Anaheim to be the Setting for the 1996 Convocation

From 2 June through 7 June, researchers will gather in Anaheim, California, to discuss a broad array of advances in optics, extending from what is happening on the research frontiers to developments now approaching the marketplace. The occasion will be the 16th Conference on Lasers and Electro-Optics (CLEO) and the 6th Conference on Quantum Electronics and Laser Science (QELS). The annual meetings, which together are expected to draw nearly 7000 participants, will feature topics ranging from fundamental science areas such as strong-field physics and ultrafast spectroscopy to applied areas such as flatpanel displays and semiconductor lasers. Over a thousand presentations are scheduled, including 65 invited papers in the CLEO sessions and 47 invited talks in the QELS program (see the table on the next page). The sessions will be held at the Anaheim Convention Center and the Anaheim Marriott Hotel.

A new feature this year will be the Lasers and Electro-optic Applications Program (LEAP), during which industry leaders will explore a variety of project management and design engineering topics. The LEAP sessions will run from Tuesday through Thursday (4-6 June). As part of the program, there will be a reception for students from 5 to 6:30 pm on Wednesday in the Orange County Ballroom at the Anaheim Marriott.

The tutorials offered this year will deal with ultrahigh-density optical recording technology, display technologies, directions in advanced integrated circuit lithography, short-wavelength lasers, microstructured media for nonlinear optics, laser cooling and trapping, squeezed light from semiconductor lasers, very high frequency quantum-well lasers, practical mode-locked fiber lasers and fiber sensor technology. All the tutorials will be in the Marriott salons. Each evening from Sunday through Tuesday (2-4 June), there will be ten short courses running from 6 to 10 pm at the Anaheim Marriott. Attendees are encouraged to register for these courses in advance. Poster sessions will be held from Tuesday through Thursday (4-6 June) at the Convention Center.

The meetings are sponsored by the



Optical Society of America and the Lasers and Electro-Optics Society of the Institute for Electrical and Electronic Engineers, in cooperation with the Laser Science Topical Group of the American Physical Society, the Quantum Electronics and Optics Division of the European Physical Society and the Japanese Quantum Electronics Joint Group.

The joint CLEO/QELS plenary and awards session is planned for Monday at 2 pm in the Marriott Ballroom. The speakers will be Robert W. Lucky of Bellcore, whose talk is titled "Speedzone Ahead! Optics and the Web"; Wayne H. Knox of Bell Laboratories, Lucent Technologies, speaking on "Ultrafast Epiphany: The Rise of Ultrafast Science and Technology in the Real World"; and M. George Craford of the Hewlett-Packard Optoelectronics Division, who will discuss "Visible Light Emitting Diode Technologies: High Performance, More Colors and Moving into Incandescent Lamp Applications.

Following the plenary speakers will be the awards presentation. Chung L. Tang will receive the Charles Hard Townes Award of the Optical Society of America (see PHYSICS TODAY, March, page 119). OSA will also give its 1996 Edwin H. Land Medal to Donald Scifres, the president and chief executive officer of SDL Inc in San Jose, California. Scifres is being honored for "his pioneering scientific and entrepreneurial contributions to the field of high power semiconductor lasers." In 1983 Scifres and Xerox PARC (his employer at the time), in a joint venture with Spectra Physics, founded Spectra Diode Laboratories, which became independent—as SDL Inc—in 1992. Also at the awards session, the IEEE's Lasers and Electro-Optics Society will announce the recipient of the 1996 Quantum Electronics Award.

The conference reception will be held from 6:30 to 8 pm on Wednesday in the Anaheim Marriott Hall. Following the reception will be a "town hall meeting," also at the Marriott, at which the Committee on Optical Science and Engineering, sponsored by the National Research Council, will present a status report from several working groups. On Tuesday evening from 8 to 10 pm, the OSA Topical Group on Laser Materials Processing will present an evening session on "Success Stories in Marketing Laser Materials Processing.'

OSA will operate an employment center at the Convention Center from 10 am to 5 pm on Monday; from 9 am to 5 pm on Tuesday through Thursday; and from 9 am to 12 noon on Friday. OSA will run the press room, also at the Convention Center. It will be open from 8 am to 5 pm from Monday through Thursday.

The CLEO exhibit, run at the Convention Center by OSA, will be open from 10 am to 5 pm from Tuesday through Thursday. To give the attendees time to visit the show, no sessions will be held on Wednesday, from 10 am to noon.



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Sessions with Invited Speakers

Monday, 3 June

morning

Laser physics. Golub

High-capacity lightwave systems. Bergano Ultrafast all-optical switching in semiconductors. Nakamura

Imaging in highly scattering media. Benaron

Femtosecond lasers I. Spielmann Near-field optical microscopy I. Xie, Merritt, Vanden Bout

Spectroscopic applications of coherent and

nonlinear processes. Walmsley
Nonlinear effects in quantum wells and semiconductors. Buss

Quantitative gas phase diagnostics. Paul Optical coherence tomography. Fercher Femtosecond lasers II. Kärtner

Near-field optical microscopy II. Weiss, Levy, Gershoni, Gammon

Perspectives on printing, storage and display. Nakamura, van Uijen, Starkweather, Haseltine

afternoon

CLEO/QELS plenary and awards session. Lucky, Knox, Craford

Tuesday, 4 June

morning Holographic data storage. *Psaltis*

New techniques in imaging and spectroscopy. Barty, Durkin
High-power laser diodes. Nakano
THz optoelectronics. Cheville
Display technologies. Williams, King Display technologies. Wittains, King
LEAP: Product design and development
process. Fantone, Day, Haugen,
Kaplan, Wallace, Zavislan
High-order harmonic generation I. Dit-

mire, Milchberg

Optics and sensors I. Bufton Condensed phase cavity QED. Haroche Optical disk storage. Mansuripur, Ohta Novel optical microscopies. Webb Tunable solid-state lasers. Petersen High-order harmonic generation II. Rundquist, Schafer

Coherence and pulsed effects in photorefractives. Hvde

afternoon

LEAP: Product design and development process. Wallace, Zavislan

Dynamics of laser tissue interaction.

Itzkan, Rink Joint symposium on strong-field physics.

Phase and amplitude control in femtosecond application. Nisoli Long-range interactions. Tiemann, Gould

New storage technologies. Castéra Optics and sensors II. Huffaker

VCSEL I. Choquette

High-power fiber lasers and amplifiers and their applications. Goldberg

Photorefractive semiconductors. Linke Multi-photon processes. Hasselbeck, Chin Pulse measurement techniques. Walmsley Atomic beam control. Hinds

Joint symposium on nonlinear optical materials. Jundt

Wednesday, 5 June

morning

Ultraviolet generation. Mori, Zavhowski Fiber gratings and applications. Ouellette Switching and guided wave devices Kobayashi

Coherence effects in semiconductors I

Cundiff

Self-trapping. Firth

Laser ablation and deposition. Geohegan Bose-Einstein condensation. Cornell, van Druten, Julienne, Bradley

afternoon

High-power lasers and applications. Fugate, Brent, Golla

asers for strong-field physics. Perry Printing technologies. Holland, Shimada,

Whiting
LEAP: Intellectual property and technology licensing. Kurland, Davis

Ultrafast lasers and applications. Wefers, Gerber

Coherence effects in semiconductors II. Bigot

Nonclassical aspects of atomic motion. Wineland, Raizen

Integrated semiconductor laser sources. Morton

Stimulated processes. Murray

Lasers for fusion. Kelly Interconnection and fiber devices. Schwartz

Rhodopsin and bacteriorhodopsin: ultrafast dynamics and spectroscopy. El-Sayed, Kobayashi, Mathies

Temporal solitons. Midrio Cavity QED. Slusher, An

Thursday, 6 June

morning Quantum kinetics. *Haug, Bar-Ad, Knorr* WDM devices. *Lin* LEAP: How to measure optical parameters.

Caughey, Roundy, Ballantyne, Dooley,

Laser material processing. Eckhard, Steen Lasers for fusion. Lehecka VCSEL II. Dapkus

Self-trapping in quadratic media and instabilities. Torner

Laser micromachining. Marabella Quantum-well physics. Kop'ev Photonic bandgap materials. Sievenpiper

afternoon

Photorefractive solitons. Shih Amplification without inversion. Scully

CO and CO2 lasers. Sato LEAP: System design for laser and optical

applications. Lawrence, Ludwiszewski, Burnham Biexciton and condensation effects. Wang

Spatial solitons, patterns and instabilities Chauvet

Quantum measurement and information I. Kimble

Visible and NIR frequency generation. Lis New trends in gas and free-electron lasers. Chichkov

Femtosecond frequency conversion. Backus, Kittelmann

Friday, 7 June

morning

Multiwavelength networks. Almström Manipulation of coherent atoms. Anderson. Monroe

Quantum optics and noise. Ficek Nonlinear spectroscopy I. Sorokin Cr lasers. Pollock

WDM network technology. Willner Surface-normal modulation and switches Lentine

Ultrafast fiber lasers II. Haus Quantum measurement and information

II. Zoller Guided wave lasers. Tünnermann