International Commission of Agricultural and Biosystems Engineering

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"...to serve - on a world-wide basis and through its members - the needs of humanity by fostering mutual understanding, improvement and rationalisation of sustainable biological production systems while protecting nature and environment and managing landscape through the advancement of engineering and allied sciences..."

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Web: www.CIGR.org
Journal: www.CIGRJournal.org
Contact us: secretarygeneral@CIGR.org
2\textsuperscript{nd} Call for Abstracts: 2020 CIGR International Conference

Stephane Goodbout  
Chair, 2020 CIGR International Conference  
IRDA, Canada

The call for abstracts for the 5th CIGR International Conference is now officially open! Under the theme “Integrating Agriculture and Society through Engineering”, the primary goal of this conference is to bring together elite scientists from all over the world, and to provide a unique forum for exchange on the challenges and opportunities in agricultural and biosystems engineering.

To submit an abstract for an oral or poster presentation click on the link below:


The CIGR 2020 local organizing committee is pleased to offer participants the chance to take charge of an entire 90-minute session during the conference. Sessions can consist of a series of technical presentations or they can give more time to an eminent scientist or even take the form of a panel discussion. A Technical Committee will evaluate the suitability of each proposed session and adjustments will be made if necessary, to fit the scope of the conference.

To submit a session, click on the link below:

https://www.conftool.org/cigr2020/

The conference will take place from June 14th to the 18th 2020 in Québec City, Canada. Québec City offers a blend of culture and history that is unique in North America. Located along the majestic Saint-Lawrence River, Quebec City is the only walled city north of Mexico and the old part of the town is a UNESCO World Heritage treasure. The province of Québec’s capital is also known to be one of the safest urban districts of the world. Québec City ranks first among Canadian destinations.

Important dates are:

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<td>Abstract submission</td>
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The 2024 CIGR International Meeting was awarded to Korea during the CIGR Presidium and Executive Board Meetings held in Rhodes Greece. The decision was based on the ability of the Korean Society of Agricultural Machinery (KSAM) to organize a high-profile event, the quality of the facilities, ease of access to the venue from international airports, and cultural points of interest at and the proximity to the venue. Other societies that expressed an interest were either not able to meet deadlines or provide a proposal that met the requirements of CIGR.

The message to the Presidium from KSAM President Jong Hoon Chung follows:

“Dear CIGR President and Executive Committee,

Representing the Korean Society for Agricultural Machinery, I hereby submit a proposal to host the 6th CIGR International Conference 2024 in Jeju, Republic of Korea.

At the outset of the proposal, we assure you that all of us in agricultural engineering industry, research institutions and the relevant private sector in Korea are fully committed to making your conference a resounding success. To deliver the assurance, every effort and preparation will be made to actively lure participants from abroad who are faced with the same challenges of the agriculture today to the CIGR conference. Together, we are determined to take advantage of the opportunity of having the conference in Jeju to explore the creative avenue for the future agriculture in Korea and beyond.

Climate change is of global significance as it adversely impacts on the market economy of every country through unpredictable natural disasters, the resulting political crisis and social instability. In the face of such general crisis, the agriculture industry takes particular importance in providing life-saving food for people. It thus goes without saying that we must work together to create the sustainable values of survival and advances for the future livelihood of the people everywhere.

Having received the generous aids and warm friendship from our overseas alliances in time of the war-stricken Korea in the 50’s, the country made an impressive economic progress. It’s now our turn to return the favor to our global neighbors. In such a vein, my colleagues and I are pleased to submit this proposal to host the 6th CIGR International Conference 2024 in Jeju by promising the organizational and financial support to make it a great success for all of us.

We believe the CIGR conference in Jeju would serve as an excellent platform for exchange of information and personnel related to the agricultural engineering research and industry, undoubtedly enhancing your society’s history and prestige through the sponsorship of the conference for first time in Jeju, Korea. We look forward to open the new future of agricultural engineering worldwide right here in Jeju.

Thank you for your favorable consideration of our proposal.

Jong Hoon Chung, Ph.D.
President, Korean Society for Agricultural Machinery”

Fedro S Zazueta
CIGR Secretary General
Work Group on Rural Development and the Preservation of Cultural Heritage

The Workgroup Rural Development and the Preservation of Cultural Heritage is being reorganized. Members interested in participating in this group please contact Prof. Picuno at Officers to be elected during the 2020 CIGR International Meeting in Canada.

Objectives:
The objectives for advancing the specific scientific area dealing with Rural Development and Preservation of Cultural Heritage (RDPCH) will be:

1) An improvement in the number of academic courses dealing with RDPCH, targeted to University students, practitioners and other stakeholders;

2) An increase in the number of scientific/technical publications produced by scientists working in the field of agricultural engineering, on topics relevant to RDPCH. A special attention will be focused on new opportunities, mostly based on the use of cutting-edge tools (ICT; IoT; etc.), for supporting the preservation and valorisation of cultural heritage in rural areas;

3) The creation in each one of the participating Countries of a national cluster - lead by the CIGR National representative of the Working Group RDPCH - belonging to the CIGR WG_RDPCH network. This cluster would be participated by every kind of interested relevant stakeholder belonging to the “Quadruple Helix”, i.e.: a) Public Institutions (Ministries; Regional/local Authorities; Relevant Agencies; etc.); b) RTD performers (Universities; Public/private research centers; Technological Parks; etc.); c) Private companies (Industries; SMEs; farmers; relevant associations; etc.); d) Civil society (NGOs; Citizen associations; etc.).

Scope:
The main WG_RDPCH activities will be an improved contribution to the creation of outputs, outcomes and benefits aimed to an integrated management approach to Rural Development and Preservation of Cultural Heritage. The boundaries of these scientific areas and application domains would be efficiently addressed by Agricultural Engineers, thanks to their aptitude to a multi-disciplinary approach to plan, organize and implement activities aimed to:

• Identify existing problems as well as assets;
• Discover innovative solutions and approaches from good practice examples;
• Uncover the elements and take the best from them;
• Adjust, combine and compile the good practice in a new scientific approach;
• Create a new good practice for regionally specific cases.

Interested in participating in this workgroup?
Contact Prof. Picuno at:
pietro.picuno@unibas.it

Mission:
The Mission of the WG_RDPCH is to consolidate, increase and exploit the role that Agricultural Engineering may play for the development of rural Society and its activities, in the framework of an enhanced preservation of cultural heritage and its related landscape in rural environment.

Rural communities everywhere are indeed often susceptible to long slow declines, if agriculture is no longer economically viable and younger generations move to cities in search of better opportunities. Preserving a way of life and the identity of a community is more important than preserving only
its physical form. Living, vibrant communities give meaning to their surroundings and create a sustainable environment for preserving culture. In this scenario, the role that would be played by Agricultural Engineers may reveal decisive for supporting the strategic technical and socio-economic development of rural areas, by proposing, testing and implementing new ways for the preservation and valorization of their cultural heritage.

**Tasks/work plan:**
Activities will be planned according to the following Workplan, divided into five tasks:

**Task 1) Identify issues through strategic problem statements**
This activity would be planned in preparation for the next CIGR Conference in Canada, June 2020, when the general meeting of the WG will establish the detailed activities. During this Conference, the WG will schedule/organize regular telematic (e.g.: Skype/WebEx) and/or physical meetings as well.

**Task 2) Define good practice and asset identification in the region of each participant to the WG**
This activity will be performed by each one of the CIGR participants at national level - with support from the Steering Committee of the WG (Chair, Vice-chair, Secretary) - by implementing a national cluster, in which other relevant interested partners belonging to the Quadruple Helix in its own Country will be involved.

**Task 3) Link the issues identified in one region to good practice from other regions**
To this aim, each one of the participants will plan suitable actions aimed to exchange the results of the activities achieved at national level, through the use of a specific platform (e.g., LinkedIn) implemented by the WG.

**Task 4) Draft Pilot Action implementation plans**
Each one of the national clusters will prepare a Local Action Plan for its Country, clearly specifying the role of national stakeholders interested to participate, in order to:

- a. Identify good practice examples to adopt;
- b. Outline specific actions to adopt / adapt good practice;
- c. Present possible Pilot Actions to colleagues, partners and communities.

**Task 5) Disseminate and exploit the results of the WG at International level**

- a. The results of this WG will be disseminated to every stakeholder in the World. A Special attention will be devoted to International Organizations involved in RDPCH, e.g.: ONU; FAO; UNESCO; IUCN; UNWTO; ICOMOS-IFLA; EU Landscape Convention; Getty Conservation Institute; etc.
- b. The results of the WG will be exploited by organizing - under the CIGR coordination and with the envisaged patronage/financial support of some of the relevant above-mentioned International organizations - targeted events (workshops, seminars, Conferences, etc.), ICT/social media (Website, Facebook, etc.) and/or pilot actions aimed to capitalize and showcase the tangible results of the WG activities.

**Expected outcome:**
Outcomes from the WG activities for a successful heritage and landscape rural development will be a significant increase in the awareness of every kind of stakeholder about the role that Agricultural Engineering may play for RDPCH. Such an outcome will contribute to bridge the gaps between:

- National and local government policy;
- People and institutions;
- Academic sphere and local stakeholders;
- Different disciplines (Agriculture; Engineering; Architecture; Economics; Archaeology; etc.);
- Policies of regional development (environmental, rural, cultural, housing, educational);
- Different technical/cultural approaches to address the most relevant issues identified (e.g. re-use of historic buildings; elaboration of new innovative financing models; systems of regular maintenance; new/integrated solutions for rural tourism; etc.).
This report highlights activities carried out during the planning and hosting of the 12th CIGR Section VI International Symposium which took place between 22nd and 25th of October, 2018 at the Conference Center, IITA, Ibadan, Nigeria. The first ever CIGR event in Nigeria took place in Ilorin, Nigeria in September 1988 under the theme: Rural Technology for Agricultural Growth in Developing Countries. 30 years after, Nigeria again won the hosting rights for the symposium. The theme ‘Innovation and Technologies for sustainable Agricultural Production and Food Sufficiency’ was carefully chosen to promote exchange of knowledge on research, innovations and technologies for sustainable agricultural production, food sufficiency and better human life quality.

Conference Planning-Local Organizing Committee Members

Planning for the conference began as early as September 2017 and the following people volunteered to serve as members of the Local Organizing Committee:

- **Prof. Akindele Folarin. Alonge**  
  Convener & Chairman  
  Department of Agricultural and food engineering, University of Uyo, Uyo, Akwa-Ibom, Nigeria

- **Dr. Mobolaji Omobowale**  
  LOC Secretary/Information Committee  
  Department of Agricultural and Environmental Engineering, University of Ibadan, Ibadan, Nigeria

- **Prof Rahman Akinoso**  
  Technical Committee Leader  
  Department of Food Technology, University of Ibadan, Ibadan, Nigeria

- **Prof. Temitayo Ewemoje**  
  Registration Committee Leader  
  Department of Agricultural and Environmental Engineering, University of Ibadan, Ibadan, Nigeria

- **Dr N. A Adewole**  
  Exhibition Committee Chairman  
  Department of Wood Products Engineering, University of Ibadan, Ibadan, Nigeria

- **Dr. Temidayo Omoniyi**  
  Transport and Logistics Committee Leader  
  Department of Agricultural and Environmental Engineering, University of Ibadan, Ibadan, Nigeria

- **Dr. Peter Kolawole**  
  Technical Tour Committee leader  
  International Institute of Tropical Agriculture, Ibadan, Nigeria

- **Dr. Bamidele Dahunsi**  
  Accommodation Committee Leader  
  Department of Civil Engineering, University of Ibadan, Ibadan, Nigeria

- **Dr. Daniel I. Onwude**  
  Website and Information Dissemination Committee  
  Department of Agricultural and Food Engineering, University of Uyo, Akwa Ibom, Nigeria

Symposium Proceedings are available here
Dr Maria Ayodele,
IITA Principal Investigator,
Over fifteen meetings took place over a period of one year to plan all pre- and post-symposium activities.

**Arrival (22nd October, 2018)**

Both local and foreign participants started arriving on the 22nd October, 2018 at the venue of the symposium. Registration and collection of conference materials by participants and setting up of exhibition booths commenced around 4:00pm. Participants were hosted to a welcome cocktail during which the chairman of the LOC welcomed participants and gave an overview of the symposium. During this period, networking and interactions began among participants.

**Symposium Day One (23rd October, 2018)**

**Plenary Session**

Registration of participants continued the next morning 23rd of October, 2018. The first plenary session (Plenary session I) kicked off around 9am, under the chairmanship of Prof. Michael O. Faborode (former Vice-Chancellor, Obafemi Awolowo University, Ile-Ife and Immediate Secretary General, Committee of Vice-Chancellors of Nigerian Universities). Prof Babatope Alabada was assisted by Dr. I.C. Ozumba as Chief Rapporteur and Rapporteur respectively. The session started with the introduction of Lead speakers, Prof Michael Ngadi (who was represented by Prof. Alonge) and Prof Klein Ileleji, as well as other discussants and other dignitaries.

Prof Ileleji made a paper presentation on ‘Building Capacity in the Stored Commodity Sector in Nigeria – Successful Local Engagement’. He spoke extensively on the US-Nigeria Agriculture Capacity Strengthening Program aimed at tackling the problem of postharvest losses in Nigeria. Through this partnership over 600 participants have been trained and 40,000 farmers impacted from more than 19 states in Nigeria. The program is expanding nationwide through a newly formed consortium - Stored Agricultural Commodity Initiative (SACI) - with 16 Nigerian Universities, a national research institute (NSPRI) and 6 trade bodies picking up interest in the program.

**Opening Ceremony**

The opening ceremony started after the tea break with Prof John Ohu (University of Maiduguri) as the Chairman. Prof Ndubusi Aviara and Dr Adesina Fadebiyi served as Chief Rapporteur and Rapporteur respectively, while Dr Babatunde Ogunsina anchored the session.

Prof Alonge, the LOC chairman gave a welcome address. The in-coming CIGR Section VI President, Dr. Oliver Schluter congratulated the LOC for their efforts in planning and convening the conference. He heartily welcomed participants from other countries and encouraged them to make time to see and enjoy Nigeria outside the gates of the IITA.

In his speech, the president illustrated how agriculture and technology have coexisted in history, the current state and what the future holds in Sub-Saharan Africa. He brought to everyone’s notice how Africa remains the global food and security spot and the need for agricultural engineers to realize their roles in the development of the rural economy at large. He charged Agricultural Engineers to remain disciplined, professional and be at the forefront of cutting-edge research and innovation in order to constantly adapt and reposition themselves to solve the needs of the society. The representative of the Director General (IITA), Dr. Kenton Dashiell also expressed his gratitude to the organising committee for selecting their campus for the symposium. He welcomed all participants, made mention of IITA’s immense contributions towards agricultural development and the organisations feat in winning the world food prize for 2018.

Goodwill messages were presented by invited dignitaries. Chief (Dr.) Olusegun Obasanjo GCFR gave a short remark and declared the conference opened. The keynote address titled ‘Post Harvest Technology in Africa; Yesterday, Today and Tomorrow’ was delivered on behalf of Emeritus Prof. J.C Igbeaka who was represented by Prof. A.O. Raji. He stated that global interest in Post-Harvest Loss (PHL) dates back to the first World Food Conference in 1974. After 10 years, the resolve of that conference brought about a 50% reduction in PHL. He also discussed about the situation of PHL in Sub-Saharan Africa (SSA), internal and external factors contributing to PHL of Grains in SSA, methods of PHL reduction/prevention in grains in SSA and possible solutions in terms of improved communication strategies, proper implementation of policies and broader user participation in
The LOC secretary, Dr. Mobolaji Omobowale gave the closing remarks by thanking the dignitaries and participants who honoured their invitation. He also appreciated the efforts of the Chairman, other members of the LOC and individuals who contributed towards the symposium. This session came to an end with a visitation to the exhibition stand and group photograph.

Parallel Technical Sessions/Poster Presentations
The first Parallel Technical session started at 2pm at 3 venues. The sessions were divided into 3 groups and 5 papers were presented at each. Each session was coordinated by a Panel chairman and 1 rapporteurs. A time frame of 15 minutes was allocated for each presentation reserve 10 minutes for interaction.

Poster presentation was coordinated by Prof Babatope Alabadan and a team assessors. 16 poster presentations were accepted at the conference and displayed at strategic places. Presentations were graded based on clarity of presentation/posters, clarity of expression, confidence, time management and responses to questions among other things.

Symposium Day Two (24th October, 2018)
Parallel Technical Sessions II
Parallel sessions II and III were held from morning till afternoon using the 3-group structure adopted the previous day. The evening period opened way for the last brainstorming and technical discussion session. The lead speakers were Prof Faborode and Prof Oliver Schulter. Prof Michael Faborode presented a paper on ‘Growing Agricultural Engineering in Nigeria’. Other panel discussants were Prof Babatunde Adewumi, Prof Tilahun Workneh and Prof Emmanuel Bobobee. This session lasted for an hour between 4pm and 5pm.

Closing Ceremony/Conference Dinner
The LOC Chairman, Prof Alonge made necessary announcements, while certificates of participation were issued. The dinner began by 7pm with an address by the LOC chairman. Awards were presented to certain participants in the following categories:


ii. 1st Runner Up: Akindele F. Alonge et al - Extraction of Vegetable Oils from Agricultural Materials: A Review

iii. 2nd Runner Up: Tobi Fadiji et al - The Role of Horticultural Package Vent Hole Design on Structural Performance

iv. Best Poster Presentation: Tobi Fadiji et al - ‘Deformation field of corrugated paperboard horticultural packages using digital image correlation’

Special awards were presented to individuals in recognition of their distinguished and meritorious service during the first CIGR Symposium held in Nigeria in September, 1988 In Ilorin, Nigeria.

i. Prof Emem U. Nwa - The LOC Chairman of CIGR Symposium

ii. Late Professor Gabriel Anazodo - The President of the Nigerian Society of Agricultural Engineers (NSAE) that Co-hosted the CIGR Symposium

iii. Late Engr. Mallam H.M Musa - The Director of National Centre for Agricultural Mechanization (NCAM) to the Success of CIGR Symposium

iv. Professor K.C. Oni – The LOC Secretary of CIGR Symposium

v. Prof C.J. Ejieji - The LOC Treasurer of CIGR Symposium

vi. Prof Obafemi Ajibola – Entertainment Chairman of CIGR Symposium

vii. Engr M. A. Ladeinde – LOC Member

viii. Late Engr J. A. Dairo – LOC member

ix. Late Engr Dr T. O. Abimbola – LOC Member

x. National Centre for Agricultural Mechanization (NCAM), Ilorin - Co-hosting CIGR Symposium and her significant contributions to the advancement of Agricultural Mechanization in Nigeria.

Special recognition was given to Emeritus Professor J.C Igbeka in Recognition of his significant contributions to the advancement of Post-Harvest Technology in Africa. Plaques were also presented to corporate bodies for their contributions to the success of CIGR section (VI) 2018 conference. They include
i. International institute of Tropical Agriculture (IITA) Ibadan Nigeria  
ii. National Centre for Agricultural Mechanization (NCAM) Ilorin, Nigeria  
iii. Nigerian Institution of Agricultural Engineers (NIAE)  
iv. University of Ibadan, Ibadan, Nigeria  
v. Landmark University, Omu-Aran, Kwara State  
vi. Bells University of Technology, Ota, Ogun State  
vii. University of Uyo, Uyo, Nigeria  
viii. Premium Feeds, Ibadan, Nigeria  
ix. National Agricultural Extension Research and Liaison Services, ABU, ZARIA  
x. Real People Concept, Ibadan, Nigeria  
xi. SMAP Farms, Ibadan, Nigeria

The award and dinner night came to a close around 8:30pm.

**Symposium Day Three (25th October, 2018)**

A technical tour to **Niji Lukas Farm and Processing Plant** at Ilero, Oyo State was held on the last day of the conference. The CEO of Niji Lukas farm (Mr. Kola Adeniji) warmly welcomed all participants to his integrated cassava processing plant. The management intimated participants with the mission and vision of Niji Lucas farm, they further explained that the farm is opened for investment and partnership. The company is IITA’s No.1 partner in the spread and multiplication of latest crop nutrition and yield innovations within Nigeria and Africa. The farm covers over 4000 hectares of land for cassava plantation and processing to various food products, packaged for local consumption and export. The tractor assembly plant at the farm was also visited by participants.

The operation of a cassava harvesting (uprooting) machine patented by Prof E. Bobobee (one of the conference participants from Ghana) was demonstrated at the farm. Cassava peeling machine, dewatering machine, flash drier, garri frying machine, starch homogenizer among others were also seen in operation. The cassava peels were also dried, chopped and packaged and packaged as feed supplements.

**Post-Symposium Activities**

A social tour was organized for interested participants to the Aflasafe Plant as well as the Cassava Processing Plant, both at IITA, and the Museum at Cocoa House, Ibadan. Eight people participated in the tour.
Free Download: The CIGR Handbooks of Agricultural and Biosystems Engineering

The CIGR handbooks are a comprehensive collection of agricultural engineering reference materials to their date of publication. They are the result of the collaboration of more than 190 authors from around the world with many more participating in the review. These are divided into six volumes with over 2,900 total pages. This handbook series is designed for engineers and others involved in agricultural and biosystems technologies.

The handbooks are available at no cost in the CIGR web page. It is strongly recommended that the CIGR Journal and other literature be consulted for developments beyond the Handbook’s date of publication.

The handbook is composed of six volumes (available in pdf format) and can be downloaded from the links below:

Vol. I: Land and Water Engineering
Vol. II: Animal Production and Aquacultural Engineering
Vol. III: Plant Production Engineering
Vol. IV: Agro Processing Engineering
Vol. V: Energy and Biomass Engineering
Vol. VI: Information Technology / Turkish

The material contained in this comprehensive six-volume handbook series provides basic reference material vetted by top professionals worldwide. In the development of this series it was recognized that professionals in both developing and developed countries need access to this type of information to sustainably meet the world demand for food, feedstock needs, and other biological materials; as well as a rational and sustainable use of natural resources.

The International Commission of Agricultural Engineering (CIGR) initiated the project with the goal of producing a comprehensive handbook. The American Society of Agricultural and Biological Engineers (CIGR member society) was asked to publish and distribute this collection of technical information in print. Since then, the handbooks were digitized, distributed in CDROM and are now available at no cost from the CIGR web page.
CIGR will provide proceedings and memoirs on-line storage in perpetuity for CIGR supported events

Organizers of CIGR sponsored events may choose to store proceedings and memoirs of CIGR sponsored events in a CIGR sponsored web space. This space will be provided in perpetuity. This action by the CIGR Presidium is to address the issue of scientific and technical materials that are lost due to lack of maintenance of web sites where the materials were originally stored. It is common for conference organizers to place the proceedings in the web page of the web site where after a few years it becomes inaccessible. Placing these materials in a location managed in perpetuity makes them available to CIGR stakeholders now and in the future. If you are interested in publishing a set of materials please submit a file with a one page description of the event suitable for publication in this newsletter and the conference proceedings or memoirs as a single pdf file. Please send these to secretarygeneral@cigr.org.

Upcoming CIGR Conferences
CIHEAM Bari is one of the three organisers of AGROSYM’s 10th edition jointly with the University of East Sarajevo - Faculty of Agriculture, and the University of Belgrade - Faculty of Agriculture, in collaboration with 32 International Institutions (Universities and Research Centres) from 19 countries.

AGROSYM is nowadays considered the most important scientific event in the field of agriculture and rural development in the Balkan area. It is also increasingly becoming a scientific platform for exchange of knowledge and good practices related to agriculture, food, rural development, environment and forestry in the Mediterranean area.

AGROSYM 2019 will cover the following thematic areas: (1) Plant production; (2) Plant protection and food safety; (3) Organic agriculture; (4) Environmental protection and natural resources management; (5) Animal husbandry; (6) Rural development and agro-economy; (7) and Forestry and agro-forestry.

Parallel to AGROSYM 2019 working sessions, some thematic side events will focus on Coastal areas management; Climate change mitigation; Aliens pests; Youth and innovation in the agri-food sector; Gender mainstreaming and research...etc.

The Symposium’s 10th edition will take place in the magnificent Termag Hotel, located in Jahorina mountain, near Sarajevo.

In 2018, during the four days of AGROSYM’s 9th edition (4-7 October 2018), we welcomed over 1200 participants from over 85 countries to the event. Moreover, 1300 papers were presented, and we were proud and honoured to achieve such a broad participation.

Please note: Registration deadline for abstract submission is May 10th, 2019 through this online address. Read here for detailed information about the Symposium.

The Scientific Committee of AGROSYM 2019 will grant the Excellent Paper Award for oral presentations and the Excellent Poster Award for poster presentations. Certificates and gifts will be delivered.

Please share this call with your network and colleagues who may be interested by forwarding this announcement.

Looking forward to meeting you in Jahorina (Bosnia and Herzegovina) in October 2019 we send our best regards.

The Organizers:

For any additional information, please feel free to contact:

Dr. Sinisa Berjan, Symposium Secretary General, agrosym2019@gmail.com
University of East Sarajevo-Faculty of Agriculture

and

Dr. Noureddin Driouech, Coordinator of CIHEAM Bari Alumni Network (FTN), infoftn@iamb.it CIHEAM-Mediterranean Agronomic Institute of Bari

- Download Symposium 1st announcement
- Visit our website: http://www.agrosym.rs.ba/
- Follow us on Facebook: https://www.facebook.com/AgrosymSymposium
MetroAgriFor intends to create an active and stimulating forum where academics, researchers and industry experts in the field of measurement and data processing techniques for Agriculture, Forestry and Food can meet and share new advances and research results. Attention is paid, but not limited to, new technologies for agriculture and forestry environment monitoring, food quality monitoring, metrology-assisted production in agriculture, forestry and food industries, sensors and associated signal conditioning for agriculture and forestry, calibration methods for electronic test and measurement for environmental and food applications.

**WORKSHOP TOPICS**
- Sensor networking and integration
- Approaches and tools for measuring Food Quality
- Soil analysis, mapping and monitoring
- Crop analysis, mapping and monitoring
- Precision agriculture, forestry and livestock farming
- Measurements for agriculture, forestry and environment
- Agroclimatic measurements

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Pasquale Daponte, University of Sannio, Italy
Matteo Lorito, University of Naples Federico II, Italy

**MORE INFORMATION**
- [www.metroagrifor.org](http://www.metroagrifor.org)
- [info@metroagrifor.org](mailto:info@metroagrifor.org)

Accepted papers will be published in the proceedings of the Workshop and the proceedings will be submitted for indexing in the IEEE Xplore Digital Library.

IEEE content is indexed by Google and has agreements in place with other publishers and services to include IEEE papers in their online and print indexes.

**SPECIAL SESSIONS**
Special sessions have the main aim of creating a mini-workshop on a specific topic, where researchers working on the same argument can make knowledge, familiarize, exchange ideas, create cooperation. Special Sessions are being developed by designated chairs. Please find more information at the following URL:
[www.metroagrifor.org/special-sessions](http://www.metroagrifor.org/special-sessions)

**IMPORTANT DATES**
- **Extended Abstract Submission**
  May 20, 2019
- **Notification of Acceptance**
  July 20, 2019
- **Final Paper Submission**
  September 1, 2019
The primary goal of this conference is to bring together the elite scientists from all over the world, and to provide a unique forum for exchange on agricultural and biosystems challenges and opportunities. For information please see http://www.cigr2020.ca/en/
The theme of this CIGR World Congress "Sustainable Agricultural Production - Water, Land, Energy and Food" will underpin the need for collaboration and cooperation of individuals from a wide range of professional backgrounds. This congress will provide an excellent international platform for academicians, researchers, engineers, industrial participants, and students from around the world to share their research findings with global experts in all areas related to agricultural engineering. For information please see http://CIGR2022.org.