



May 16-18

Trinity College Dublin, Ireland

Dublin 2022

International Workshop on Antenna Technology (iWAT)

DUBLIN 2022
iWAT

The International Workshop on Antenna Technology (iWAT) is an annual forum for the exchange of information on the progress of research and development in innovative antenna technology. It especially focuses on small antennas and applications of advanced and artificial materials to antenna design. At iWAT, all the oral presentations are delivered by invited speakers

and there is a particular focus on interactive poster sessions where authors have the opportunity to discuss their work with leading researchers in the antenna community.

iWAT2022 will be an in-person event and is a continuation of a series of annual international antenna workshops held in Singapore (2005), White Plains,

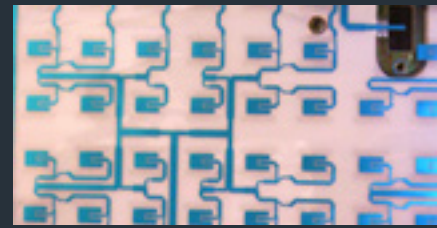
USA (2006), Cambridge, UK (2007), Chiba, Japan (2008), Santa Monica, USA (2009), Lisbon, Portugal (2010), Hong Kong, PRC (2011), Tucson, USA (2012), Karlsruhe, Germany (2013), Sydney, Australia (2014), Seoul, Republic of Korea (2015), Cocoa Beach, Florida, USA (2016), Athens, Greece (2017), Nanjing, China (2018), Miami, USA (2019) and Bucharest, Romania (2020).

Topics include, but will not be limited to:



SMALL ANTENNAS

- Adaptive (smart) arrays
- Antenna measurements
- Antennas on/in IC packages
- Body-centric antennas
- Broadband antennas
- Conformal antennas
- SAR measurements of handheld devices
- Millimeter-wave through Terahertz antennas
- Modeling and simulation
- Non-Foster/active elements
- Reconfigurable antennas
- Reflectarrays
- Ultra-wideband (UWB) antennas
- Wearable antennas



INNOVATIVE STRUCTURES AND NOVEL MATERIALS

- Analysis and design of EM materials
- Artificial magnetic conductors (AMC)
- Electromagnetic anisotropy
- Electromagnetic bandgap (EBG) structures
- Fractal structures
- Frequency selective surfaces (FSS)
- Single and double negative metamaterials
- Electromagnetic skins: epidermal, flexible and stretchable antennas, sensing substrates
- Metasurfaces
- Magnetic nanoparticles, graphene carbon-nanotubes in antennas
- MEMS/nano technology for antennas
- 3D printed antennas and structures



APPLICATIONS

- Antennas for 5G/6G communication terminals
- Antennas for IoT
- Automotive systems
- Biomedical and healthcare applications
- Bluetooth/WLAN (PDAs, laptops)
- Energy harvesting
- Hyperthermia and RF ablation
- GNSS systems
- Intelligent reflective surfaces
- RFID antennas
- Medical diagnostic and therapeutic applications
- Millimeter-wave/terahertz communications and imaging
- MIMO systems
- Physically secured wireless systems
- Sensing systems
- Software-defined / cognitive radio
- Satellite communications
- UWB communications
- WBAN systems
- Wireless communication systems (handheld devices, base stations)
- Wireless power transmission and harvesting for implanted systems
- 5G communication systems
- Simultaneous transmit and receive systems



Call for papers

IMPORTANT DATES

DEADLINE OF PAPER SUBMISSION: January 10, 2022

NOTIFICATION OF ACCEPTANCE: March 7, 2022

PAPER SUBMISSION GUIDELINES:

Authors MUST submit camera ready papers that are 2 to 4 pages including figures and references by January 10, 2022 via EDAS at <https://iwat2022.edas.info/N29078>.

Papers will be published on IEEEXplore and must be formatted in two-column IEEE conference A4 paper format including figures and electronic submissions must meet all IEEEXplore specifications. Further details on templates and more information on creating acceptable electronic files are available on the workshop website at <http://iwat2022.org/>.

Contact:

Aine Murphy, Tyndall National Institute, Ireland
contact@iwat2022.org

Chairs

GENERAL CO-CHAIRS

Max Ammann
TU Dublin, Ireland

William Scanlon
Tyndall National Institute, Ireland

GENERAL VICE-CHAIR

John Buckley
Tyndall National Institute, Ireland

INTERNATIONAL ADVISORY COMMITTEE CHAIRS

Zhi Ning Chen
National University of Singapore

Raj Mittra
University of Central Florida, USA

TECHNICAL PROGRAM COMMITTEE CHAIRS

Steven R. Best
The MITRE Corporation, USA

Vince Fusco
Queen's University, Belfast, UK

LOCAL ARRANGEMENTS CHAIR

Patrick McEvoy
TU Dublin, Ireland

EXHIBITION CHAIR

Gareth Conway
Queen's University, Belfast, UK