

ICALLEO®

32nd INTERNATIONAL CONGRESS ON
APPLICATIONS OF LASERS & ELECTRO-OPTICS

LIA Annual Meeting & Awards Luncheon

Honoring the 2013 Arthur L. Schawlow Award Recipient



Professor Dr. Ursula Keller
ETH Zurich • Zurich, Switzerland

Wednesday, October 9, 2013
Hyatt Regency® Miami
Miami, FL USA

Awards Luncheon
Sponsored By:



Fraunhofer

IWS

The 2013 Arthur L. Schawlow Award Citation

*The 2013 Arthur L. Schawlow Award is presented by the
Laser Institute of America Board of Directors to*

Professor Dr. Ursula Keller

*In Recognition of her pioneering research on Ultrafast
Laser Science and Technology.*

Whereas:

- *Prof. Keller joined ETH Zurich as professor of physics in 1993 and currently serves as a director of NCCR MUST which brings together 15 Swiss research groups working on Ultrafast Science across the fields of physics and chemistry.*

Further:

- *Prof. Keller received her Ph.D. in Applied Physics from Stanford in 1989 and conducted research on photonic switching, ultrafast lasers and semiconductor spectroscopy at AT&T Bell Lab.*

Further:

- *Her current research is on ultrafast solid-state and semiconductor lasers, ultrashort pulse generation, frequency comb generation, attosecond science, and reliable and functional instrumentation for EUV to X-ray generation.*

Whereas:

- *Prof. Keller has chaired many international conferences including CLEO Europe in 2005 and 2007 and ECOC in 2011 and served on the editorial board of Applied Physics B and Laser Physics Letters.*

Further:

- *She has been a board member of EPS, IEEE LEOS, is a Director at Large for OSA, is a Fellow of OSA and EPS and is an elected foreign member of the Royal Swedish Academy of Sciences and the German Academy Leopoldina.*

Therefore let it be known that:

- *Professor Dr. Ursula Keller is a most worthy recipient of the 2013 Arthur L. Schawlow Award.*

Arthur L. Schawlow

May 5, 1921 – April 28, 1999

Professor Schawlow received a Nobel Prize for Physics in 1981 for “his contribution to the development of laser spectroscopy.” He was co-author, with C.H. Townes, of the book, *Microwave Spectroscopy*, and of the first paper describing optical masers. For this latter work, the pair were awarded the Stuart Ballantine Medal by the Franklin Institute (1962), and the Thomas Young Medal and Prize by the Physical Society and Institute of Physics (1963). Prof. Schawlow was also awarded the Morris N. Liebmann Memorial Prize by the Institute of Electrical and Electronic Engineers (1964).

Other Honors Prof. Schawlow Received:

- 1973 – California Scientist of the Year
- 1977 – Third Marconi International Fellowship
- 1982 – Arthur L. Schawlow Award established by LIA for “outstanding contributions in the applications of lasers for science, industry, or education”
- 1990 – Arthur L. Schawlow Prize for Laser Science established by The American Physical Society
- 1991 – National Medal of Science presented by President Bush for “his role in the Conception of the laser and in advancing its applications, especially in Laser spectroscopy”

Prof. Schawlow wrote the introduction for *Scientific American Readings on Lasers and Light*, and three of the articles in that collection; he authored and co-authored nearly 200 scientific publications. He appeared on a 21st Century television program with Walter Cronkite, and on one of the Experiment Series with Don Herbert, as well as in films for Canadian, British, Japanese and German TV Networks.

About the Award

Laser Institute of America established the Arthur L. Schawlow Award to recognize individuals who have distinguished themselves by making outstanding contributions in the applications of lasers for science, industry or education. Professor Schawlow, Nobel Laureate, was a founding father of LIA (then known as Laser Industry Association), an LIA Fellow and Life Member. He retired in 1991 as Professor of Physics after thirty years at Stanford University. As the first honoree in 1982 of this award, it is fitting that LIA’s highest achievement award is given in Professor Schawlow’s name. The industry is indebted to him.
