ISTRO INFO
NEWSLETTER
of the
International Soil Tillage Research Organisation

Blair McKenzie

It is with considerable sadness that I inform ISTRO members that Brennan Soane passed away at Liberton Hospital yesterday (1 April). The funeral will be later this week. I will include a full obituary in the next issue. For the few who would not have met him, Brennan was a founding father and dedicated member of ISTRO and a true gentleman.

Can 2013 already be one-quarter over? The year is certainly rushing by for me. It seems that several ISTRO members are being very busy organising events, meetings and workshops. Information about these is in the next few pages.

I have been conscious that in the last few issues of ISTROINFO I have correctly given significant coverage to the activities of the various ISTRO working groups. I will of course continue to do this. I welcome any submissions from any ISTRO member at any time but I thought for this and the next issue I would give the many branches of ISTRO around the world the opportunity to let colleagues know what they have been doing and have planned for the next year or so. Several have responded and you can see their contributions later in this newsletter. For those who have yet to respond – we look forward to hearing from you in future editions. As usual the next issue is will be distributed at the end of June or early July – so submissions by 24 June please.

⌘ Second Announcement of Workshop on Soil Structure and its functions on ecosystems.

Nanjing 8-10th September 2013

Invited Speakers Confirmed: Five keynote speakers have been confirmed.

Prof. Johan Six, University of California, Davis
http://www.plantsciences.ucdavis.edu/Agroecology/staff.html

Prof. Rainer Horn, Institute of Plant Nutrition and Soil Science, Kiel University, Germany
http://www.soils.uni-kiel.de/deutsch/mitarbeiter/pers-horn.shtml

Prof. Henry Lin, Institutes of Energy and the Environment, Penn State University, USA

Prof. Yves Le Bissonnais, LISAH, Montpellier, INRA.
http://www.umr-lisah.fr/index.php?lang=fr&page=staff&doc=CV&ref=144

Prof. Denis Angers
Agriculture and Agri-food Canada
http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1181927128431&lang=eng

Background: Soil structure is a fundamental property of soil fertility, its controls the ability to transport water, nutrients and gas, and the habitat provided for microorganisms and fauna. Aggregated soil structure can improve agronomic productivity and increase the resistance to soil erosion. The formation of soil structure (or aggregates) is the result of biotic (i.e., microorganisms, fauna, roots) and abiotic (i.e., tillage, wetting and drying, freezing and thawing, clay, ion concentrations) factors and their interaction. The relation between soil structure and biotic agents may be the key mechanism to sequester C in soil. Although aggregate formation and stability have been investigated in numerous studies, aggregation is not a surrogate of soil structure. With new technology (i.e., micro CT, NEXAFS), it may be possible to characterise the natural heterogeneity of the soil as a three-dimension porous system to provide us with a chance to fully understand soil structure

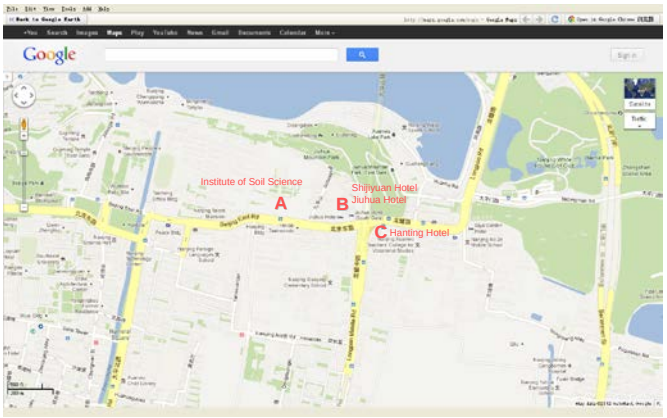
formation, stability and its functions on C sequestration, water transport, and soil erosion.

Important dates
Abstract submission is open until **May 31st**
Early bird registration is active until **June 30th** For international participants the early registration fee is US$250 and for accompanying persons US$80.
Registration fee includes:
- Two days of conference presentations, poster sessions and discussions.
- Program CD and abstract book.
- Coffee break, lunch, and dinner of 9-10th September 2013

Organizing Committee
Chinese Academy of Sciences,
Natural Science Foundation of China
Institute of Soil Science, CAS
State Key Lab of Soil and Sustainable Agriculture
International Soil Tillage Research Organization
Scientific program:
Session 1. Quantification of Soil Structure and modeling
Session 2. Formation and Stabilization of Soil Structure: Biotic and Abiotic factors
Session 3. Dynamics of Soil Structure and modeling
Session 4. Soil Structure and its Function on C sequestration
Session 5. Soil Structure and its Function on Hydrological Process and Fertility
Session 6. Soil Structure Stability and its Function on Soil Erosion

Payment method
Bank transfer in **US dollars** payable to:
Bank: Industrial and Commercial Bank of China, Jiangsu Xuanwu Branch.
Bank address: No. 139 North Hongwu Road, Nanjing, Jiangsu
Swift: ICBKCNBJNJG
Account number: 4301015909914100587
Account Name: Institute of Soil Science, Chinese Academy of Sciences
The bank transfer must indicate the name of the participant and the title of the congress 'Soil Structure2013'. The sender must pay all bank charges. Copy of the bank transfer must be sent by fax (+86-25-8688 1000) or email (soil2013@issas.ac.cn) soon after the registration, otherwise the form cannot be accepted.

More information, abstract submission, accommodation details
See the link to the ISTRO website (www.istro.org). Note 200m East of the Institute (marked A on the map below) are Shijiyuan Hotel and Hangting Hotel.



Contact Person
Dr. ZHOU Hu
Email: soil2013@issas.ac.cn
Tel: 025 8688 1221

⌘ First Announcement of the 2nd Soil and Crop Management: Adaptation and Mitigation of Climate Change.

Osijek, Croatia 26-28th September 2013

Meeting website and regularly updated information at www.pfos.hr/~hdpot

The Organizing Committee of the Croatia Soil Tillage Research Organization – CROSTRO and International Soil Tillage Research Organization – ISTRO, invites all ISTRO members and other interested to attend on 2nd international scientific conference "Soil and Crop Management: Adaptation and Mitigation of Climate Change" in Osijek, Republic of Croatia, from the 26th to 28th of September, 2013. The official language of the conference will be English. With support from the Faculty of Agriculture, University Josip Juraj Strossmayer in Osijek; Faculty of Agriculture, University of Zagreb and the Agriculture Institute Osijek.

Conference themes will be:
1. Soil tillage and crop management in function of environmental protection
2. Adaptation and mitigation of climate changes in crop production
3. Soil degradation (biotic and abiotic) in agriculture production
4. Good agronomy practice
5. Sustainable production systems for food and bioenergy

At the dawn of mankind, first crop-growers figured out that plant is thriving stronger and yielding more if soil had been tilled. Since then, the soil tillage still has the strongest influence at the environment, modeling and adopting soil for growing crop in a way no other agricultural practices have been done. This 2nd CROSTRO conference, being created as well for scientific as for experts and practitioners, has goal to promote correct agricultural practices, the newest state-of-the-art informatics, bio-technical, environmental and engineering solutions, as well as alternative and inventive approaches in agricultural production, all in attempt to cope with ever-changing environment and ensuring sufficient food and energy resources on sustainable ways.

Important dates:
15 April – register title of paper
10 June – submission of full paper
10 July – full paper for publication acceptance notification (second circular)
1 August – registration payment
1 September – final program published

Registration fee
Registration fee is compulsory for all conference attendances. Registration fees are covering the conference attendance in scientific program, conference book, CD, professional field trip, welcome reception, lunches, coffee break and gala dinner. Until 1August fees are:
ISTRO (incl Croatian Branch) members Euro100
Non-members Euro 120
Students Euro 50

Payment instructions and **Accommodation instruction**
Details about payment instruction and accommodation instruction will be mentioned in the second announcement (second circular) and on web page www.pfos.hr/~hdpot

Register your interest now by emailing hdpot@pfos.hr

News from the Branches

⌘ Estonian Branch

The Estonian branch of ISTO has existed since 1998 and currently has Edvin Nugis as Chair (www.emu.ee), Endla Reintam as Secretary and Rein Lehtveer as Treasurer.

Recent Activities

Our members have been involved in organizing and participating in several local and international conferences The Estonian Research Portal gives information about national research (on all topics) and includes research output from Estonian branch members see https://www.etis.ee/index.aspx?lang=en . The Estonian branch has strong links with the national Soil Science Society about which information can be found at (http://emts.emu.ee/index.php?option=com_contact&view=contact&id=1&Itemid=8&lang=en). John Morrison (who mentors several ISTRO branches) visited the Estonian branch in May 2012.

Planned activities

A range of seminars will be held at Tartu 2013 on 9-10 May, and the Esri Päevad (Esri Days*) conference will be in Tallinn 08.-09 May in hotel Euroopa (Paadi tn 5). Esri (http://www.alphagis.ee/en/) offer a wide range of software for Geographic Information Systems, web development and mapping. In neighboring Latvia, the Priekuli Plant Breeding Institute will be hosting and International Conference on Crop breeding and management for friendly farming: research results and achievements (4-6 June, 2013).

⌘ Hungarian Branch

Events from 2012 from the Hungarian Branch. The Hungarian Branch was founded in April 1993

In January S. Hoffmann Sándor and Z. participated in a cooperative Science and Technology programme at Ho Chi Minh University (Vietnam/ Ho Chi Minh City). While later in the month at AGROmashEXPO international exhibition and fair, two members, M. Birkas and C Gyuricza delivered presentations on climate mitigation and biomass production. February several members were involved in events organised by the Croatian branch reported in earlier issues of ISTROINFO

March was a busy month for branch members including several presenting lectures for farmers and representatives of Pannon Power on the use of straw to produce heat and power. T. Kismányoky, S. Hoffmann, and Z. Tóth participated the winter session of the IOSDV of the ISSS, held at University of Giessen, Germany. C. Gyuricza was elected Dean of the Faculty of Agricultural and Environmental Sciences at Szent Istvan University in Godollo and Marta Birkas elected as an honorary member of CROSTRO.

Throughout May and June members including J. Nagy, P. Pepó, C. Gyuricza Cs. and M. Jolankai delivered field demonstrations and made TV and radio presentations for land managers around Debrecen, Godollo and Martonvásár. T. Rátonyi attended and made presentations on corn starch for bioethanol at a meeting in Torremolinos, Spain.

August and September saw branch members attending major international meetings including the 12th European Society for Agronomy Congress, the first conference of the new Farmers'net in Godollo and of course the 19th ISTRO conference in Montevideo where members Zoltán Tóth (Keszthely), Attila Dunai (Keszthely), Sándor Hoffmann (Keszthely), Kornél Tamás and István Jóri J. (Budapest), László Fenyvesi and Zoltán Hudoba (Gödöllő) made scientific presentations.

In October the 34th Ovar Scientific Day at Mosonmagyaróvár was held and the 54th Georgikon Scientific Days held at the Faculty of Georgion, Pannon University, in Keszthely. Branch member János Nagy received several honours including being elected as external member of the Ukrainen Agricultural Academy, receiving the Regional Prima Award in Hajdú-Bihar County and being made an honorary professor of the Ukrainian Ministry of Education, and Science.

In November the 1st Soil Science, Water Management and Crop Production Scientific Day held in Debrecen.

⌘ Slovak Branch

Jana Galambosova reports that research on the effects of controlled traffic farming was started at the Slovak University of Agriculture in Nitra in 2009 with EU funding. A 6-m "out-track" CTF model was implemented. The long-term experiment methodology was design in conjunction with Richard (Dick) Godwin and Tim Chamen as external advisors.

Tim, Jana, Dick and colleagues examine the soil structure.

Since then the effect of CTF on soil properties and crop production has been studied. A particular focus of the work has been ensuring practical operating procedures. Main crops have been winter wheat and spring barley. Funding from EU finished in 2012 however Jana and her colleagues are continuing the research. Sunflower is the current crop with a return to cereals scheduled for next year.

The CTF tracks clearly in place.

Working Groups

⌘ Working Group K – Controlled Traffic Farming

Report on Informal ISTRO CTF Working Group meeting 18.00 hours on 25 February 2013 at CTF2013 conference in Toowoomba

Meeting objectives

The aim of the meeting was to discuss research needs in terms of controlled traffic farming systems

Resumé of discussions on research needs

Environmental issues: There was a plea for more environmental research into soil conditions associated with CTF and nitrous oxide emissions, water use efficiency (WUE) and nutrient use efficiency (NUE) in particular. A proposal for work on nitrous oxide emissions is currently under consideration within Australia, but previous attempts there and in the UK had been unsuccessful, despite addressing many of the environmental concerns that are currently of global interest. Some quantitative data are already available on CTF impact on WUE, soil biology and nutrient loss in run-off, together with anecdotal data on NUE in Australia but far more data are needed worldwide.

Economics: Although there had been some studies in this arena, far more needed to be done and particularly those using a whole farm model approach. This was time consuming but likely to give more reliable results, such as those achieved with the Silsoe Arable Farm model.

Engineering issues: In respect of engineering issues, these really need to be brought to people's notice before funding was likely and a suggestion was to try and get CTF as a prominent topic at Landtechnik AgEng, the biennial conference that immediately precedes Agritechnica in Hanover in November of odd years. Getting it onto this year's list of topics would not be possible, but we could start canvassing for it in 2015. Tim Chamen agreed to have a word with Dave Tinker who was closely involved with the conference. It was also noted that there seemed relatively little interest from the USA.

(*post the meeting, a suggestion for the US was to increase awareness by having a session (e.g. as part*

of the session on tillage, traction and compaction) during the annual meetings of ASABE, this could be done by making a proposal to the ASABE PM45/PM46 Working Group (Soil Dynamics) to consider contributions on CTF. Dio Antille offered to do this as a member of this working group and could put this forward should we consider this a good idea. ***Responses please***)

In the context of bringing CTF more to the forefront, John Rochecouste suggested that we need a 20-30 page "manual" on CTF that outlined its principles, benefits and methods of achievement together with case studies. To a large extent this had been addressed by the group working on CTF in Western Australia which, with sponsorship from GRDC and the Government of Western Australia, produced a technical manual in 2004. This was targeted mostly for Western Australian conditions but it would form a good basis for a global document. It can be downloaded from:

http://www.agric.wa.gov.au/objtwr/imported_assets/content/lwe/land/cult/bulletin4607_complete.pdf

Funding to create such a publication would be needed and further data could be drawn from the chapter on CTF by Vermeulen et al. in the book, "Soil Engineering", edited by Dedousis, A.P., Bartzanas, T. in 2010.

Drainage issues: In terms of drainage issues, CTF was not seen as a cure for sub-surface problems but layouts on sloping fields were crucial to the safe and efficient disposal of surface water. These aspects should be included in the manual and particularly for cane production systems. Additional information for this could be drawn from a paper in press by McPhee et al. Any underlying drainage issue needs to be addressed prior to CTF adoption, and particularly subsoil health, which was becoming a greater issue with the ever heavier machines that are being used.

Permanent traffic lanes: The principal area where most people considered research to be necessary was on the permanent traffic lanes associated with CTF. These can represent 15 - 30% of field areas and in Europe were mostly a cropped feature, other than those used for chemical applications. Difficulties with the traffic lanes varied from their becoming proud of the surrounding soil (mostly in intensive vegetable production) and to becoming too deep, particularly in moist climates. Presently they have a great diversity of management but more fundamental study is needed.

Controlled traffic "beds" :The point was made that most research on agricultural systems had been conducted in the presence of significant compaction, whereas little had been undertaken to optimise soil conditions or crop genealogy on non-trafficked soils. Without uncontrolled compaction, great opportunities existed to engineer optimum soil conditions for crop growth and soil function.

Next working group meeting

A number of staff from Harper Adams University in the UK were present at the meeting and were very positive about a suggestion to have our next meeting at the University. The meeting as a whole supported this suggestion, the timing of which would probably be around the UK "Cereals" event in 2014, normally in the second week of June. So, please put this date in your diaries if you are interested in coming along.

⌘ 20th Triennial ISTRO conference

ISTRO President Xinhua Peng has been in contact just reminding us all to keep thinking and planning for the 20th conference in Nanjing. Keep the dates of **14-18 September 2015** in your calendars, diaries etc.

Some major sponsors are in place but good attendance is key to making any event a success.

The date has been chosen to avoid the extreme heat of summer, the cold of winter and provide a time of intense agricultural activity. By announcing these dates early the organising team are hoping that ISTRO members will have time to plan activities.

Practical matters

Travel: There are numerous direct flights into Nanjing e.g. from Frankfurt, Seoul, Tokyo, Hong Kong with more routes opening each year. Connections to and from Beijing are frequent. There are also high speed trains from the Shanghai to Nanjing.

Accommodation: Nanjing has a wide range of international standard hotels with over 40 rated at 5-star and over 60 rated at 4-star. Many of these are located close to the Institute.

Planning for tours either a pre or post conference tour and a mid-week tour is underway. So, put the dates in your diaries, i-pads, tablets etc

⌘ PhD position Switzerland

PhD student position "Natural restoration of compacted soil structure"

The Research Station Agroscope Reckenholz-Tänikon ART conducts research for an environmentally friendly, competitive agriculture. We combine ecology, economy and agricultural technology in an integrated research approach and develop science based decision support for farmers, government authorities and society. A PhD student position is available in the research group "Soil Fertility and Soil Protection".

Soil compaction due to agricultural field traffic alters pore spaces, which may trigger an array of adverse impacts on soil ecological services and functions. Little is known about natural mechanisms of soil structural restoration after compaction. The project "Biophysical processes controlling restoration of compacted soil structure – long-term soil structure observatory and mechanistic studies" aims at studying post-compaction soil structural restoration and investigating key biophysical mechanisms controlling rates of restoration of impacted soil structure. In the frame of this project, you will focus on abiotic processes (impacts of drying-wetting and freeze-thaw cycles on soil structure evolution). The approach includes in situ monitoring of relevant state variables and fluxes, periodic direct soil sampling, small scale laboratory experiments to study the roles of mechanisms for post-compaction soil structural evolution, and modelling. The research will be carried out in close collaboration with two other PhD students within the project. You will be responsible for the long-term field experiment that is established within the project, including data acquisition and management.

We are seeking a highly motivated candidate with a strong interest in soil physics and applied agricultural research. Applicants should hold a Master degree (or an equivalent) in environmental sciences, earth sciences, engineering, physics, agricultural science or similar. Experience in the field of soil physics is beneficial. Good knowledge of spoken and written English is required. Knowledge of German is welcome.

The duration of the position is three years with a salary according to the guidelines of the Swiss National Science Foundation (www.snsf.ch). You

will be based at the Swiss Federal Research Station Agroscope at Zürich-Affoltern, Switzerland (www.agroscope.ch), and associated with the Soil and Terrestrial Environmental Physics group of Prof D. Or at the Swiss Federal Institute of Technology Zürich ETH (www.step.ethz.ch). More infor-mation on doctoral studies at ETH are found here: www.ethz.ch/doctorate. The project will start 1 June 2013 (negotiable).

Deadline for application: 12 April 2013. Please mention the keyword "Soil structure recovery" in your cover letter. Applicants should submit a complete academic record, CV, statement of research interests, copy of certificates, and addresses of 2 to 3 potential referees to: Agroscope Reckenholz-Tänikon ART, Fachgruppe Personal, Thomas Zehnder, Reckenholzstrasse 191, 8046 Zürich, Switzerland or to human_resources@art.admin.ch For further information please contact: Dr. Thomas Keller, research group "Soil Fertility and Soil Protection", phone +41 44 377 76 05, e-mail: thomas.keller@agroscope.admin.ch (Do not send applications to this e-mail)

⌘ New Book

Soil School What to learn from and what to teach about soils. Marta Birkas. 2012 Hardback, 521 pages. Szent Istvan University Press
The Preface to the book reads

It took me quite some time to find a title for this book. I intended it to be a memorial volume or a book of facts, but with some other title. Then on 24 June in the morning it just came to me, from the blue. It was title that would make sense in English as well: *Soil – School*. The Hungarian original would translate into English as *Soil – Schools* but in English there is no need for the plural form of school. Though while putting the text together I kept corresponding with a number of authors, *Julia Krümmelbein* was the first one to whom I wrote about this idea. She found it 'great', indeed she proposed a sub-title: what we can learn from and what we should teach about soil. The sub-title provides a frame and at the same time it gives a hint concerning the contents. So I thank Julia for her suggestion at this point again.

Both *soil* and *school* in the title may be interpreted in a narrow as well as in a broader sense. *Soil* is one of the most important factors of life on Earth. It is not possible to get to know it or effectively protect it without underlying basic knowledge and without years of studies. *School* and knowledge were highly important even thousands of years ago and they will continue to be important in the future as well. Hungarian and foreign mentors, contemporaries, farmers and others engaged in the profession have also come to visit this Soil-School and each of them brought a piece of work to enrich its contents. Each of them is an outstanding representative of his or her field and their common trait is the shared concern for soils, the environment and the development of agriculture as a profession, and a strong commitment to improvement. They made contributions to this book in good heart – for which I thank them here again – because they consider teaching, improvement and setting examples to be their most important task. The authors' contact data are presented at the end of their articles in the hope that it will contribute to establishment of new professional contacts.

My work as a teacher and as a researcher has been devoted during the past nearly 40 to the development and improvement of tillage and the condition of soils. I really learned a lot about soils while I was conducting experiments, taking measurements and assessing soils' condition and I am very happy to be able to pass this knowledge on. It is beyond doubt that over the years I faced numerous difficulties but I met a lot more inspiring challenges both in Hungary and abroad, and thanks to the grace of fate, I can also see the results of my work. *I recall the most important stages of my career in chapter one of this book* but neither learning, nor teaching is brought to an end by this book.

My contemporaries and I began to respond to the challenges of our profession in the mid-seventies. There was an abundance of precious groundwork and results produced by great predecessors to build on – for which we must be truly grateful – but there were also many question marks. We answered some of those questions with our findings and results but then we found ourselves facing new question marks. It was not us who started to raise the profession but

– if we did a good job in teaching the next generations – we will not be the last ones to improve it either.

Over the years, I could help many and I was also helped by many. Let me thank my pupils from whom it is only in exchange for continuously renewed and usable knowledge that we can receive the experience of recognition and appreciation. I am grateful to teachers and tutors, colleagues in the institution the faculty and in the university as a whole, to the teachers and researchers of Hungarian and foreign partner institutions, farmers and machine manufacturers and distributors as well, for the joint efforts, for the challenges and for the encouragement that made it possible to produce results that can be utilised on hundreds of thousands of hectares of land.

⌘ Upcoming meetings

European Geoscience Union
7-12 April 2013 Vienna, Austria
http://www.egu.eu/
Sessions include:
SSS0.2
Your best lecture on soil
Convener: Nikolaus J. Kuhn
Soils are vital to food production and a range of other environmental services, e.g. water quality and net greenhouse gas emissions. Unlike water and air, they are also much more sensitive to misuse, especially when considering the recovery time required for soils to achieve a level of productivity they had before degradation, which can be on the order of thousands of years. Unlike most singular major natural disasters, soil degradation can lead to a non-recoverable, permanent damage to the economy of a society. In the light of this relevance of soils, their standing in many school and university curricula is rather low and they are often cosidered to be boring. This session therefore aims at exchanging ideas on how to teach on soils at university and school level, but also to the wider public and decision makers. We invite everybody teaching on soils and land use to submit an abstract outlining a succesfull lecture on these topics and share the approaches that generated interest and positive reception with their audiences.

SSS0.3
Soils in Africa: challenges and opportunities
Convener: Nikolaus J. Kuhn
Africa is seen by many as the continent with the greatest potential for agricultural growth, including large companies like Syngenta, but also growing economies like China. In addition, land degradation and environmental change threaten the African soil ressource much more severely than in many other regions of the planet. Finally, the well-being of poor Afican small-scale farmers as well as entire national economies rely heavily on the protection and regeneration of their soils. This session aims at giving an overview of the current research and state of knowledge on soils in Africa, identifying the risks to the environmental services they provide to Africa and the world, as well as examples of sustainable land use and the research needs to restore, develop and maintain these services. Contributions from all areas of soil science, agronomy, ecology, hydrology and geography are invited to contribute to this session. The session is also officially supported by the IUSS division 3.2, Soil & Water Conservation.

International Union of Soil Sciences
IUSS Global Soil Carbon Conference
3-6 June 2013 Madison, Wisconsin, USA
Submission deadline: 1 February 2013
http://iuss-c-conference.org/

Nordic Association of Agricultural Sciences
Does Climate Change demand a new approach to drainage design?
23-25 September 2013 Norway
http://www.njf.nu/site/seminarRedirect.asp?intSeminarID=462&p=1004

VII Iberian Congress of Agriculutral Engineering and Horticultural Sciences
26-29 August, Madrid Spain
http://sechaging-madrid2013.org/index.php?idioma=en

Several of the sessions should be of particular interest to ISTRO members including: Irrigation engineering, Mechanization, Precision agriculture and information technology, Land Management and environmental engineering, Agro-energetics, energy crops and biomass, Sustainable production and Mechanical harvesting of fruits.

The First International Conference on **Global Food Security**, organized by Elsevier, from September 29 to October 2nd, 2013 in the Netherlands. The conference aims to deliver state-of-the-art analysis, inspiring visions and innovative research methods arising from interdisciplinary research with the view to ensure that the best science is garnered to support the emergence of the Sustainable Development Goals. The call for abstracts is open until May 10th, 2013.

Website: http://globalfoodsecurityconference.com/index.html

6th African Soil Science Society and 27th Soil Science Socitey of East Africa Conference
20-25 October 2013 Nakuru Kenya

Transforming Rural Livelihoods in Africa: How can land and water management contribute to enhanced food security and address climate change adaptation and mitigation?

Sub-Themes

a) Enhancing applications of adaptation and mitigation to climate variability and change
b) Enhancing the status of human nutrition and food security in Africa through Integrated Soil Fertility Management (ISFM), and small scale irrigation
c) Exploring options for sustainable intensification and diversification of crop soil livestock systems
d) Land use planning for sustainable food security and climate change adaptation in Africa
e) Commercialization aspects in land and water management: Markets and private sector engagement
f) Scaling, socio-economic and policy options in land and water management
g) Capacity building in land and water management within the Agricultural Product Value Chains (APVC)approach
h) Adaption to climate change: Lessons learned and challenges ahead

Policy Forum:

The conference will integrate a policy forum linking scientists and policy makers with the specific objectives of:
a) Brief review of existing policies with respect to soil management in the ASARECA member countries and AU/NEPAD/CAADP initiatives.
b) Review with decision makers and/or their advisors impediments (at policy, institutional, market level) for scaling up technologies.
c) Required actions to improve the situation.
It is expected that representatives from African Union and regional and national research and policy bodies will attend.

Payment and Registration

Early Scientist USD$ 120 : Late Scientist $170
Early Students USD $ 50 : Late Student $70
Early Registration closes 31 August

The Secretariat, SSSEA/ASSS Conference,
P O Box 14733 – 00800 Nairobi, Kenya
Tel: 254--20-444029/30/31/32 or 444256/4444144/137
Fax: 254--20-4443926/444251
E-mail: soilseakenya@gmail.com.
All cheques to be paid to Soil Science Society of East Africa (SSSEA)

Deadlines

The deadline for papers submissions is 31 May 2013. Titles, Abstracts and Full papers indicating area of focus should be submitted to Dr. Cyrus Githunguri, Organizing Committee, SSSEA/ASSS, Email: soilseakenya@gmail.com.

Latin America Soil Science Congress, Cuzco Peru 9-15 November 2014 www.slsc.org.mx

⌘ Final comments

Unlike some other association or groupings ISTRO is overtly a research organisation. The vast majority of our membership is engaged in scientific or engineering research, in communicating that research to farmers, advisors or policy makers or in training future generations of reseachers. These young researchers will in time become key members and drivers taking ISTRO forward. ISTRO seeks to reward newly completed PhD's with 3 years free membership of ISTRO (and a years subscription to our journal – Soil & Tillage Research). As our webpage (www.istro.org) makes clear all that is needed to nominate a recently completed PhD is to email the Secretary-General (doug.karlen@gmail.com); nominate the person and provide the abstract from their PhD.

If you take a quick look at our website you will notice that in the last 4 months it has been accessed over 1000 times. Notices and newss about ISTRO conferences and meetings are frequently updated on the website. So keep it bookmarked.

ISTRO INFO is the newsletter of the **International Soil Tillage Research Organisation**. (www.istro.org).

For more information, please contact: Dr. Blair M. McKenzie**,** Assistant Secretary General, ISTRO, James Hutton Institute, Invergowrie, Dundee, DD2 5DA, UK.