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Education

Ph.D., Physics, University of Illinois at Urbana-Champaign, 1982.
M.S., Physics, University of Illinois at Urbana-Champaign, 1979.
A.M., Physics, Harvard University, 1977.
A.B., Chemistry and Physics, Radcliffe College, Harvard University, 1977.

Professional History (since Ph.D.)

Bernard Gray Distinguished Professor, Dept. of Physics and Astronomy, Univ. of North Carolina at Chapel Hill, 2014 – present.
Visiting Scholar, School of Materials Sci. and Eng., Nanyang Technological Univ., Singapore, 2009
Chair, Dept. of Physics and Astronomy, Univ. of North Carolina at Chapel Hill, 2004 - 2009.
Interim Chair, Curriculum in Applied and Materials Sciences, UNC-CH, 2007 - 2008.
Assist. Chair for Advancement, Dept. of Physics and Astronomy, Univ. of North Carolina at Chapel Hill, 1999 - 2004.
Visiting Research Scientist, DuPont Central Research and Development, 1998 – 1999
Professor, Dept. of Physics and Astronomy and Curriculum in Applied and Materials Sciences, Univ. of North Carolina at Chapel Hill, 1996 - 2014.
Associate Chair for Graduate Studies, Curriculum in Applied and Materials Sciences, Univ. of North Carolina at Chapel Hill, 1995 - 1998.
Faculty Research Participant, Materials Science Division, Argonne National Laboratory, 1990.
Assistant, then Associate Professor, Dept. of Physics and Astronomy and Curriculum in Applied Sciences, Univ. of North Carolina at Chapel Hill, 1984 - 96.
Postdoctoral Associate and I.B.M. Postdoctoral Fellow, Center for Materials Science and Engineering, Massachusetts Institute of Technology, 1983 - 84.

Honors and Awards

Fellow, American Physical Society
J.D. Jackson Award, American Association of Physics Teachers, 2025
American Physical Society Five Sigma Physicist 2021
George B. Pegram Award, Southeastern Section of the American Physical Society, 2019
Sigma Xi Distinguished Lecturer 2019-2024
Guy and Rebecca Forman Lecturer, Dept. of Physics and Astronomy, Vanderbilt University, 2021
Chapman Faculty Fellow and Academic Leadership Fellow, Institute for the Arts and Humanities, UNC-CH
William F. Little Award, UNC-CH, 2011
University Award for the Advancement of Women, UNC-CH, 2010
Mary Turner Lane Award, UNC-CH Association of Women Faculty and Professionals 2009
Dorothy K. Daspit Lectureship in Science, H. Sophie Newcomb College Institute, Tulane Univ. 2007
Kathryn A. McCarthy Lectureship in Physics, Dept. of Physics and Astronomy, Tufts Univ., 2000
Bowman and Gordon Gray Professorship, Univ. of North Carolina at Chapel Hill, 1996 - 1999.

Selected Recent Professional Activities

Deputy Editor, *Journal of Applied Physics* 2014 - present
Member, Cottrell Scholars Selection Committee, Research Corp. for Scientific Advancement, 2016 - 2023
Member, Operational Resource Group, Statistical Research Center, AIP, 2016 - 2023
Member, APS Council of Representatives and Board of Directors, 2021 – 2024
Chair, APS Forum on Education 2019
Member, APS Council of Representatives (2021 - 2024) and Board of Directors (2022 - 2024)
NSF review panels: NIRT, IGERT, MWN, CAREER, EAPSI, IMI, GRFP, IUSE, MRI, MRSEC, ERF
APS/CSWP "Climate for Women" Site Visit Program 1994 – present
Chair, National Advisory Board, Faculty Teaching Institute 2021 - present

101. Brandon T. Yost, Addison Wilson, Bradley Gibbons, Muhammad Kasule, Yue Wu, Amanda J. Morris, L. E. McNeil, "Hydrolysis of Dimethyl Phosphite by Zr- and Hf-UiO-66," *ACS Omega* **9**, 43469-43476 (2024) doi: 10.1021/acsomega.4c04872
100. Britta R. Gorman and L.E. McNeil, "Effect of polymerization on free water in polyacrylamide hydrogels observed with Brillouin spectroscopy," *Soft Matter* **20**, 5164 - 5173 (2024) doi: 10.1039/D4SM00250D
99. Zafrullah Jagoo, Zachary A. Lamport, Oana D. Jurchescu, and L.E. McNeil, "High-photoresponsivity transistors based on small-molecule organic semiconductors," *ACS Applied Electronic Materials* **4,** 5799–5808 (2022) doi: 10.1021/acsaelm.2c00970
98. Brandon T. Yost, Bradley Gibbons, Addison Wilson, Amanda J. Morris, and L.E. McNeil, "Vibrational Spectroscopy Investigation of Defects in Zr- and Hf-UiO-66," *RSC Advances* **12**, 22440 (2022).
97. Paula Heron and Laurie McNeil, "Preparing Physics Students for 21st Century Careers," in *Connecting Research in Physics Education with Teacher Education*, J. Guisasola and E. McCloughlin, eds. (International Commission on Physics Education 2022)
96. Zafrullah Jagoo, Zachary A. Lamport, Oana D. Jurchescu and L.E. McNeil, "Efficiency enhancement of organic field-effect thin film phototransistor due to photo-assisted charge injection," *Applied Physics Letters* **119**, 073302 (2021). doi: 10.1063/5.0047570
95. Rohan Isaac; Ajith Ashokan; Veaceslav Coropceanu and Laurie McNeil, "Organic charge-transfer compounds: complex interactions at the nanoscale," SPIE Proceedings 10926, *Quantum Sensing and Nanoelectronics and Photonics XVI* (2019) doi: 10.1117/12.2505784
94. David P. Smith, Laurie E. McNeil, David T. Guynn, Alice D. Churukian, Duane L. Deardorff and Colin S. Wallace, "Transforming the content, pedagogy and structure of an introductory physics course for life science majors," *Am. J. Phys.* **86**, 862 (2018) doi: 10.1119/1.5058685
93. Boris Averkiev, Rohan Isaac, Evgheni V. Jucov, Victor N. Khrustalev, Christian Kloc, Laurie E. McNeil, and Tatiana V. Timofeeva, "Evidence of Low-Temperature Phase Transition in Tetracene–Tetracyanoquinodimethane Complex," *Crystal Growth & Design* **18**, 4095-4102 (2018) doi: 10.1021/acs.cgd.8b00501
92. Rohan Isaac, Katelyn P. Goetz, Drew Roberts, Oana D. Jurchescu, and L. E. McNeil "Temperature-dependent vibrational spectroscopy to study order-disorder transitions in charge transfer complexes," *AIP Advances* **8**, 025117 (2018). doi: 10.1063/1.5018731
91. Laurie McNeil and Paula Heron, "Preparing physics students for 21st-century careers," *Physics Today* **70** (11), 39 (2017). doi: 10.1063/PT.3.3763
90. Derek Vermeulen, Nathan Corbin, Katelyn P. Goetz, Oana D. Jurchescu, Veaceslav Coropceanu, L. E. McNeil, "Electron-phonon coupling in anthracene-pyromellitic dianhydride," *J. Chem. Phys.* **146**, 214705 (2017). doi: 10.1063/1.4984268
89. Kelly A. Hogan, Jennifer Krumper, Laurie E. McNeil and Michael T. Crimmins, "Advancing Evidence-Based Teaching in Gateway Science Courses Through a Mentor-Apprentice Model," in *Transforming Institutions: Undergraduate STEM Education for the 21st Century*, edited by Gabriela C. Weaver, Wilella D. Burgess, Amy L. Childress and Linda Slakey (Purdue University Press, West Lafayette, IN 2016) pp. 77-89.
88. A. Fonari, N.S. Corbin, D. Vermeulen, K.P. Goetz, O.D. Jurchescu, L.E. McNeil, J.L. Bredas, and V. Coropceanu, "Vibrational properties of organic donor-acceptor molecular crystals: Anthracene-pyromellitic-dianhydride (PMDA) as a case study," *J. Chem. Phys.* **143**, 224503 (2015). doi: 10.1063/1.4936965
87. Alice D. Churukian and Laurie E. McNeil, " Joining hands to establish a teacher training program: An example from a major research university," in *Recruiting and Educating Future Physics Teachers: Case Studies and Effective Practices*, edited by C. Sandifer and E. Brewe (American Physical Society, College Park, MD, 2015), pp. 275-282.
86. D. Vermeulen, L. Y. Zhu, K. P. Goetz, Hu Peng, Jiang Hui, C.S. Day, O. D. Jurchescu, V. Coropceanu, C. Kloc, L. E. McNeil, "Charge transport properties of perylene-TCNQ crystals: The effect of stoichiometry," *J. Phys. Chem. C* **118**, 24688-24696 (2014). doi: 10.1021/jp508520x

85. Peng Hu, Lin Ma, Ke Jie Tan, Hui Jiang, Fengxia Wei, Chuhuan Yu, Katelyn Goetz, Oana Jurchescu, Laurie McNeil, Gagik Gurzadyan, Christian Kloc, "Solvent-Dependent Stoichiometry in Perylene - 7,7,8,8-tetracyanoquinodimethane Charge Transfer Compound Single Crystals," *Crystal Growth and Design* **14**, 6376-6382 (2014). doi: 10.1021/cg501206f
84. K. P. Goetz, A. Fonari, D. Vermeulen, P. Hu, H. Jiang, P. J. Diemer, J. W. Ward, M. E. Payne, C. S. Day, C. Kloc, V. Coropceanu, L. E. McNeil, O. D. Jurchescu, "Freezing in orientational disorder induces crossover from thermally-activated to temperature-independent transport in organic semiconductors," *Nature Communications* **5**, 5642 (2014) doi:10.1038/ncomms6642.
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45. Q. Meng, T. Daniels-Race, Z. Luo and L.E. McNeil, "The polarization sensitivity of optical absorption in tensile strained GaAs/InAlAs double quantum wells," *Superlattices and Microstructures* **25**, 583 (1999).
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32. L.E. McNeil, "General remarks on Raman and IR spectroscopy of group III nitrides", "Raman and IR reflection spectra of AlN", "Raman and IR reflection spectra of GaN" and "Raman and IR reflection spectra of InN and ternary group III nitrides", in Properties of Group-III Nitrides, ed. by J.H. Edgar (EMIS Datareviews Series, INSPEC, London, 1994).
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23. M.J. Peters and L.E. McNeil, "Evidence of distinct structural clusters in amorphous $Ge_{1-x}Sn_xSe_2$", *J. Non-Crystalline Solids* **139**, 231 (1992).
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