Curriculum Vitae of Winfried Teizer

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EDUCATION

1989-1991: Universität Karlsruhe, Germany	Vordiplom (1991)
1991-1997: Universität Karlsruhe, Germany	Diplom (1997)
1992-1993: University of Massachusetts, Amherst	national exchange
1993-1995: University of Massachusetts, Amherst	M.S. (1995)
1995-1998: University of Massachusetts, Amherst	Ph.D. (1998)

APPOINTMENTS

1991-1992: *Assistant Lecturer, Institut für Angewandte Mathematik, Universität Karlsruhe*
Taught discussion section for mathematics for civil engineering majors

1993-1996: *Teaching Assistant, Physics Department, University of Massachusetts, Amherst*
Taught various physics laboratories and mathematics for business majors

1994-1998: *Research Assistant (Prof. R. B. Hallock), Physics, Univ. of Massachusetts, Amherst*
1-d ^{4}He Adsorbate in Single Wall Carbon Nanotubes, ^{4}He Adsorption to C_{60}

1998-2001: *Postdoc (Prof. R. C. Dynes), Physics, University of California, San Diego*
Coulomb Gap in Density of States of 3-d Gd_xSi_{1-x} at the Metal-Insulator Transition, Josephson Scanning Tunneling Microscope, MicroSQUIDs

2001-2006: *Assistant Professor, Physics, Texas A&M University, College Station (TAMU)*

Since 2003: *Director of Center for Nanoscale Science and Technology (CNST), TAMU*
CNST is sole provider of E-beam lithography services to TAMU community

Since 2004: *Joint Assistant Professor, Electrical Engineering, TAMU*

Since 2006: *Associate Professor, Physics & Joint Ass. Professor, Electrical Engineering, TAMU*
Molecular Magnets, Thin Films, Spin Hall Effect, MicroSQUIDs, Tunable Metal-Insulator Transition

AWARDS

- Diploma ("Abitur")-Prize of the German Chemical Industry (1989)
- Exchange Fellowship: Massachusetts, USA–Baden-Württemberg, Germany (1992-1993)
- European Union/Science and Techn. Agency-Japan Post-Doc Fellow (1998-1999), declined
- Montague/Center for Teaching Excellence Scholar, Texas A&M University (2004)

MENTORS

- Ph. D. Advisor: Robert B. Hallock, Distinguished Professor of Physics, University of Massachusetts, Amherst
- Postdoctoral Advisor: Robert C. Dynes, Professor of Physics, University of California, Berkeley and President, University of California System

COMPLETED DEGREES IN MY GROUP

1. Bai Bing, M. S. (May 2005), currently employed at Veritas DGC Inc., Houston, TX
2. Dongmin Seo, M. S. (May 2005), currently pursuing a Physics Ph.D. at TAMU
3. Raj Srivastava, M. S. (May 2005), currently pursuing a Physics Ph.D. at TAMU
4. Luohan Peng, M. S. (May 2005), currently pursuing a Physics Ph.D. at TAMU
5. Arlene Ford, M. S. (August 2005), currently pursuing a Physics Ph.D. at TAMU

LIST OF PEER REVIEWED PUBLICATIONS

Members of Teizer's group at Texas A&M University in **bold**.

1. *A search for ^4He in C_{60} interstitial sites.* W. Teizer, R. B. Hallock and A. F. Hebard, Czech. J. Phys. **46** S1, 421-422 (1996).

2. *^4He Adsorption and Superfluid Transition on C_{60}.* W. Teizer, R. B. Hallock and A. F. Hebard, J. Low Temp. Phys. **109**, 243-265 (1997).

3. *Thin Film Adsorption of ^4He to C_{60}.* W. Teizer, R. B. Hallock and A. F. Hebard, J. Low Temp. Phys. **110**, 647-652 (1998).

4. *Anomalous ^4He Adsorption to in-situ baked C_{60}.* W. Teizer, R. B. Hallock, Q. M. Hudspeth and A. F. Hebard, J. Low Temp. Phys. **113**, 453-458 (1998).

5. *^4He Desorption from Single Wall Carbon Nanotube Bundles: A One-Dimensional Adsorbate,* W. Teizer, R. B. Hallock, E. Dujardin and T. W. Ebbesen, Phys. Rev. Lett. **82**, 5305-5308 (1999); **84**, 1844-1845 (2000).

6. *Magnetic Field Induced Insulator to Metal Transition in Amorphous-Gd_xSi_{1-x}.* W. Teizer, F. Hellman and R. C. Dynes, Solid State Commun. **114**, 81-86 (2000).

7. *The Density of States of Amorphous Gd_xSi_{1-x} at the Metal Insulator Transition.* W. Teizer, F. Hellman and R. C. Dynes, Phys. Rev. Lett. **85**, 848-851 (2000).

8. *Tunneling into amorphous Gd_xSi_{1-x} at the Metal-Insulator Transition and its Independence of Magnetic Impurities in the Barrier*. W. Teizer, F. Hellman and R. C. Dynes, Proc. 25th Int. Conf. Phys. Semicond., pg. 250-251, Osaka 2000 (Eds. N. Miura and T. Ando), Springer.

9. *The fabrication of reproducible, superconducting scanning tunneling microscope tips.* O. Naaman, W. Teizer and R. C. Dynes, Rev. Sci. Instrum. **72,** 1688-1690 (2001).

10. *Fluctuation Dominated Josephson Tunneling with a Scanning Tunneling Microscope.* O. Naaman, W. Teizer and R. C. Dynes, Phys. Rev. Lett. **87**, 97004-97007 (2001).

11. *Hall Effect Measurements in Amorphous Gd_xSi_{1-x} at the Metal-Insulator Transition.* **W. Teizer**, F. Hellman and R. C. Dynes, Physica E **18**, 266-269 (2003).

12. *Hall Effect at a tunable Metal-Insulator Transition.* **W. Teizer**, F. Hellman and R. C. Dynes, Phys. Rev. B – Rapid Communications **67**, 121102-121105 (2003).

13. *Spin Polarized Tunneling at the Metal-Insulator Transition.* **W. Teizer**, F. Hellman and R. C. Dynes, International Journal of Modern Physics B **17**, 3723-3725 (2003).

14. *Films of molecular magnets deposited by low energy laser ablation.* **J. Means**, **R. Srivastava**, **V. Meenakshi**, **W. Teizer**, H. Zhao, K. Dunbar, Al.A.Kolomenskii and H. A. Schuessler, Journal of Magnetism and Magnetic Materials **284**, 215-219 (2004).

15. *Spin-Hall and spin-diagonal conductivity in the presence of Rashba and Dresselhaus spin-orbit coupling*. N. A. Sinitsyn, E. M. Hankiewitz, **Winfried Teizer** and Jairo Sinova, Phys. Rev. B – Rapid Communications **70**, 081312-081315 (2004).

16. *Films of Mn_{12}-Acetate by Pulsed Laser Evaporation.* **V. Meenakshi**, **W. Teizer**, D. Naugle, H. Zhao and K. Dunbar, Solid State Communications **132**, 471-476 (2004).

17. *Variation of the Density of States in Amorphous GdSi at the Metal-Insulator Transition*. L. Bokacheva, **W. Teizer**, F. Hellman and R. C. Dynes, Phys. Rev. B. **69**, 235111-235117 (2004).

18. *Undergraduate Educational Components for Nanoscale Issues in Manufacturing*. J. Froyd, T. Creasy, I. Karaman, **W. Teizer** and R. Caso, Proceedings of the 2004 American Society for Engineering Education Annual Conference & Exposition, 2004 http://www.asee.org/acPapers/2004-541_Final.pdf.

19. *Lithographic Patterns of Molecular Magnets*. **K. Kim**, **D. Seo**, **J. Means**, **V. Meenakshi**, **W. Teizer**, H. Zhao, K. Dunbar, Applied Physics Letters **85**, 3872-3874 (2004).

20. *Metallurgy in a Beaker: Nanoparticle Toolkit for the Rapid Low-Temperature Solution Synthesis of Functional Multimetallic Solid-State Materials.* Raymond E. Schaak, Amandeep K. Sra, Brian M. Leonard, Robert E. Cable, John C. Bauer, Yi-Fan Han, **Joel Means**, **Winfried Teizer**, Yolanda Vasquez, Edward S. Funck, Journal of the American Chemical Society **127**, 3506 - 3515 (2005).

21. *Enhanced Magnetic Anisotropy of Mn12-acetate*. **D. Seo**, **V. Meenakshi**, **W. Teizer**, H. Zhao and K. Dunbar, Journal of Magnetism and Magnetic Materials, **301/1**, 31-36 (2006).

22. *Challenges in Patterning Mn_{12}-Acetate Thin Films by Electron-Beam Lithography*. **K. Kim**, **A. Ford**, **V. Meenakshi**, **W. Teizer**, H. Zhao, and K. R. Dunbar, Proceedings of 24th International Conference on Low Temperature Physics, pg. 1139 (2006).

23. *Improved Fitting of the Spin Polarized Tunneling Conductance near the Metal-Insulator Transition*. **W. Teizer**, **R. Srivastava**, F. Hellman and R. C. Dynes, Proceedings of 24th International Conference on Low Temperature Physics, pg. 1490 (2006).

24. *Magnetic Relaxation and Magnetic Moment of Mn12-Acetate Film Material*. **D.M. Seo**, **V. Meenakshi**, **W. Teizer**, Hanhua Zhao, Kim Dunbar, Proceedings of 24th International Conference on Low Temperature Physics, pg. 1137 (2006).

25. *Near Perfect Alignment and Quantum Tunnelling of the Magnetization in a Frozen Matrix of Mn_{12}-ac*. **Dongmin Seo**, **Winfried Teizer**, Hanhua Zhao, and Kim R. Dunbar, accepted at Journal of Magnetism and Magnetic Materials, 2007.

OTHER PUBLICATIONS

Members of Teizer's group at Texas A&M University in **bold**.

1. S*earch for Intercalation of ^4He into C_{60}.* W. Teizer, R. B. Hallock and A. F. Hebard, Bull. APS **41**, 39 (1996).

2. *^4He Filme auf kristallinem C_{60} – ^4He Films on crystalline C_{60}.* W. Teizer, Diplomarbeit, Universität Fridericiana Karlsruhe, Germany (1997).

3. *^4He Adsorption to Fullerenes.* W. Teizer, Ph. D. Thesis, University of Massachusetts, Amherst, USA (1998).

4. *^4He Desorption from Single Wall Carbon Nanotube Bundles.* W. Teizer, R. B. Hallock, E. Dujardin and T. W. Ebbesen, Bull. APS **44**, 519 (1999).

5. *Magnetic Field Change of the Density of States of Amorphous-Gd_xSi_{1-x} at the Metal Insulator Transition.* W. Teizer, F. Hellman and R. C. Dynes, Bull. APS **45**, 611 (2000).

6. *The Density of States of Amorphous Gd_xSi_{1-x} at the Metal-Insulator Transition.* W. Teizer, Bull. APS **46**, 851 (2001).

7. *Reproducible fabrication and applications of superconducting scanning tunneling microscope tips.* O. Naaman, W. Teizer and R. C. Dynes, Bull. APS **46**, 732 (2001).

8. *Hall Effect Measurements in Amorphous Semiconductors at the Metal-Insulator Transition.* W. Teizer, G. Malardier, F. Hellman and R. C. Dynes, Bull. APS **46**, 1157 (2001).

9. *The simultaneous Measurement of the Density of States and the Conductivity at the Metal-Insulator Transition and Implications for the Scaling Theory.* R.C. Dynes, F. Hellman and **W. Teizer**, Bull. APS **47**, 166 (2002).

10. *Hall Effect and Spin Polarized Tunneling of a-Gd_xSi_{1-x} at the Metal-Insulator Transition.* **W. Teizer**, F. Hellman and R. C. Dynes, Bull. APS **47**, 522 (2002).

11. *Josephson Scanning Tunneling Microscope*. O. Naaman, W. Teizer and R. C. Dynes, Bull. APS **47**, 982 (2002).

12. *Matrix assisted pulsed laser deposition of Mn_{12}-acetate molecular magnet films.* **V. Meenakshi**, **W. Teizer**, K.D.D. Rathnayaka, D. Naugle, H. Zhao and K. Dunbar. Bull. APS **48**, 1019 (2003).

13. *Magnetic properties of Mn_{12}-acetate films*. **V. Meenakshi**, **W. Teizer**, D. G. Naugle, H. Zhao and K. R. Dunbar. Bull. APS **49**, 192 (2004).

14. *Pulsed Laser Deposition of Mn_{12}-acetate Films using a Nitrogen Laser*. **J. Means**, **R. Srivastava**, **V. Meenakshi**, **W. Teizer**, H. Zhao, K. Dunbar, Al.A.Kolomenskii and H. A. Schuessler. Bull. APS **49**, 191 (2004).

15. *Fabrication of Mn_{12}-acetate Molecular Magnet Thin Films by the Dip-and-Dry Method*. **D.M. Seo**, **M. Viswanathan**, **W. Teizer**, H. Zhao and K. R. Dunbar. Bull. APS **49**, 628 (2004).

16. *A Simple Way to Pattern Mn_{12}-acetate Thin Films*. **K. Kim**, **D.M. Seo**, **J. Means**, **M. Viswanathan**, **W. Teizer**. Bull. APS **49**, 191 (2004).

17. *The Spin Polarization at the Metal-Insulator Transition.* **R.V.A. Srivastava**, **W. Teizer**, F. Hellman and R.C. Dynes. Bull. APS, Texas Section Fall Meeting, pg. 36 (2005). http://tsaps.phys.uh.edu/index_files/Program_Complete.pdf

18. *Alignment of Mn_{12}-Acetate in Suspension*. **D. Seo** and **W. Teizer**. Bull. APS **51**, 991 (2006). http://www.aps.org/meet/MAR06/baps/all_MAR06.pdf

19. *Magnetization Measurements of Mn_{12}-acetate Thin Films*. **T. Wellington**, A. Yamaguchi, K. Suzuki, H. Ishimoto, **J. Means**, **W. Teizer**. Bull. APS, Texas Section Fall Meeting (2006).