



NEWSLETTER

COMMISSION INTERNATIONALE D'OPTIQUE • INTERNATIONAL COMMISSION FOR OPTICS

In Memoriam: William T. Rhodes

Professor Rhodes devoted many years of service to the International Commission for Optics.



Prof. William T. Rhodes (1943-2026). At every institution, he made enduring contributions to optical information processing, diffraction theory, imaging science, computational optics, and the education of generations of engineers and scientists.

Group photo at the Winter College on Optics in Image Science, February 2011. Courtesy of ICTP.

In June 2026, the international optics community received the profoundly sad news of the passing of Professor William T. Rhodes, a pioneering scientist whose visionary contributions shaped the fields of optics, optical image processing, optical communications, imaging science, and many other areas of modern optical engineering. His passing marks the loss of an outstanding researcher, dedicated educator, inspiring mentor, and generous colleague whose influence extended far beyond his own scientific achievements.

William T. Rhodes—"Bill" to his family, friends, colleagues, and students—led a remarkable professional life distinguished by scientific excellence, academic leadership, and an unwavering commitment to education. An electrical engineer by training, he entered the field of optics through his doctoral studies completed in 1971 under the supervision of Professor Joseph W. Goodman. From 1971 until 2005, he served on the faculty of the School of Electrical and Computer Engineering at the Georgia Institute of Technology, where he played a central role in establishing Georgia Tech's internationally recognized optics

programs. He was also Director of the Center for Optical Science and Engineering, helping build one of the world's leading academic environments for optical research and education.

Other distinguished positions were: Research Director in Metz, France; appointments at Georgia Tech Lorraine; Denver Business Challenge Professor of Electrical Engineering at the University of Colorado Boulder; Humboldt Research Fellow at the University of Erlangen-Nürnberg, Germany; and later Professor of Electrical Engineering and Computer Science at Florida Atlantic University. At every institution, he made enduring contributions to optical information processing, diffraction theory, imaging science, computational optics, and the education of generations of engineers and scientists. His research encompassed Fourier optics, optical information processing, optical image formation, diffraction theory, imaging systems, optical communications, partially coherent imaging, atmospheric turbulence imaging, tomographic Fourier microscopy, computational imaging, and secure quantum communications.



Professor Rhodes' scientific contributions were both broad and pioneering.

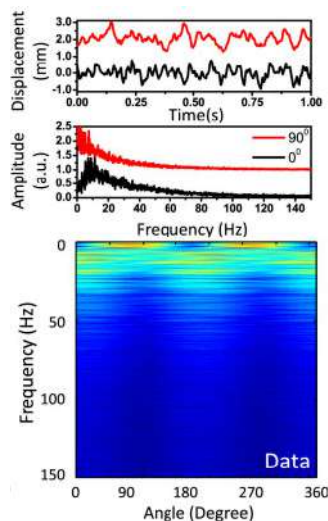


Image from Nootz, G., Hou, W., Dalglish, F. R., & Rhodes, W. T. "Determination of flow orientation of an optically active turbulent field by means of a single beam." *Opt. Lett.* 38(13), 2185-2187 (2013).

Professor Rhodes' scientific legacy is reflected in more than 250 peer-reviewed publications and over 3,000 citations, representing a research career of exceptional productivity and lasting impact. Among his most influential publications are Frequency Variant Optical Signal Analysis (1976), Space-Frequency Conversions for Image Transmission and Processing (1978), Closure Phase and Lucky Imaging (2009), and Time-Average Fourier Telescope (2012), all of which continue to be recognized as significant contributions to the advancement of optical science.

Equally remarkable was Professor Rhodes' enthusiasm for education, intellectual rigor, and generosity as a mentor earned him the deep respect and lasting appreciation of countless students, many of whom have themselves become distinguished scientists and engineers.

Professor Rhodes also received widespread international recognition for his scientific and professional accomplishments. He was elected Fellow of OPTICA (formerly the Optical Society of America) and served with distinction as Editor-in-Chief of *Applied Optics* from 1987 to 1993. He was also a Fellow of SPIE, Editor of the Optical Sciences monograph series published by Springer, and Chair of the IEEE Committee on Optical Processing. Through these leadership positions, he helped shape the direction of optical science and engineering while maintaining the highest standards of scholarly excellence.

His commitment to the international optics community was equally extraordinary. Professor Rhodes devoted many years of service to the International Commission for Optics (ICO), contributing extensively to its editorial, educational, and organizational activities. As a long-standing member of the editorial committee of the ICO Newsletter, he

played an important role in disseminating scientific advances and educational initiatives while fostering international cooperation across the global optics community.

Professor Rhodes was likewise a dedicated collaborator of the International Centre for Theoretical Physics (ICTP) in Trieste, where he actively supported schools, workshops, and educational programs designed to bring advanced optics education to scientists from developing countries, to the Winter College for Optics and Photonics. Through numerous ICO and ICTP initiatives, he lectured extensively throughout Latin America, Africa, Asia, and Eastern Europe, helping establish enduring international collaborations, strengthening scientific networks, and inspiring generations of young researchers worldwide.

Beyond his many scientific accomplishments, those who had the privilege of knowing Bill will remember his kindness, intellectual generosity, integrity, wisdom, and genuine enthusiasm for sharing knowledge. He inspired colleagues through his vision, encouraged young scientists with patience and generosity, and exemplified the values of scholarship, collaboration, and service throughout his life.

At this time of profound loss, we extend our deepest and most heartfelt condolences to his wife, Angela, to his family, friends, former students, and colleagues around the world. Although Professor William T. Rhodes is no longer with us, his scientific achievements, his educational vision, and his unwavering dedication to the international optics community will continue to inspire future generations.

May he rest in peace, and may his memory continue to illuminate the path of future generations of optical scientists and engineers.

Prof. María L. Calvo
ICO President (2011-2014)

ICO-Sponsored Light Conference in Changchun

The very high quality of the ICO-sponsored conference was also evident in the outstanding plenary lectures.



ICO VP Prof. Juergen Czarske opened the Expo, was Advisory Committee Member and co-chaired track 7 of the Light conference.

The **Light Conference 2026**, co-sponsored by the International Commission for Optics (ICO), marks its 15th edition in Changchun from June 11 to 15, 2026. With strong international participation, the event features presentations on in-depth fundamental research, groundbreaking scientific discoveries, and cutting-edge technological innovations. Around 150 invited talks were presented in a variety of sessions on key topics. Around 100 Posters were displayed and several technological innovations were presented. Best poster and paper awards were presented, particularly to support the next generation.

A variety of other high-caliber plenary and keynote lectures also sparked intense discussions and made the conference an unforgettable experience. Awards for outstanding reviewers and editors were presented during the opening session. The 2010 Nobel Laureate in Physics, Konstantin Novoselov, National University of Singapore, presented the awards and spoke about "van der Waals heterostructures". The long-standing Editor-in-Chief of *Light: Science & Applications* (LSA) and winner of Edwin Land Medal of OPTICA, Xicheng Zhang, University of Rochester,

USA, presented "THz Photonics". The winner of the Carl Zeiss Research Award, Martin Wegener, Karlsruhe Institute of Technology, highlighted "Holographic 3D laser printing at the speed-of-light limit". The "Foreign Fellow of Chinese Optical Society", Chengwei Qiu, National University of Singapore, delivered a plenary about "Metaphotonics". The winner of Falling Walls Science Breakthrough in Berlin, Lu Fang, Tsinghua University, outlined "A Symphony of Physics and Intelligence".

Since its inception in 2011, this prestigious event—organized in conjunction with the high-impact journal LSA—has evolved into a key global gathering for the optics and photonics community, fostering international collaboration. The translation of research into innovative applications is a central focus, pursued alongside the Optoelectronics Expo. Building on fifteen years of success, the ICO-sponsored conference serves as a vital interface, transforming fundamental research into solutions with tangible global benefits and expanding the international network.

Organizers of the Light conference at the closing ceremony.

Prof. Jürgen Czarske
ICO Vice President



The Day of Women and Girls in Science in Pakistan

2026 program consists of activities targeting a critical stage in the academic journey of female students.



Ghazali Premier School girls on International Day of Women and Girls in Science (see also bottom image).

In Pakistan, the International Day of Women and Girls in Science has been celebrated by the Active Learning in Optics Group (ICO Pakistan territorial committee, together with the Optica Student Chapter at the Dep. of Physics, Quaid-i-Azam University, Islamabad), launching an outreach initiative that aims to inspire, engage, and empower young women by introducing them to the beauty and relevance of optics and other STEM fields. This year's program consists of two carefully designed activities, each targeting a critical stage in the academic journey of female students. The first activity, held on 10 February, focused on middle school girls—a pivotal age when curiosity is high and early exposure can strongly shape future educational choices.

We welcomed 35 enthusiastic students from Ghazali Premier School, Bhara Kahu, a suburban area of Islamabad.

The session inspired curiosity, confidence, and a sense of possibility in STEM.

The second activity, held on 12 February 2026, engaged undergraduate female students from Rawalpindi Women University. This session was designed to deepen scientific understanding, highlight career pathways in optics and physics, and encourage participants to envision themselves as future researchers, educators, and leaders in science.

Imrana Ashraf
ICO Pakistan Territory
Representative

Contacts

International Commission for Optics (<http://e-ico.org>).

Bureau members (2024–2027)

President E Rosas

Secretary H. Michinel,
Escola de Enx. Aeroespacial
Universidade de Vigo, Campus
de Ourense (Spain)
e-mail: secretariat@e-ico.org

Past-president J Howell

Treasurer K Choquette

Assoc. Secretary A Podoleanu

Vice-presidents, elected

A Candeo, J Czarske, Y Huang,
K Minoshima, A Naumov,
J Niemela, R Nogueira,
N Westbrook

Vice-presidents, appointed

B Gu, Y Ismail, L Lilge, P
Segonds, A Wagué, M Costa,
C Londoño

IUPAP Council representative

C Cisneros

Editor in chief H Michinel



Forthcoming events with ICO participation

Below is a list of forthcoming events with ICO participation.

For further information, visit their official websites listed below.

24-28 August 2026

XIV Annual Meeting of the EOS

Tampere, Finland

Contact: Elina Koistinen

elina@europeanoptics.org

<https://www.europeanoptics.org>

