BIOGRAPHICAL SKETCH

NAME	POSITION & TITLE
James P. Wicksted	Professor and Head, Department of Physics

A. PROFESSIONAL PREPARATION

INSTITUTION	MAJOR	DEGREE	YEAR
New York University	Physics	B.A. (cum laude)	1975
City University of New York	Physics	M.A.	1978
City University of New York	Physics	Ph.D.	1983
Brookhaven National Laboratory	Physics	Post doctoral	1983-1985

B. APPOINTMENTS

Head, Department of Physics, 2005 – present	Oklahoma State University
Director, DOE EPSCoR Program, 2004 – present	State of Oklahoma
Associate Director, EPSCoR Program, 2004 – present	State of Oklahoma
Interim Head, Department of Physics, 2003 – 2005	Oklahoma State University
Director, Center for Sensors & Sensor Tech., 1997 – 2003	Oklahoma State University
Professor, Department of Physics, 1993 – present	Oklahoma State University
Associate Professor, Department of Physics, 1989 – 1993	Oklahoma State University
Assistant Professor, Department of Physics, 1985 – 1989	Oklahoma State University

C. PUBLICATIONS

(i) Closely Related to Project

1. Z. Pan, J.P. Wicksted, and H. Liu, "Photoluminescence Studies of Amorphous and Thermal-Aged Poly (P-Phenylene Sulfide) Films", Phys. Rev. B **48**, 844 (1993).
2. J.P. Wicksted, R.J. Erckens, M. Motamedi, and W.F. March, "Raman Spectroscopy Studies of Metabolic Concentrations in Aqueous Solutions and Aqueous Humor Specimens", Appl. Spectrosc. **49**, 987 (1995).
3. N.J.C. Bauer, J.P. Wicksted, F.H.M. Jongsma, W.F. March, F. Hendrise, and M. Motamedi, "Non-invasive assessment of the hydration gradient across the cornea using confocal Raman spectroscopy", Invest. Ophthalmol. Vis. Sci. **39**, 831 (1998).
4. Arif A. Mamedov, Nicholas A. Kotov, Maurizio Prato, Dirk M. Guldi, James Wicksted, Andreas Hirsch, "Approaching the Strength of Carbon Nanotube: SWNT/Polyelectrolyte Multilayer Composites", Nature Materials **1**, 190 (2002).
5. V.A. Sinani, A.A. Yaroslavov, M.K. Gheith, A.A. Rakhnyanskaya, A.A. Mamedov, J.P. Wicksted, and N.A. Kotov, "Aqueous Dispersions of Single and Multiwall Carbon Nanotubes with Designed Amphiphilic Polycations", JACS **127**, 3463 (2005).

(ii) Other Significant Publications

1. G. S. Dixon, A. Y. Hamad, and J. P. Wicksted, "Kinetics of Holographic Refractive Index Gratings in Rare-Earth-Sensitized Glasses", Phys. Rev. B **58**, 200 (1998).
2. A.Y. Hamad and J.P. Wicksted, "Holographic image storage in Eu^{3+}-doped alkali-aluminosilicate glasses", Appl. Opt. **40**, 1822 (2001).
3. A.Y. Hamad, J.P. Wicksted, M.R. Hogsed, J.J. Martin, C.A. Hunt, and G.S. Dixon, "Effect of Al concentration on the holographic grating efficiency and ionic conductivity in sodium magnesium aluminosilicate glasses", Phys. Rev. B **65**, 064204 (2002).
4. A.Y. Hamad, J.P. Wicksted, R. Ascio, J.J. Martin, C.A. Hunt, and G.S. Dixon, "Effect of Eu^{3+} Concentration on the Grating Efficiency and Ionic Conductivity in Sodium-Magnesium-Aluminosilicate Glasses", J. Appl. Phys. **92**, 2235 (2002).
5. Z.N. Utegulov, M.A. Eastman, S. Prabakar, K. T. Mueller, A.Y. Hamad, J.P. Wicksted, and G.S.

Dixon, "Structural Characterization of Eu_2O_3-MgO-Na_2O-Al_2O_3-SiO_2 Glasses with varying Eu_2O_3 Content: Raman and MAS NMR Studies", J. Non-Cryst. Solids **315**, 43 (2003).

D. SYNERGISTIC ACTIVITIES

Editor, Division of Laser Science Newsletter, The American Physical Society, 1996-98.
Southwestern and Rocky Mountain Division, AAAS, Physical Sciences Section, Vice-Chair, 1995-96.
Developed multidisciplinary Photonics Masters Degree Program
Developed advanced undergraduate course in electromagnetic fields and waves
Member of the American Physical Society
Member of the American Association for the Advancement of Science
Member of the Optical Society of America
Noble Research Fellow in Optical Materials

E. COLLABORATORS

(I) Collaborators

K.E. Bartels, Prof. Of Veterinary Medicine, Oklahoma State University
N.J.C. Bauer, Department of Ophthalmology, Academic Hospital Maastricht, The Netherlands
R.J. Erckens, Department of Ophthalmology, Academic Hospital Maastricht, The Netherlands
W.T. Ford, Department of Chemistry, Oklahoma State University
A. Y. Hamad, Department of Physics, Southern Illinois University
N. Kotov, Department of Chemistry, Oklahoma State University
F. Hendrikse, Department of Ophthalmology, Academic Hospital Maastricht, The Netherlands
S. Mian, Department of Physics, Western Maryland College
M. Motamedi, Director, Center for Biomedical Engineering, University of Texas Medical Branch, Galveston

(II) Graduate and Post Doctoral Advisors

Postdoctoral advisor: Dr. G. Shirane, Department of Physics, Brookhaven National Laboratory
Graduate Advisor: Dr. H. Z. Cummins, Department of Physics, City College of New York, CUNY

(I) Thesis Advisor and Postgraduate-Scholar Sponsor (last five years)

Graduate students: Jerry Morgan (M.S., Current), Emanuela Ene, (Ph.D., Current), (Deok-Jin Yu, M.S., Current), Walid Hikal (Ph.D., Current), Muhammed Gheith (Ph.D., 2004, Rice Univ.), Sang Hoon Park (M.S., 2004 Univ. of Central Florida), Zhandos Utegulov (M.S., 1999; Ph.D., 2003, Univ. of Cincinnati), Xiwang Zhang (M.S., 2001), Abdur Rahman (M.S., 2000, Colorado State University)
Post Doctoral Scholars: I. Berezhnyy, A.Y. Hamad, G. Shen
Total Number of Graduate Students Sponsored: 21
Total Number of Post Doctoral Scholars: 5