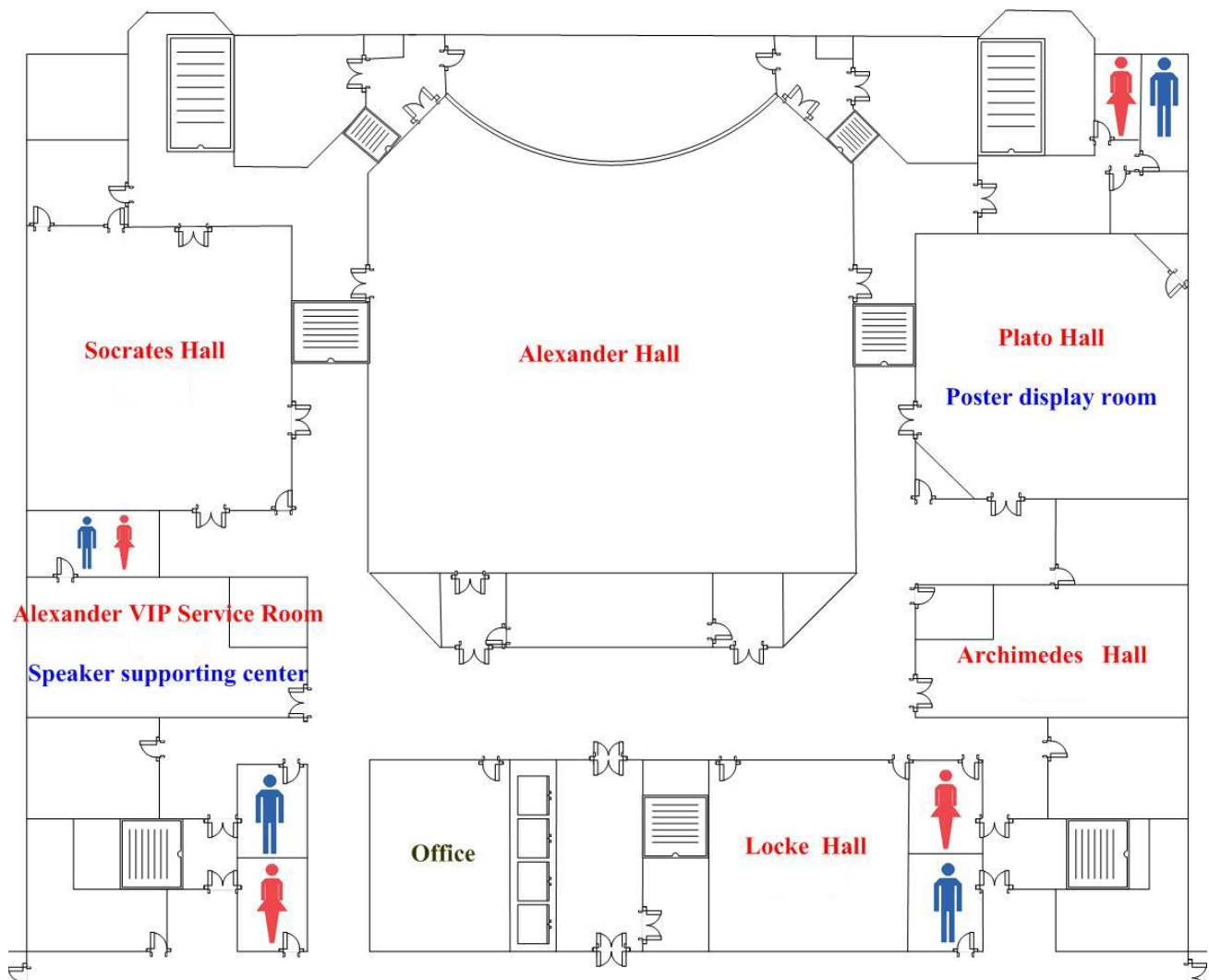
Mobile phone numbers for local contact

0910-012-699 (Prof. Zueng-Sang Chen)

0953-909-848 (Prof. Dar-Yuan Lee)

0968-161-712 (Prof. Tser-Sheng Lin)

Floorplans of venue



Transportation

From Taiwan Taoyuan International Airport (formerly known as CKS International Airport) to Taipei City

By Taxi		Approx. 40 min.	1,500 NTD /one way
By Bus (CKS International Airport - Taipei Railway Station)			
Routes	Fare (NT\$)	Service Hours	Journey Time
Taiwan Bus Corp. (Kuokuang Line)	Adult NT\$125 Child NT\$65 (one way)	Taoyuan Airport 05:40-24:50 Taipei Railway Station 05:00-23:30	50

- ▲ Bus ticket counters are located in the Arrival Passenger Reception Areas of Terminals.
- ▲ Howard International House Taipei, Leader Hotel-Taipei, Lu-Ming Guest House, and GIS Convention Center are located close to the NTU campus and less than 1 kilometer from Gongguan MRT Station
- ▲ Taxi from Taipei Railway Station to National Taiwan University (NTU Campus) is about 120 NTD.
- ▲ If you take the MRT Danshui-Xindian (green) line from Taipei Railway Station to Gongguan Station (NTU Campus), it will cost 25 NTD.

Accommodation Information

Leader Hotel Taipei (to the venue by walking in about 2 minutes)

No. 83, Sec. 4, Roosevelt Rd., Taipei City 10617, Taiwan

立德台大尊賢會館

台北市羅斯福路四段 83 號

Phone: +866-2-8369-2858 Fax: +866-2-8369-2859

E-mail: ntu@leaderhotel.com

<http://www.leaderhotel.com/>

Howard International House Taipei (to the venue by walking in about 15 minutes)

No. 30, Hsin Sheng South Road Sec. 3, Taipei City 10617, Taiwan

福華文教會館

台灣台北市新生南路三段 30 號

Phone: +886-2-8369-1155 Fax: +886-2-8369-1177

E-mail : rv-ih@howard-hotels.com.tw

<http://intl-house.howard-hotels.com/?Lsn=2>

Lu-Ming Guest House, National Taiwan University

(to the venue by walking in about 5 minutes)

No.64, Lane 144, Sec. 4, Keelung Rd., Da-an District, Taipei City 10617, Taiwan

國立台灣大學鹿鳴雅舍

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Map of venue and hotels



A Love Affair with the Sun

Crystal Heart Garden is located in the warmest place in Taiwan — Hengchun.

It has had the exclusive privilege of enjoying glorious sunshine since the day it was born.

The photovoltaic (PV) panels, against the tranquil backdrop of the emerald sea and the blue sky, perpetually create clean and natural electric energy.

Taipower Crystal Heart Garden

It is the first “BIPV (Building Integrated Photovoltaic System)” solar energy demonstration system. It was constructed based on the image of a wafer, the basic element of a PV panel. Wearing a high-tech overcoat made of 196 pieces of poly crystalline silicon and 200 pieces of single crystal silicon, it can generate up to 50KWp of electricity.

By 2011, the total installed capacity of Taipower’s PV system will be 10 MW. It is expected that the total energy production will reach 12 million KWh/year, and the CO₂ emissions will be reduced by 8,375 ~ 12,325 tons/year.



台湾電力公司
www.taipower.com.tw

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