Environment

New Mexico is a state of scenic beauty, an inspiration for artists, particularly the visual and musical arts. It is also a paradise for hikers and nature lovers, with countless parks and monuments. While generally mild and dry, the climate of the region has distinct seasons. Snow capped mountains in the winter are a skier’s delight. The 10,500 ft. tall Sandia Mountains overlooking Albuquerque, about 45 minutes away by car, also offer a cool green retreat in the summer.

If there is a single event that catapults Albuquerque into limelight, it is the International Balloon Fiesta, held every October, that attracts thousands of ballooning enthusiasts from around the world. Both Albuquerque and Santa Fe, 60 miles to the north, have extensive art colonies, a wide range of musical entertainment, theater groups and community concert series.

Founded in 1889, the University of New Mexico (UNM) has become one of the fastest growing research universities in the nation. The total number of enrolled students approaches 27,000, with approximately 15% enrolled in graduate school.

Contact

Ms. Doris Williams, Program Advisor
Optical Science & Engineering
1313 Goddard, SE
Albuquerque, NM 87106
(505) 272-7764, optics@unm.edu

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Background

Established in the mid 1980's, the Optics Program at UNM has acquired a national and international reputation. More than 300 students have completed the graduate program and found employment in industry, academia, and research laboratories. This interdisciplinary program offers courses in all aspects relating to theoretical and experimental optics, providing versatile and flexible preparation in optics for a future career in science, industry and academia.

Research Areas

Advanced Materials, Atom Optics, Biomedical Optics, Fiber Optics, Laser Cooling, Laser Physics, Lithography, Nanostructures, Nonlinear Optics, Optical Imaging, Optical Sensors, Optoelectronics Photonic Integrated Circuits, Quantum Optics, Spectroscopy and Ultrafast Phenomena

Pioneering research has originated from this program in areas ranging from the quantum theory of lasers to ultrashort pulse physics to opto-electronic devices, among others.

Degree Concentrations

1. Optical Science
2. Photonics
3. Imaging Science
4. Quantum Optics

Faculty

Participating faculty belong to the Departments of Physics and Astronomy (P&A), Electrical and Computer Engineering (ECE), Chemistry, and Chemical Biological Engineering.

S. Prasad, (Ph.D., Harvard, 1983), P&A (General Chair)
M. Hayat, (Ph.D., Univ. of Wisconsin-Madison, 1992), ECE (Co-Chair)
V. Acosta (Ph.D., UC Berkeley, 2011), P&A
L. Arissian (Ph.D., U. of New Mexico, 2007)
G. Balakrishnan (Ph.D., U. New Mexico 2005), ECE
E. Elohim Beccera (Ph.D., CINVESTAV, Mexico 2009), P&A
S. Brueck, (Ph.D., MIT, 1971), ECE & P&A
F. Cavallo (Ph.D. Univ. of Chemnitz, Germany, 2009), ECE
C. Caves, (Ph.D., Caltech, 1979), P&A
C. Christodoulou, (Ph.D., NC State, 1985), ECE
R. Dawson (Ph.D., USC, 1968), ECE
I. H. Deutsch, (Ph.D., Berkeley, 1992), P&A
J. C. Diels, (Ph. D., Brussels, 1973), P&A & ECE
P. G. Eliseev (Ph.D., P. N. Lebedev Physics Institute, Moscow, Russian Academy of Sciences, 1965), ECE
L. A. Emmert (Ph.D., Materials Science and Engineering, Cornell University, 2000), P&A
R. I. Epstein (Ph. D., Stanford University)
D. Feezell (PhD, Univ. of California, Santa Barbara, 2005), ECE
C. Fledderman (Ph.D, Univ. of Illinois at Urbana-Champaign, 1985), ECE
T. G. Habteyes (Ph. D., Univ. of Arizona, May 2008), Chemistry
R. K. Jain (Ph.D., Univ. of California, Berkeley, 1974), ECE
M. P. Hasselbeck (Ph.D., CREOL/ Univ. of Central Florida, 1995), P&A
M. Hossein-Zadeh, (Ph.D., Univ. of Southern California, 2005), ECE
V. M. Kenkre, (Ph.D., SUNY - Stony Brook, 1971), P&A
S. Krishna, (Ph.D., Univ. of Michigan - Ann Arbor), ECE
O. Lavrova (Ph.D., UC, Santa Barbara, 2001), ECE
K. A. Lidke (PhD, University of Minnesota, 2002), P&A
A. Mafi (PhD, Physics, The Ohio State University, 2001), P&A
K. Malloy, (Ph.D., Stanford, 1983), P&A
M. Osinski, (Ph.D., Polish Academy of Sciences, 1979), ECE & P&A
W. Rudolph, (Ph.D., Univ. of Jena, 1985), P&A & ECE
E. Schamiloglu, (Ph.D., Cornell, 1988), ECE
M. Sheik-Bahae, (Ph.D., SUNY – Buffalo 1987), P&A
Andy Shreve (Ph.D., Cornell, 1991)
J. Thomas, (Ph.D., Cornell, 1991), P&A