

Abstract deadline
21 October 2019



OPTRO 2020

9th International Symposium
on Optronics in Defence & Security

OECD • Paris • France • 28-30 January 2020

Call For Papers

www.optro2020.com

OBJECTIVES

3AF - The French Aerospace Society - organizes **OPTRON2020, the 9th International Symposium on Optronics in Defence and Security, from 28 to 30 January, 2020.**

OPTRON is the European event for engineers and scientists in the fields of Optronics.

For its 9th edition, **OPTRON2020** will gather all the leading specialists from governments, industry, universities and laboratories, and give opportunity to implement fruitful exchanges between colleagues of different countries and disciplines.

OPTRON2020 will begin on 28 January with a plenary session and present the status on recent advances in Optronics in the fields

of Defence and Security and on the perspectives that Photonics offer in the near future, covering the current aspects of Optronics but also addressing emerging technologies in Photonics.

OPTRON2020 will host an exhibition within the conference centre, offering to all attendees and exhibiting companies in Optronics areas an opportunity to exchange on technical know-how and products.

The OPTRON2020 Award will be attributed on 29 January 2020.

PhD's communications will be included in Symposium sessions and will be highlighted by the OPTRON2020 Best PhD Communication Award.

Keynote Addresses

- Philip **RUSSEL**, Max Planck Institute for the Science of Light
- Michael **GROENERT**, NVESD
- Ingmar **RENHORN**, Renhorn IR Consultant AB
- Marc **EICHHORN**, Fraunhofer IOSB

Round Table

[Optronics for Space]

PROGRAMME COMMITTEE

ADAM	Philippe	ADI	FR
BARRAT	Benoit	MBDA FRANCE	FR
BERGINC	Gérard	TOSA	FR
BERIZZI	Fabrizio	EDA	
BESSON	Claudine	ONERA	FR
BRETES	José	Laser Components	FR
CASTELEIN	Pierre	CEA-LETI	FR
COTEL	Arnaud	Airbus Defense & Space	FR
COURSAGET	François	NIT	FR
COUTRIS	Jean-François	CCINT	FR
CUGNY	Bruno	CNES	FR
CYMBALISTA	Patricia	ONERA	FR
DUPOUX	Thierry	Safran Electronics & Defence	FR
FOURNIER	Gilles	ArianeGroup	FR
GEYL	Roland	Safran REOSC	FR
GOUDAİL	François	IOGS	FR
GUYOT	Eric	TELOPS	FR
GROENERT	Michael	NVESD	US
HAAKESTAD	Magnus	FFI	NO
HILL	Lee	DSTL	UK
KLING	Emmanuel	SAFRAN	FR
KOECHLIN	Charlie	SODERN	FR
KOPCZYNSKI	Krzysztof	Mil. University of Tech.	PL
KRAUSE	Ulf	Menoptik	DE
LALLIER	Eric	TRT	FR

LEE	Carlos	EPIC	BE
LEFEVRE	Franck	ONERA	FR
LEMASTER	Daniel	AFRL	US
LETALICK	Dietmar	FOI	SE
LONNOY	Jacques	3AF	FR
LUTZ	Holger	AIM	DE
MATHIEU	Clément	Dassault Aviation	FR
McCORMICK	Kenny	Leonardo	UK
MÜNZBERG	Mario	Hensoldt	DE
PAOLACCI	Sylvie	DGA	FR
PISTONE	Frédéric	Thales Alenia Space	FR
POZO	José	EPIC	FR
RABAULT	Denis	TOSA	FR
ROUX	Jean-Noël	Thales LAS	FR
ROY	Vincent	DRDC-RDDC-VALCATIER	CA
RUBALDO	Laurent	Lynred	FR
SCHMITT	Nikolaus	Consulting	DE
SHIMONI	Michal	RMA	BE
SILVER	Mark	Thales	UK
SODNIK	Zoran	ESA/ESTEC	
STEIN	Karin	Fraunhofer-IOSB	DE
URIBE	Juanie	NVESD	US
USAI	Andrea	Ellectronica	IT
VORONTSOV	Mikhail	Dayton University	US
WALTHER	Martin	Fraunhofer -IAF	DE

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 (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				
	COCKTAIL SOCIAL EVENT OPTRO 2020 Award OPTRO 2020 PhD Best Paper Award				
					END OF SYMPOSIUM

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
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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
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Detailed information on
www.optro2020.com

Partners

