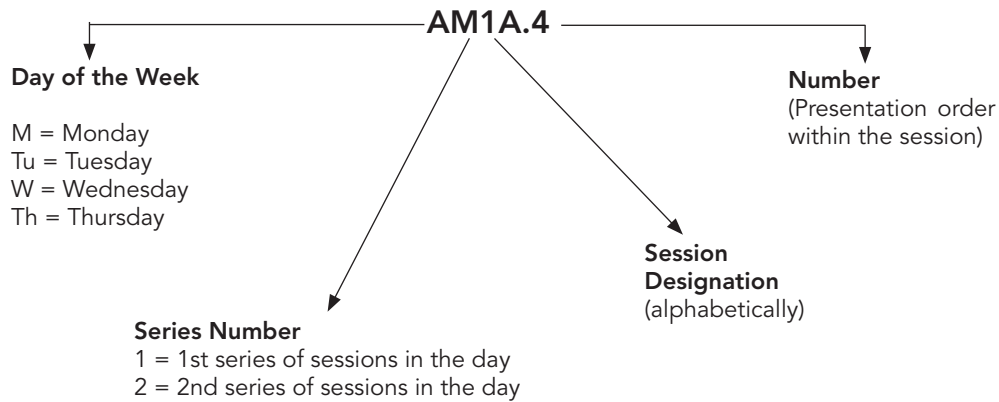


Explanation of Session Codes



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 conference app for the latest changes.

Technical Registrants: Download digest papers by visiting 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 conference 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 in-person events with on-demand content.

Pacific Time (PT, UTC-07:00)

Agenda of Sessions — Monday, 21 July

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

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 (PT, UTC-07:00) | Atlantic I | Pacific I | International I, II | Atlantic II | Pacific II |
|---------------------------------|--|--|---|---|--|
| | AIS | QSM | SENSORS | MIXED | MIXED |
| 07:30–18:30 | Registration, Foyer | | | | |
| 08:00–09:30 | ATu1A • Air and Climate Effect of Industrial Processes: Elements | QTu1B • Compact Cold-Atom Sensors | STu1C • Navigation and Ranging | STu1D • Fourier Transform Spectroscopy II | STu1E • Hyperspectral/Multispectral Imaging and Sounding of the Environment II |
| 09:30–16:00 | Exhibit Hours, International III, IV, V Coffee Break with Exhibitors, 09:30–10:00 <i>Coffee break sponsored by American Elements</i> | | | | |
| 10:00–11:45 | JTU2A • Joint Plenary Session I, International I, II | | | | |
| 13:00–15:00 | ATu3A • Extraction Industries and Circular Economy | QTu3B • Quantum Magnetometers and RF Sensors | STu3C • Distributed Optical Fiber Sensors I | ATu3D • Energy and Resource Optimization Towards Green Industry I: Techniques | STu3E • Optics and Photonics for Sensing the Environment II |
| 15:00–15:30 | Coffee Break with Exhibitors, International III, IV, V <i>Coffee break sponsored by American Elements</i> | | | | |
| 15:30–17:00 | SpE2 • Industry Panel I, International I, II | | | | |
| 17:00–18:30 | Congress Reception, Catalina | | | | |

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 — Wednesday, 23 July

| Pacific Time (PT, UTC-07:00) | Atlantic I | Pacific I | International I, II | Atlantic II | Pacific II |
|---------------------------------|---|--|----------------------------|---|---|
| | AIS | QSM | MIXED | SENSORS | MIXED |
| 07:30–17:30 | Registration, Foyer | | | | |
| 08:00–10:00 | AW1A • Agri-Food-Pharma-Precision-Photonics for Industrial Optimization II | QW1B • Correlated Photons and Nonclassical Light for Quantum Sensing | SW1C • Chem/Bio Sensors I | SW1D • Optics and Photonics for Sensing the Environment III: : Applications of Dual Comb Spectroscopy (begins at 08:30) | SW1E • Distributed Optical Fiber Sensors II |
| 10:00–16:00 | Exhibit Hours, International III, IV, V Coffee Break with Exhibitors, 10:00–10:30 Coffee break sponsored by American Elements | | | | |
| 10:30–11:30 | JW2A • Joint Plenary Session II, International I, II | | | | |
| 13:00–14:30 | AW3A • Energy and Resource Optimization Towards Green Industry II: THz Technology | QW3B • Quantum Learning and Entanglement Protocols (ends at 14:45) | SW3C • Chem/Bio Sensors II | SW3D • Optics and Photonics for Sensing the Environment IV | SW3E • Hyperspectral/ Multispectral Imaging and Sounding of the Environment III |
| 14:30–15:00 | Coffee Break with Exhibitors, International III, IV, V Coffee break sponsored by American Elements | | | | |
| 15:00–17:30 | SpE3 • Industry Panel II and Social Engagement, International I, II | | | | |

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

Key to Conference Abbreviations

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Sp = Special Event

Agenda of Sessions — Thursday, 24 July

| Pacific Time (PT, UTC-07:00) | Atlantic I | Pacific I | International I, II | Atlantic II | Pacific II |
|---------------------------------|---|-----------|---|---|------------|
| | AIS | QSM | SENSORS | SENSORS | SENSORS |
| 07:30–17:30 | Registration, <i>Foyer</i> | | | | |
| 08:00–09:30 | SpE4 • Joint Panel: Precision Versus Price-Point: Why and How of the Sensing Domain, <i>International I, II</i> | | | | |
| 09:30–15:30 | Exhibit Hours, <i>International III, IV, V</i> Coffee Break with Exhibitors, 10:00–10:30 <i>Coffee break sponsored by American Elements</i> | | | | |
| 10:00–11:00 | SpE5 • Industry Panel IIIA, <i>Pacific I</i> | | SpE6 • Industry Panel IIIB, <i>Pacific II</i> | | |
| 11:00–12:00 | JTh1A • Joint Postdeadline Paper Session, <i>International I, II</i> | | | | |
| 13:30–15:00 | JTh2A • Joint Posters Session II, Coffee with Exhibitors, <i>International III, IV, V</i> | | | | |
| 15:00–16:30 | Ath3A • HOT TOPICS in Industrial Sensing II: Techniques | | STh3B • Hyperspectral/ Multispectral Imaging and Sounding of the Environment IV | STh3C • Hyperspectral/ Multispectral Imaging and Sounding of the Environment IV | |
| 16:00–16:30 | Coffee Break with Exhibitors, <i>Ariane Foyer</i> <i>Coffee break sponsored by American Elements</i> | | | | |
| 16:30–18:00 | | | | | |
| 18:00–19:00 | Industry Social Engagement Event, <i>Caravelle 1</i> | | | | |

Friday, 25 July

| | |
|-------------|----------------------------------|
| 10:00–15:30 | SiLC Technologies Tour, Monrovia |
|-------------|----------------------------------|

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

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S = Optical Sensors (Sensors)
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