IEEE Multi-conference on Natural and Engineering Sciences for Sahel's Sustainable Development (MNE3SD)

Special tribute to Prof. François ZOUGMORE

28th – 30th November 2024, Ouagadougou, Burkina Faso

General Chair
Pr Cheikh Ahmadou Bamba GUEYE
University of Cheikh Anta Diop, Senegal

Conference Co-chairs
Dr Bernard ZOUMA
University of Joseph KI-ZERBO, Burkina Faso
Dr Marcel Bawindsom KEBRE
University of Joseph KI-ZERBO, Burkina Faso

Honorary Co-chairs
Pr Brayima DAKYO
University of Le Havre Normandie, France
Pr Michel MISSON
University of Clermont Auvergne, France
Pr Oumarou SIE,
Université Aube Nouvelle, Burkina Faso,
Pr François ZOUGMORE
Burkina Institute of Technology, Burkina Faso
Dr Toundé Mesmin DANDJINOU
University of Nazi BONI, Burkina Faso
Dr Lassina ZERBO
Executive Secretary Emeritus of the CTBTO

Technical Program Co-chairs
Pr Tiguiane YELEMOU
University of Nazi BONI, Burkina Faso
Dr Pasteur PODA
University of Nazi BONI, Burkina Faso
Dr Ferdinand GUINKO
University of Joseph KI-ZERBO, Burkina Faso
Pr Frédéric OUATTARA
University of Norbert Zongo, Burkina Faso
Pr Pascal ANDRE
University of Clermont Auvergne, France
Dr Abdoul Karim KAGONE
University of Joseph KI-ZERBO, Burkina Faso
Pr Raguilignaba SAM
University of Nazi BONI, Burkina Faso
Pr Agnidé Emmanuel LAWIN
Université d'Abomey-Calavi, Benin
Pr Remko UIJLENHOET
Delft University of Technology, The Netherlands

Patronage & Sponsors Co-chairs
Dr Pengwendé ZONGO
University of Norbert Zongo, Burkina Faso
Dr Ali DOUMOUNIA
École Normale Supérieure, Burkina Faso

Local Organizing Committee Chair
Pr Zacharie KOALAGA
University of Joseph KI-ZERBO, Burkina Faso

Registration Committee Chair
Dr Afoussatou SANOU
Virtual University of Burkina Faso*, Burkina Faso*

Publication Committee Chair
Dr Hamadoun TALL
University of Nazi BONI, Burkina Faso

Web Committee Chair
Dr Abdoul Azize KINDO
University *of Nazi BONI, Burkina Faso*

Publicity Committee Co-Chairs
Pr Sadouanouan MALO
University of Nazi BONI, Burkina Faso
Dr Azise Oumar DIALLO
Université Lumière Lyon 2 (France), co-chair

Best Paper Committee Chair
Pr Issa ZERBO
University of Joseph KI-ZERBO, Burkina Faso

PhD Students Competition Committee Chair
Dr Dimitri OUATTARA,
University of Joseph KI-ZERBO, Burkina Faso

Sub-Saharan countries are facing scarcity of water and vegetation resources. Temperatures are very high and drought is gaining ground every year destroying the efforts of these countries to achieve food self-sufficiency. In addition to these natural constraints, few years ago, the insecurity due to terrorism limited the production and investment actions. In this context, reflection efforts are conducted to find innovative technologies or to adapt emerging technologies to this challenging context.

MNE3SD aims to be a framework where researchers and experts will meet to discuss development issues in this region. We want big data, IoT and AI technologies combined with green energy and applied physics to be investigated to find original solutions able to mitigate the scarcity of the resources in this region of the world.

The MNE3SD conference is an international meeting for the exchange of experiences and knowledges among researchers and developers concerned with technologies for Sahel's sustainable development. For this fourth Edition, the International MNE3SD conference will provide opportunities for researchers to interact, share new results and discuss emerging directions in Big data and IoT for sustainable development and also energy and applied physic for sustainable development.

Through this edition, we pay tribute to **Prof. François ZOUGMORE**, full professor in Electronics-Instrumentation & Measurements, Public Research Trophy "Energy-Environment-Climate" Laureate 2015, admitted to retirement for his immense contribution to the development of research in Physics in Burkina Faso and IEEE Burkina Faso sub-section.

MNE3SD 2024 will take place in Ouagadougou, Burkina Faso, November 28th -30th 2024.

MNE3SD 2024 is soliciting high quality technical papers addressing research challenges in the areas of big data, and IoT on societal and environmental application, Energy and Applied physic. Papers should present original work validated via analysis, simulation or experimentation. Practical experiences and Testbed trials also are welcome.
MNE3SD 2024 will host two parallel tracks and a special track, including but not limited to the following topics:

Track 1: Big data and IoT for Sustainable and Societal Development
- Big data managements techniques
- Privacy issues related to IoT and big data
- Network protocols for IoT
- Innovations in the edge/fog/cloud architectures
- Green communications in IoT
- Smart cities technologies, infrastructures and services
- Green networking
- Data mining
- Machine learning, deep learning, reinforcement learning

Track 2: Energy and Applied Physics for Sustainable Development
- Alternative Sustainable Energy
- Energies vectors and technologies for Smart cities
- Energy harvesting and storage technologies
- Biomass and biofuel power sources
- Integration of renewable energy sources to Smart Grids
- Applied Physics

Special Track tribute to Prof. François ZOUGMORE: Measurement and Instrumentation - Water and Climate change
- Commercial Microwave Links (CML) applications
- Measurement, Sensor technology and Signal processing for data collection
- Emerging Environmental Technologies & Environmental monitoring
- Water and Climate change

IMPORTANT DATES
Submission Deadline: **July 31, 2024**
Notification of Acceptance: **September 30, 2024**
Camera ready Date: **October 15, 2024**
Registration date: **October 15, 2024**
Conference start: **November 28, 2024**
Conference end: **November 30, 2024**

INSTRUCTIONS FOR PAPER SUBMISSION

Authors are required to submit fully formatted, original papers (PDF), with graphs, images, and other special areas arranged as intended for the final publication.

Papers should be written in English conforming to the IEEE standard conference format (*two-column, 10 pt font, etc., including figures, tables, and references*).

The review submissions are limited to six pages, with two additional pages for final papers (*additional charges may apply for additional pages*).

Conference content will be submitted for inclusion into IEEE Xplore as well as other Abstracting and Indexing (A&I) databases.

Each accepted paper must be presented at the conference by one of the co-authors or a third party, otherwise it will not be indexed and archived through IEEE Xplore.

Only timely submissions through EDAS will be accepted.

For more details, please visit the MNE3SD'2024 official website: https://ieee-bf.org/call-for-papers-mne3sd-24/

For the special track, authors can in addition submit abstracts for oral communications or posters to contact given bellow.

ACCEPTED PAPERS
All accepted papers will be published in the conference proceedings and presented for inclusion in IEEE Xplore Digital Library.

CONTACTS
info@ieee-bf.org
marcel.kebre@ujkz.bf
pengwende.zongo@unz.bf
afoussatous0@uv.bf
azize.kindo@u-naziboni.bf