The 2024 IEEE International Humanitarian Technologies Conference (IEEE IHTC) is an interdisciplinary conference series organized by IEEE Region 8 (Africa, Europe, and the Middle East), IEEE Region 7 (Canada), and IEEE Region 9 (Latin America and the Caribbean). Stakeholders from the public, private, education and research, and societal sectors around the world are invited to submit their contributions focused on showcasing challenges, success stories, lessons learned, case studies, and technological innovation related to achieving the United Nations’ Sustainable Development Goals (SDGs), ICT4D, and the application of Humanitarian Technologies (including Disaster Relief and Disaster Recovery).

We invite authors to submit high-quality full papers reporting original and novel research results on all the above topics. Papers should be written in English, unpublished, and not submitted elsewhere. Full papers must be formatted as the standard IEEE double-column template (word, latex). A maximum of 7 pages are allowed for each paper, including all illustrations and references. All submissions will undergo a Plagiarism and AI Utilization Check before being assigned for blind peer review by members of the Technical Program Committee (TPC).

Accepted papers will be published in the IEEE IHTC 2024 Conference Proceedings. Full papers presented and discussed orally will be submitted for inclusion in the IEEE Xplore Digital Library. After the conference, the Program committee can select the best papers for further review to be published in the IAS periodicals. The limit is 20% of the presented papers.

**PAPER SUBMISSION**

**COMMITTEE MEMBERS**

**Honorary Chair:**
Vincentzio Piuri, Region 8 Director 2023-2024

**Conference General Chair:**
Massimo La Scala, Politecnico di Bari, Italy

**Technical Program Chairs:**
Nikos Hatzijiriou, National Technical University of Athens, Greece
João Peças Lopes, FEUP, Universidade do Porto, Portugal

**Steering Committee:**
Usman Munawar, R7 Conference Committee Chair
Tiziana Tombosso, R8 Conference Committee Chair
Fabrício Braga Soares de Carvalho, R9 Conference Committee Chair
Magdalena Salazar Palma, IEEE Humanitarian Technologies Board (HTB)

**Advisory Committee:**
Massimo La Scala, IHTC 2024 General Chair
Theodoros Panagiotis Chatzinikolaou, R8 HuAC Chair
Augusto Herrera, R9 HuAC Chair
Saída Maaroufi, R7 HuAC Chair
Carlos Lozano Garzon, IHTC 2023 General Chair
Petri Musilek, IHTC 2025 General Chair
Gianfranco Chicco, IEEE Italy Section Chair

**Conference Treasurer:**
Pisana Placidi, IEEE Italy Section Treasurer

**Publication Chair:**
Sergio Bruno, Vice-Chair IEEE Italy PES Chapter

**Student, YP, WIE Special Events:**
Abdullateef Alyu, IEEE R8 Student Activities Committee Chair
Stefano Selleri, IEEE Italy Section Student Activity and Educational Committee Coordinator
Ines Ignacio, IEEE R8 Young Professional Committee Chair
Santi Concetto Pavone, IEEE Italy Section YP Affinity Group Chair
Wafa Ben-Hmida, IEEE R8 WIE Committee Chair
Patrizia Lamberti, IEEE Italy Section WIE Affinity Group Chair

**Climate Change Event:**
Paul Cunningham, R8 Climate Change Committee Chair

**Humanitarian Events Chairs:**
Theodoros Panagiotis Chatzinikolaou, R8 HuAC Chair
Paolo Maresca, IEEE Italy Section Humanitarian Activity Coordinator

**Social media manager:**
Roberto Cometa, Politecnico di Bari

**Webmaster:**
Gianluca Mazzilli, Athena Srl
**THEMATIC AREAS**

**CLEAN AND AFFORDABLE ENERGY**
- Reliable and efficient power systems in emerging markets and developing economies:
  Strategies for the economical and safe operation of transmission and power distribution systems, models for coordination between system operators, business models for access to energy, optimization and planning.
- Renewable energies application for sustainable development (design, operations, planning, economics, efficiency improvement):
  Multi-carrier energy systems, decentralized RES use, EVs, RES integration in insular and rural power systems, advantageous strategies for hydrogen management.
- Energy links: means for sustainability, cooperation and development:
  Energy interconnectors, Regional Policies, Energy hubs, new projects, lesson learnt.

**CRITICAL EVENTS AND ADVERSE LIVING CONDITIONS**
- Supply Chain and logistics innovative solutions in support of emergency scenarios:
  New methodologies to optimize the Supply Chain in the humanitarian context, best practices, and experiences.
- Technologies for effective management of refugees, their reintegration into society and for ensuring sustainable settlements:
  Solutions to empower displaced people with technology, applications for immigrant integration into society, sustainable housing for asylum seekers, logistical management of refugees, castaways research and recovery systems.
- Technologies to assist in disaster mitigation, management, relief, and recovery:
  Innovative protection systems and devices, earthquake and other natural disasters monitoring systems, solutions for urban and suburban security and safety, ideas for preserving the integrity of the territory, derisking investment.

**LIFE QUALITY IMPROVEMENT**
- Information and Communication Technologies for Development: ICT4D solutions to foster economic development by ensuring equitable access to up-to-date communication technologies and bridging the digital divide between more and less industrialized nations.
- Solutions to make cities and human settlements inclusive, safe, resilient, and sustainable:
  Smart cities and smart buildings, systems for the care and the protection of citizens, efficient methods to restore and consolidate transport routes to the most isolated and vulnerable communities, innovations in infrastructures. Technologies for cultural heritage preservation and use.
- Technologies for poverty alleviation, ensuring healthy lives, ending hunger, achieving food security, and promoting a sustainable agriculture:
  Solutions for food safety and quality control, human disease monitoring systems, crop and livestock health monitoring systems, dual-use solar and other resources for agricultural efficiency.
- Technologies to combat climate change and its impacts:
  Climate-proofing systems, weather monitoring systems, monitoring Earth’s ecosystems, oceans and ice caps, characterization of potential risks for the environment, sustainable solutions for wastes treatment and strategies for pollution reduction.
- Technologies to ensure availability and sustainable management of water and sanitation for all:
  Water quality measurement systems, smart water management systems for reducing water losses, hydraulic infrastructures sustainability (environment, economic and social), equipment for water supply, distribution, and purification. Water Energy Food nexus.
- Technologies to ensure inclusive and equitable quality education and promoting lifelong learning opportunities for all:
  Initiatives to promote access to information and education, smart solutions for school and University, young people, women, gender and minorities empowerment, training, and capacity building on vocational and executive levels.

**TECHNICAL CO-SPONSORS:**

**IEEE Societies:**
- IEEE Education Society
- IEEE Geoscience and Remote Sensing Society
- IEEE Humanitarian Technologies Board
- IEEE Industry Applications Society
- IEEE Oceanic Engineering Society
- IEEE Power & Energy Society

**IEEE Chapters:**
- IEEE Central South Italy Section Industry Applications/Power Electronics (IA/PEL) Chapter
- IEEE Italy Section Communications (COM) Chapter
- IEEE Italy Section Education (E) Chapter
- IEEE Italy Section Engineering in Medicine and Biology (EMB) Chapter
- IEEE Italy Section Geoscience and Remote Sensing (GRSS) Chapter
- IEEE Italy Section Industry Applications (IA) Chapter
- IEEE Italy Section Magnetics (MAG) Chapter
- IEEE Italy Section Oceanic Engineering (OE) Chapter
- IEEE Italy Section Power & Energy (PE) Chapter
- IEEE Italy Section Robotics and Automation (PAS) Chapter

**IEEE Affinity Groups:**
- IEEE Italy Section Women in Engineering (WIE) Affinity Group
- IEEE Italy Section Young Professionals (YP) Affinity Group

**PATRONS:**
- AIEI (Associazione Italiana di Elettrotecnica, Elettronica, Automazione, Informatica e Telecomunicazioni)
- CIIGRE Study Committee C1 Power System Development & Economics
- Ensiel (Energia e Sistemi Elettrici – Italian Inter-University Consortium for Energy and Electrical Systems)
- GUSEE (Gruppo Universitario per i Sistemi Elettrici e per Energia)
- RES4AFRICA Foundation
- RSE S.p.A.

**CONTACTS:**
- **Internal Organizing Committee – General Requests**
  ihtc2024@ieeesizioneitalia.it
- **Authors and Registration Information**
  ihtc2024-authors@ieeesizioneitalia.it
- **Facebook**
  IEEE International Humanitarian Technologies Conference
- **Instagram**
  ieee_ihtc
- **LinkedIn**
  IEEE International Humanitarian Technologies Conference
- **Twitter**
  ieeeihtc