





## CALL FOR PAPERS

Papers are invited on the areas outlined in the following conference topics. The paper selection will be made on the basis of an abstract describing the topic and interest of the presentation. Each abstract will be reviewed by members of the Symposium Programme Committee. After selection of the abstracts, contributors are requested to submit the full paper to the Conference Secretariat.

All accepted and presented communications will be published in the online proceedings and available only for the participants. PhD's papers are most welcome.

## TOPICS AND KEYWORDS

**\_1 Imaging & Systems:** IR Imaging, SWIR imagers, goggles, binoculars, I2, low light level imaging, airborne piloting and targeting, spectroscopic imagers, intelligent munitions, thermal weapon sights, multi modal(RF/Optro) sensors, multispectral, image fusion, soldier systems, displays, inertial sensors...

**\_2 Sensors & Components:** visible detectors, EMCCD, IR uncooled and cooled, superlattice detectors, multi band detectors, 3D FPA, photon counting, optical design, optical engineering, optomechanics, optical materials, windows, domes, finishing methods, optical testing, optical filters, protective coatings, laser damage resistance, cooling systems, adaptive optics, deformable mirrors...

**\_3 Laser Sensors & Systems:** medium and high energy laser, laser weapons, active (2D/3D) imaging, fiber laser, QCL, laser range finder, laser designator, laser polarimetry and vibrometry, laser spectroscopy, lidar, laser radar, air vehicles self protection, laser tracking systems, turbulence corrections...

**\_4 Signal, Image Processing and Artificial Intelligence for optronics:** multispectral / hyperspectral algorithms, anomaly detection, atmospheric correction, feature extraction, target recognition, performance measurement, tracking, matching and filtering, sensor / data fusion, centralized distributed architecture, adaptive / knowledge based fusion, artificial intelligence for optronics, man-machine teaming, computational vision, aid decision making...

**\_5 Simulation and Augmented Reality:** physical model, analytical model, performance analysis, evaluation means, model validation, simulation, scenario, scene and target generation, virtual reality for training, augmented reality for situation awareness...

**\_6 Photonics R&T and Emerging Technologies:** micro-nanotechnologies, nanophotonic material, plasmonics, carbon nanotubes, metamaterials, photonic crystals, terahertz, on chip processing, compressive sensing...

**\_7 Airborne Applications:** Airborne lasers and optical measurement (active/passive), sensors (incl. fiber optical sensors), optical navigation, sense & avoid, self-protection, optical communication, for mission or flight critical systems in civil and/or military aircraft, UAV payload...

**\_8 Air, Land & Sea Defense Applications:** Reconnaissance, ISR, navigation systems,IRST, naval E.O directors, optronic mast, periscope, avoidance systems, gyro stabilized airborne sights, armored vehicles fire control systems, anti aircraft and antitank systems...

**\_9 Homeland Security Applications:** border surveillance, detection-recognition-tracking and protection against small UAV's and unmanned vehicles, forensics, illicit substance detection, CBRN detection (chemical, biological, radiological, nuclear) (point, standoff), mines detection, explosive compound detection, IED detection, multi sensors sensing, sensors fusion, system integration, detection of underground tunnels / bunkers, UWB radars...

**\_10 Space Applications:** space optical systems, space telescope, space imagers, space cryogenics, Earth observation, mission description, remote sensing, space spectrometers, space lidars and lasers, metrology...

**\_11 Defence Technology Research with EDA (Special Topic):** research activities/initiatives/ projects/programs in OPTRONICS developed in the Defence EU framework with the support and management of EDA...

## ABSTRACT SUBMISSION

The main purpose of the abstract is to give the Programme Committee information to assist them in selecting the papers to be presented at the Symposium.

- The selected papers will be presented in a 20 minutes speech at the Symposium (included 5 minutes for Q&A).
- An abstract will be selected based on the importance and originality of the subject addressed, on its relevance to the conference theme, on the clarity of its expression.
- The abstract should be a "stand alone" summary that can be used in the compilation of abstracts.
- The abstract should be in English and no longer than 500 words.

- The abstract should summarize the main objectives of the paper to be presented and outline its conclusions.
- Work that has been presented elsewhere, and not updated, will be considered inappropriate.
- Notification by the Programme Committees will be accompanied by detailed instructions allowing authors to prepare and make the online submission of their full paper.
- Failure to comply with the deadlines and instructions required will entail not having the manuscript selected and included in the conference proceedings.
- All abstracts should be submitted on [www.optro2020.com](http://www.optro2020.com) (from June 2019 to October 2019).

## OPTRO2020 AT A GLANCE

TUESDAY 28 JANUARY 2020		WEDNESDAY 29 JANUARY 2020		THURSDAY 30 JANUARY 2020	
M O R N I N G	REGISTRATION	M O R N I N G	PARALLEL SESSIONS	M O R N I N G	PARALLEL SESSIONS
	WELCOME ADDRESSES				
	INTRODUCTION TO THE SYMPOSIUM				
	HONORARY PRESIDENT ADDRESS				
	INTRODUCTION TO OPTRO 2020				
	KEYNOTE ADDRESSES				
A F T E R N O O N & E V E N I N G	KEYNOTE ADDRESSES	A F T E R N O O N & E V E N I N G	PARALLEL SESSIONS	A F T E R N O O N	PARALLEL SESSIONS
	SYMPOSIUM ROUND TABLE				
	GALA DINNER				
					END OF SYMPOSIUM
			COCKTAIL SOCIAL EVENT OPTRO 2020 Award OPTRO 2020 PhD Best Paper Award		

### Notification of acceptance or refusal

The Conference Programme Committee will notify all the authors of its decision on **25 October 2019**.

This notification will include detailed instructions allowing selected authors to prepare and send their **finalized paper by 4 December 2019**.

Authors who fail to register and pay by **20 January 2020** will not have their presentations added in the proceedings.

### Language

Symposium official language is English.  
All documents must be in English

### Organizing Committee

**Symposium Chair:** Claudine BESSON  
ONERA - The French Aerospace Lab - DOTA Deputy Director  
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**Co-Chairs :** Philippe ADAM - ADI  
Jean-François COUTRIS - CCINT  
Patricia CYMBALISTA - ONERA  
Jacques LONNOY - 3AF

### Submission milestone

Abstract Deadline :	21 October 2019
Author Notification :	25 October 2019
Final Manuscript Deadline :	4 December 2019
Final Programme :	20 December 2019

### Venue

OECD Conference Centre  
2, rue André Pascal - F-75016 Paris - France

### Conference Secretariat

**OPTRO2020 Secretariat**  
6, rue Galilée - 75016 Paris France  
Phone: +33 (0)1 56 64 12 30  
E-mail: [optro2020@3af.fr](mailto:optro2020@3af.fr) - [optro2020.exhibition@3af.fr](mailto:optro2020.exhibition@3af.fr)

Detailed information on  
[www.optro2020.com](http://www.optro2020.com)

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