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Part I Conference Schedule

Time: June 1 to 3, 2019

Location: Kunming Jin Jiang Hotel(昆明锦江大酒店)

Date	Time	Location		
June 1	14:00-17:00	Registration (Lobby)		
		Room 1 (1 号会议室)	Room 2 (2 号会议室)	
		Psychology:	Earth & Geology:	
		Keynote Speech Session I	Keynote Speech Session I	
		Prof. Ik Ki Kim, Prof. Mark E. Williams,	Dr. Dong Xu, Dr. Pinnaduwa Kulatilake,	
	08:30-12:00	Prof. Ian Macreadie, Prof. Hui-Ming Wee,	Prof. Liu Defu, Dr. Kegen Yu, Dr. Victor	
		Prof. C. S. Chen	Novikov	
		Chair:	Chair:	
		Coffee Break: 10:30-10:40	Coffee Break: 10:30-10:40	
	12:00-13:30	Lunch	[Revolving Restaurant 旋转餐厅, 23rd Floor]	
June 2		Psychology:	Earth & Geology: Keynote Speech	
		Keynote Speech Session II	Session II	
	14:00-18:00			
		Dr. YANG Lan (Joy), Prof. Yang Lee, Dr.	Prof. Bo Pan, Dr. Dongfang Yang, Dr.	
		Nanxiang Xiong, Dr Vidya Sagar Athota,	Huan Yu, Prof. Jia-Jang Hung, Prof. Alex	
		Prof. Qiuping LI, MS. Yitong Shen	Hay-Man Ng, Prof. Jingao Liu	
		Chair:	Chair:	
		Coffee Break: 16:00-16:10	Coffee Break: 16:00-16:10	
	18:00-19:30	Dinne	er [Revolving Restaurant 旋转餐厅, 23rd Floor]	
		Room 1 (1 号会议室)	Room 2 (2 号会议室)	
	08:30-12:00	Psychology: Keynote Speech Session III	Earth & Geology: Keynote Speech	
		& Technical Session	Session III & Technical Session	
June 3		Prof. Kuang-Wu KOAI	Prof. Zhao Junmeng, Prof. Junye Wang	
Guile 3		Chair:		
		Coffee Break: 10:30-10:40	Chair:	
			Coffee Break: 10:30-10:40	
	12:00-13:30	Lunch	[Revolving Restaurant 旋转餐厅, 23rd Floor]	
June 4	6:00-18:30	One Day Tour (on pending)		

Part II Keynote Speeches

Psychology: Keynote Speech Sessions

Keynote Speech: Comparison of Living Arrangements and Family Support for

the Urban Elderly in Incheon-Gyeonggi, Korea and Shandong, China

Speaker: Prof. Ik Ki Kim, Renmin University of China, China

Time: 08:30-09:15, Sunday Morning, June 2, 2019

Location: Room 1 (1 号会议室),3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

This study tries to compare the differences of the living arrangements of the elderly and thus show the different patterns of the family support for the elderly between Korea and China. China and Korea have shared many



similarities in the socio-demographic characteristics despite some differences. So, comparing the living arrangements and patterns of family support in the process of rapidly aging population may be meaningful.

China has a huge population with diverse characteristics, while Korea is a small country with homogeneity. Comparing the living arrangements and family support for the whole population may not be appropriate. So, for a more sophisticated analysis, this study selects the urban elderly of Incheon-Gyeonggi Province in Korea and Shandong Province in China.

In addition, this study analyzes the data based on the same questionnaire in both Chinese and Korean cities at the about the same time. Korean data for the Incheon-Gyeonggi Province were collected in Incheon Special City and 17 cities in Gyeonggi Province. The sample size of the Korean elderly aged 65 years and over is 1,013. The Chinese data were collected in Jinan(Capital city of Shandong Province) and three coastal cities in Shandong Province. The sample size for the Chinese data turns out to be 738.

Keynote Speech 2: A New Nosology of Dementia

Speaker: Prof. Mark E. Williams, University of North Carolina, USA

Time: 09:15-10:00, Sunday Morning, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

Dementia is among the most feared of chronic health conditions. It is a common problem, whose prevalence increases dramatically with age.



Dementing illness can cause tremendous suffering, not only for those with the impairment, but also for their families and other caregivers. The number of persons with dementia is expected to increase worldwide as the global population ages. The enormous scope of the problem, combined with the difficulty in identifying individual cases, make early and accurate diagnosis an urgent public health challenge.

Even in medical circles, the terminology is confusing. Since Alois Alzheimer's first description (in 1906) of the clinical and pathologic findings in the case of a 54 year-old woman with progressive dementia, a nosology of dementia has developed, based primarily upon pathologic findings at post mortem examination. This taxonomy is imprecise however, and remains confusing. Moreover it is not helpful to clinicians caring for living individuals. We now know that what we call 'dementia' is not one but many diseases which share similar features, particularly loss of mental function. The more we learn about these distinct diseases, the more important it becomes to diagnose them as accurately and as specifically as possible in the pre-morbid state. This presentation will present an alternative nosology of dementias that can be applied to living persons based on specific clinical observations.

Keynote Speech 3: Clearing deleterious proteins for healthier aging

Speaker: Prof. Ian Macreadie, RMIT University, Australia

Time: 10:15-11:00, Sunday Morning, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

The build up of deleterious proteins is one of the biggest problems in ageing. The brain, the most organ sensitive to this phenomena, seeks to maintain the correct balance by the process known as proteostasis but this process declines



with aging. Reduced proteostasis causes major age-related diseases such as Alzheimer's Disease, Parkinson's Disease, and prion diseases, where aberrant proteins are known to associate with such diseases. Being able to restore proteostasis is likely to slow age-related decline in brain function, but the challenges are to find chemo preventatives that can enhance proteostasis to youthful levels, and to know how to administer these chemopreventative agents. A combination of epidemiology and studies in a convenient model system are providing approaches to find answers to these important questions.

Keynote Speech 4: THE SINGULARITY: Aging and Reverse Aging

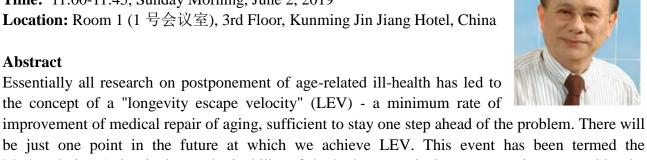
Speaker: Prof. Hui-Ming Wee, Chung Yuan Christian University, Chinese

Taipei

Time: 11:00-11:45, Sunday Morning, June 2, 2019

Abstract

Essentially all research on postponement of age-related ill-health has led to the concept of a "longevity escape velocity" (LEV) - a minimum rate of



be just one point in the future at which we achieve LEV. This event has been termed the Methuselarity. Aging is due to the inability of the body to repair damage over time, caused by the decay of molecular components that repair damaged molecules. Recent studies show that aging is a fundamental property of all eukaryotes. Eukaryote is an organism whose cells contain a nucleus surrounded by a membrane; whose DNA is bound together by proteins (histones) into chromosomes. The right perspective of aging is to live a healthy life at age 80s and 90s or even hundreds. Not necessarily living forever. The WHO defines Health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The definition has not been amended since 1948. Due to global warming, some snow in the Arctic began to melt; a Russian scientist discovered certain living organisms/bateria that were frozen some many years old. He conducted research by injecting the organisms into an old mouse (80-90 human age). He discovered that the mouse rejuvenated and started reproduction. Since it was hard to get human experimentation, he injected the organisms into himself. He discovered he felt healthier and seldom get sick.

Keynote Speech 5: Some Smart Systems and Technologies for Healthy and

Active Aging

Speaker: Prof. C. S. Chen, Center for General Education, National Tsing

Hua University, Hsinchu, Taiwan

Time: 11:45-12:30, Sunday Morning, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

Modern sciences have helped the increasing of human lifespan, but failed in slowing down the physical and mental deterioration during the aging of most

of us. More and more elderly persons need helps physically and mentally to achieve the healthy and active aging. We have been exploring the application and development of more smart systems and technologies to help the elderly persons in having a healthy and active aging.



As an over 80 years old retired physicist still active in teaching and research, I would like to offer some of my related experiences and thinking for discussion.

We have taken a holistic approach to examine the aging issues. A top-down approach has been used to isolate the critical issues. We have got the help of modeling and simulation to examine the issues more rationally. Helpful public literatures and several thousands of students' feedback about their grandparents and elderly relatives are used to guide our exploration also.

We have made good progress in several aspects. The more promising interactive smart systems and technologies (ISST) have been chosen and examined for elderly welfare. More details for further development have been mapped out. We have also examined the acceptance and cognition issues towards the ISST among the elderly persons. We are exploring some improved augmented reality (AR) for helping the elderly persons in applying the modern technologies. We hope that our efforts will be helpful in promoting the healthy active and independent aging more successful physically and psychologically.

Keywords: aging, healthy, holistic, interactive, technologies, augmented reality

Keynote Speech 6: Inside Out: The importance and necessity of assessing students' self-perceptions of teacher feedback for harnessing the power of feedback

Speaker: Dr. Lan Yang (Joy), Department of Curriculum and

Instruction The Education University of Hong Kong **Time:** 14:00-14:45, Sunday Afternoon, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel,

China

Abstract

Although the impact of feedback on student achievement has been identified to be powerful (i.e., top 10 among over 100 influences relating to achievement, Hattie, 2009), students might respond to



teacher feedback differently due to individual differences in terms of self-perceptions of feedback in multiple aspects. To harness the power of teacher feedback in student learning, it is meaningful to search for productive ways to help students to accept and use feedback effectively to promote learning. Awareness and assessment of individual differences in terms of students' perceptions of teacher feedback are prerequisites or facilitators of harnessing teacher feedback. To address both, this study examined students' individual differences in terms of four key feedback orientations(FOs). The four FOs are students' self-perceptions of feedback pertaining to feedback usefulness, competence and responsibility to use teacher feedback to improve academic performance, and social awareness to use feedback for establishing/maintaining good student-teacher relationships. The relationships between these FOs and student engagement in learning were also tested given the role of engagement in improving learning. Participants were a

sample of over three hundred secondary students in mainland China. Findings showed these variables were significantly and positively correlated with each other. A further regression analysis showed feedback usefulness is the strongest predictor of school engagement followed by responsibility, competence and social awareness to use feedback. Theoretical implications to the field of feedback research and practical implications of assessing and understanding students' feedback orientations in developing effective feedback delivery strategies in classrooms to harness the power of teacher feedback on students' engagement and academic achievement are discussed. Keywords: Self-perceptions, the power of feedback, individual differences, feedback orientations, Chinese students

Keynote Speech 7: Gih to Meditation; Zen with Tea: 茶禪一如

Speaker: Prof. Yang Lee, Gyeongsang National University, Republic of Korea

Time: 14:45-15:30, Sunday Afternoon, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

It has been argued that Gih can be refined as integrating mind and matter (Lee, Shaw, &Jin 2017). Gih works in meditation since the latter is conceptualized as regarding both mind and matter. The reciprocity inherent in



meditation is illustrated by some of its popular aphorisms as 茶禪一如(Tea and Zen are same; Choi, 1980). This study asked how tea would match to Zen. Since tea is matter, they must be conceptualized to work in mind, as Tea-Gih. With the same point, Zen is an ideal entity as, say, "mindfulness," which must be transformed to work in matter as Zen-Gih. Thus this study propounds that Zen-Gih is construed as an example of "Embodied" mind (Borrett, Kelly, &Kwan, 2000;Dove, 2016), while Tea-Gihis as instances of "Enminded" matter. This line of conceptualization used the affordance-based control exhibited by archers (Lee, Lee, Carello, &Turvey, 2012) as an experimental paradigm to analyze Tea-Gih and Zen-Gih. This framework refines psychosomatic in terms of dual directions, extending to philosophical discussions as phenomenology (Haship, 2015).To demonstrate an empirical approach, this study showed some psychosomatic phenomena induced by respiration control, heart-rate and neural activity in processes of body, and coincident with mindfulness and emotion in terms of mind events, owing to conditions of that a tea-rite was practiced. The results were discussed in respect to what would be theoretically related (e.g., Turvey, 2012). Thus, this study concluded that Gih could modulate tea rite to realize Zen.

Key words: Gih, Meditation, Zen with Tea(茶禪一如), Embodied, Enminded, Psychosomatic Borrett, D., Kelly, S.,&Kwan, H., (2000). Bridging embodied cognition and brain function: the role of phenomenology. Philosophical Psychology. 13(2), 261-266.

Choi, B. (1980). Tea-Zhen, Jinju: Dasolsa

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Haship, H. (2015). Phenomenon of life and death by Dōgen and Heidegger—in view of "embodied cognition" in Buddhist philosophy and phenomenology. Asian Studies, 3, 105-128.

Lee, Y., Lee, S., Carello, C., &Turvey, M. T. (2012). An archer's perceived form scales the "hitableness" of archery targets. Journal of Experimental Psychology: Human Perception and Performance, 38, 1125-1131.

Lee, Y., Shaw, R. E, &Jin, Z (2017). Gih (Qi): Beyond affordance. Frontiers in Psychology. 8, 556. doi: 10.3389/fpsyg.2017.00556.

Park, Y (1990). Sword-Zhen, Jinju: Namhaedojang.

Turvey, M. T. (2012). From physical education to physical Intelligence: 50 years of perception-action by Michael T. Turvey. The Journal of the PhilosophicalInterdisciplinary Vanguard (AVANT), 3, 128-138.

Keynote Speech 8: Chitosan hydrogels cross-linked with citric acid as scaffolds

for spinal cord injury restoration and axon regeneration

Speaker: Prof. Nanxiang Xiong, Wuhan Union Hospital, China

Time: 15:45-16:30, Sunday Afternoon, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

Spinal Cord Injury (SCI) is a highly devastating condition for which there is still no effective cure. Recently, artificial substrates transplantation is regarded with great expectation. Hydrogels such as chitosan (CHI) have been



applied in SCI repair with promising results. However, the poor physical property is one of the main factors limiting the CHI use in clinical applications for central nervous system repair until now. In the present study, we propose to cross-link CHI with citric acid (CA) to construct hydrogel scaffolds with better physical property in order to promote SCI regeneration. In vitro, CHI/CA hydrogels had good compatibility and could induce robust neurite outgrowth. In vivo experiments in a transection SCI rat model revealed that all of CHI/CA scaffold groups led to significant motor improvements when compared to control group. This was accompanied by a decreased infiltration of astrocytes, and by an increased intensity of remyelination and neurofilament. Because it effectively induces SCI repair, CHI/CA hydrogels may be a promising new approach to treat SCI, and a suitable substrate to combine with other strategies.

Keynote Speech 9: TBD

Speaker: Prof. Vidya Sagar Athota, The University of Notre Dame Australia,

Australia

Time: 16:30-17:15, Sunday Afternoon, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract TBD



Keynote Speech 10: The positive aspects of cancer patients and their family caregivers

Speaker: Prof. Qiuping LI, Wuxi Medical School, Jiangnan University, China

Time: 17:15-18:00, Sunday Afternoon, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

While there is a vast body of studies exploring the negative aspects of cancer patients and their family caregivers', there have also been reports on the



positive aspects in the context of coping with cancer and its treatment. The objective of this report was to summarize and appraise the positive aspects in dyads of cancer patients and their family caregivers, and to identify directions for future research. Contents would cover the following three sections: (1) the positive aspects of spousal caregivers for cancer patients: a systematic review showed that spousal caregivers for cancer patients experienced various positive aspects of caregiving, such as an enhanced relationship with the care-receiver, the feeling of being rewarded, a sense of personal growth, and a perception of personal satisfaction. Daily enrichment events and self-efficacy on the part of the caregivers were identified as the determining factors in the positive aspects of caregiving. (2) psychometric properties of the 17-item benefit finding scale (BFS) in Chinese cancer patients and their family caregivers: dimensionality analysis confirmed a three-dimensional structure validity. The extracted three factors were personal growth, improved relationships, and acceptance. The overall and three subscales of BFS in both cancer patients and family caregivers had good internal consistency, with all of the Cronbach's a ≥0.819. (3) factors

moderating the mutual impact of benefit finding between Chinese patients with cancer and their family caregivers: cancer patients and family caregivers experienced similar moderate to high benefit finding ranging from 65% to 81%, with the exception of acceptance, in that cancer patients had higher levels of acceptance than did family caregivers (P<0.05). Various factors modifying the benefit finding relationships between cancer patients and their family caregivers were identified, including dyads' gender, marital status, education level, employment status, level of being informed about the disease, and cancer type and treatment, anxiety, depression, and self-efficacy. Healthcare professionals need to encourage the cancer patient-caregiver dyads to share their experience and improve benefit finding together; and to develop a dyadic-based intervention program to help enhancing dyads benefit finding.

Keywords: cancer; oncology; positive aspects; benefit finding; family caregivers, cancer patient-family caregiver dyads

Keynote Speech 11: Correlates of sleep problems in Tuberous Sclerosis Complex

- TS 2000 project

Speaker: Ms Yitong Shen, MAUDSLEY HOSPITAL, UK **Time:** 18:00-18:45, Sunday Afternoon, June 2, 2019

Location: Room 1 (1 号会议室), 3rd Floor, Kunming Jin Jiang Hotel,

China

Abstract

Background

Tuberous Sclerosis Complex (TSC) is a genetic disorder with multi-system manifestations that often gives rise to brain lesions (e.g. cortical tubers), epilepsy and neuropsychiatric disorders (e.g. Autism Spectrum Disorder – ASD and; Attention Deficit Hyperactivity Disorder – ADHD). Sleep problems frequently occur in children with TSC and are also common in ASD, ADHD and epilepsy, but the relationship between sleep problems in TSC and the neuro-epileptic complications and neuropsychiatric problems has been little investigated. Objective

The aim of the study is to examine the relationship between sleep problems and the neuro-epileptic complications (cortical tuber count age of onset and severity of epilepsy) and neuropsychiatric disorders(ASD, ADHD), in a population representative sample of children and adolescent with TSC.

Methods

This study is based on data from the TS2000 cohort study, a prospective, longitudinal population-based cohort study of UK TSC patients. 125 children diagnosed with TSC were recruited during 2001 to 2005 when they were age 0 to 16 years. Genetic tests were undertaken to identify the TSC mutation and consenting participants were assessed at several follow-up time points. In middle childhood and adolescence assessments included the Composite Sleep Disturbance

Index (CSDI) a parent rated questionnaire, and questionnaire, interview and observational assessment for ASD (SRS, ADOS and ADI-R) and ADHD (DAWBA, SDQ, DIVA, K-SADS, Connersscales and ABC). Epilepsy severity was assessed using an epilepsy interview (E-chess) and recorded at several time points across development. Brain magnetic resonance imaging (MRI) scans were rated for cortical tuber count by expert neuro-radiologists. Statistical analyses were undertaken using parametric and non- parametric tests.

Preliminary results

39.7% of TSC participants had sleep problem with a reduced duration of sleep (average 6.77 hours continuous sleep). In univariate analysis, participants with sleep problems over last three months presented withover last three months had lower IQ score in the phase 2 (t=3.49, p<0.01), more severe ADHD symptoms (t=-2.81, p<0.01), ASD symptoms (t=-2.81, p<0.001), severity of seizures in the year 2 (t=-2.29, p<0.05), higher risk of ADHD (U=139.5, p<0.01), ASD (U=128, p<0.001) and comorbid ASD+ADHD (U=81, p<0.01). In addition, significant correlationswere found betweensleep problems score, and IQ score in the phase 2 (r=-0.344, p<0.01) and phase 3 (r=-0.371, p<0.01), ADHD (r=0.464, p<0.01), ASD (r=0.638, p<0.01) and seizure severityat year 2 (r=0.267, p<0.05). Duration of continuous sleep hours were significantly correlated with ASD (r=-0.61, p<0.01), ADHD (r=-0.362, p<0.05) and IQ score in the phase 2 (r=0.314, p<0.05). There was no association between sleep problems, tuber count or the severity of seizures in middle childhood, when the sleep questionnaire was completed. Multivariate analysis indicated that both ASD symptoms(p=0.000) and the severity of seizures in second year (p=0.077) alone jointly predicted the sleep problems score.

Conclusion

Sleep problem in TSC are common and most often develop in TSC patients that had severe epilepsy in the second year of life and ASD symptoms.

Earth & Geology: Keynote Speech Sessions

Keynote Speech 1: Planform evolution of meandering rivers and its coupling with vegetation dynamics

Speaker: Dr. Dong Xu, Tianjin University, China **Time:** 08:30-09:15, Sunday Morning, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

Some paleogeographic studies believe that the remarkable development of the meandering river in the middle period of the Paleozoic is closely related to the

prosperity of terrestrial vegetation. The terrestrial vegetation has significant effects on river sedimentation and planform evolution of meandering rivers. The growth of riparian vegetation is

also affected by rivers. Rivers provide water and nutrients to affect riparian vegetation, involving multiple physical and biological processes. Numerical simulations were carried out by coupling submodels for river flow hydrodynamics, morphology dynamics and also riparian vegetation dynamics. Simulation results show that under the influence of vegetation dynamic factors, the distribution of wavelength and skewness of the meandering river increase, while the distribution of fatness decrease; the density of vegetation shows a scattered distribution pattern when coupled with river dynamic rather than a strip-like distribution when the river channel is fixed. A Vegetation-River Coupling factor (VRC) was proposed based on the simulation results and natural rivers are found can be classified into three types according to the vegetation-river coupling factor.

Keynote Speech 2: Prediction of Rock Mass Deformations in Three Dimensions for a Part of an Open Pit Mine and Comparison with Field Deformation

Monitoring Data

Speaker: Prof. PINNADUWA H.S.W. KULATILAKE, University of

Arizona, USA

Time: 09:15-10:00, Sunday Morning, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China



The intact rock properties and discontinuity properties for both DRC and DP rock formations that exist in the selected open pit mine were determined from tests conducted on rock samples collected from the mine site. Special



survey equipment which has a total station, laser scanner and a camera was used to perform remote fracture mapping in the research area selected at the mine site. From remote fracture mapping data, the fracture orientation, spacing and density were calculated in a much refined way in this study compared to what exist in the literature. Discontinuity orientation distributions obtained through remote fracture mapping agreed very well with the results of manual fracture mapping conducted by the mining company. GSI rock quality system and Hoek-Brown failure criteria were used to estimate the rock mass properties combining the fracture mapping results with laboratory test results of intact rock samples. Fault properties and the DRC-DP contact properties were estimated based on the laboratory discontinuity test results. A geological model was built in a 3DEC model including all the major faults, DRC-DP contact, and two stages of rock excavation. The built major discontinuity system of 44 faults in 3DEC with their real orientations, locations and three-dimensional extensions were validated successfully using the fault geometry data provided by the mining company using seven cross sections. Numerical modeling was conducted to study the effect of boundary conditions and lateral stress ratio on the stability of the considered rock slope. For the considered section of the rock slope, the displacements obtained through stress boundary conditions were seemed more realistic than that obtained through zero velocity boundary conditions (on all four lateral faces). Stable deformation distributions were obtained for k0 in the range of 0.4–0.7. Because the studied rock mass is quite stable, it seems that an appropriate range for k0 for this rock mass is between 0.4 and 0.7. The displacements occurred between July 2011 and July 2012 due to the nearby rock mass excavation that took place during the same period were compared between the field monitoring results available from the mining company and the predicted numerical modeling results; the best agreement was obtained for k0 = 0.4. Therefore, k0 = 0.4 can be decided as the most appropriate value for the studied mine site. In overall, the successful simulation of the rock excavation during a certain time period indicated the possibility of using the procedure developed in this study to investigate rock slope stability with respect to expected future rock excavations in mine planning.

Keywords: Open-pit mine, Rock slope stability, 3-D discontinuum stress analysis, Simulation of excavation, Validation

Keynote Speech 3: Typhoon/ Hurricane/ Tropical Cyclone Disasters: Prediction,

Prevention and Mitigation

Speaker: Prof. Defu Liu, Disaster Prevention Research Institute, Ocean

University of China, China

Time: 10:15-11:00, Sunday Morning, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

Since 1972 Rita typhoon attacked on Dalian Port and induced severe catastrophe, we were studied on statistical prediction model of typhoon



induced wave height and wind speed. With an increasing tendency of the natural hazards frequency and intensity, risk assessment of some design codes for coastal defence infrastructures should be of paramount importance influencing the economic development and a lot of lifes in China. Comparison between existing extreme statistical model like Gumbel, Weibull, P-III distribution or Probable Maximum Typhoon/Hurricane(PMT/PMH), Design Basis Flood (DBF) with our 1975-1980 proposed (CEVD) model showed that all the planned, designed and constructed coastal infrastructures accepted the traditional safety regulations are menaced by possibility of future typhoon/hurricane disasters and cannot satisfy the safety requirements with the increasing tendency of the extreme natural hazards. Our first publication in US (J. of Waterway Port Coastal & Ocean Eng. ASCE, 1980, ww4) proposed an new model "Compound Extreme Value Distribution" used for China sea, after then the model was used in "Long term Distribution of Hurricane Characteristics" for Gulf of Mexico & Atlantic coasts, U.S. (OTC.1982). 2005 hurricane Katrina, Rita and 2012 hurricane Sandy induced disasters proved 1982 CEVD and CEVD has been developed into Multivariate Compound Extreme Value Distribution (MCEVD). 2006 MCEVD predicted extreme hazards in New Orleans, Gulf of Mexico and Philadelphia areas. 2013 typhoon Fitow induced disaster in China also proved MCEVD 2006 predicted results.

During the past years, CEVD and MCEVD have been applied to more than 50 coastal, offshore, and

hydraulic projects in China and abroad. The theory of MCEVD is also referenced by some foreign experts and used for extreme sea hazards study in North Sea and around Korean coast. In view of the "Summary of flood frequency analysis in the United States" concluded that "the combination of the event-based and joint probability approaches promises to yield significantly improved descriptions of the probability laws of extraordinary floods". MCEVD is the model that follows the development direction of the extraordinary floods prediction, as desired by Kirby and Moss. It stands to reason that MCEVD is a good model for typhoon and hurricane disaster prediction. Our proposed methods are used as design criteria of wind-structure interaction experimentation for mitigating hurricane-induced U. S. coastal disasters.

Our lecture will included following centents:

- (1) Comparison between 1982 CEVD predicted results and NOAA proposed SPH and PMH
- (2). Main reason of Hurricanes Katrina and Rita destroyed 116 fixed platforms in Gulf of Mexico.
- (3). 2012 HurricaneSandyinduced flooded area proved 1982 CEVD predicted storm surge
- (4) Hurricane Katrina and Hurricane Sandy proved MCEVD predicted results
- (5) 2013 Typhoon Fitow proved 2006 MCEVD predicted disaster in Shanghaicity
- (6), Poisson- Weibull Compound Extreme Value Distribution (P-W CEVD) and Its Application along U. S. Coasts
- (7). 2012 HurricaneSandyinduced flooded area proved 1982 CEVD predicted storm surge
- (8). 2013 Typhoon Fitow proved 2006 MCEVD predicted disaster in Shanghaicity
- (9), Risk assessment for Nuclear Power Plant (NPP) against sea hazards
- (10), Study on the flood volume of the Three Gorges Dam Project
- (11), Design Code Calibration of Offshore Platform Against Typhoon/Hurricane Attacks
- (12), Prediction of the Flood Disasters in Yangtze River: Examples for Three Gorges Dam Project and Estuarine City Shanghai
- (13) System Analysis of Disaster Prevention Design Criteria for Coastal and Estuarine Cities,
- (14) Four Natural Disasters in US and China: A Evidence for Validity of Probability Prediction by Compound Extreme Value Distribution

Keynote Speech 4: Monitoring of Ocean State with GNSS Reflectometry

Speaker: Prof. Kegen Yu, China University of Mining and Technology,

Time: 11:00-11:45, Sunday Morning, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

GNSS reflectometry (GNSS-R) is a new remote sensing technology which is operable under all weather conditions. GNSS-R is cost-effective since the

GNSS signals are free for use and are available anytime and anywhere on the globe. A wide range of geophysical parameters of land and ocean can be retrieved using GNSS-R. The focus of this talk is on the monitoring of ocean state with GNSS-R. In particular, we will talk about GNSS-R based

wind speed estimation, sea surface altimetry, tsunami detection and parameter estimation, and sea ice detection. In addition to describing the fundamental principles of the estimation of the parameters, experimental results are also presented.

Keynote Speech 5: Is it possible to prevent catastrophic earthquakes? Insight from field and laboratory experiments on high-power DC current injection into the Earth crust

Speaker: Prof. Victor Novikov, Joint Institute for High Temperatures of

Russian Academy of Science, Russia

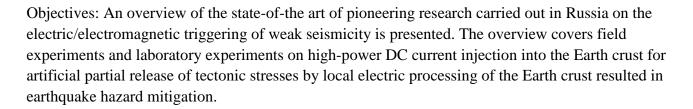
Time: 11:45-12:30, Sunday Morning, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel,

China

Abstract

Key Words: DC electric current injection, earthquake triggering, earthquake control



Methods: The field experiments on DC electric pulses injection were started more than forty years ago at Garm geophysical test site (Tajikistan, Pamir mountains) and were continued at the test site near Bishkek city, Kirgizia (Northern Tien Shan) in 1978 with application of pulsed magneto-hydrodynamic (MHD) power systems, and ERGU-600 pulsed electric system (PES) powered from industrial electric line. The PESs provided DC current of 600-2500 A in emitting dipole grounded into the earth crust with a distance between electrodes of about 4 km. The prime goal of the field experiments was deep electromagnetic (EM) sounding of the Earth crust for monitoring of EM precursors of strong earthquakes.

Results: After a few years of operation of MHD power systems it was found that electric pulses provided a spatiotemporal re-distribution of local seismicity. During forty years of the filed experiments there is clear deficit of strong earthquakes in the region under study (100 x 100 km). The results of monitoring of seismic activity by KNET seismic stations were supported by measurement of acoustic emission in the wells during the sessions of DC current injections.

The field results were verified under laboratory conditions with application of various press

equipment and spring-block sliders simulated behavior of the fault during its electric processing. Some theoretical attempts were taken to explain the electric/electromagnetic triggering phenomena, which consider not only interaction of electric/EM-fields with stressed rocks, but fluid migration under electric action which may result in triggering of weak earthquakes.

Conclusion: Today it is clearly shown that the electric processing of the Earth crust may be used for development of advanced technology of prevention or mitigation of catastrophic earthquakes. The future research should be directed to application of electric processing of the seismogenic fault for transformation of "stick-slip" seismic mode to the mode of slow-slip events or creep.

Keynote Speech 6: Generation of environmentally persistent free radicals and

the new challenges in environmental geochemistry

Speaker: Prof. Bo Pan, Kunming University of Science and Technology

Time: 14:00-14:45, Sunday Afternoon, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel,

China

Abstract

Environmentally persistent free radicals (EPFRs) are defined as organic free radicals stabilized on or inside particles. They are persistent because of the protection by the particles and show significant toxicity to organisms.



Increasing research interests have been attracted to study the potential environmental implications of EPFRs. Because of their different physical forms from conventional contaminants, it is not applicable to use the commonly used technique and strategy to predict and assess the geochemical behavior and risks of EPFRs. Thus a new challenge is now encountered. For example, the mining and burning of low-rank coal in Xuanwei, China have attracted a great deal of research attention because of the generated polyaromatic hydrocarbons (PAHs) and the high incidence of lung cancer in this region. Importantly, we detected strong electron paramagnetic resonance (EPR) signals of 3.20×10^{17} - 3.10×10^{19} spins/g in environmental samples, including chimney soot, coal, soil and total suspended particles (TSP). These EPR signals did not significantly change after 18-months storage and had g-values in the range of 2.0039-2.0046, suggesting typical organic free radicals. Similar strong EPR signals were observed in PAH (anthracene and pyrene as model compounds) degradation on simulated soil particles and lasted over one month even when the applied PAHs were 100% degraded. Based on g-value and bond width, we propose that EPR signals detected in TSP and soot originated from both coal combustion and PAH photodegradation. We emphasized that EPFRs are formed in this region and the potential risk had not been addressed. For future studies, quantitative analysis of the interactions between organic contaminants and EPFRs will greatly improve the predictive accuracy of the multimedia environmental fate models. In addition, the health risks will be better evaluated when considering the toxicity contributed by EFPRs.

Keynote Speech 7: Yang's dynamic vertical balance process for the content of

Cd in a marine bay

Speaker: Prof. Dongfang Yang, College of Chemistry and Environmental

Science, Guizhou Minzu University, China

Time: 14:45-15:30, Sunday Afternoon, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel,

China

Abstract

This study analyzes the horizontal and vertical migration processes of Cd contents based on the investigations conducted during May and August 1990. It reveals the dynamic balance process of Cd substance in a marine bay and shows that in the waters close to the source input, the content of Cd in the surface waters is the highest, and also the vertical dilution amount is the highest. This is the beginning of the dynamic vertical balance process. Along with distance from the source input, the sedimentation is an ongoing process, which results in a decrease in the content of Cd in the surface waters, and a reduction in the vertical dilution amount. This process continues to the balance point. In waters far away from the source input, the content of Cd is homogeneous in the waters, and the vertical dilution amount decreases to the lowest value, i.e., the balance point. Furthermore, a block diagram has been provided to demonstrate the dynamic vertical balance process.

Keywords: Cadmium, Balance, Dynamic, Process, Jiaozhou Bay

Keynote Speech 8: Opportunities and Challenges for Advancing Landscape

Geochemistry with Support of Geospatial Technologies

Speaker: Prof. Huan Yu, College of Earth Sciences, Chengdu University of

Technology, China

Time: 15:45-16:30, Sunday Afternoon, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

As a cross-disciplinary scientific domain, landscape geochemistry interacts with natural resources relevant subjects such as mineral exploration,

agricultural production and land use planning with considerable environmental benefits, and provides substantially theoretical and applied supports to their utilization. Since its establishment, a great deal of research has been conducted. However, there are a few gaps that still remain. First, the current studies are only limited to characterizing the spatial distribution of chemical elements and exploring their mechanisms at landscape level and ignore the integrated analysis using



multidisciplinary approaches. Moreover, the used methods lack the ability of revealing the relationships of landscape geochemistry with other sciences, and the obtained knowledge is thus fragmented and isolated, and its development has not been globally paid attention to. In this study, the state-of-the-art regarding the applications of relatively new geospatial technologies including fractal theory, geographic information system and remote sensing to landscape geochemistry was reviewed and analyzed to provide deep insights of current research and a roadmap for furthering the development of landscape geochemistry as a cross-disciplinary discipline. The results showed that substantial research on the applications of fractal theory, GIS and RS technologies for analyzing the processes and data of landscape geochemistry has been conducted by using the advantages of the geospatial technologies. However, the great challenges still exist when the geospatial technologies were individually utilized due to the limitations of the technologies themselves and the complexity of landscape geochemistry. In the end, opportunities and challenges for advancing the further studies of landscape geochemistry were discussed in detail and new directions of studying landscape geochemistry using multidisciplinary or integrated approaches to enhance understanding the relationships among the relevant disciplines were suggested.

Keywords: Landscape geochemistry; fractal theory; geographic information systems; remote sensing; environmental geochemistry; exploration geochemistry; multidisciplinary approach.

Keynote Speech 9: Biogeochemical Processes of Nutrient and Organic Carbon on the Internal-Waves Dominated Margin off Dongsha Atoll, North South China Sea

Speaker: Prof. Jia-Jang Hung, Department of Oceanography, National Sun

Yat-sen University, Kaohsiung, Taiwan

Time: 16:30-17:15, Sunday Afternoon, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel,

China

Abstract

Internal waves (IWs) are ubiquitous features and have pronounced impacts on carbon biogeochemistry in marginal seas and deep oceans. In the northern South China Sea (NSCS), the IWs generated frequently in the Luzon Strait and propagated westward to reach or break down on the Dongsha continental shelf. To understand the biogeochemical response of IWs impacts in the Dongsha margin, the study was conducted in several cruises to measure hydrological (T, S, D) and biogeochemical (nutrients, Chl-a, organic carbon) conditions from two transects covering the slope, shelf break and shelf zones of Dongsha Atoll. We found that the surface water off Dongsha Atoll was generally depleted with nutrients and its DIN/DIP ratio was quite low and similar to the typical ratio of surface water in the South China Sea. However, the concentrations of nutrients, Chl-a and particulate organic carbon (POC) were enhanced after IWs lifted cold and nutrient rich water to the surface. Meanwhile, the DIN/DIP ratio in the euphotic zone was elevated to close to aphotic zone after lifting subsurface water to the surface layer. Such features can be

seen in both eastern transect (M1-M6) and northeastern transect (NM1-NM4) particularly in the shallow zones near the Atoll. The effects of a down-welling occurrence (W2 moored station) on biogeochemical distributions can be evaluated through a short-term observation of T, DO and nutrients at 50 m during the passage of IWs. The down-welling IWs can transport DOC and POC into subsurface layer and affect carbon budget significantly. In addition, the moored station (the rmistor and trap array) show simultaneous changes of T and Chl-a at 40, 100 and 150 m, indicating a significant effect of IWs on T and phytoplankton abundance. The enhanced POC did not accumulate on shelf sediments (<100 m), which may imply a transport of Chl-a and POC toward north-western regions. Biological pump (active and passive carbon transport) was also elevated under the impacts of IWs in the Dongsha continental shelf.

Keynote Speech 10: Guangzhou-Foshan subway tunnels and highways

monitoring using In SAR

Speaker: Prof. Alex Hay-Man Ng, Department of Surveying Engineering,

Guangdong University of Technology, China

Time: 17:15-18:00, Sunday Afternoon, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

The Greater Pearl River Delta (GPRD), one of the largest urban agglomerations and fastest-growing urban regions of the world, is one of the main hubs of China's

economic growth. Guangzhou and Foshan are two of the main mega-cities in the GPRD. The development in these cites has growth rapidly in the past few decades. This rapid growth in population along with the city development has significantly increased the pressures on transport systems. The increased in demand in highway usage and underground subway network expansion puts the local population under a greater risk of environmental problems, particularly land subsidence. For example, tens of buildings in Jinshazhou at Guangzhou were damaged by the subsidence caused by underground construction of the high-speed railway underground project, resulting in an economic loss of 30 million RMB (currency of People's Republic of China). Therefore, it is important to monitor the transport system in Guangzhou and Foshan cities.

Synthetic Aperture Radar Interferometry (InSAR) is an alternative technique to obtain measurements of land displacement with high spatial resolution, large spatial coverage and comparable accuracy. In this work, we report the land deformation results between 2011 and 2017, obtained by analyzing the high resolution COSMO-SkyMed (CSK) data, in the city of Guangzhou and Foshan. Eighty-six X-band CSK HIMAGE SAR images in strip map mode are processed using the GEOS-ATSA software for InSAR time-series analysis (TS-InSAR).

According to the result, it is found that the surface displacement at these cities is mostly within the range between -35 mm/year and 10 mm/year. By comparing the CSK result with the historical ENVISAT results and leveling data, a board agreement between datasets have been observed, suggesting that localized subsidence phenomena occurs at different locations in Guangzhou and Foshan. A comparison between different land use types and the TS-InSAR time-series result has also been conducted. However, no clear relationship has been observed.

The local scale deformation zones have been analyzed in order to understand the causes of the deformation. It is found that majority of deformations is related to excessive groundwater extraction for agricultural and industrial purposes but subsidence in areas of subway construction and highways also occurred. Furthermore, a detailed analysis on the sinkhole collapse incidents occurred in early 2018 has been conducted. It is found that the surface loading along the busy highway maybe a controlling factor of the subsidence. It is necessary to continue to monitor the magnitude and spatial pattern of the evolving deformations in the identified deforming areas in order to minimize the risk and hazards of land subsidence.

Keynote Speech 11: How do we interpret subtle 182W anomalies of terrestrial rocks?

Speaker: Prof. Jingao Liu, State Key Laboratory of Geological Processes and Mineral Resources, China University of Geosciences (Beijing)

Time: 18:00-18:45, Sunday Afternoon, June 2, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel,

China

Abstract

The now-extinct short-lived 182 Hf- 182 W radiometric isotope system with a half life of 8.9 Myrs has been widely used to provide significant geochronological constraints on planetary processes, such as core-mantle segregation and early crust-mantle differentiation [1]. Evolving from a chondriticreservoir (μ^{182} W = ~-190 calculated as the deviation of 182 W/ 184 W from modern Earth's mantle multiplied by 1 million), the modern Earth was long believed to consist of two components –a bulk silicate earth with a homogeneous 182 W isotopic composition(μ^{182} W = 0) and by inference a metalliccore with μ^{182} W = ~-220. Recently, high-precision (\leq ±5 ppm 2 σ SD on 182 W/ 184 W) measurements of W isotopic ratios [2-5] have been able to discriminate subtle 182 W isotopic anomalies in terrestrial rocks, triggeringconsiderable exploration of early Earth processes and their influence on modern Earth. In theory, the older rock samples and the deeper mantle-derived rocks are more likely to preserve the information of early-formed 182 W isotopic variation within the silicate Earth.

Previous studies have revealed that Hadean to Eoarchean supracrustal rocks are often characterized by positive $\mu^{182}W$ ranging from +10 to +15 [2, 6-15], while negative values are also reported [9]. The positive ^{182}W anomalies could reflect the heritage of a pre-late accretionary mantle [2,8,13,14] or an early depleted,high Hf/W parental mantle reservoir (while ^{182}Hf was still extant) [6,7,10]. The negative values could record the influence of the mantle contaminated by more proportional meteoritic materials during localized late accretion or an early, enriched low Hf/W parentalmantle reservoir [9]. Given ~40% of the W budget of the silicate Earth resides in the continental crust, the accessible continental crust over time can provide the long-term evolution of W isotopic compositionfor the uppermost portion of the convecting upper mantle where the crust was derived. Archean upper continental crust sampled by diamictites is characterized by generally negative $\mu^{182}W$ of -13 that progressively diminished to zero in diamictites through the Paleoproterozoic to Phanerozoic [16], most likely reflecting the efficient homogenization of W isotopic composition in the upper mantle by plate tectonics and crustal growth/rejuvenation.

Provided by the W mobility in the crust-mantle reservoirs [7,17], another way to inspect the W isotopic composition is to analyze tungsten ore deposits (scheelite or wolframite) formed in ancient to modern continents. Recently, Mundl et al. [18] reported negative ¹⁸²W anomalies for the deep plume-derived basalts, the deep sources of which may not be well homogenized by subduction or it could reflect the primordial signature in the deep mantle or the interaction between the lowermost mantle and metalliccore. Surprisingly, Rizo et al. [19] found substantially larger µ ¹⁸²W values from +24 to +48 for Phanerozoic flood basalts from the Ontong Javal Plateau (120Ma) and the Baffin Bay (60Ma). However, Kruijer and Kleine [20] proposed that the ¹⁸²W excesses for the OJP sample reported by Rizo et al. [19] and perhaps also the Baffin Bay samples were caused by the effect of nuclear field shift leading to the deficit of ¹⁸³W, which is used in the NTIMS analyses via a double normalization. Another critical issue is that significant mass dependent fractionation of W isotopes (e.g., δ^{182} W/ 184 W up to >0.2%) can occur in the natural samples [21]. Whether such large amounts of mass dependent fractionation of W isotopes in the rocks can be well corrected deserves further investigation before concluding subtle variations of the W isotopic ratios on the terrestrial rocks. Collectively, the interpretation of the highly precise and accurate ¹⁸²W isotopic anomalies of the terrestrial rocks should be assisted by data of ¹⁴⁶Sm-¹⁴²Nd, ¹⁹⁰Pt-¹⁸⁷Re-^{186,187}Os, and highly siderophile element abundances. In addition, how the mobility of W in the mantle affects the magnitute of W anomaly demands detailed work coupled with elements with similar incompatibilities.

Acknowledgements: This work has been supported by the National Natural Science Foundation of China (No. 41822301) and China "1000 Youth Talents Program".

References:[1] Kleine and Walker (2017) *Annu. Rev. Earth Planet. Sci.* 45, 389-417. [2] Willbold et al. (2011) *Nature*477, 195-198. [3] Touboul and Walker, 2012. IJMS 309, 109-117.[4] Archer et al., 2017. IJMS 414, 80-86.[5] Mei et al., 2018. JAAS 33, 569-577. [6] Touboul et al. (2012) *Science*335, 1065-1069. [7] Touboul et al. (2014) *Chem. Geol. 383*, 63-75. [8] Willbold et al. 2015 EPSL 419, 168-177. [9] Puchtel et al., 2016a. G-cubed 17, 2168-93. [10]Puchtel et al., 2016b. GCA 180, 227-255. [11] Liu et al. 2016. EPSL 448, 13-23. [12] Rizo et al., 2016a. GCA 175, 319-336.[13] Dale et al., 2017. EPSL 458, 394-404. [14] Puchtel et al. 2018. GCA 228, 1-26.[15]Reimink et al., 2018. EPSL 494, 12-22. [16] Mundl et al., 2018 *Chem. Geol.* 494, 144-152.[17] Liu et al. 2018. GCA 233, 300-318. [18] Mundl et al., 2017 Science 356, 66-69. [19] Rizo et al., 2016b, Science 352, 809-812. [20]Kruijer and Kleine, 2018. Chem. Geol. 485, 24-31. [21] Kurzweil et al., 2019. GCA 251, 176-191.

Keynote Speech 12: Lithospheric Structure of Himalayan Western Syntaxis

Inferred from Anisotropic Tomography

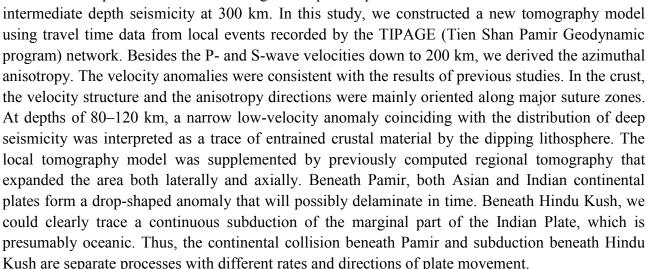
Speaker: Prof. Zhao Junmeng, Key Laboratory of Continental Collision and

Plateau Uplift, Institute of Tibetan Plateau Research, CAS **Time:** 08:30-09:15, Monday Morning, June 3, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel, China

Abstract

The Pamir and Hindu Kush is an example of a puzzling collision system where a complex knot of colliding lithosphere plates coexist with



Keywords: Pamir; Hindu Kush; P-wave tomography; seismic anisotropy, continental collision; subduction.

Keynote Speech 13: Modelling of Integrated Terrestrial and Aquatic systems

Speaker: Prof. Junye Wang, Faculty of Science and Technology,

Athabasca University, Canada

Time: 09:15-10:00, Monday Morning, June 3, 2019

Location: Room 2 (2 号会议室), 3rd Floor, Kunming Jin Jiang Hotel,

China

Abstract

A river basin consists of aquatic and terrestrial ecosystems which are tightly linked at multi-scale. Land use changes due to the human

activities and climate changes can pose serious threats to the economic development and ecological sustainability at river basins due to many factors, such as soil degradation, erosion, nutrient runoff,



flooding and draught. The physics and biogeochemistry of a river basin is complicated as the biogeochemistry can result in a large response to hydrological processes. In recent years, there has been a significant interest in understanding the interaction between hydrological and biogeochemical processes in watersheds. In this talk, I will summarize our recent work on modelling of integrated aquatic and terrestrial ecosystems and face challenges and opportunities of watershed modelling and management through coupling hydrological and biogeochemical processes. We will use Soil and Water Assessment Tool (SWAT) as modelling framework of watershed hydrology to quantify the impacts of climate change and agricultural activities on water quality and water resources. Then, we will integrate the biogeochemical models of agroecosystem into the SWAT model to enhance capacities of the nitrification, denitrification and soil respiration of the SWAT. Finally, we will apply the integrated model into Athabasca river basin (ARB) to test the simulation of water quality, N2O and CO2 emissions.

Part III Technical Sessions

Psychology: Technical Session

Session Chair:

Room 1 (1 号会议室), 3rd Floor 08:30-12:00, Monday Morning, June 3, 201				
No.	Paper Title	Author	Affiliation	
08:30-09:15	TBD	Prof. Kuang-Wu	United International	
Keynote		KOAI	College	
Speech				
09:15-09:30	Health management through genetic testing technology and Big Data	Dr. Chiao Ven Huang	Chung Yuan Christian University, Chinese Taipei	
09:30-09:45	A Prospective Study of Crash Events in Older Motorcyclists	Mau-Roung Lin	Taipei Medical University	
09:45-10:00	Life satisfaction and quality of life enjoyment among retired people aged 65 or older	Wong MF Florence	School of Nursing, Tung Wah College, Hong Kong	
10:00-10:15	COFFEE BREAK			
10:15-10:30	Study on the morphology of excitatory neurons in mouse visual cortex	Yalun Zhang	Huazhong University of Science and Technology	
10:30-10:45	Chinese Positive Psychology Concept: Appreciative Joy and Research on Its Relationship with Character Strengths	Xianglong Zeng	Beijing Normal University	
10:45-11:00	Effect of Compassion Meditation Training on Improving Gratitude: A Pilot Study	Yidan Liu	Beijing Normal University	
11:00-11:15	Relationship of Large US Listed Corporations' CEO Personality on Employee Satisfaction: A Study Using Natural Language Processing	Riyang Phang	American University of Central Asia	
11:15-11:30	Dynamic Equity Theory: Computational Experiments of Adams Equity Theory of Fairness	Riyang Phang	American University of Central Asia	

11:30-11:45	The role of mind wandering in trauma and dissociative experience: A systematic review	Siqing Guan	Waseda University, Japan
11:45-12:00	Love for Friend and Brother for Happiness	Mihyang Ju	Center of Gih Study, Gyeongsang Natioanal University
Poster	Two-Chinese character-words overcome interocular suppression faster than two-Chinese character-nonwords	JIANE BAI	Jiangsu Normal University

Earth & Environment: Keynote Speech Session II & Technical Session

Session Chair:

Room 2 (2 号会议室), the 3rd Floor 08:30-12:00, Monday Morning, June 3, 2019				
No.	Paper Title	Author	Affiliation	
08:30-09:15 Keynote Speech	Lithospheric Structure of Himalayan Western Syntaxis Inferred from Anisotropic Tomography	Prof. Zhao Junmeng	Key Laboratory of Continental Collision and Plateau Uplift, Institute of Tibetan Plateau Research, CAS	
09:15-10:00 Keynote Speech	Modelling of Integrated Terrestrial and Aquatic systems	Prof. Junye Wang	Faculty of Science and Technology, Athabasca University, Canada	
10:00-10:10	COFFEE BREAK			
10:10-10:20	Study on Semi-Aerospace Transient Electromagnetic Adaptive Regularization-Damped Least Squares Algorithm	Yang Cong Li Lun	Chengdu University of Technology	
10:20-10:30	Identification and Evolution of the Delta Fans in the Gaonan Slope of Nanpu Sag, Bohaiwan Basin, Northeast China: Application of Post-stack Seismic Data	Youliang Ke	China University of Geosciences (WuHan)	
10:30-10:40	Using seismic multi- attributes to predict pre-salt carbonate reservoir's thickness in Block L Brazil	Yonggang Zhang	Petrochina Hangzhou Research Institute of Geology	

10:40-10:50	Characteristics of tight sandstone cement and its effect on compaction —Taking the Upper Paleozoic in the Ordos Basin as an example	Kang Rui	Exploration and Development Research Institute Changqing Oilfield Company
10:50-11:00	Shale Reservoir Characteristics and Influencing Factors of Wufeng-Longmaxi Formation in Dingshan Area, Southeast Sichuan	Ning Lei	School of Geoscience and Technology
11:00-11:10	Evaluation of the maximum impact force of dry granular flow onto rock shed under different influencing factors	CHUN LIU	Southwest Jiaotong University
11:10-11:20	Magnetic and thermal constraints on the spatial distribution of continental seismicity	Liguo Jiao	Institute of Geophysics, China Earthquake Administration
11:20-11:30	Climate Change and Biodiversity Threats on Pachypodium Species in South Africa	Danni Guo	South African National Biodiversity Institute, Kirstenbosch Research Center, Cape Town, RSA
11:30-11:40	A study of climate variability in Papua New Guinea	Felix Pereira	Department of Applied Physics
11:40-11:50	Distribution nature of Sargassum species in the Kuwaiti waters	Aws Alghunaim	Kuwait Institute for Scientific Research
11:50-12:00	Diagnosis of Thermodynamic Shear Advection Parameter in Heavy Rainfall Events	Yanbin QI	Joint open laboratory for weather modification of Chinese Meteorological Administration and People's Government of Jilin province
12:00-12:10	The use of macroalgae as water quality indicators in marine ecosystems	Leidy Ardila	Cicimar
12:10-12:20	Lagrangian Coherent Structures in the Bohai Sea current field	yilei feng	Ocean University of China
12:20-12:30	The evolution of the earth's mass	Xiangming Huang	School of Mechanical Engineering, Anhui

			University of Technology
12:30-12: 40	Baseline drift correction by different method for airborne transient electromagnetic grounding exploration	Guo Ming	Chengdu University of Technology
12:40-12: 50	A New Method of Multiple Attributes Analysis for Carbonate Reservoir Prediction in Santos Basin	Guoping Zuo	PetroChina Hangzhou Research Institute of Geology
12:50-13: 00	Hydrocarbon enrichment law in the deep water area of the northeastern Rovuma Basin, East Africa	Sun Hui	PetroChina Hangzhou Research Institute of Geology, China
13:00-13: 10	Geochemical Investigation of Metals and Trace Elements around the Abandoned Cu – Ni Mine Site in Selibe Phikwe, Botswana	Fiona Motswaiso	Tohoku University, GSES
Poster	Fault Identification Based on Wide-azimuth Seismic Data: A Case Study in the Bohai Bay	Sian ZHU	Dagang Branch, BGP, CNPC

Part IV Abstracts

Psychology

Earth & Environment

Part VI Instructions for Presentations

Oral Presentation

Devices Provided by the Conference Organizing Committee:

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

Materials Provided by the Presenters:

PowerPoint or PDF files

Duration of each Presentation:

- Regular Oral Session: 15-20 Minutes of Presentation
- Plenary/Keynote Speech: 30-40 Minutes of Presentation

Poster Presentation

Materials Provided by the Conference Organizing Committee:

- X Racks & Base Fabric Canvases (60cm×160cm, see the figure below)
- Adhesive Tapes or Clamps

Materials Provided by the Presenters:

Home-made Posters

Requirement for the Posters:

- Material: not limited, can be posted on the Canvases
- Size: smaller than 60cm×160cm
- Content: for demonstration of the presenter's paper



Part VII Hotel Information

About Hotel

Kunming Jin Jiang Hotel (昆明锦江大酒店) is recognized as one of the most distinguished deluxe hotels in Kunming, an area rich with Yunnan minority culture and warm hospitality. Situated in the heart of the commercial and trade center, the hotel is within walking distance of Jewelry City and both the Kunming International Trade Center and Foreign Trade Center. There are 320 well-appointed guestrooms, seven deluxe restaurants and conference and banquet facilities. With its high-quality service standard, the hotel is ideal for both business and leisure travelers alike.

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Telephone: +86-871-6313 8888

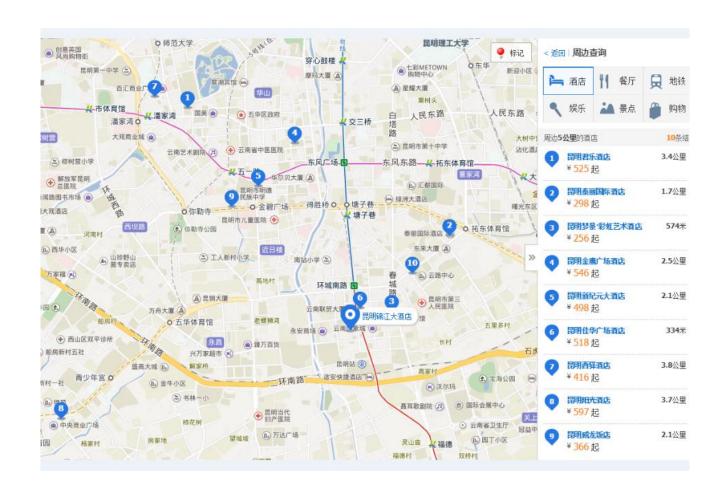
Fax: +86-871-6313 1910

Website: http://hotels.jinjiang.com/Hotels/604

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For non-Chinese author, please show the following info to the driver if you take a taxi:

请送我到:中国云南省昆明市北京路98号,昆明锦江大酒店



Contact Us

Organizing Committee

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