**Aims of the Workshop**

The 2023 IEEE workshop on Climate Change will be held in Oran, Algeria on November 27 and 28, 2023.

This will be the second workshop on this theme, after the first edition in Singapore in November 2022. That workshop led to a [white](https://ieee-cas.org/files/ieeecass/2023-03/White-paper_IEEE%2Bclimate_formatted_short.pdf) [paper](https://ieee-cas.org/files/ieeecass/2023-03/White-paper_IEEE%2Bclimate_formatted_long.pdf) “Climate action by & within IEEE”.

The 2023 edition hopes to continue the discussion on current and future issues raised by climate change. The workshop will bring together about 40 participants from across the globe (30 international participants and 10 local researchers), and be structured into four half-day thematic sessions, dedicated to the interplay between climate change on one hand, and, on the other, population migration, health, food security and poverty.

The workshop aims first and foremost to sensitise members of the IEEE research community on the current understanding of the societal implications of climate change. The thematic deep-dives will help the participants in thinking about how their own work – and the work of research and innovation actors – can be better attuned to respond to this most pressing issue of our times. Participants would leave the workshop better informed about climate change impacts and inspired on how their own work can contribute to reduce both climate change and its impacts.

**Chairs’ Message**

The progress towards the human and national development goals suffered significant setbacks due to the social and economic repercussions of the CODIV-19 pandemic. These setbacks came amidst a climate crisis that has been festering for decades. We must therefore continue to consider how to build forward better from these crises. The research community at large, and the IEEE in particular, can and should contribute to the response to the climate crisis as well as the economic and health recovery needed to manage, and recover from the COVID-19 pandemic.

Electronics-based and information technologies can contribute to reducing the causes and impact of climate change. Today, the availability of technologies ranging from social media to nanoelectronics, from IoT to artificial intelligence, can help better understand climate change and can help societies adapt to climate change that has already occurred and mitigate the change in the future. Research must therefore focus on both adaptation and mitigation.

The “Electronics to Mitigate the Climate Change, EmC2” workshop will focus the contribution of these technologies to both exacerbating climate change, and to addressing climate change. We will consider four themes – areas in which the impacts of climate change are heavily felt – human health, migration, food security and poverty. This deliberations, recommendations and actions of this brainstorming workshop will lead a white paper to be shared widely.

The format of the workshop this year is based on four half days dedicated to the four themes. Each thematic half-day will start with a framework keynote to explain the specific theme; this will be followed by 3 mini-keynotes on action being taken on the theme. This will be followed by a discussion between the panelists (the keynote speakers) and the audience.

We would like to express our gratitude to University of Science and Technology of Oran (USTO) for his support, to our sister Societies SSC, EDS and SSIT and to Sensors and Nano Councils.

**The Programme**

The workshop will be held in Algeria Standard Time.

[Time converter](https://www.timeanddate.com/worldclock/meeting.html)

The workshop will open with short remarks from the two Chairs; this will be followed by the presentation of a summary of the white paper from the previous edition.

Each thematic half-day will consist of the following segments – a main keynote (45 – 55 minutes) to provide the main trends and challenges in each theme; three small keynotes of 15 minutes each, to present good practices and relevant experiences; panel discussion (75 minutes); conclusions (15 minutes). All participants will attend all the thematic sessions.

The workshop will end with a 60-minute concluding session, in which a synthesis of each session will be presented, and the audience will discuss the next steps.

Each half-day will be organised by a ‘champion’ –

* Food security: Victor Grimblatt, R&D Group Director, Synopsys Chile Innovation Center, Chile;
* Health: Balwant Godara, Political advisor – country engagement, Sanitation and Water for All international partnership;
* Migration: Olivier Feneyrol, Head of Migration programme, Terre des hommes, Switzerland;
* Poverty: Fidel Makatia, Developer Advocate, Autodesk, Nairobi, Kenya.

The champions have expertise and experience in their respective themes; together, they represent a range of stakeholder groups (corporate, international development organisation and non-governmental organisation) and geographical zones (Africa, Europe, Latin America).

The champion’s main tasks are:

1. Define the scope of the half-day
2. Identify and reach out to potential keynote speakers
3. Manage the organisation of the session
4. Panel – ask guiding questions and moderate discussion between audience and panelists
5. Deliver a mini-keynote, if relevant
6. Deliver the closing remarks for the session
7. Support the participant(s) in preparing and delivering a synthesis of their session during the closing of the workshop
8. Produce a summary report of the session
9. Help draft the final report of the workshop.

As in the previous edition, the deliberations and conclusions of the workshop will be published in the form of a white paper. It is hoped that in the future, the workshop will evolve into a full-fledged conference, with published papers in Open Access Journal.

Program at a glance: TBD

**The Health theme**

This proposal is for a half-day workshop on the theme of health in the light of climate change.

Structure of the session:

* This session will run on the first day of the workshop, from 2pm to 6pm, with a 30-minute break between the ‘keynotes’ and ‘panel’ sections.
* The session will open with the welcome and then the main keynote (around 50 minutes).
* This will lead to the three mini-keynotes on the practical experiences on the climate – health link, with a focus on the current and future uses of information and communications technologies in understanding and reducing the influence of climate change on human health. Each keynote will last about 15 minutes
* This will be followed by a 30-minute break
* When the participants come back from the break, they will have a detailed discussion with the panel (the four keynote speakers).
* The session will end with the conclusions presented by the champion.

Speakers to invite for the main keynote:

* Saleemul Huq
  + Director, International Centre for Climate Change and Development (ICCCAD), Bangladesh
  + Associate, International Institute on Environment and Development (IIED), UK;
  + Chair, Expert Advisory Group for the Climate Vulnerable Forum (CVF).
  + Lead author of 3rd, 4th and assessment reports of IPCC; Advises the LDC group in the UNFCCC.
  + Some relevant publications - [University-based researchers as knowledge brokers for climate policies and action](https://scholar.google.co.uk/citations?view_op=view_citation&hl=en&user=xlEibT0AAAAJ&sortby=pubdate&citation_for_view=xlEibT0AAAAJ:BOlwja0KXvYC); [Closing (Policy): Building international partnerships to support and achieve adaptation and resilience](https://scholar.google.co.uk/citations?view_op=view_citation&hl=en&user=xlEibT0AAAAJ&sortby=pubdate&citation_for_view=xlEibT0AAAAJ:s9ia6_kGH2AC); …
  + Has done much fieldwork in South Asia.
  + One of [Reuter’s](https://www.reuters.com/investigates/special-report/climate-change-scientists-list/) Hot 1000 Climate Scientists list.
* Benjamin Sultan
  + Director of Research, Institut de Recherche pour le Développement, IRD, France.
  + Co-director of EspaceDev; moderator of communauté de savoir CoSav “Climate”
  + [www.linkedin.com/in/benjamin-sultan-82b6001aa/?originalSubdomain=fr](http://www.linkedin.com/in/benjamin-sultan-82b6001aa/?originalSubdomain=fr)

Speakers for mini-keynotes:

* ETH Zurich – health and climate
* Balwant Godara – water and climate
* 1 keynote from Oran, Algeria
* Pan African University Institute of Water and Energy Sciences (PAUWES), Algeria esp. Malik Bendimerad ([rm.merad@gmail.com](mailto:rm.merad@gmail.com), +213 (0) 561 87 79 42)
* Reach out to members of Asia eHealth Information Network (AeHIN).
* Reach out to members of CoSav at IRD, France
* Project [ENBEL](https://www.enbel-project.eu/about) - Enhancing Belmont Research Action to support EU policy making on climate change and health. This project has received funding from the European Union’s Horizon 2020 research and innovation programme. Project will end in October 2023.
* Chukwumerije Okereke, Centre for Climate Change and Development, Alex Ekwueme Federal University, Abakaliki, Nigeria. Co-authored “Impacts of meeting minimum access on critical earth systems amidst the Great Inequality”