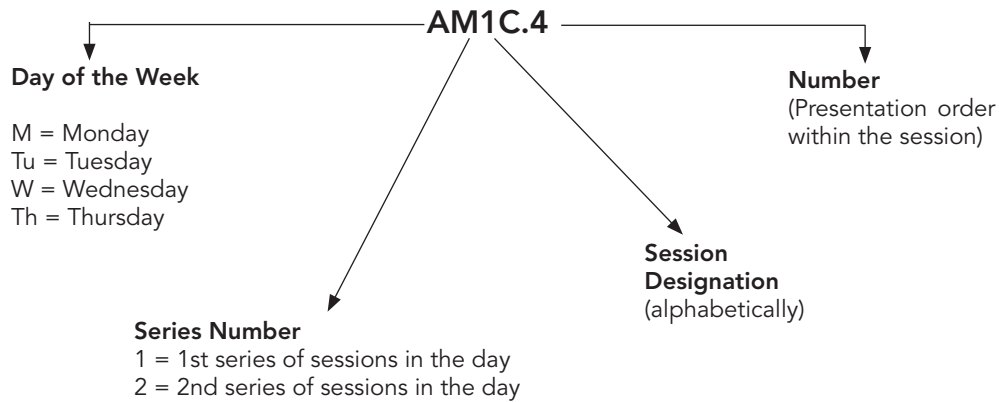


## Explanation of Session Codes



The first letter of the code signifies the topical (A=AIS, Q-QSM, S=Sensors). The second letter of the code denotes the day of the week (Monday=M, Tuesday=Tu, Wednesday=W, Th=Thursday). The third element indicates the session series in that day (for instance, 1 would denote the first parallel sessions in that day). Each day begins with the letter A in the third element and continues alphabetically through a series of parallel sessions. The lettering then restarts with each new series. The number on the end of the code (separated from the session code with a period) signals the position of the talk within the session (first, second, third, etc.). For example, a presentation coded AM1C.4 indicates that this AIS paper is being presented on Monday (M) in the first series of sessions (1), and is the third parallel session (C) in that series and the fourth paper (4) presented in that session.

The information in this program is as of 08 July 2025. All times reflect Pacific Time (UTC-07:00). Please consult the congress app for the latest changes.

Technical Registrants: Download digest papers by visiting [optica.org/SensingOPC](https://optica.org/SensingOPC) and clicking on the "Download Technical Digest Papers" from the right column navigation on the home page. As access is limited to Full Technical Conference attendees only, you will be asked to validate your credentials by entering the same login email address and password provided during the congress registration process.

Recorded sessions are also available 24 hours after the session by navigating to the Schedule tab. Select a session and click the "Watch Recorded Session" button.

# 2025 Optica Sensing Congress

20-24 July 2025

Hilton Long Beach, Long Beach, California, USA

Optica Sensing Congress is presented  
as an in-person event with on-demand content.

Pacific Daylight Time (PDT, UTC-07:00)

## Agenda of Sessions — Sunday, 20 July

08:00–17:30	<b>Registration, Foyer</b>
09:00–17:00	<b>Demystifying Quantum, Pacific I</b> <b>Part One: Introduction to Quantum Metrology (09:00–12:00)</b> <b>Part Two: Applications of Quantum Metrology (14:00–17:00)</b>

## Monday, 21 July

Pacific Time (PDT, UTC-07:00)	Atlantic I	Pacific I	International I, II	Atlantic II	Pacific II
	AIS	QSM	SENSORS	SENSORS	MIXED
07:00–17:30	<b>Registration, Foyer</b>				
08:00–09:30	<b>AM1A • Disease in the Industrial Era I: Techniques</b>	<b>QM1B • Quantum Sensor Networks and Distributed Entanglement</b>	<b>SM1C • THz Sensing (ends at 09:00)</b>	<b>SM1D • Fourier Transform Spectroscopy I</b>	<b>SM1E • Point Optical Fiber Sensors</b>
09:30–16:00	<b>Exhibit Hours, International III, IV, V</b>				
09:30–10:00	<b>Coffee Break with Exhibitors, International III, IV, V</b> <i>Sponsored by American Elements and SiLC Technologies, Inc.</i>				
10:00–11:15	<b>AM2A • Disease in the Industrial Era II: Essential Components and Elements</b>	<b>QM2B • Quantum Noise and Squeezed Light Interferometry (ends at 11:30)</b>	<b>SM2C • AI-Assisted Sensing (ends at 10:45)</b>	<b>SM2D • Optics and Photonics for Sensing the Environment I (ends at 11:00)</b>	<b>AM2E • Agri-Food-Pharma-Precision-Photonics for Industrial Optimization I</b>
11:15–13:00	<b>Lunch on Your Own</b>				
13:00–14:30	<b>AM3A • Hot Topics in Industrial Sensing I: Trends</b>	<b>QM3B • Integrated Photonics for Quantum Sensing</b>	<b>SM3C • Laser-Based Chemical Sensing (begins at 13:30)</b>	<b>SM3D • Hyperspectral/Multispectral Imaging and Sounding of the Environment I (ends at 15:15)</b>	<b>SM3E • Quasi-Distributed and Point Optical Fiber Sensors</b>
14:30–16:00	<b>JM4A • Joint Posters Session I, Coffee with Exhibitors, International III, IV, V</b> <i>Sponsored by American Elements and SiLC Technologies, Inc.</i>				
16:00–17:30	<b>SpE1 • GEMM: Optical Sensing Panel, International I, II</b>				

Schedule subject to change. Please check the congress app for the most current schedule.

### Key to Conference Abbreviations

A = Applied Industrial Spectroscopy (AIS)

J = Joint Session

Q = Quantum Sensing and Metrology (QSM)

S = Optical Sensors (Sensors)

Sp = Special Event

# Agenda of Sessions — Tuesday, 22 July

Pacific Time (PDT, UTC-07:00)	Atlantic I	Pacific I	International I, II	Atlantic II	Pacific II
	AIS	QSM	SENSORS	MIXED	MIXED
07:30–18:30	<b>Registration, Foyer</b>				
08:00–09:30	<b>ATu1A • Air and Climate Effect of Industrial Processes: Elements</b> (ends at 09:15)	<b>QTu1B • Compact Cold-Atom Sensors</b>	<b>STu1C • Navigation and Ranging</b> (ends at 09:15)	<b>STu1D • Fourier Transform Spectroscopy II</b>	<b>STu1E • Hyperspectral/Multispectral Imaging and Sounding of the Environment II</b>
09:30–15:30	<b>Exhibit Hours, International III, IV, V</b>				
09:30–10:00	<b>Coffee Break with Exhibitors, International III, IV, V</b> <i>Sponsored by American Elements and SiLC Technologies, Inc.</i>				
10:00–11:45	<b>JTu2A • Joint Plenary Session I, International I, II</b>				
11:45–13:00	<b>Lunch on Your Own</b>				
12:15–13:15	<b>SpE6 • Let's Shed Some Light on Food, Mediterranean I, II (RSVP requested)</b>				
13:00–15:00	<b>ATu3A • Extraction Industries and Circular Economy</b> (ends at 14:15)	<b>QTu3B • Quantum Magnetometers and RF Sensors</b>	<b>STu3C • Distributed Optical Fiber Sensors I</b>	<b>ATu3D • Energy and Resource Optimization Towards Green Industry I: Techniques</b>	<b>STu3E • Optics and Photonics for Sensing the Environment II</b> (begins at 14:00)
15:00–15:30	<b>Coffee Break with Exhibitors, International III, IV, V</b> <i>Sponsored by American Elements and SiLC Technologies, Inc.</i>				
15:30–17:00	<b>SpE2 • Commercializing New Technologies, International I, II</b>				
17:00–18:30	<b>Congress Reception, Catalina</b>				

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# Agenda of Sessions — Wednesday, 23 July

Pacific Time (PDT, UTC- 07:00)	Atlantic I	Pacific I	International I, II	Atlantic II	Pacific II
	AIS	QSM	MIXED	SENSORS	MIXED
07:30–17:30	<b>Registration, Foyer</b>				
08:00–10:00	<b>AW1A • Agri-Food-Pharma-Precision-Photonics for Industrial Optimization II</b> (ends at 09:45)	<b>QW1B • Correlated Photons and Nonclassical Light for Quantum Sensing</b>	<b>SW1C • Chem/Bio Sensors</b> (ends at 09:45)	<b>SW1D • Optics and Photonics for Sensing the Environment III: : Applications of Dual Comb Spectroscopy</b>	<b>SW1E • Distributed Optical Fiber Sensors II</b>
10:00–15:00	<b>Exhibit Hours, International III, IV, V</b>				
10:00–10:30	<b>Coffee Break with Exhibitors, International III, IV, V</b> <i>Sponsored by American Elements and SiLC Technologies, Inc.</i>				
10:30–11:30	<b>JW2A • Joint Plenary Session II, International I, II</b>				
11:45–13:00	<b>Lunch on Your Own</b>				
13:00–14:30	<b>AW3A • Energy and Resource Optimization Towards Green Industry II: THz Technology</b>	<b>QW3B • Quantum Learning and Entanglement Protocols</b> (ends at 14:15)			<b>SW3E • Hyperspectral/ Multispectral Imaging and Sounding of the Environment III</b>
14:30–15:00	<b>Coffee Break with Exhibitors, International III, IV, V</b> <i>Sponsored by American Elements and SiLC Technologies, Inc.</i>				
15:00–17:30	<b>SpE3 • Technologies for New Applications, and Networking, International I, II</b>				

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# Agenda of Sessions — Thursday, 24 July

Pacific Time (PDT, UTC- 07:00)	Atlantic I	Pacific I	International I, II	Atlantic II	Pacific II
	AIS	QSM	SENSORS	SENSORS	SENSORS
07:30–11:30	Registration, Foyer				
08:00–09:30	SpE4 • Precision Versus Price-Point: Why and How of the Sensing Domain, International I, II				
09:30–11:00	JTh2A • Joint Posters Session II, International III, IV, V				
11:00–12:00	SpE5 • PIC-Driven Killer Apps, Pacific I		SpE7 • Moving Vibrational Spectroscopy beyond Glucose Monitoring Pacific II		
11:20–12:00	SpE9 • Moving Vibrational Spectroscopy beyond Glucose Monitoring—Software and Cloud Aspects, Atlantic II				
14:00–21:00	SiLC Technologies Tour, Monrovia (Registration required. Meet at 12:45)				

Schedule subject to change. Please check the congress app for the most current schedule.

## About Optica

[www.Optica.org](http://www.Optica.org)

Optica is a society dedicated to promoting the generation, application, archiving and dissemination of knowledge in the field. Founded in 1916, it is the leading global organization for scientists, engineers, business professionals, students and others interested in the science of light. Optica's renowned publications, meetings, online resources and in-person activities fuel discoveries, shape real-life applications and accelerate scientific, technical and educational achievement.

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Advancing Optics and Photonics Worldwide

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