



# INTECOL 2017 Beijing

## International Congress of Ecology

INTECOL 2017 Beijing  
Ecology and Civilization in a Changing World

Ecology and Civilization in a Changing World

# 12th

August 20-25, 2017

Personal impressions by  
Prof. Dr. Bernd Markert & Dr. Simone Wünschmann, Germany



# FOREWORDS



## Welcome from the Ecological Society of China



On behalf of the Ecological Society of China, and the Local Organizing Committee of the 12<sup>th</sup> INTECOL Congress, we would like to welcome all of you to participate in the 12<sup>th</sup> INTECOL Congress, August 20-25, 2017, Beijing, P.R. China.

China is an ancient country with a rich cultural legacy. The beauty of China's natural areas and the diversity of its cultural landscapes have gained much attention from all over the world. The harmonious multi-national development in China provides a good opportunity for appreciating and understanding the relationships between culture and landscape. Over the past three decades, China has experienced a dramatic change in social-economic development which has resulted in accelerating rates of ecosystem degradation and landscape change and the inevitable conflicts between man and environment. China now faces the challenge of protecting biodiversity and enhancing ecosystem services that will serve as a basis for sustainable development as well as eco-security and environmental amelioration.

Established in 1979, the Ecological Society of China (ESC) is a non-profit academic institution consisting of Chinese ecologists, decision-makers, entrepreneurs, as well as overseas Chinese scholars. Currently ESC has a total membership of nearly 10,000, and 23 subordinated specialized committees and 5 working groups, covering almost all ecological research fields, such as agro-ecology, urban ecology, mathematical ecology, marine ecology, microbial ecology, animal ecology, chemical ecology, landscape ecology, wetland ecology, etc. ESC joined INTECOL in 1984 as a group member. It is a great privilege for ESC to host the first INTECOL Congress ever held in China, which is expected to assemble about 2600 participants around the world.

The theme of the 12<sup>th</sup> INTECOL Congress is **Ecology and Civilization in a Changing World**, which will focus on harmonious and sustainable development among people, nature, and society in the context of global change. During the Congress, a range of topics embracing various ecological fields will be explored, including but not limited to ecosystem service valuation and sustainable development, culture conservation and human well-being, global change, environmental change in urbanization, ecosystem restoration and management, biodiversity conservation and ecosystem health, ecological civilization, molecular ecology and ecological genomics.

We do hope you will enjoy this great event and leave at the end of the week with not only new knowledge but also strengthening collaborations and friendships.

Thank you again for your active participation and contribution to the 12<sup>th</sup> INTECOL Congress and I look forward to meeting you during the event.

Professor Shirong Liu  
Chair, INTECOL 2017 Beijing Local Organizing Committee  
President, the Ecological Society of China





## FOREWORDS

### Welcome from the Congress Scientific Committee



On behalf of the Scientific Committee of the Congress, we would like to extend our warmest welcome to you all, to participate the 12th International Congress of Ecology in Beijing.

We are now facing a series of grand ecological and environmental challenges, such as global climate change, environmental degradation, loss of biodiversity and extinctions, and decline of ecosystem services. This Congress, focusing on "Ecology and Civilization in a Changing World" has been designed to provide an innovative and comprehensive overview of not only the latest research

progresses in basic and applied ecology, but also of how the work of ecologists has both revealed and solved environmental problems toward sustainability. Many ecologists, together with practitioners and decision-makers from different countries will participate this Congress, and work together to promote the development of ecology disciplines and the sustainable development of human society.

With the theme of "Ecology and Civilization in a Changing World", the Congress provides 74 scientific sessions with nearly 1000 oral presentations and 300 posters that are organized into 12 thematic topics, such as ecosystem services and management, global climate change and ecosystem response, urbanization and regional environmental change, evolutionary ecology and molecular ecology, conservation ecology, and ecosystem health. The Congress has also invited 12 distinguished ecologists to give plenary lectures. They will elaborate the development of ecology and achievements from the aspects of global changes, biogeochemical cycles, biodiversity conservation, ecosystem services assessment, ecosystem simulation and the role of ecology in decision-making. Additionally, this Congress has designed a series of exciting academic events, such as the Beijing Forum on Ecological Civilization and Green Development, International Forum on Landscape Sustainability, Vocational Training and Guidance for Youth Scholars, and Periodical Editing, Publishing, and Information Exchange.

We would like to express our thanks to our sponsors for their generous support, to the Ecological Society of China for their excellent works in all aspects of the Congress, to our dedicated staff and colleagues in supporting this meeting, and to all of you for participation and contribution to this Congress. Again, welcome to the 12th International Congress of Ecology in Beijing. We hope that you will enjoy the Congress and that your interaction with your colleagues from all of the world will stimulate a creative exchange of ideas and will be personally rewarding. We wish you a pleasant time in Beijing.

Bojie Fu & Alan Covich  
Chairs of Congress Scientific Committee



## FOREWORDS

### Welcome from INTECOL



Dear INTECOL Colleagues

Tena koutou, tena koutou, tena koutou katoa  
(Greetings, greetings, greetings to you all)

INTECOL (International Association for Ecology) warmly welcomes you to the 12<sup>th</sup> Congress in Beijing, hosted by the Ecological Society of China. INTECOL was founded in 1967 in The Hague, in response to ecologists seeking greater international links, and to provide a forum to address major ecological problems. This global meeting of ecologists will be INTECOL's 50th birthday celebration.

One of the key roles of the association is to support international ecological conferences including the INTECOL Congress, the International Wetlands Conference and EcoSummit. This is the first time the Congress has been held in China and it is very exciting to be here. INTECOL is extremely appreciative of the work of the Ecological Society of China in hosting and organizing this very important event.

We have a great lineup of plenary speakers, symposia and contributed paper sessions. There are over 2000 participants from over 73 countries/regions attending. The Congress provides an important platform for presenting the latest global ecological research, and providing a forum for ecologists to network and collaborate. The central theme is 'Eco-Civilization', recognizing the importance of the integration amongst environment and people. A range of key topics will be discussed including developing solutions to environmental and ecosystem changes at regional and global levels. INTECOL values the support provided by national and regional ecological societies and we are pleased that our membership continues to grow. Representatives from a number of national organizations are participating in the Congress.

Over 1000 students will attend this meeting and this is fantastic! Fostering the next generation of ecologists is vital to the future of INTECOL. The International Network of Next Generation Ecologists (INNGE) will have a high profile and there will be workshops and sessions organized specifically for early career ecologists. At the Congress INTECOL will launch an early career ecologist award that relates to the importance of ecology for society.

I hope this meeting provides you all with an excellent chance to work together, to learn and share recent research and ideas on biodiversity and ecosystem management. In four years' time INTECOL Congress will be held in Geneva, Switzerland and I hope you will also be able to join us there!

Shona Myers  
President, INTECOL



**Further Members of the Scientific Committee**

- Prof. Nicky Allsopp (South African Environmental Observation Network, Africa)
- Prof. Andras Baldi (Institute of Ecology and Botany of the Hungarian Academy of Sciences, Hungary)
- Prof. Michael Bull (Royal Society of South Australia, Australia)
- Prof. John Grace (University of Edinburgh, UK)
- Dr. Alice Hughes (Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences, UK)
- Prof. Eun-Shik Kim (Kookmin University, Korea)
- Prof. Yonglong Lv (Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, China)
- Prof. Sandra S. Luque (National Research Institute of Science and Technology for Environment and Agriculture, France)
- Prof. Azim Mallik (Lakehead University, Canada)
- Prof. Bernd Markert (Environmental Institute of Scientific Networks, Germany)
- Prof. Shona Myers (INTECOL, New Zealand)
- Prof. Nobuko Saigusa (National Institute for Environmental Studies, Japan)

**Congress Organizing Committee (COC)**

**Chair:**

Shirong Liu

**Vice - Chairs (In alphabetical order):**

|             |               |              |             |
|-------------|---------------|--------------|-------------|
| Lizhe An    | Ming Dong     | Qinwen Min   | Jianping Ge |
| Yonglong Lu | Zhiyun Ouyang | Shaolin Peng | Kelin Wang  |
| Fuwen Wei   | Wenliang Wu   | Jianhui Xue  |             |

**Members (In alphabetical order):**

|             |              |              |                |
|-------------|--------------|--------------|----------------|
| Shuqing An  | Liding Chen  | Yaning Chen  | Jixi Gao       |
| Junxiang Li | Mingzhou Qin | Zehao Shen   | Qian Shi       |
| Zuomin Shi  | Qibing Zhang | Wenhao Zhang | Linsheng Zhong |
| WeiQi Zhou  |              |              |                |

**Secretary - General:**

Liding Chen

**Staffs (In alphabetical order):**

|              |             |            |                |
|--------------|-------------|------------|----------------|
| Jinlou Huang | Wenke Jiang | Bo Li      | Junxiang Li    |
| Xiuzhen Li   | Nan Lu      | Zehao Shen | Qian Shi       |
| Zuomin Shi   | Zhenrong Yu | Dan Zhang  | Linsheng Zhong |
| WeiQi Zhou   | Yan Zhuang  |            |                |

Departure 17 August 2017, Munich (Germany) – Beijing (China)



After landing in Beijing on 18 August early in the morning we drove by taxi to the International Convention Center Grand Hotel nearby the Chinese International Convention Center located in the North of Beijing, better to say in the Olympic Village.

The **Beijing Olympic Village** is a complex of high-rise apartments in Beijing, which was opened to the public on July 26, 2008 in conjunction with the 2008 Summer Olympics.

Chinese International Convention Center



Hello Beijing!



Olympic Games 2008 in Beijing

**18 August**

What a coincidence!  
After landing we rested a little bit and then we went into the direction of the world famous Stadion the „Bird Net“. On our way we suddenly recognized a man who we have met already some months ago in Egypt: Prof. Zakaria Fouad Fawzy Hassan from Cairo and his colleague. He is staying in Beijing for several months.

Before the big INTECOL Congress will start Bernd and I visited the Forbidden City... see next.

By the way, the average daily temperature was about 30°C.





The new European imperial couple



Dr. Nasrullah Khan from Pakistan

**19 August**  
 The **Forbidden City** was the Chinese imperial palace from the Ming dynasty to the end of the Qing dynasty—the years 1420 to 1912. It is in the center of Beijing, China, and now houses the Palace Museum. It served as the home of emperors and their households as well as the ceremonial and political center of Chinese government for almost 500 years.

20 August

First meeting of  
the **INTECOL**  
**Board Members**  
at the Institute of  
Geographic  
Sciences and  
Nature Resources  
of the Chinese  
Academy of  
Sciences before  
the Congress  
officially started.  
About 2000  
participants are  
expected...

Upper row: Eun-Shik Kim, Alan  
Covich, Shin-ichi Nakano, John  
Grace, Alice Hughes, Sun Kee

Front row: Bernd Markert,  
Eugene Turner, Azim Mallik,  
Bojie Fu, Shona Myers, Shirong  
Liu







... with lots of important persons...

The Opening Ceremony was chaired by: Prof. Shirong Liu, President, Ecological Society of China.

Shirong Liu, Zhang Jianlong



# INTECOL 2017 BEIJING

Ecology and Civilization in a Changing World

The 12<sup>th</sup> International Congress

August 20-25, 2017 Beijing·China



Bernd in front of the Convention Center



(left to right) Shirong Liu (President, Ecological Society, China), Zhang Jianlong (Administrator, State Forestry Administration China), Shu Wie (Executive Secretary, China Association for Science and Technology), Bujie Fu (Vice President, INTECOL, Chinese Academy of Sciences, Beijing), Luo Fuhe (Vice President, CPPCC, and Executive Vice Chairman, Central Committee, China Association for Promoting Democracy), Shona Myers (President, International Association for Ecology).

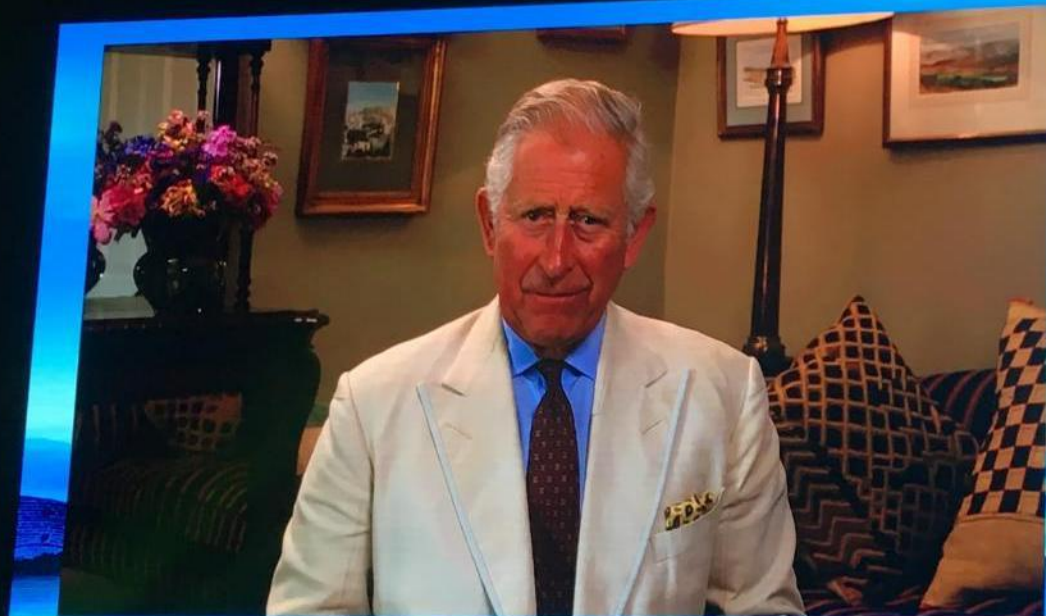


Simone & Eugene Turner



Sympathetic and nice participants...





**INTECOL 2017 BEIJING** The 12<sup>th</sup> Inter  
Ecology and Civilization in a Changing World August 20-25, 2017 B

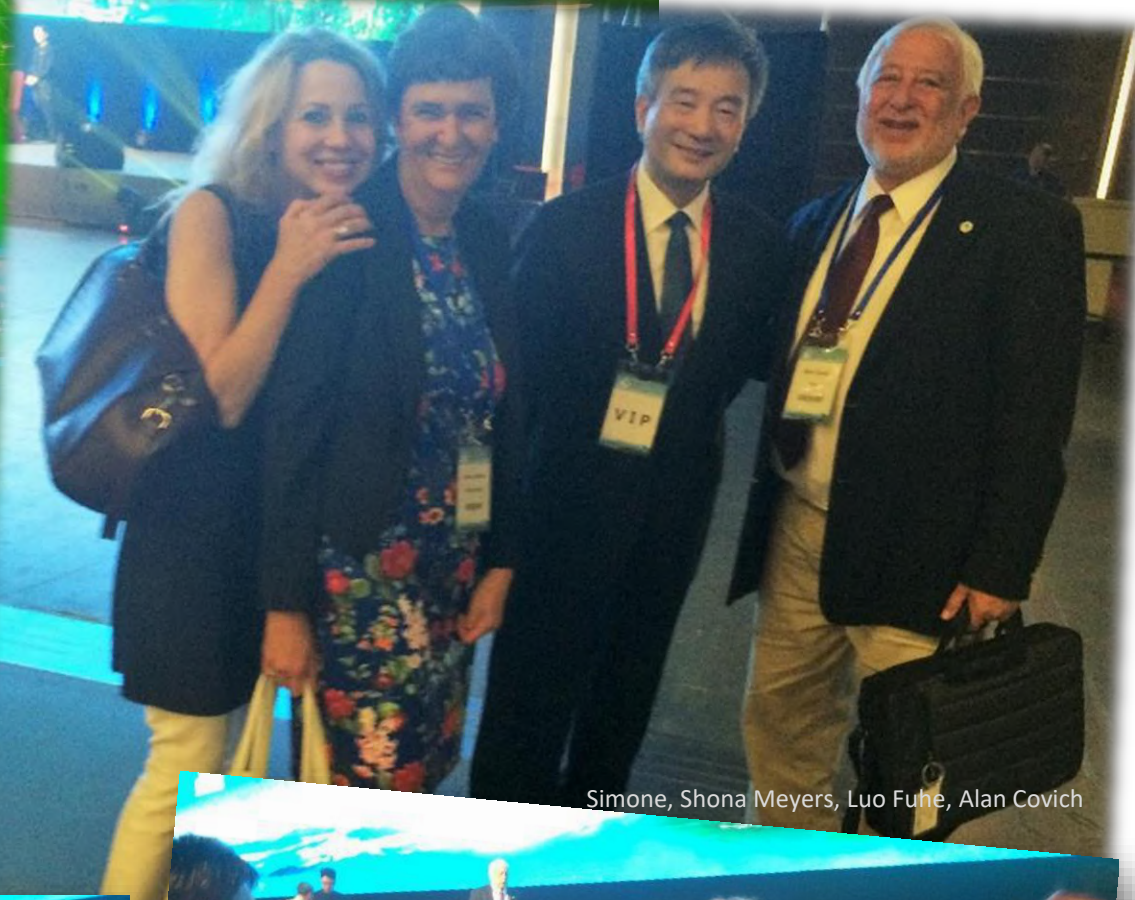
# OPENING CEREM

Patron of the Congress: HRH Charles, Prince of Wales





Shirong Liu, Shona Meyers, Luo Fuhe, Simone, Zhang Jianlong, Bernd



Simone, Shona Meyers, Luo Fuhe, Alan Covich



Luo Fuhe, Simone, Zhang Jianlong





After the Opening Ceremony  
keynote speakers followed:

**Prof. Shirong Liu (Chinese Academy of Forestry)** – China's Research in Ecology – Interface between Science and Policy-Making

**Prof. Gretchen C. Daily (Stanford University, USA)** – The Science and Practice of Valuing Nature in Decisions

**Prof. Hideaki Shibata (Hokkaido University, Japan)** – Changing Winter Climate Alter Nitrogen, Biogeochemistry in Northern Forest Ecosystems

Dewei Yang (Institute of Urban Environment, Xiamen, Chinese Academy of Sciences) and his daughter, one of the youngest participants of the Congress!



Of course, many oral sessions were held in parallel – we chose the session: EcoScience+Art: Interdisciplinary Collaboration Between Ecosystem Science and Art to Enhance Ecological Communication and Resilience; Chair: Changwoo Ahn (George Mason University)



Patricia Johanson



Changwoo Ahn

# ICE BOOKS of Basia Ireland



Bernd, Changwoo Ahn, Patricia Johanson, Meie Wang & Simone



Basia Ireland is a Professor Emerita, Department of Art and Art History, University of New Mexico. Please have a look to her website so you can read about the philosophy of the ICE BOOKS.



Simone, Stacy Levy, Eugene Turner, Aviva Rahmani, Changwoo Ahn, Lillian Ball, Basia Ireland, Patricia Johanson & Bernd

22 August

Congress Banquet – Chinese Cuisine and traditional Performances





Impressions



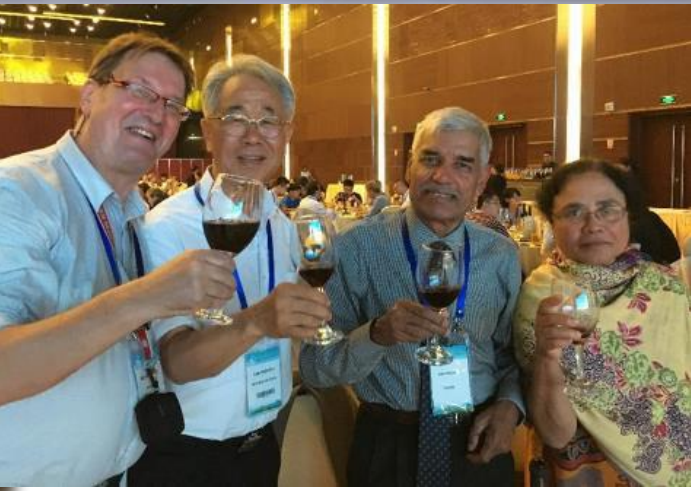
Shirong Liu, Alan Covich, Bojie Fu and Shona presented the students their certificates.



Nice moderator of the evening









Lunch-Meeting of the INTECOL Board Members with ....



**Upper row:** Yonglong Lu (Co-Director, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences), Hazel Norman (BES), Alberto Basset (President, European Ecological Federation), Azim Mallik, Shin-ichi Nakano, Amy Hahs (Vice president, Ecological Society of Australia), Jae Geun Kim (President, Ecological Society of Korea), Bek Christensen (University of Queensland, Australia), Bastiaan Ibelings (University of Geneva), Alice Hughes, Alan Covich, William Sutherland (University of Cambridge, UK), Bernd Markert, Marc Cadotte (University of Toronto-Scarborough, Executive Editor, Journal of Applied Ecology)

**Front row:** from left to right Eun-Shik Kim, Shirong Liu, Sue Hartley (President, BES), Bojie Fu, Shona Myers, John Grace, Eugene Turner, Chen Peng (China Green Foundation), Wenliang Wu (Vice President, ESC)

# Exhibition Arrangement China Convention Center



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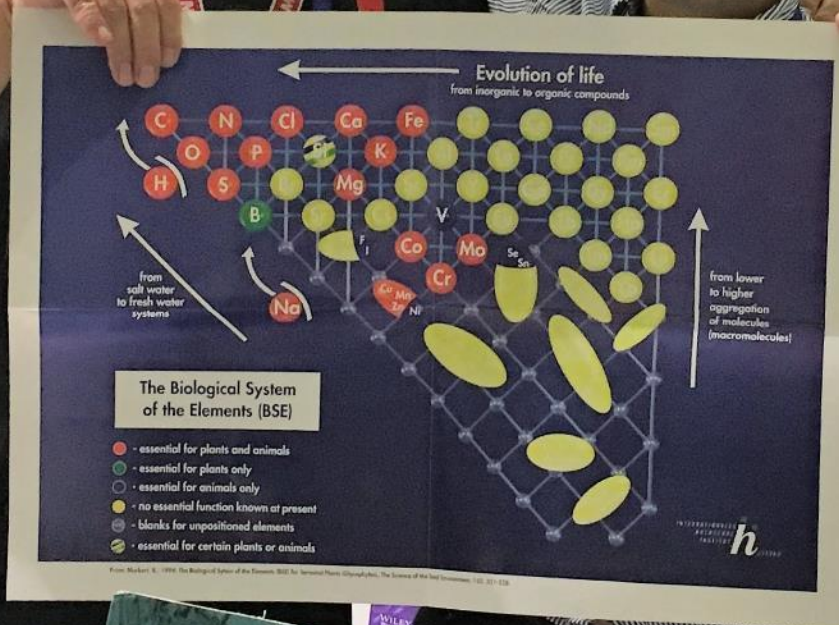
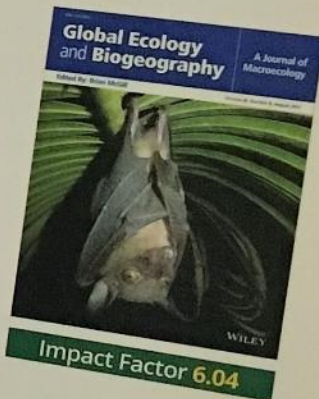
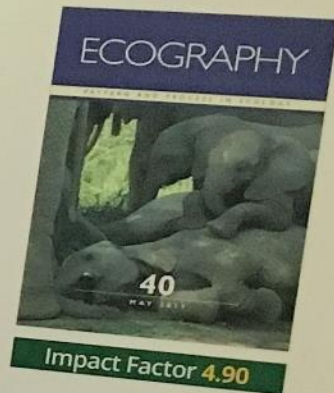
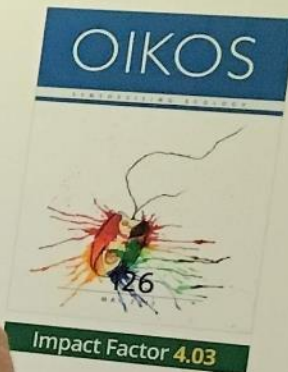
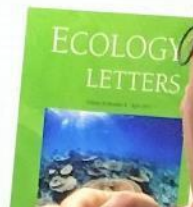
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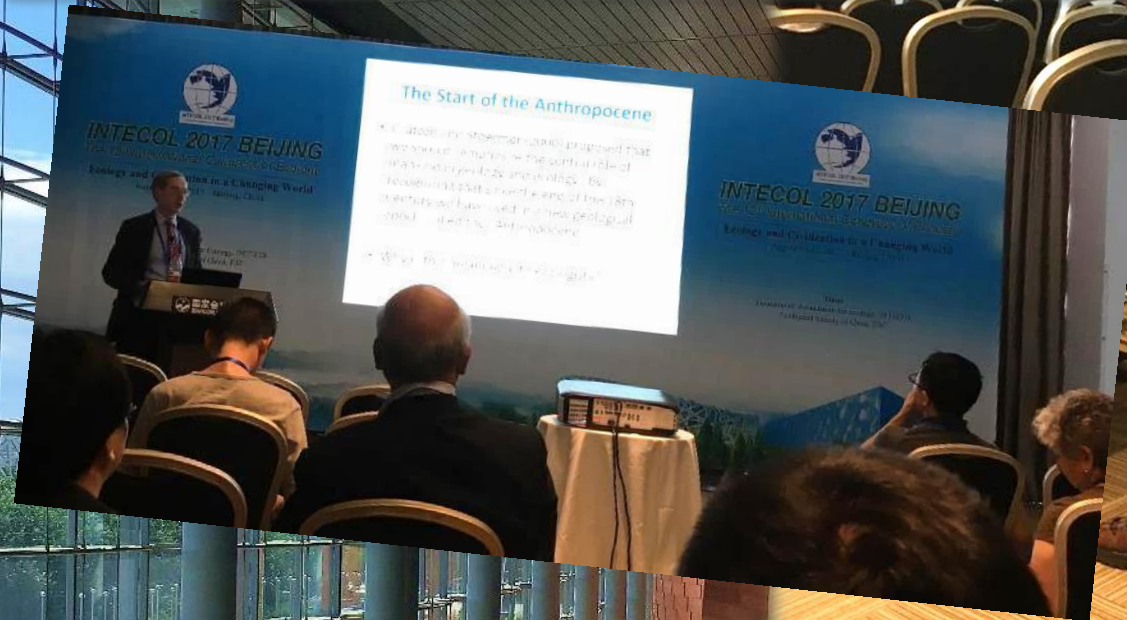


22 August

Session: Civilization and Ecology in the Anthropocene: Improving a Broken Relationship? Chair: Alice Huges



Alan Graininger, Bernd



Orou Gaoe, University of Tennessee, Knoxville,  
Dept. Ecology and Evolutionary Biology, USA

23 August

# General Assembly of INTECOL

## The Agenda for the General Assembly

1. Welcome and update by President (Shona Myers)
2. Report of the General Assembly held in London, UK 2013
3. Secretary General's Report (Eun-Shik Kim)
4. Treasurer's Report (Azim Mallik)
5. Appointment of the New Board (John Grace)
  1. Officers
  2. Board Members
6. Report of the Beijing Congress (Shirong Liu)
7. Outline of XIII Congress in Geneva, Swiss 2021 (Bastiaan Ibelings)
8. Any Other Business

Shona Meyers has done a great job as President of INTECOL! Thank you so much!

"INTECOL is strong on networking and sharing ecological knowledge and information across the world, and this is one of the core aims of the association and roles of the Congress, every four years. INTECOL also supports other conferences including the International Wetlands Conference and Eco Summit. The 2013 INTECOL Congress in London was organised by the British Ecological Society and had the theme of "taking ecology into the next 100 years". The theme of next years 2017 Beijing Congress will be "Ecology and Civilisation in a Changing World" and is being organised by the Ecological Society of China. The Congress provides an important platform for presenting the latest research on global ecological, and providing a forum for ecologists to network and collaborate. Ecological research is fundamental to understanding and addressing environmental concerns."

**Shona Meyers**

President of INTECOL 2013-2017

**New President of INTECOL:**

**Prof. Dr. Eun-Shik Kim**  
South Korea

SAVE THE DATE

# INTECOL 13th GENEVA, SWITZERLAND

Frontiers in Ecology: Science & Society

22 - 27 August 2021



Local Organizing Committee  
Anthony Lehman, Chair  
University of Geneva



Scientific Programme Committee  
Bastiaan Ibelings, Chair  
University of Geneva

INTECOL2021  
Geneva, August 22-27



SAVE THE DATE

/ 13<sup>TH</sup> INTERNATIONAL  
CONGRESS OF ECOLOGY  
FRONTIERS IN ECOLOGY:  
SCIENCE & SOCIETY

22 - 27 AUGUST 2021  
GENEVA SWITZERLAND

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This foto was taken after finishing the 13th General Assembly of INTECOL: Sun-Kee, Eun-Shik, Simone & Bernd

23  
August

Dinner-  
Party with  
lots of fun



Shona



Alan Grainger & Shin-ichi Nakano



Bernd Markert, Eun-Shik Kim, Shirong Liu



John Grace



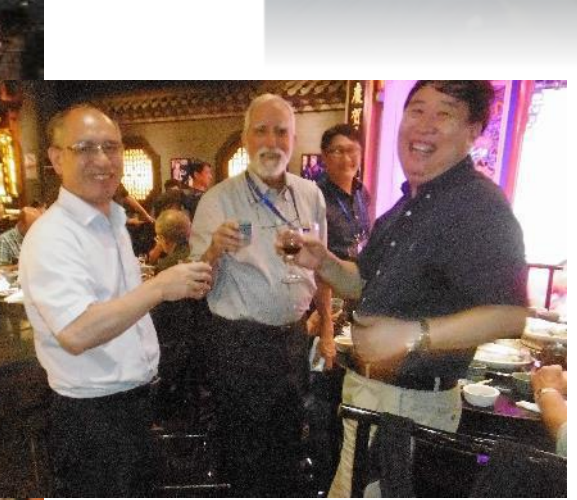
Shirong & Eun-Shik



Richard Harper



Bastiaa Iberlings





END OF  
PART I

PART II  
CONTINUES  
CURIOUS?