

出國報告（出國類別：會議）

出席 ISEIS 環境資訊國際研討會
（ISEIS 2010 International
Conference on Environmental
Informatics）

服務機關：行政院環境保護署

姓名職稱：吳仲林 科長

派赴國家：中國

出國期間：民國 99 年 8 月 26 日至 8 月 30 日

報告日期：民國 99 年 11 月 23 日

摘要

本次會議在中國北京舉行，由加拿大 Regina 大學與 ISEIS 與北京師範大學環境學院共同舉辦之 2010 年國際環境資訊會議，本次會議討論主題為生態資訊與生態系統保護。

會議中收集有關環境變化對生態影響、水資源管理與環境監測及環境資訊專題等共 190 餘篇論文，以供業務推動參考。

雖我國今年無參與專題發表，但我國目前已建置環境監測資料管理系統及環境資料庫，將來可朝增加國際會議參與發表，提出我國的執行經驗與成果，以彰顯台灣在環保工作上的績效。

利用遙感探測及衛星影像變化監測對區域改變的趨勢，進而預測未來環境的變化，以提供環境政策之參考，有關應用地理資訊系統（GIS）與遙感探測作大面積之環境變遷監測，及從現有資料分析找到未來環境變化之趨勢，進而提供未來環境政策之參考，此種決策參考模式較有學理依據，值得借鏡。

日本研究提高綠色家庭用具生產，透過綠色家庭用具使用來降低所需消耗之能原，以減少二氧化碳排放，也值得參考。

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出席 ISEIS 環境資訊國際研討會 (ISEIS 2010 International Conference on Environmental Informatics) 出國報告

壹、目的及會議背景說明

ISEIS 2010 International Conference on Environmental Informatics 會議主題為研討環境資訊管理(IM)與空間資訊技術 (IT)與決策支援圖型運算等，與會人員主要為各國環境資訊產官學界人員及環境資訊廠商，目的是讓與會者了解資訊技術於環境資訊處理之運用，並探索環境資訊利用之創新方式。相關研究成果將可供本署引用於提昇本署環境資訊系統整體規劃參考。

國際環境資訊會議係國際間針對環境資訊科學發展相關課題之主要研討會，係由加拿大 Regina 大學與國際環境資訊協會(International Society for Environmental Information Sciences)共同發起，在國際間享有聲譽。

前幾屆會議，分別在美國，加拿大，中國和泰國舉行。會議的目的是提供一個論壇，以解決環境資訊科學有關的問題的基礎，技術和工具。

本次參加由加拿大 Regina 大學與 ISEIS 在中國北京與北京師範大學環境學院共同舉辦的 2010 年國際環境資訊會議，本次會議討論主軸為生態資訊與生態系統保護。

北京市，舊稱「燕京」、「北平」，是中華人民共和國的首都、四個直轄市和五大國家中心城市之一，是中國政治、文化和國際交流中心，中國「四大古都」之一。北京市位於華北平原的西北邊緣，背靠燕山，有永定河流經老城西南，毗鄰天津市、河北省，是一座有三千餘年歷史、八百五十餘年建都史的歷史文化名城，歷史上有四個朝代在此定都，薈萃了自元明清以來的中華文化，擁有眾多歷史名勝古蹟和人文景觀。

北京師範大學的前身是 1902 年創立的京師大學堂師範館，1908 年改稱為京師優級師範學堂，獨立設校。1912 年改名為北京高等師範學校。1923 年正式更名為北京師範大學，成為中國歷史上第一所師範大學。北京師範大學重學科建設，研究生與大學生比例約 1:1，屬於研究型大學，課程多元，培養許多優秀師資，研究成果數量可觀，並經常舉辦大型國際學術會議，享有國際聲譽。

貳、會議經過

一、2010 年 ISEIS 環境資訊國際研討會議於今年 8 月 27 日至 29 日在北京京儀大酒店舉行。本屆年會的主題為生態資訊與生態系統保護，由北京師範大學環境學院主辦，會議主席由北京師範大學環境學院院長楊志峰教授擔任。參加該會議的與會代表約二百餘人，主要來自中國、美國、英國、加拿大、德國、澳大利亞、日本等 20 多個國家；我國由環保署監資處吳仲林科長參加，會議議程及相關資料詳附件一。

二、本屆年會分別邀請了來自美國、澳大利亞和加拿大的教授作了大會主報告。大會主題和參會者報告內容，口頭報告被劃分為 25 個議題，分設在 5 個分會場進行。除口頭報告外，還有 30 多位參會者的研究報告進行了海報宣傳和交流。而且在分會場，三個國際 SCI 雜誌主編就國際雜誌投稿、審稿等內容與參會者進行了經驗交流，並給出了積極中肯的意見和建議。會議召開期間也有大陸的一些出版社以及儀器公司也參加了本次會議，分別對出版的生態與環境類圖書、雜誌和代理的儀器設備進行了宣傳。

三、8 月 27 日：開幕及議題討論

(一) 由大會會主席美國聖地亞哥州立大學 George Christakos 博士與北京師範大學環境學院院長楊志峰教授分別致詞，歡迎來自世界各國的學者專家參與本屆環境資訊會議，共同關心及研討有關國際會議

生態資訊和生態系統保護專題討論相關議題。

- (二) 本屆年會邀請了來自美國、澳大利亞和加拿大的教授作大會主報告，澳大利亞 Friedrich Recknagel 博士報告生態資訊學的模式，美國 George Christakos 博士報告大範圍整體化的問題解決，及加拿大 Christine Chan 博士報告應用的人工智慧 (AI) 碳捕獲過程，闡述如何將現實生態系統透過系統之資料蒐集、數化過程建立數值之生態資訊系統及各種生態系統運算模式，進而建立資料倉儲及運用電腦作各種模式之模擬運用，有系統的提供決策參考之資訊。
- (三) 與會各國報告有關環境策略分析、水資源決策支援管理與環境監測及環境資訊專題討論相關議題共 29 篇論文，包括生態資訊科學、水域生態問題、生態監控系統、環境管理策略分析、流域管理、CO2 捕獲技術等研究成果。

四、8 月 28 日：議題討論

- (一) 與會各國報告有關環境風險評估、水資源管理與環境監測及環境資訊專題討論相關議題共 52 篇論文，包括重金屬污染監測及環境風險評估、水質污染特性評估、環境生態風險評估等研究成果。
- (二) 來自伊朗 RASULY 報告主題 Detecting of Arasbaran Forest Changes Applying Image Processing Procedures and GIS Techniques，應用地理資訊系統 (GIS) 與遙感探測作大面積之環境變遷監測，利用遙感探測及衛星影像變化監測對森林含蓋區域改變的趨勢，找到過去森林砍伐的主要原因，進而預測未來森林面積的變化，以提供環境政策之參考。
- (三) 日本學者 Yoshikuni Yoshida 報告主題 Estimating CO2 Emission

Reduction in Eco-Point Program for Green Home Appliances in Japan，研究提高綠色家庭用具生產，透過綠色家庭用具使用來降低所需消耗之能原，以減少家庭二氧化碳排放，成果也值得借鏡。

(四) 大會安排於京儀大酒店 (Hotel) 舉辦晚宴，感謝各國學者專家參與本次會議。

在本次會議中，經 ISEIS2010 學術委員會成員的篩選和評比，最終確定授予三名參會者傑出青年科學家獎，同時授予 6 名參會者最佳論文獎。這些獲獎者分別來自英國、德國、加拿大、日本和中國。在大會晚宴上，大會主席楊志峰教授主持舉行了隆重的授獎儀式，並頒發了榮譽獎牌。

五、8 月 29 日：議題討論

(一) 與會各國報告有關環境風險評估、水資源管理與環境監測及環境資訊專題討論相關議題共 52 篇論文，包括重金屬污染監測及環境風險評估、水質污染特性評估、環境生態風險評估等研究成果。

參、心得與建議

心得

- 一、雖我國今年無參與專題發表，但我國目前已建置環境監測資料管理系統及環境資料庫，多年來亦蒐集相當之環境資料，將來可朝增加國際會議參與發表，提出我國的執行經驗與成果，以彰顯台灣在環保工作上的績效。
- 二、利用遙感探測及衛星影像變化監測對森林含蓋區域改變的趨勢，找到過去森林砍伐的主要原因，進而預測未來森林面積的變化，以提

供環境政策之參考，有關應用地理資訊系統（GIS）與遙感探測作大面積之環境變遷監測，及從現有資料分析找到未來環境變化之趨勢，進而提供未來環境政策之參考，此種決策參考模式較有學理依據，值得借鏡。

- 三、日本研究顯示制定規定要求家庭減少二氧化碳排放很難實現，故其研究提高綠色家庭用具生產，透過綠色家庭用具使用來降低所需消耗之能源，以減少二氧化碳排放。研究發現透過綠色家庭用具生產、使用，每年估計可減少約 1.7 億公噸二氧化碳排放，排放量約減少 2.4 個百分點。

我國現行以獎勵家庭節約用水、用電，並在價格上予以優惠措施，也有成效，而透過綠色家庭用具生產、使用來減少二氧化碳排放，也值得參考。

- 四、我國政府骨幹網路(GSN)仍無開放中國大陸網站連結，到北京原希望利用本署之 Web Mail 收發信件與辦公室聯繫，因無法連結台灣網站，才發現中國大陸也對台灣之網站也一樣進行封鎖，故網路使用仍相當不便。

- 五、藉由參加這次會議之機會能有機會到中國北京，也對中國有進一步的認識，雖然兩岸分治多年，但語言、習俗等卻仍多有相同，如兩岸能有機會增加藉由各學術及專業領域之交流，將可增進彼此之了解，進而化解兩岸之猜疑。

建議

- 一、環境污染與保護是跨國界的議題，涵括環境生態、水資源管理、環境監測及資訊專題等面向，我國目前已建置環境監測資料管理系統

及環境資料庫，多年來亦蒐集相當之環境資料，將來可朝增加國際會議參與發表，以彰顯台灣在環保工作上的績效。

二、另與中國北京相比我國環境保護工作推展已相當進步，在環境清潔、會議環境及交通設施都相對較為便利，我國亦可結合學術單位多爭取主辦相關國際研討會，讓各國參與會議的與會人員可多了解台灣之美麗，亦可提高台灣之國際能見度。

三、本署已建置環境監測資料管理系統及環境資料庫建置，多年來亦蒐集相當之環境資料，將來可加強各業務單位之專業領域知識，結合學界發展適當之分析模式，利用 Web-GIS 空間資訊展示和空間資料分析，以圖形化、視覺化的方式，呈現資料分析結果，將可大幅提升業務決策參考之依據。

2010 環境資訊國際研討會 城市－中國北京



2010 環境資訊國際研討會－會議地點北京京儀大酒店



2010 環境資訊國際研討會報到處



2010 環境資訊國際研討會報到處留影



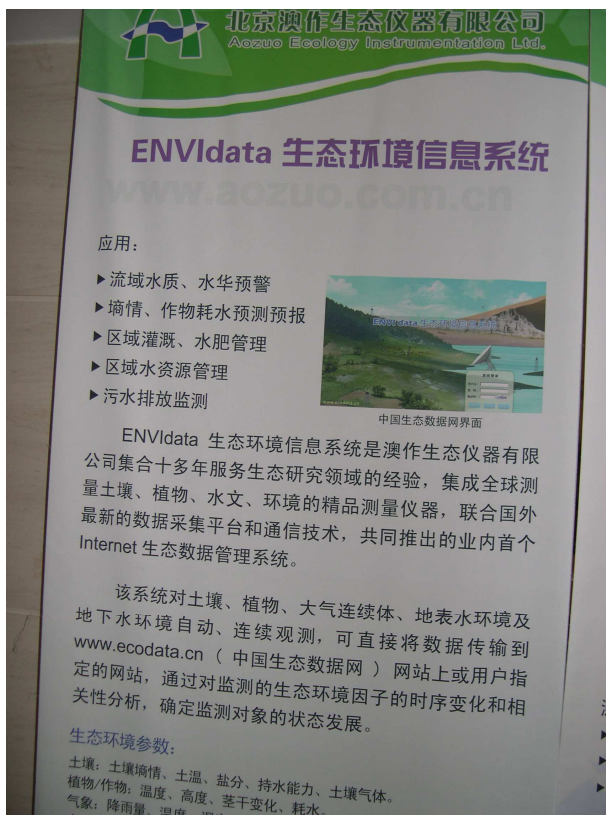
研討會開幕北京師範大學環境學院楊志峰院長致詞



研討會開幕大會主席 Dr. George Christakos 致詞



2010 環境資訊國際研討會—各國以海報方式發表的論文區



2010 環境資訊國際研討會—環工產業廠商到會場展示



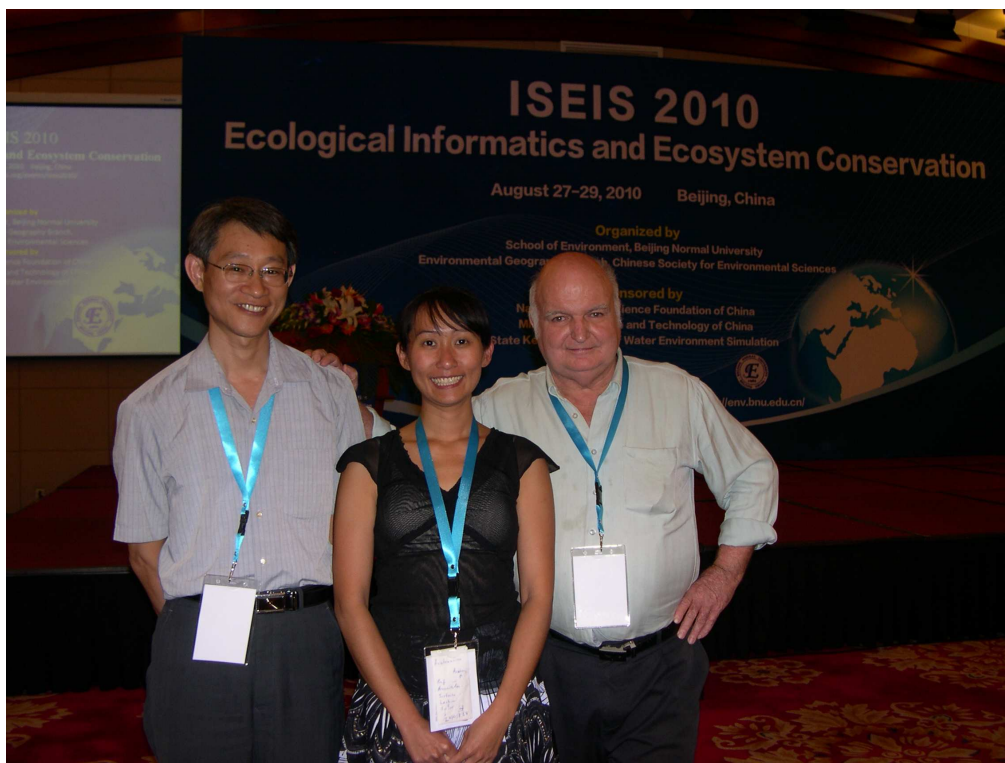
2010 環境資訊國際研討會—開幕第一位 Keynote Speakers Dr. Friedrich Recknagel 專題報告



2010 環境資訊國際研討會—論文發表



2010 環境資訊國際研討會—與北京師範大學環境學院楊志峰院長合影



2010 環境資訊國際研討會—與與會人員合影

Conference Schedule

International Conference
on
Ecological Informatics and Ecosystem Conservation

ISEIS'2010

School of Environment
Beijing Normal University, China
August 27-29, 2010



<http://www.iseis.org/events/iseis2010/>

The schedule of the conference includes keynote speeches, venue, sequential technical sessions, and a poster exhibition.

Keynote Speakers

- [Dr. Friedrich Recknagel](#), University of Adelaide, AUSTRALIA
- [Dr. George Christakos](#), San Diego State University, USA
- [Dr. Christine Chan](#), University of Regina, CANADA

Venue: Yingdong Conference Hall, Beijing Normal University

August 26, 2010

August 26, 2010	Lobby of Yingdong Conference Hall
Time	
09:00 - 18:00	Conference registration

August 27, 2010

August 27, 2010	Lecture Hall
Time	
09:00 - 17:00	Conference registration (Lobby of Yingdong Conference Hall)
09:00 - 10:00	Poster setup, coffee break
10:00 - 10:20	Welcome and opening remarks
10:20 - 11:00	Keynote I: State art of ecological informatics by Dr. Friedrich Recknagel
11:00 - 11:40	Keynote II: Large scope integrative problem-solving by Dr. George Christakos
11:40 - 12:20	Keynote III: Applications of artificial intelligence (AI) for carbon capture process operation by Dr. Christine Chan
12:20 - 13:30	Luncheon (Yumadam Restaurant)
14:00 - 15:00	Reviewer Workshop- Chair: Friedrich Recknagel
15:00 - 15:20	Coffee break
15:20 - 16:20	Reviewer Workshop- Chair: Friedrich Recknagel
18:30 - 21:30	Dinner (Jingshi Hotel)

August 28, 2010

August 28, 2010	Meeting Room A
Time	
08:30 - 17:10	Conference Registration
08:30 - 12:10	Symposium on Advanced Technologies for Greenhouse Gas Emission Control Chairs: Paitoon Tontiwachwuthikul and Christine Chan
08:30 - 10:10	Session 1: CO2 Capture and Greenhouse Gas Mitigation Chairs: Paitoon Tontiwachwuthikul and Christine Chan
08:30 - 09:10	Carbon emissions from energy combustion in rural China by Lixiao Zhang
09:10 - 09:40	Advanced carbon capture technologies for greenhouse gas mitigation by Paitoon (PT) Tontiwachwuthikul and Henry Liang
09:40 - 10:10	Estimating CO2 emission reduction in eco-point program for green home appliances in Japan by Y. Yoshida
10:10 - 10:30	Coffee break
10:30 - 11:00	Monitoring and diagnosis of the carbon dioxide capture process using an intelligent system approach by Qing Zhou
11:00 - 11:30	
12:10 - 13:30	Luncheon (Yumadun Restaurant)
13:30 - 15:35	Session 2: Emerging issues Greenhouse gas Emission Reduction Chairs: Yongping Li and Ryuji Matsuhashi
13:30 - 14:10	Keynote Speech: Global overview of carbon dioxide capture & storage and EOR for climate change mitigation by Paitoon (PT) Tontiwachwuthikul, Farshid Torabi and Christine Chan
14:10 - 14:40	An interval full-infinite mixed-integer programming method for supporting energy systems planning in association with carbon dioxide abatement by Y. Zhu, G.H. Huang, Y.P. Li, and Y.F. Li
14:40 - 15:10	Sustainable development under ambitious medium term target of reducing greenhouse gases by Ryuji Matsuhashi
15:35 - 15:55	Coffee break
15:55 - 16:25	Emerging issues related to carbon storage and enhance oil recovery by Farshid Torabi
16:25 - 16:55	An analysis of GHG emission trading system from the perspective of stakeholders by Zhihong Yan

August 28, 2010

August 28, 2010	Meeting Room B
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Ecological Processes of Wetlands-Chair: Junhong Bai
08:30 - 08:55	Examination of wetlands system using ecological network analysis:A case study of Baiyangdian Basin, China by Xufeng Mao
08:55 - 09:20	Comparative Study on characteristics and influencing factors of soil respiration of reed wetlands in Yellow River Estuary and Liaohe River Estuary by Xianxiang Luo
09:20 - 09:45	Changes of phosphate and ammonium nitrogen in irrigated waters of Hani terrace wetlands along the elevation gradients by Huifeng Xu
09:45 - 10:10	Nutrient removal by hybrid subsurface flow constructed wetlands for high concentration ammonia nitrogen wastewater by Xinshan Song
10:10 - 10:30	Coffee break
10:30 - 12:10	Ecological Processes of Wetlands-Chair: Junhong Bai
10:30 - 10:55	A hybrid neural network model for cyanobacteria bloom in Dianchi Lake by Z Wang
10:55 - 11:20	Concentration, distribution and comparison of total and bioavailable Metals in top soils and plants accumulation in Zanjan Zinc Industrial Town-Iran by A.H. Parizanganeh
11:20 - 11:45	Effect of anaerobic fermentation residues on a chromium-contaminated soil-vegetable system by Na Duan
11:45 - 12:10	
12:10 - 13:30	Luncheon (Yumadun Restaurant)
13:30 - 15:35	Informatics of Biodiversity of Wetlands-Chair: Shikui Dong
13:30 - 13:55	A graded sediment transport and bed evolution model in estuarine basins and its application to the Yellow River Delta by Chen Yang
13:55 - 14:20	Assessment of occurrence and concentrations of Xenobiotics in three fish species from Lake Naivasha, Kenya by Njogu Paula
14:20 - 14:45	Distribution of Organochlorine Pesticides and Heavy metals in fish collected from Xiaohai Lagoon, Hainan, China by Mangala Yatawara,

14:45 - 15:10	Impacts of environmental factors and human disturbance on composition and diversity of roadside vegetation in Xishuangbanna National Nature Reserve of Southwest China by Dong S. K
15:10 - 15:35	Heavy metals in water, soils and plants (<i>Scirpus tripueter</i> and <i>Cyperus malaccensis</i>) in riparian wetlands in the Pearl River Estuary, South China by Honggang Zhang
15:35 - 15:55	Coffee break
15:55 - 17:10	Informatics of Biodiversity of Wetlands-Chair: Shikui Dong
15:55 - 16:20	Scenario simulation of change of forest land in Poyang Lake watershed by Yan Haiming
16:20 - 16:45	Impacts of Manwan Dam construction on aquatic habitat and community in Middle Reach of Lancang River by Xiaoyan Li
16:45 - 17:10	

August 28, 2010

August 28, 2010	Meeting Room C
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Environmental Geomatics-Chair: Ping Guo
08:30 - 08:55	GIS application in evaluating the potential habitat of giant pandas in Guanyinshan Nature Reserve, Shaanxi Province by Pengfeng Wu
08:55 - 09:20	Detecting of Arasbaran Forest Changes Applying Image Processing Procedures and GIS Techniques by A.A. Rasuly
09:20 - 09:45	Analysis of the impact of Land use/Land cover change on Land Surface Temperature with Remote Sensing by Jing Jiang
09:45 - 10:10	Sand dunes monitoring using remote sensing and GIS techniques for some sites in Iraq by Ayad Mohammed Fadhil
10:10 - 10:30	Coffee break
10:30 - 12:10	Environmental Geomatics-Chair: Ping Guo
10:30 - 10:55	Space-earth based Integrated Monitoring System for Water Environment by Rei Liu
10:55 - 11:20	Land Use/Cover Change in Response to Driving Forces of Zoige County,

	China by Pang Aiping
11:20 - 11:45	A GIS-based decision support system for water trade management of River Basin Cities by Guozhen Zhang
11:45 - 12:10	
12:10 - 13:30	Luncheon (Yumadun Restaurant)
13:30 – 15:35	Analytical and Monitoring Technologies for Environmental Informatics-Chair: Christine Chan
13:30 - 13:55	Polycyclic aromatic hydrocarbons (PAHs) in the air of North East India, Manipur by N. Linthoingambi Devi
13:55 - 14:20	Sensitivity analysis of soil erosion in the Northern Loess Plateau by L. Liu
14:20 - 14:45	The assimilation of historic photography and cartography into long-term coastalgeomorphological analysis by Peter G. Bannon
14:45 - 15:10	Metallomic distribution in various regions of the brain as Influenced by dietary Intakes and implications by G. L. Wright
15:10 - 15:35	Physico-chemical analysis of the industrial effluents and their Impact on the soil microflora by Arminster Kau
15:35 - 15:55	Coffee break

August 28, 2010

August 28, 2010	Meeting Room D
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Environmental Informatics for Human-dominated Production and Consumption -Chairs: Hua Wang, Linyu Xu
08:30 - 09:00	Keynote speech: Information strategies for pollution control by Hua Wang
09:00 - 09:25	The whole-farm alternative energy sustainable biofuels project by Jennifer Taylor
09:25 - 09:45	Energy efficiencies of industrial sectors for China's major cities by Jiansu Mao
09:45- 10:10	Design of control circuit of grid-connected photovoltaic system based on SPMC75F2413A

	by Ma Hongmei
10:10 - 10:30	Coffee break
10:30 - 11:45	Environmental Informatics for Human-dominated Production and Consumption -Chairs: Hua Wang, Linyu Xu
10:30 - 10:55	The effect of determining gasoline price according to market mechanism on environment pollution by Kiomars Sohaili
10:55 - 11:20	Agroforestry systems in northern temperate zone under global changes: productive and ecological perspectives by Tingxiang Liu
11:20 - 11:45	Effect of dam construction on spatial-temporal change of land use—A case study of Man-Wan, Lancang River , Yunnan, China by Q.H. Zhao
11:45 - 12:10	Effect of reclamation project on marine ecological environment in Tianjin Harbor Industrial Area by Kunyu Li
12:10 - 13:30	Luncheon (Yumadam Restaurant)
13:30 – 15:35	Simulation and Optimization of Ecosystems-Chair: Friedrich Recknagel , Bin Chen
13:30 - 13:55	Stabilization of ecosystem due to mutual interference between predators by Jianfeng Feng
13:55 - 14:20	Extended exergy-based urban ecosystem network analysis: a case study of Beijing, China by Gengyuan Liu
14:20 - 14:45	Simulating soil freezing and thawing of desert ecosystem on the Qinghai-Tibet Plateau by Zhifang Yin
14:45 - 15:10	Kinetics reaction model of NO Removal in a discharge barrier plasma reactor by Jianfeng Zhang
15:10 - 15:35	Evaluation of different aspects of maximum entropy for niche-based modeling by Elisângela Silva da Cunha Rodrigues
15:35 - 15:55	Coffee break
15:55 - 17:10	Simulation and Optimization of Ecosystems-Chair: Friedrich Recknagel , Bin Chen
15:55 - 16:20	Information indices from ecological network analysis for urban metabolic system by Shaoqing Chen
16:20 - 16:45	Simulation of competitive mechanism for limited resources by Two-Species Meta-Populations in two Patches by Liu Kunkun
16:45 - 17:10	Research on developing environmental protection industry based on TRIZ theory

	by Zhang Jing
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August 28, 2010

August 28, 2010	Meeting Room E
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Ecological Water Demand-Chair: Yingxia Li
08:30 - 08:55	Assessing alternatives for sustainable management of a flood control dam by Meng Yang
08:55 - 09:20	Applying multi-source remote sensing data on estimating ecological water requirement in arid and semi-arid region by Yu Zhang
09:20 - 09:45	Study on the simulation of nutrient release from river inner source and its application----A case study of Guangzhou-Foshan river network, China by Xiaoxia Le
09:45 - 10:10	A simulation-based multistage interval-stochastic programming model for planning water resources allocation in Tarim River Basin by Y. Huang
10:10 - 10:30	Coffee break
10:30 - 12:10	Ecological Water Demand-Chair: Yingxia Li
10:30 - 10:55	Water simulation method based on BPNN response and analytic geometry by Zhiming Zhang
10:55 - 11:20	Application of Markov Chain Model on environmental fate of Phenanthrene in soil and groundwater by Dazhi Sun
11:20 - 11:45	Environmental flows management strategies based on the spatial distribution of water quality, a case study of Baiyangdian Lake, a shallow freshwater lake in China by Chong Zheng
11:45 - 12:10	
12:10 - 13:30	Luncheon (Yumadam Restaurant)
13:30 - 15:35	Decision Analysis for Environmental Management-Chair: Gordon Huang
13:30 - 13:55	Integrated water resources management in Peru by Higa Eda
13:55 - 14:20	An interval-fuzzy multi-objective linear programming model for planning environmental and economic management: a case study for chemical industry district in Tianjin, China by Yanfeng Li

14:20 - 14:45	Uncertainty propagation in environmental decision making using random sets by Kejiang Zhang
14:45 - 15:10	Uncertainty analysis of a spatially explicit simulation for host and parasitoid population interaction dynamic by Cha-Chi Fan
15:10 - 15:35	Development of a GIS-based decision support system for eco-environment and natural resources of Northeast Asia by Weijie Liu
15:35 - 15:55	Coffee break
15:55 - 17:10	Decision Analysis for Environmental Management-Chair: Gordon Huang
15:55 - 16:20	Regulations of environmental accident hazards control in China and their implementation by Pengli Xue
16:20 - 16:45	An early warning system for water shortage in basins based on SD model by Yayi Tan
16:45 - 17:10	A multi-level system for delivering biodiversity knowledge, data analysis and pest management recommendations to growers, for environmentally sustainable crop protection by D. Johnson

August 28, 2010

August 28, 2010	Meeting Room F
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Environmental Information Management-Chair: Hong Jiang
08:30 - 08:55	Estimation of air pollution parameter using artificial neural network by Carolyn Payus
08:55 - 09:20	Emergy-based health assessment of Baiyangdian Watershed Ecosystem in temporal and spatial scales by R Zeng
09:20 - 09:45	Comparison and uncertainty analysis on PAHs source apportionment models by Feifei Zhao
09:45 - 10:10	Clinoptilolite adsorption capability of ammonia in pig farm by Yang Wang
10:10 - 10:30	Coffee break
10:30 - 12:10	Environmental Information Management-Chair: Hong Jiang
10:30 - 10:55	Ecological compensation mechanism of Xin'an Spring water source protection zone in Shanxi Province

	by Shen Nan
10:55 - 11:20	Assessment of river water quality in Pearl River Delta using multivariate statistical techniques by X. Y. Fan
11:20 - 11:45	Ecological network analysis of China's endosomatic and exosomatic societal metabolism by Yating Li
11:45 - 12:10	Ecological network analysis of urban energy metabolic system by Yan Zhang
12:10 - 13:30	Luncheon (Yumadun Restaurant)
13:30 – 15:35	Urban Eco-planning-Chair: Lixiao Zhang
13:30 - 13:55	Manufacturing industry development in Jiaodong Peninsula based on the awareness of conservation culture by P. L. Wu
13:55 - 14:20	Design and practice of Foshan First Ring Landscaping by Chen Weidong
14:20 - 14:45	Gap analysis and conservation network planning in the Central Yangtze Ecoregion by Xiaowen Li
14:45 - 15:10	Industrial structure change and its eco-environmental influence since the establishment of municipality in Chongqing, China by Jifei Zhang
15:10 - 15:35	
15:35 - 15:55	Coffee break
15:55 - 17:10	Urban Eco-planning-Chair: Lixiao Zhang
15:55 - 16:20	Methodology for identifying urban growth potential of an area using land use and population data: a case study of Islamabad Zone IV by Muhammad Adeel
16:20 - 16:45	Evaluation indicators for urban ecological security based on ecological network analysis by Z.X. Li
16:45 - 17:10	Eco-security monitoring index system for urban development zone by Xiaocui Zhou

August 29, 2010

August 29, 2010	Meeting Room A
Time	
08:30 - 16:45	Conference Registration
08:30 - 10:55	Environmental and Ecological Risk Assessment-Chair: Yuchao Zhao
08:30 - 08:55	A probabilistic risk forecast of accidental oil spills from ships in Luoyuan Bay, Fujian Province, PRC by Hong Xiaoyu
08:55 - 09:20	Effects of diet intakes on metal and electrolyte distributions in vital organs by S. W. Leung
09:20 - 09:45	A combination weighting method for determining the index weight in geological disaster risk evaluation by Chan. M. Minski
09:45 - 10:10	The ecological vulnerability evaluation in southwestern mountain region of China based on GIS and AHP method by G.B. Song
10:10 - 10:30	Coffee break
10:30 - 12:10	Environmental and Ecological Risk Assessment-Chair: Yuchao Zhao
10:30 - 10:55	Ecological risk assessment of hydropower dam construction based on ecological network analysis by SH. H. Lv
10:55 - 11:20	Pollution and potential ecological risk evaluation of heavy metals in the sediments around Dongjiang Harbor, Tianjin by Weihua Guo
11:20 - 11:45	Ecological security assessment of Beijing based on PSR model by Zhanguang Liu
11:45 - 12:10	Ecological security assessment of Tianjin by PSR Model by Xiaorui Bai
12:10 - 13:30	Conference Banquet (Jingshi Hotel)
13:30 - 15:35	Environmental and Ecological Risk Assessment-Chair: Yuchao Zhao
13:30 - 13:55	Zoning abrupt environmental pollution risk in a mega-city by R.Z. Liu
13:55 - 14:20	A System for identifying and analyzing environmental accident risk sources by G.L. Alistair

August 29, 2010

August 29, 2010	Meeting Room B
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Ecological Assessment of Environmental Systems-Chair: Jeffrey Romm
08:30 - 08:55	Integration of discrete event simulation methodology with ecological material flow analysis for modelling eco-efficient production systems by Bernd Page
08:55 - 09:20	Analysis of electricity subsidies removing in Iran on air pollution by using of VECM by Kiomars. Sohaili
09:20 - 09:45	Assessing effects of dam operation on flow regimes in the lower Yellow River by Yan Yan
09:45 - 10:10	Assessment of trophic status based on water body types in Xixi National Wetland Park, China by Yufeng Li
10:10 - 10:30	Coffee break
10:30 - 11:45	Ecological Assessment of Environmental Systems-Chair: Jeffrey Romm
10:30 - 10:55	On the research of adsorption of polycyclic aromatic hydrocarbons (phenanthrene) in soil-groundwater in Zhangshi Irrigation District by D. Z. Sun
10:55 - 11:20	An Assessment of Correlation on MODIS-NDVI and EVI with Natural Vegetation Cover in Northern Hebei Province, China by Zhongfei Li
11:20 - 11:45	Water Pollution Characteristics and Assessment for Lower Reaches of Haihe River Basin by Xianbin Liu
11:45-12:10	Hydrological Informatics for Wetlands-Chair: Haifei Liu
11:45 - 12:10	Method exploring on dew condensation monitoring in wetland ecosystem By B. X .Yan
12:10 - 13:30	Conference Banquet (Jingshi Hotel)
13:30 – 15:35	Hydrological Informatics for Wetlands-Chair: Haifei Liu
13:30 - 13:55	Research on the vicissitude of coastline in the estuary of high sediment concentration Yellow River by Kong Qingrong
13:55 - 14:20	Investigation of water pollution in Baiyangdian Lake, China by Y. Zhao
14:20 - 14:45	A comparison study on hydrological modeling of a subarctic wetland system by Bing Chen
14:45 - 15:10	Assessing changes of trophic interactions during once anthropogenic water

	supplement in Baiyangdian Lake by Yang Ying
15:10 - 15:35	Discharge-salinity relationships in Modaomen waterway, Pearl River estuary by Z.M. Zhang
15:35 - 15:55	Coffee break
15:55 - 17:10	Hydrological Informatics for Wetlands-Chair: Haifei Liu
15:55 - 16:20	Aquatic environmental quality variation in Lake Dianchi Watershed by Yajuan Yu
16:20 - 16:45	Training a BPN-PLS Model for Inland Lake Chl-a concentration estimation in Northeast China by Dongmei Lu
16:45 - 17:10	Effects of reservoir impounding on key ecological factors in the Three Gorges Region by H. C. Dail

August 29, 2010

August 29, 2010	Meeting Room C
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Geographical Analysis for Regional Development-Chair: Anjie Li
08:30 - 08:55	Multifunctional offshore wind-farm development under integrated coastal zone management by Pierre-Alexandre Chateau
08:55 - 09:20	Water rights trading: a case study in the Yellow River Basin in China by Luqin Sun
09:20 - 09:45	Environmental impact assessment of land use planning in Wuhan City based on ecological suitability analysis by J. Liu
09:45 - 10:10	Change of urban ecosystem development—A case study of Beijing, China by Zhifeng Yang
10:10 - 10:30	Coffee break
10:30 - 12:10	Geographical Analysis for Regional Development-Chair: Anjie Li
10:30 - 10:55	Scenario analysis on economic growth and environmental load in China by C. K. Gao
10:55 - 11:20	A GIS-based buffer gradient analysis on spatiotemporal dynamics of urban expansion in Shanghai and its major satellite cities by Xiaowen Li
11:20 - 11:45	Temporal and spatial distributions of soil nutrients in Hani terraced paddy

	fields, Southwestern China by Baoshan Cui
11:45 - 12:10	Trans-boundary air pollution in Windsor, Ontario (Canada) by Sharmeen Farhana
12:10 - 13:30	Conference Banquet (Jingshi Hotel)
13:30 – 15:35	Other Areas of Environmental Science and Information Technology -Chair: Sheng Peng
13:30 - 13:55	Competitive interaction effects of hydrilla verticillata and vallisneria natans on phosphorus concentrations in water by X.F. Zhang
13:55 - 14:20	The program to improve the air quality of Mexicali, Baja California, Mexico 2010-2015 by Margarito Quintero-Núñez
14:20 - 14:45	Experimental study on oil recovery from petroleum refinery sludge by Jianbin Li
14:45 - 15:10	The influence of BRT on the ambient PM10 concentration at roadside sites of Trans Jakarta Corridors by S.B Nugroho
15:10 - 15:35	Environmental education in Bangladesh: A historical overview by Md. Abdullah Al Masum
15:35 - 15:55	Coffee break
15:55 - 17:10	Other Areas of Environmental Science and Information Technology -Chair: Sheng Peng
15:55 - 16:20	Classifying diatoms into trophic state index classes with novel classification algorithm by Andreja Naumoski
16:20 - 16:45	Effect of cultivated ages and degraded levels on the soil nutrient in the alpine region of headwater areas of Qinghai-Tibetan Plateau, China by L. Zhu
16:45 - 17:10	Relationship between vegetation greenness and urban heat island effect in Beijing City by X. X. Zhang

August 29, 2010

August 29, 2010	Meeting Room D
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Risk Assessment for Wetlands-Chair: LX. Xu
08:30 - 08:55	Effects of water recharge on ecosystem health in Baiyangdian Lake, China

	by F. Xu
08:55 - 09:20	The comparative study on the two methods of ecological sensitivity analysis in Huixian wetland, China by Mingwu Zhang
09:20 - 09:45	A novel index system for assessing ecological risk under water stress in the Yellow River Delta wetland by Yan Qin
09:45 - 10:10	Phytoremediation in engineered wetlands: mechanisms and applications by Boyu Zhang
10:10 - 10:30	Coffee break
10:30 - 11:45	Risk Assessment for Wetlands-Chair: LX. Xu
10:30 - 10:55	Key aquatic environmental factors affecting ecosystem health of streams in the Dianchi Lake Watershed, China by Yi Huang
10:55 - 11:20	Contamination characteristics of heavy metals in wetland soils along a tidal ditch of the Yellow River Delta, China by Junhong Bai
11:20 - 11:45	
12:10 - 13:30	Conference Banquet (Jingshi Hotel)
13:30 - 15:35	Environmental Policy Analysis-Chair: Jianbin Shi
13:30 - 13:55	The impact of improvement in Iran iron and steel production technology on environment pollution by Kiomars. Sohaili
13:55 - 14:20	The general theory of relativity for development economics by Liu Jiancheng
14:20 - 14:45	Environmental policy analysis for water management in Lanzhou City by Guozhen Zhang
14:45 - 15:10	Evaluation on international environmental protocols by Daitri Chatterjee
15:10 - 15:35	Financial risk management for energy service project under the Tokyo Emission Trading System by Tsuyoshi Yoshioka
15:35 - 15:55	Coffee break
15:55 - 17:10	Environmental Policy Analysis-Chair: Jianbin Shi
15:55 - 16:20	The changes of environmental policies in China by Lijun Wang
16:20 - 16:45	Watershed eco-compensation mechanism and policy study in China by Lijun Wang
16:45 - 17:10	Ecological, social, and economic implications of major eco-environmental policies in rural Western China by Shikui Dong

August 29, 2010

August 29, 2010	Meeting Room E
Time	
08:30 - 17:10	Conference Registration
08:30 - 10:10	Wetland Degradation and Ecological Restoration-Chair: Baoshan Cui
08:30 - 08:55	Wetlands shrink simulation using cellular automata: a case study in Sanjiang Plain, China by Huan Yu
08:55 - 09:20	Effect of degradation intensity on the ecosystem function of alpine meadow in the headwater areas of Qinghai-Tibetan Plateau, China by L. Wen
09:20 - 09:45	Evolution of land use policies and its effects on wetlands change in Tianjin Binhai New Area, China by Xuemei Li
09:45 - 10:10	Integration of water replenishment and pollutant reduction to achieve ecological restoration goals based on sustainability of the lacustrine wetlands by Hongjuan Zhai
10:10 - 10:30	Coffee break
10:30 - 12:10	Wetland Degradation and Ecological Restoration-Chair: Baoshan Cui
10:30 - 10:55	A conceptual ecological model of Cangzhou Coastal Wetlands, Hebei Province, China by Jianhua Wang
10:55 - 11:20	Wetland landscape change in Daliaohe River basin and the driving factors analysis by L. Yu
11:20 - 11:45	A landscape approach for wetland change detection (1979-2009) in the Pearl River Estuary by Hui Zhao
11:45 - 12:10	Modeling the scenarios of wetland restoration in Hengshui Lake National Nature Reserve by Cong Li
12:10 - 13:30	Conference Banquet (Jingshi Hotel)
13:30 - 15:35	Wetland Utilization and Management-Chair: Baoshan Cui
13:30 - 13:55	Estimation and Analysis of Net Primary Productivity of Ruoergai Wetland in China for the Recent 10 Years Based on Remote Sensing by Bian Jinhu
13:55 - 14:20	Effect of degradation intensity on the ecosystem function of alpine meadow in the headwater areas of Qinghai-Tibetan Plateau, China by Ainong Li
14:20 - 14:45	Evolution of land use policies and its effects on wetlands change in Tianjin

	Binhai New Area, China by Jun Xiang
14:45 - 15:10	Integration of water replenishment and pollutant reduction to achieve ecological restoration goals based on sustainability of the lacustrine wetlands by Suling Liu
15:10 - 15:35	Distribution characteristics and controlling factors of soluble heavy metals in the Yellow River Estuary and adjacent sea by Guozhen Zhang
15:35 - 15:55	Coffee break
15:55 - 17:10	Wetland Utilization and Management-Chair: Baoshan Cui
15:55 - 16:20	Wetland Landscape change in Daliaohe River basin and the driving factors analysis by Bing Chen
16:20 - 16:45	A landscape approach for wetland change detection (1979-2009) in the Pearl River Estuary by K. Y. Song
16:45 - 17:10	Modeling the scenarios of wetland restoration in Hengshui Lake National Nature Reserve by Nawal Prasad Singh

August 29, 2010

August 29, 2010	Meeting Room F
Time	
08:30 - 15:10	Conference Registration
08:30 - 10:10	Carbon Metrics and Ecological Systems Input-Output Modelling-Chairs: Guoqian Chen and Bin Chen
08:30 - 08:55	A review of ecological systems input-output modeling by Guoqian Chen, Zhanming Chen and Bin Chen
08:55 - 09:20	Nonrenewable energy cost and greenhouse gas emissions of a biogas system in China by Guoqian Chen, Qing Yang and Coulter J.
09:20 - 09:45	Ecological risk assessment of hydropower dam construction based on ecological network analysis by Shaoqing Chen
09:45 - 10:10	Extended exergy analysis for China by Jing Dai
10:10 - 10:30	Coffee break
10:30 - 12:10	Carbon Metrics and Ecological Systems Input-Output Modelling -Chairs: Guoqian Chen and Bin Chen

10:30 - 10:55	Carbon footprint analysis of Chongqing city by Liping Ju
10:55 - 11:20	Two-scale input-output analysis for typical urban agglomerations in China by Chen H., Chen G.Q.
11:20 - 11:45	Embodied greenhouse gas emissions of international trade: A case of Macau by Lei T.M., Chen Z.M., Chen G.Q.
11:45 - 12:10	Ecological systems input-output modeling: Comparison of different technical schemes by Li J.S., Chen Z.M., Chen G.Q.
12:10 - 13:30	Conference Banquet (Jingshi Hotel)
13:30 – 15:35	Carbon Metrics and Ecological Systems Input-Output Modelling - Chairs: Guoqian Chen and Bin Chen
13:30 - 13:55	Consumption-based greenhouse gas emission inventory for China 2007 by Zhang B., Chen G.Q.
13:55 - 14:20	Taylor dispersion in a two-zone packed tube by Wu Z., Chen G.Q., Zeng L.
14:20 - 14:45	Low-carbon ecological wastewater treatment: A constructed wetland in Beijing by Shao L., Chen G.Q., Chen B., Chen Z.M.
14:45 - 15:10	Exploitation of tidal energy resources in the UK: At what cost? by Richard Burrows
15:10 - 15:35	
15:35 - 15:55	Coffee break

Poster Exhibition

August 27-29	Room: To be announced
Setup Time (August 27)	
09:00 - 10:00	Assessment of heavy metal pollution in surficial soils surrounding Zinc Industrial Complex in Zanjan-Iran by A.H. Parizanganeh, P. Hajisoltani, and A.A. Zamani
09:00 - 10:00	Analyzes Land-use Change and Its Demographic Factors in Original-stream Watershed of Tarim River Based on an Integrated Methodology of GIS and Statistic by Yongliang SHI, Rusong WANG, Jingsheng LI, Dongfeng YANG
09:00 - 10:00	An Experimental Method for Analyzing Environmental Effects of Blowing Sands on Glass Abrasion by Bian Jinhu, Li Ainong, Deng Wei1, Ma Liqun, Jiang Jingang
09:00 - 10:00	Estimation and Analysis of Net Primary Productivity of Ruoergai Wetland in China for the Recent 10 Years Based on Remote Sensing by Bian Jinhu, Li Ainong, Deng Wei1, Ma Liqun, Jiang Jingang
09:00 - 10:00	Construction of a New Classifier Integrated Multiple Sources and Multi-temporal Remote Sensing Data by Jingang Jiang, Ainong Li, Wei Deng, Jinhu Bian
09:00 - 10:00	Evaluation of emergency planning for water pollution incidents in reservoir based on fuzzy comprehensive assessment by C.Y. Cheng and X. Qian
09:00 - 10:00	An analysis of spatiotemporal changes of urban landscape pattern in Phoenix metropolitan region by Moquan Sha, Guangjin Tian
09:00 - 10:00	Ecological security assessment of Yuan River watershed based on landscape pattern and soil erosion by Zhaoling Zhang, Shiliang Liu
09:00 - 10:00	Research on ANN-based Pre-warning Water Bloom Model of LiuHai Lake in Beijing by Weihua Zeng, Qilong Song, Hengchen Liu
09:00 - 10:00	Numerical modelling for the interpretation of a laboratory mock-up experiment of bentonite/granite interface by Qingchun Yang, Xiang Zhang, Zhongping Yang, Ji Liang
09:00 - 10:00	Landscape pattern changes under the disturbance of road networks by S.L. Liu, W. Fu, S.K. Dong
09:00 - 10:00	Driving Forces Analysis for Residential Housing Price in Beijing (China) by Cheng-jie He, Zhen Wang, Huai-cheng Guo, Hu Sheng, Ri Zhou, Yong-hui Yang
09:00 - 10:00	Numerical model of a long-term in situ diffusion and retention (DR) experiment in Opalinus Clay by Q. C. Yang, X. Zhang, Z. P. Yang, J. Liang
09:00 - 10:00	Study on Risk Zoning Technology of Major Environmental Risk Sources in Urban Scale and Its Application in Shanghai, China

	by Yang Ya, Junwei Ma
09:00 - 10:00	Degeneration mechanism research of Suaeda heteroptera wetland of the Shuangtaizi Estuary National Nature Reserve in China by Y. Wang, R.H. Liu, H.W. Gao, J. Bai, M. Ling
09:00 - 10:00	Heavy Metals Contamination and its Sources in the Luoyuan Bay by Jinyu Wang, Ruhai Liu , Min Ling, Ping Yu, Aikun Tang
09:00 - 10:00	Distribution Characteristics and Controlling Factors of Soluble Heavy Metals in the Yellow River Estuary and Adjacent Sea by Aikun Tang, Ruhai Liu , Min Ling, Liaoqi Xu, Jinyu Wang
09:00 - 10:00	A risk assessment on the alga bloom in city-a case of the "six seas" urban lakes in Beijing by Y. Zeng
09:00 - 10:00	Methodology for Identifying Urban Growth Potential of an Area Using Land use and Population Data: a Case Study of Islamabad Zone IV by Muhammad Adeel
09:00 - 10:00	Seasonal variation of phytoplankton in the DaNing River and its relationships with environmental factors after impounding of the Three Gorges Reservoir: A four-year study by Jia-Lei Zhang
09:00 - 10:00	Gap analysis and conservation network planning in the Central Yangtze Ecoregion by Xiaowen Li, Lina Zhang, Chen Liang
09:00 - 10:00	Modeling the scenarios of wetland restoration in Hengshui Lake National Nature Reserve by Cong Li, XiaoWen Li
09:00 - 10:00	Beijing Normal University
09:00 - 10:00	University of Regina
09:00 - 10:00	Higher Education Press

Instructions for Oral Presentations

Devices Provided by the Conference Organizer:

Laptops (with MS-Office & Adobe Reader)

Regular Oral Session: about 20 Minutes of Presentation and 5 Minutes of Q&A

Keynote Speech: 30 Minutes of Presentation and 10 Minutes of Q&A

Contact Persons

Lecture Hall (Yingdong Conference Hall)

Shikui Dong

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Yuchao Zhao

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Sheng Peng

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Jianbin Shi

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Meeting Room E (Jingshi Hotel)

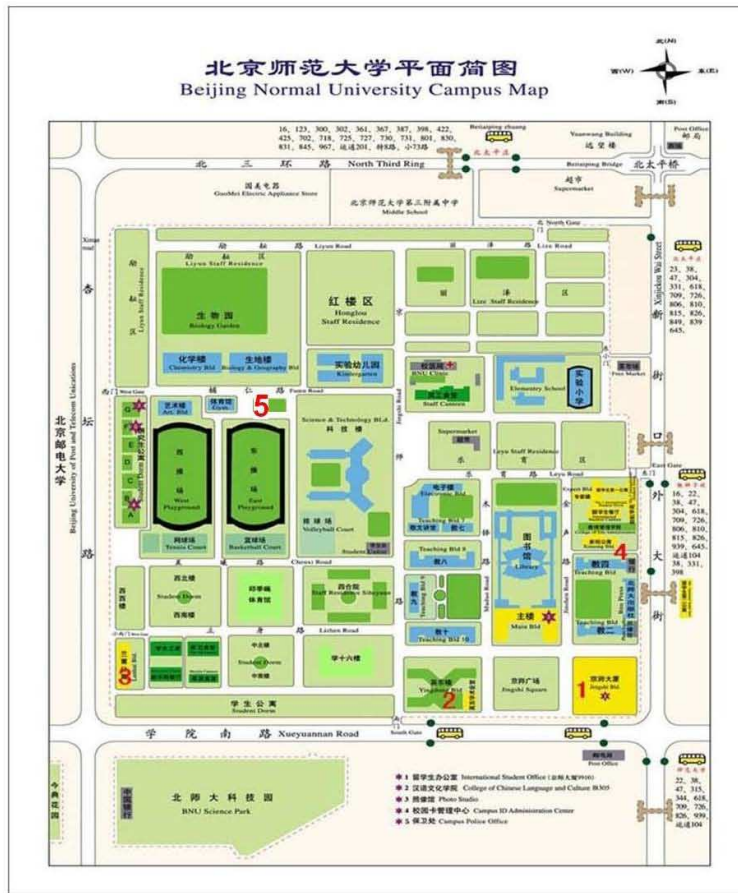
Yingxia Li

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Meeting Room F (Jingshi Hotel)

Bin Chen

Mob: 13811765907



1. Jingshi Hotel 2. Ying Dong Conference Hall
 3. Lanhui Restaurant 4. Liyun Hotel (YuMaDun Restaurant)
5 School of Environment