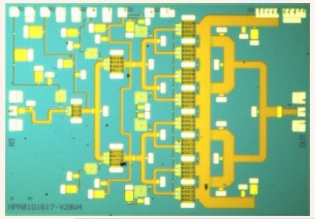
Defence, Security & Space and FORUM, PARIS 2024

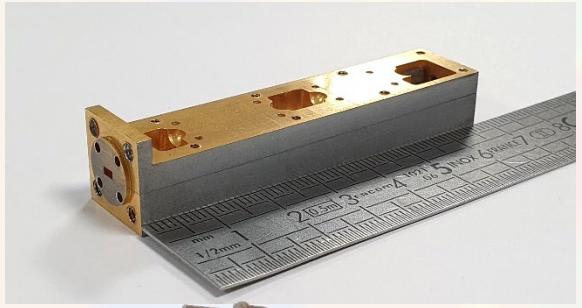
EuMW 2024

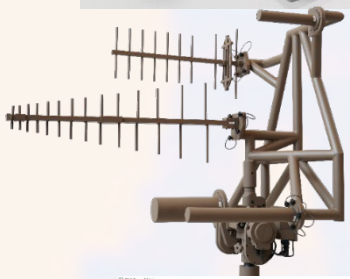
Systems development

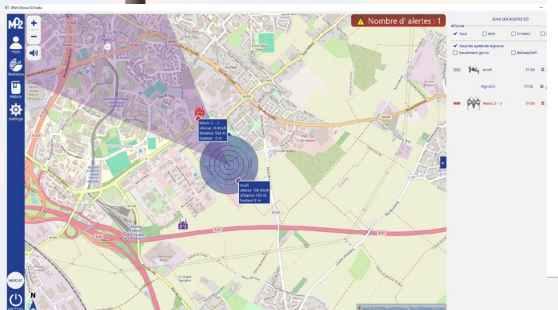
MC2 technologies

SPEAKER : **Christophe GAQUIERE**









C-IED, EW

SPART

C-UAV

NEROD RF

FLYJAM

NEROD HG

BLAST

MAJES 6B

C-UAV, EW

MAJES DFB6

NEPTUNE

DNA DRONE

C-UAV, EW

MATIA

HADDES

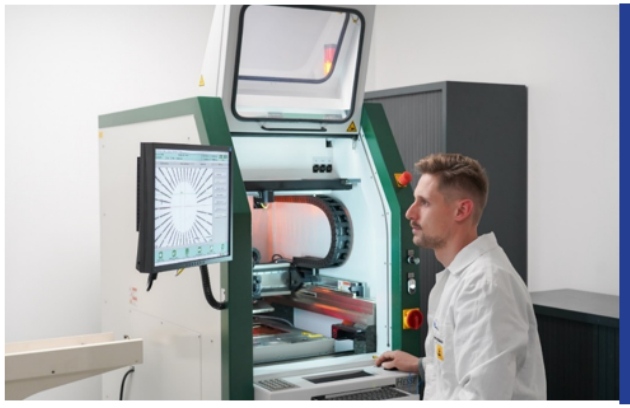
MERCAT

NEUTRALISATION

PORTABLE | BOARDED | STATIONARY

DETECTION | IDENTIFICATION | LOCATION

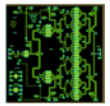
TERAHERTZ RADAR | RF SENSOR



CUSTOMIZED PRODUCTS & SERVICES

Microwave amplifiers

Prototyping (radar, hyper modules, etc.)



MMIC design & antennas

Characterization & Testing

MM-IMAGER

HIDDEN OBJECTS DETECTION

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Systems development

MC2 technologies SPEAKER : **Christophe GAQUIERE**

Biography: Pr C. GAQUIERE is the General Manager and co-founder of MC2 Technologies created in 2004 (95 persons). Prior to that, Mr. Gaquiere was full professor at the University of Lille, and carries out his research activity at the Institut d'Electronique de Microélectronique et de Nanotechnology (IEMN). The topics concerned design, fabrication, characterization and modeling of HEMT's and HBT devices from 1 to 500GHz. He worked on GaAs, InP, metamorphic HEMT's and GaN activities. He was responsible for the microwave characterization part of the common laboratory between Thales TRT and IEMN focus on wide band gap semiconductor (GaN, SiC, and Diamond) from 2003 up to 2007. He had in charge the Silicon millimeter wave advanced technologies part of the common lab between ST microelectronics and IEMN from 2007 up to 2018. Christophe Gaquière is the author or co-author of more than 150 publications and 300 communications.

Talk title/Descriptions:

Electronic Warfare: from MMIC to products

Abstract: The development of the drone offering has led to the emergence and intensification of the threat due to their widespread use and ease of access. Recent or ongoing conflicts (Ukraine, Syria/Iraq, Gaza, Azerbaijan/Armenia, Red Sea...) demonstrate the diversity of drone threats and possible environments (high-intensity conflict, land or maritime terrorism...).

In this context, the company MC2-Technologies is developing innovative products that enable the detection, identification through artificial intelligence, and neutralization of all types of electromagnetic communications using the latest BiCMOS and GaN technologies combined with advanced packaging technologies.

During this presentation Mr Gaquiere will present few realizations based on THz radar, a compact microwave radio goniometry product and smart jamming systems.