

OSE Academics

Currently, more than 30 faculty members participate in OSE graduate programs. Nearly 150 students have graduated over the past 10 years (93 M.S. and 53 Ph.D.) and found employment in industry, academia, and government research laboratories.

Among OSE faculty, there are 20 OSA, SPIE, and APS fellows. The OSE program has four members who have received the title of Distinguished Professor at UNM. One faculty member is the recipient of the UNM President's Award for their lifetime achievement in education and research. Also, several faculty members have been recognized as the Regent's Lecturers, Young Researcher Award recipients, and department teaching awards. Finally, one faculty member was inducted into the National Academy of Innovators.

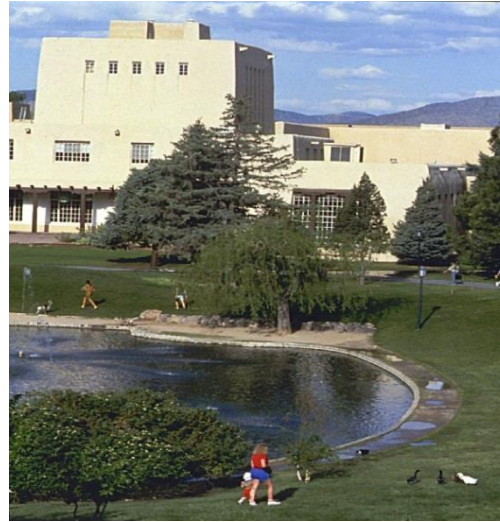


OSE Program Initiatives:

1. *OSE Seminar Series*
2. *OSE Best Dissertation Award*
3. *OSE Student Scholarship Fund*



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



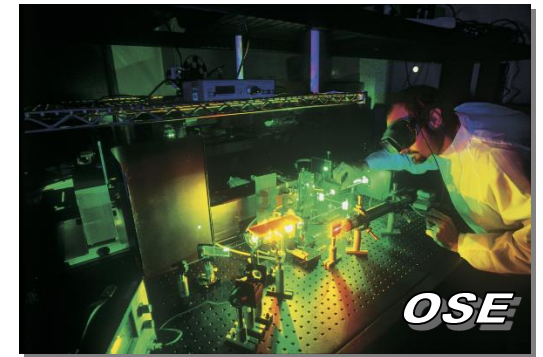
The University of New Mexico is an Affirmative Action/Equal Opportunity institution. In accordance with the Americans with Disabilities Act, this material is available in alternate formats upon request.

Optical Science & Engineering

at the
 THE UNIVERSITY OF
NEW MEXICO.

M.S. Optical Science and Engineering

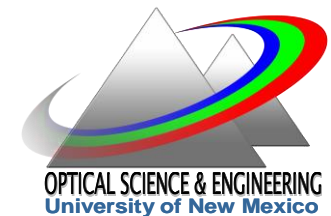
Ph.D. Optical Science and Engineering



Program jointly administered by the Departments of

Physics and Astronomy

and Electrical and Computer Engineering



optics@unm.edu
www.optics.unm.edu

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.

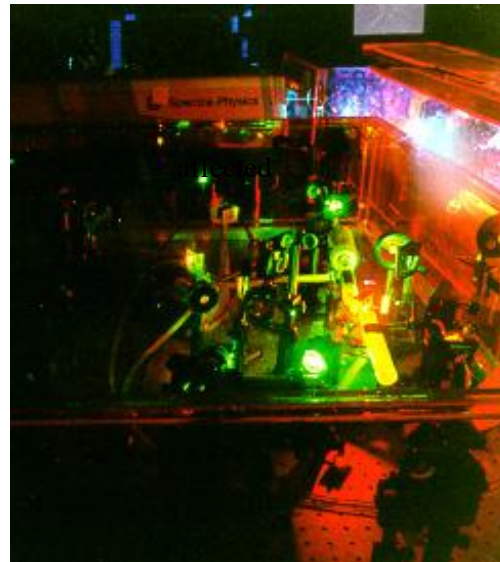


The optics research facilities are located in the Departments of Physics & Astronomy, and Electrical and Computer Engineering, as well as at the Center for High-Technology Materials (CHTM). In 1996 the Optics Program became a member of WICHE (Western Interstate Commission for Higher Education). There are numerous collaborations with the three Federal Laboratories in New Mexico - Sandia National Laboratories (SNL), Los Alamos National Laboratories (LANL), and the Air Force Research Laboratory (AFRL), and with members of the optics industry cluster, the New Mexico Optics Industry Association - NMOptics.

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 (PandA), Electrical and Computer Engineering (ECE), Chemistry, and Chemical Biological Engineering.

G. Balakrishnan (Ph.D., U. New Mexico 2005), ECE (General Chair)
J. Thomas, (Ph.D., Cornell, 1991), P&A (Co-Chair)

V. Acosta, (Ph.D., UC Berkeley, 2011), P&A
L. Arissian, (Ph.D., U. of New Mexico, 2007), ECE
V. Babicheva, (Ph.D., Technical University of Denmark, 2013), ECE
F. Elohim Becerra, (Ph.D., CINVESTAV, Mexico 2009), P&A
S. Brueck, (Ph.D., MIT, 1971), ECE & P&A
T. Busani, (Ph.D., Univ. of J. Fourier, France 2006), ECE
F. Cavallo, (Ph.D., Univ. of Chemnitz, Germany, 2009), ECE
C. Caves, (Ph.D., Caltech, 1979), P&A
T. Chakraborty, (Ph.D., Univ. of Calcutta 2006) P&A
C. Christodoulou, (Ph.D., NC State, 1985), ECE
I. H. Deutsch, (Ph.D., Berkeley, 1992), P&A
J. C. Diels, (Ph.D., Brussels, 1973), P&A & ECE
T. Drake, (Ph.D., Univ. of Colorado, 2015), P&A
L. A. Emmert, (PhD, Materials Science and Engineering, Cornell University, 2000), P&A
R. I. Epstein, (Ph.D., Stanford University)
D. Fezell, (Ph.D., Univ. of California, Santa Barbara, 2005), ECE
C. Fledermann, (Ph.D, Univ. of Illinois at Urbana-Champaign, 1985), ECE
T. G. Habteyes, (Ph.D., Univ. of Arizona, May 2008), Chemistry
M. P. Hasselbeck, (Ph.D., CREOL/Univ. of Central Florida, 1995), P&A
V. M. Kenkre, (Ph.D., SUNY - Stony Brook, 1971), P&A
K. Lidke, (PhD., University of Minnesota, 2002), P&A
P. Lushkinov, (PHD, Landau Institute for Theoretical Physics of the Russian Academy of Sciences, 1997), Math and Statistics
A. Mafi, (Ph.D., Physics, The Ohio State University, 2001), P&A
K. Malloy, (Ph.D., Stanford, 1983), P&A
A. Manjavacas, (Ph.D., Universidad Complutense de Madrid/CSIC, Spain, 2013), P&A
J. Matthews, (Ph.D., University of Toronto, 1971), P&A
M. Osinski, (Ph.D., Polish Academy of Sciences, 1979), ECE
W. Rudolph, (Ph.D., Univ. of Jena, 1985), P&A
E. Schamiloglu, (Ph.D., Cornell, 1988), ECE
S. Posse, (Ph.D., Physics, University of Cologne, Germany, 1986), MIND Inst.
M. Sheik-Bahae, (Ph.D., SUNY – Buffalo 1987), P&A
A. Shreve, (Ph.D., Cornell, 1991), CBE