

Heinrich-Heine-Universität Düsseldorf  
Arbeitsgruppe Photoaktive Materialien  
Universitätsstraße 1  
40225 Düsseldorf



Jun.-Prof. Dr. Markus Suta  
[markus.suta@hhu.de](mailto:markus.suta@hhu.de)

Your reference/ your letter dated  
**Letter of Intent**

Department  
**4088 R&D**

Date  
**27.03.2026**

**Letter of Support: Horizon Europe Proposal “LUMITHERM2.0: High-Performance Luminescence Thermometry for Research and Innovation Excellence”**

Dear Jun.-Prof. Suta, dear members of the planned LUMITHERM2.0 project,

with this letter, we would like to express our interest in your project proposal “LUMITHERM2.0: High-Performance Luminescence Thermometry for Research and Innovation Excellence” to optimize the design of luminescent thermometers by using your developed physical models as training data for machine learning approaches.

ams-OSRAM is a global leader in optical solutions. We offer a unique product and technology portfolio for sensing, illumination, and visualization: from prime-quality light emitters and optical components to micro-modules, light sensors, ICs and related software. We continuously advance our technologies in sensing, illumination and visualization to make the world safer, simpler and more efficient. Our vision is to inspire people with innovative light and sensor solutions.

ams-OSRAM International GmbH, a 100% subsidiary of the ams-OSRAM group, has more than 40 years of expertise in research, development, and production of optoelectronic semiconductor components. It currently employs ~2.800 people at our R&D and production site in Regensburg, Germany to drive innovation in various fields of illumination, visualization, and sensing. The major R&D activities focus on visible, ultraviolet, and infrared light-emitting diodes (LEDs) and power lasers, based upon the material systems InAlGa<sub>N</sub>, InAlGa<sub>P</sub> and InAlGa<sub>As</sub>. ams-OSRAM International has full, in-house production capabilities along the entire value chain (semiconductor frontend- and backend-activities), consisting of facilities for compound semiconductor epitaxy, chip processing, light conversion technologies and device packaging. The company owns 7.500 patents covering the technology for industrial production of electrically-driven- and phosphor-based LEDs and lasers.

As a technology leader in the field of highly efficient and reliable LEDs, we see significant potential in the application of the luminescent thermometers investigated within this project. Providing training data for machine learning approaches helps to improve the design of these thermometers is an important step toward industrial application. Integrated on the lens surfaces of our component cavities or directly within the matrix material, these thermometers could substantially improve and simplify temperature measurement in LEDs. The results of the planned project are of high technological and economic relevance, as they can significantly enhance the precision and reliability of our optoelectronic components, thereby opening up new application opportunities in our target markets of photonics and sensing.

Name Elisabeth Hofmeister Global Public Funding	Phone +49 (151) 1451 3421  Main Phone +49 (941) 850-5	E-mail Elisabeth.hofmeister@ams- s-osram.com	Main E-mail sensors@ams-osram.com Internet ams-osram.com	1/2
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Office address: ams-OSRAM International GmbH Leibnizstrasse 4 93055 Regensburg / Germany	ams-OSRAM International GmbH Regensburg Chairwoman of the Supervisory Board: Babette Froehlich	Managing Directors: Dr. Jörg Strauss (Chairman); Dr. Jörg Schäfer	Registered office: Regensburg, Germany; Commercial registry: Local court Regensburg, HRB 8522
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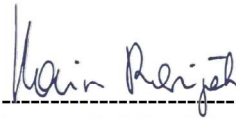
In view of the high development risk of the underlying technology as well as the still unresolved fundamental questions – in particular with regard to the application luminescent thermometers for temperature imaging in an LED – direct participation LUMITHERM2.0 in is not possible at this early stage of technology development. Nevertheless, we explicitly support your initiative and emphasize the high relevance and future potential of your research for our industry. We wish you every success with your proposal submission and are happy to be available for any questions or further discussions through Dr. Philipp Pust (philipp.pust@ams-osram.com, +49 170 1426327).

Just for clarification it is pointed out that this Letter of Interest is only a noncommittal statement; it is not intended to be legally or otherwise binding and does therefore not constitute a binding contractual commitment or agreement.

Sincerely yours,



Dr. Ulrich Steegmueller  
Senior Vice President, R&D  
ams-OSRAM International GmbH



Dr. Karin Ronijak  
Vice President  
Global Public Funding

Name  
Elisabeth Hofmeister  
Global Public Funding

Phone  
+49 (151) 1451 3421

E-mail  
Elisabeth.hofmeister@ams-  
osram.com

Main E-mail  
sensors@ams-osram.com  
Internet  
ams-osram.com

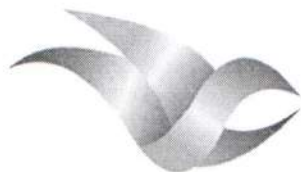
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Office address:  
ams-OSRAM International GmbH  
Leibnizstrasse 4  
93055 Regensburg / Germany

ams-OSRAM International GmbH  
Regensburg  
Chairwoman of the Supervisory Board:  
Babette Froehlich

Managing Directors:  
Dr. Jörg Strauss (Chairman);  
Dr. Jörg Schäfer

Registered office:  
Regensburg, Germany;  
Commercial registry:  
Local court Regensburg, HRB 8522



# PIROGRAMS

Bulevar Mihajla Pupina 10G lok 30  
11070 Novi Beograd  
Tel: +381 64 1594467  
Mat.br.: 20360127  
PIB: 105387475  
OTP Banka  
325-9500700037689-36  
mail: pirograms@outlook.com

Letter of Expression of Interest

To whom it may concern,

Pirograms is a Serbian company specializing in the design and manufacture of pyrometers and pyrometer systems for applications across industry, energy, and scientific research.

We would like to express our strong interest in the future outcomes of the project proposal *HIGH-PERFORMANCE LUMINESCENCE THERMOMETRY FOR RESEARCH AND INNOVATION EXCELLENCE – LUMITHERM2.0*. We understand that the project aims to develop a groundbreaking, data-driven Luminescence Thermometry 2.0 approach for temperature determination.

Furthermore, we would be pleased to participate in the Industrial Advisory Board of the LUMITHERM2.0 project, where we could contribute our industrial perspective and support the translation of research outcomes into practical technological applications.

Signature of the PIROGRAMS d.o.o. legal representative



Prof. Dr. Ljubiša Zeković, Director

Belgrade, Serbia, March 24<sup>th</sup>, 2026,

Madrid, 17th March 2026

## Letter of Support – Industrial Advisory Board

To whom it may concern,

On behalf of MECWINS S.L., I am pleased to express our interest in supporting the Horizon Europe proposal “LUMITHERM2.0: High-Performance Luminescence Thermometry for Research and Innovation Excellence.”

MECWINS is a technology-driven company specialized in the development of advanced biomedical devices and solutions for cardiovascular intervention and medical imaging. The company has extensive experience in translating innovative scientific concepts into clinically relevant technologies, particularly in the field of minimally invasive diagnostics and medical instrumentation.

We believe that the development of high-precision luminescence thermometry technologies, particularly when combined with nanomedicine and advanced optical sensing, represents a highly promising approach for future biomedical diagnostics. Temperature is a fundamental physiological parameter that reflects metabolic activity, inflammation, and pathological processes. The possibility of measuring temperature remotely and with high spatial resolution using luminescent nanosensors could open new opportunities for early diagnosis, monitoring of disease progression, and evaluation of therapeutic interventions.

For companies operating at the interface between medical technology and clinical applications, such as MECWINS, the outcomes of the LUMITHERM2.0 project may contribute to the development of next-generation diagnostic tools and smart biomedical devices capable of providing quantitative thermal information in complex biological environments.

For this reason, we would be pleased to participate in the Industrial Advisory Board of the LUMITHERM2.0 project, contributing our industrial perspective and supporting the translation of research outcomes toward potential technological and clinical applications.

We look forward to following the progress of this initiative and to contributing, when appropriate, to discussions on technology transfer and innovation pathways emerging from the project.

Sincerely,

02612082H JESUS  
OSCAR AHUMADA  
(R: A70171277)

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02612082H JESUS OSCAR  
AHUMADA (R: A70171277)  
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Dr. Óscar Ahumada Heredero  
CEO  
Mecwins

## LETTER OF SUPPORT FOR PROJECT APPLICATION

For whom it may concern,

Cellbox Labs (Cellboxlab SIA) is an innovative European-based company focused on the development of advanced technological solutions for biomedical and life science applications, supporting research, diagnostics, and innovation through high-quality products and specialized expertise.

We are aware of the proposal **LUMITHERM2.0: High-Performance Luminescence Thermometry for Research and Innovation Excellence**, submitted to the European Commission for funding, and we would be pleased to participate in the Industrial Advisory Board of the project should it be selected for funding.



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Roberts Rimša  
Member of board

Institute of Solid State Physics, University of Latvia  
8 Kengaraga Street, Riga, LV-1063  
01.04.2026.

## Letter of support

Lightguide International is a dynamic and competitive European-based company engaged in the development, manufacture, and supply of optical fibers, fiber bundles, cables, and laser delivery systems for cutting-edge scientific, industrial, and medical applications worldwide. For more than 20 years, we have been offering our clients an individual approach, seeking solutions that best meet their needs and expectations. One of the company's core pillars is our Research and Development department, which frequently collaborates directly with clients to create innovative and previously unseen solutions.

Some challenges we address in cooperation with our long-term partner, the Institute of Solid State Physics, University of Latvia. Together, we have successfully implemented the ERDF project "*Novel materials for development of all-optical temperature sensor (OPTSEN)*" (2020–2023) and continue active work on the project "*Advanced materials and methods for distributed fiber-based all-optical temperature sensor*" (2025–2028). We recognize that scientific research plays a vital role in the development of both science and manufacturing.

We are aware of the project LUMITHERM2.0: High-Performance Luminescence Thermometry for Research and Innovation Excellence, submitted for funding to the European Commission, and we would be pleased to participate in the Industrial Advisory Board of the project should it be selected for funding.

**Artūrs Pfafrods**  
Head of research and development department

