## SAN FRANCISCO MEETING WILL SHOWCASE ELECTRO-OPTICS

A lways a welcome blend of applied and fundamental research, the annual Conference on Lasers and Electro-Optics, to be held this year in conjunction with the International Quantum Electronics Conference, is expected to attract about 8,000 scientists and engineers to the City by the Bay from 3 through 8 May. The technical sessions will be held in San Francisco's Moscone Center and the short courses will be offered at the Palace Hotel.

Among the highlights on the CLEO technical program will be reports of a tunable source of short laser pulses, optical intersatellite links for the Celestrit Satellite Communications System, a high-sensitivity streak camera, a high-power semiconductor laser with good efficiency, blue radiation made by frequency doubling the output of an indium gallium arsenide diode amplifier and the fabrication of micropixel arrays of organic green-lightemitting diodes. The IQEC technical sessions will emphasize more fundamental research, such as recent experimental developments in Bose-Einstein condensates, applications of optical tweezers to study micromolecules in solution, the guiding of light by photonic bandgap structures, the coherent control of scattering in semiconductors and new work on nonlinear magneto-optics.

The speakers at a plenary session starting at 2:30 pm on Monday, 4 May, will survey three dif-

ferent fields to which optical technology is contributing. David E. Smith of NASA's Goddard Space Flight Center will discuss NASA's use of optics and lasers in space. Chan Joshi of the University of California, Los Angeles will talk about the physics of laser particle acceleration. And James G. Fujimoto of MIT will describe biomedical imaging using optical coherence tomography. Also at this plenary session, two of the meeting's sponsoring organizations will announce the recipients of fellowships and awards. The Optical Society of America (OSA) will present its Charles Hard Townes Award to Marlan Scully, the Burgess

Distinguished Professor and director of the Center for Theoretical Studies at Texas A&M University. Scully is being cited for "his role in laying the theoretical foundation for laser science, free electron lasers and lasers without inversion." The Institute of Electrical and Electronics Engineers's Lasers and Electro-Optics Society (IEEE/LEOS) will present its Quantum Electronics Award at the meeting, but the recipient



had not been announced by press time.

A second plenary session scheduled for 4:30 pm on Tuesday will feature two of the three winners of the 1997 Nobel Prize in Physics-Steven Chu of Stanford University and William D. Phillips of the National Institute of Standards and Technology in Gaithersburg, Maryland. These two shared the prize with Claude Cohen-Tannoudji of the Ecole Normale Supérieure in Paris "for the development of methods to cool and trap atoms with laser light." The presentations made by Chu and Phillips will be based on the speeches they gave at the awards ceremony in Stockholm; they plan to trace the development of the techniques of laser cooling and trapping and highlight recent advances in the field.

On Wednesday evening from 6 to 7:30, a reception will be held in the Moscone Center for all those attending the conference.

In parallel with the CLEO and IQEC technical sessions will be the Lasers and Electro-Optics Applications Program to explore emerging applica-

tions of lasers and business issues. The topics of the five LEAP sessions, running Monday, 4 May, through Thursday, 7 May, will be laser-zone texture of manufacturing of high-end disk drives, lithography, optics in semiconductor manufacturing, how to start a business and intellectual property.

The organizers of CLEO/ IQEC have also arranged a full program of tutorials, to run in parallel with the technical sessions. The topics include terahertz waves, tribology issues in recording technology, oscillators and amplifiers, fiber lasers and microwave photonics. In addition, conference participants will be able to choose from more than 30 short courses, which will be held on three successive evenings from 6 to 10 on Sunday through Tuesday, 3-5 May, at the Palace Hotel. An additional set of photonics basics short courses, intended for technical managers and engineers, will be offered all day Sunday, Monday afternoon and evening and Tuesday morn-

ing at the convention center.

As usual, the equipment exhibit will be a key element of the meeting, with vendors showcasing the latest laboratory tools, software, books and services. The exhibit hours are 10 am to 5 pm from Tuesday through Thursday at the Moscone Center. No technical sessions are scheduled from 10 am to noon on Wednesday to give attendees more time to visit the exhibits. Coffee will be served in the exhibit area during breaks between technical sessions.

The conference is being cosponsored by OSA and by IEEE/LEOS, in cooperation with the laser science division of the American Physical Society.