

CURRICULUM VITAE

JASON ALLEN DEIBEL

CONTACT INFORMATION

Department of Physics
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Wright State University
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EDUCATION

Doctor of Philosophy in Applied Physics, February 2004.

University of Michigan Rackham School of Graduate Studies, Ann Arbor, Michigan.

Thesis Title: *A Study of Nonlinear Optical Polymers for Use
in Ultrafast Electro-Optic Sampling Experiments*

Thesis Advisor: Dr. John F. Whitaker, Department of Electrical Engineering and Computer Science

Bachelor of Arts in Physics and Mathematics, History (Minor), May 1997.

Transylvania University, Lexington, Kentucky.

EXPERIENCE

Director of Undergraduate Research & Experiential Learning, March 2014 - present
College of Science & Mathematics, Wright State University

Associate Professor of Physics (w/tenure), August 2013 – present.

Wright State University, Department of Physics, Dayton, Ohio.

- Associate Professor with Tenure
- Joint Appt., Department of Electrical Engineering, September 2008 - present
- Dissertation Qualified Faculty, Ph.D. Program in Engineering, Sept. 2009
- Member, Institute for Development and Commercialization of Advanced Sensor Technology

Visiting Staff, Education Division, August 2014 – June 2015 (Sabbatical Leave Work)
National Museum of the United States Air Force, Dayton, Ohio.

Research Grants Consultant, July 2014 – present
Hanover Research Corporation, Arlington, Virginia

Assistant Professor of Physics, August 2007 – July 2013.
Wright State University, Department of Physics, Dayton, Ohio.

Research Consultant, October 2006 – July 2007, January 2009 – August 2011.
Princeton Nanotechnology Systems, Monmouth Junction, New Jersey.

Postdoctoral Research Associate, February 2004 – June 2007.
Rice University, Department of Electrical and Computer Engineering, Houston, Texas.

- Advisor: Professor Daniel Mittleman
- Director of Central Intelligence Postdoctoral Fellow, February 2004 –December 2006

Visiting Fellow, Royal Society North America Incoming Short Visit Program, Aug. – Oct. 2006.
University of Leeds, School of Electronic and Electrical Engineering, Leeds, United Kingdom.

- Hosts: Professor Giles Davies and Professor Edmund Linfield

EXPERIENCE (Continued)

Graduate Student Research Assistant, August 1997 – February 2004.

University of Michigan, Center for Ultrafast Optical Science, Ann Arbor, Michigan.

- Laboratory of Dr. John F. Whitaker. Ultrafast Technology Group

Graduate Student Research Assistant, June 2003 – December 2003.

University of Michigan, Department of Physics, Ann Arbor, Michigan.

- Laboratory of Professor Keith Riles.

RESEARCH INTERESTS AND SPECIALTIES

- Pulsed Terahertz Source Development.
- Terahertz time-domain spectroscopy of novel materials including nanostructured materials, ceramic matrix composite materials, polymers, diluted magnetic semiconductors, metal-insulator transition materials, superconductors, and metamaterials.
- Ultrafast electronic properties of carbon nanomaterials.
- Terahertz frequency plasmonics and surface plasmon polaritons.
- Phenomenology of scattering at terahertz frequencies.
- Development of applications of terahertz spectroscopy and imaging.
- Terahertz waveguides and near-field microscopy.
- Non-destructive evaluation of aerospace materials and components using terahertz imaging.
- Terahertz emission spectroscopy.
- Finite element method and finite difference time-domain method based simulation of terahertz frequency devices and phenomena and nanoscale materials and devices.
- Ultrafast optoelectronic measurements and materials.
- Ultrafast pump-probe measurements of novel semiconductors.
- Characterization and application of nonlinear optical polymers.
- Development and implementation of novel active learning technologies for physics, general science education, and inter-disciplinary nanoscience education/laboratory experiences.
- Advancement and the implementation of the impact and availability of undergraduate research as a best impact practice for the quality of the undergraduate education experience.
- Development of physics concepts modules aligned with popular culture topics (flight, movies, etc.) for dissemination among non-science educated public populations.

EXTERNAL AWARDS AND GRANTS

University of Dayton Research Institute, January 2015 – January 2017, \$175,000

Design, Development and Characterization

of Microwave/Terahertz Frequency Superconducting Antennas

Principal Investigator, Sub-contract for work to be done at AFRL Aerospace Systems Directorate

The Proctor and Gamble Company, October 2014 – June 2014, \$30,000

Terahertz Imaging – Developing Non-invasive 3d Imaging of Paper Product Fit and Fluid Distribution on Consumers

Co-Principal Investigator with Dr. Douglas Petkie

Universal Energy Systems, Inc., June 2014 – May 2015, \$16,500

Electron Emission from Carbon Nanotube Materials Assisted By Ultrafast Laser Pulse Excitation

Principal Investigator, Sub-contract for work to be done at AFRL Materials & Manufacturing Directorate

Traycer Diagnostic Systems, Inc., August 2013 – November 2013, \$6,261

Terahertz Spectroscopic Measurement Services

Principal Investigator

Office of Naval Research, July 2012 – December 2012, \$25,000.

SBIR Phase I: Broadband Multi-Mode Terahertz Imaging for Detection of Corrosion and Defects under Hull Coatings

Co-Principal Investigator with Dr. Douglas Petkie and Dr. Ivan Medvedev. Sub-contract with PNTS, Inc.

National Science Foundation, August 2011 – August 2013, \$199,957.

NUE – WSU Nanoscience and Nanotechnology Laboratory Experience

Co-Principal Investigator with Dr. Ioana Pavel Sizemore, Dr. Hong Huang, & Dr. Steven Higgins.

MEMC Electronic Materials, August 2011 – March 2012, \$9,125.

Terahertz Imaging Characterization Work

Principal Investigator

Office of Naval Research, June 2011 – November 2011, \$25,000.

SBIR Phase I: Advanced Instrumentation and Non-Destructive Evaluation for Composite Structures

Co-Principal Investigator with Dr. Douglas Petkie and Dr. Ivan Medvedev. Sub-contract with PNTS, Inc.

Mound Laser and Photonics Center, April 2011 – March 2012, \$10,000

MLPC-WSU Terahertz Wire Waveguide Modeling and Characterization

Principal Investigator

Battelle Memorial Institute, August 2010 – September 2010, \$4,830

Characterization using Terahertz Scattering Measurements

Principal Investigator

Air Force Research Laboratory Propulsion Directorate, July 2010 – December 2010, \$24,500.

Terahertz frequency spectroscopy and imaging of combustion science

Co-Principal Investigator with Dr. Douglas Petkie. Sub-contract with Spectral Energies, LLC.

Air Force Research Laboratory Materials Directorate, July 2010 – April 2013, \$253,800.

Electromagnetic NDE Techniques for the Detection and Characterization of Damage and Degradation in Thermal Protection Systems (TPS)

Co-Principal Investigator with Dr. Douglas Petkie. Sub-contract with Universal Technology Corporation.

EXTERNAL AWARDS AND GRANTS (Continued)

National Science Foundation, January 2010 – December 2010, \$45,000.

SBIR Phase I: Laser Machining of Terahertz Waveguide & Microscopy Components

WSU Principal Investigator

Sub-contract with Mound Laser & Photonics Center (MLPC), \$149,935 total award to MLPC

ASEE United States Air Force Summer Faculty Fellowship, June 2009 – August 2009, \$15,600.

Combustion Diagnostics with Terahertz Computed Tomography

Principal Investigator

Air Force Research Laboratory, January 2009 – June 2009, \$10,149.

SBIR Phase I: Advanced THz Materials for Nondestructive Evaluation (NDE)

WSU Co- Principal Investigator with Dr. Douglas Petkie

Sub-Contract with Traycer Diagnostic Systems, Inc.

IDCAST Ohio Sensor Company Assisted Research, January 2009 – November 2009, \$40,000.

WSU Co- Principal Investigator with Dr. Douglas Petkie

Sub-contract with Traycer Diagnostic Systems, Inc.

\$187,000 total award to Traycer Diagnostic Systems, Inc.

Ohio Board of Regents & Ohio Department of Development, May 2008 – May 2013, \$4,100,000.

Ohio Academic Research Cluster for Layered Sensing (OARCLS)

WSU Co- Principal Investigator with Dr. Douglas Petkie

Collaborative grant lead by the University of Dayton including MU, OSU, and WSU

\$23,448,718 total award amount.

ASEE United States Air Force Summer Faculty Fellowship, June 2008 – August 2008, \$15,600.

Combustion Spectroscopy and Imaging with Terahertz Wire Waveguides

Principal Investigator

Office of Naval Research, March 2008 – September 2008, \$15,189.

SBIR Phase I: Portable 3D Corrosion Detector for Inspecting Aircraft Structures with Complex Geometries

WSU Co- Principal Investigator with Dr. Douglas Petkie and Dr. Hong Huang

Sub-contract with Photon-X

PENDING EXTERNAL AWARDS AND GRANTS

American Physical Society Public Outreach Grant Proposal, submitted December 2014

\$10,000

The Physics of Flight – From the Earth to the Stars

WRIGHT STATE INTERNAL AWARDS AND GRANTS

Wright State University Teaching Innovation Grant

August 2013, \$12,500

Enhancing Student Learning in Introductory Physics Courses through the Use of Peer Instruction, SCALE-UP, Lesson Study, and Collaboration with Mathematics & Statistics Department

Co-Principal Investigator with Dr. Douglas Petkie, Dr. Jerry Clark, and Dr. Gary Farlow

Wright State University Research Challenge – Major Collaboration and Infrastructure Grant Program, January 2009, \$50,000.

Research Collaboration in Terahertz Non-Destructive Evaluation and Diagnostics

Co-Principal Investigator with Dr. Douglas Petkie

Wright State University Research Challenge – Early Start/Augmentation Program, January 2008, \$39,672.

Terahertz Time-Domain Spectroscopy of Novel Semiconductor Systems

Principal Investigator

FACULTY DEVELOPMENT

2014-2015, Professional Development Leave (Sabbatical) awarded

The Physics of Flight and the Evolution of Terahertz Science & Imaging

2012-2013 Enhancing Student Learning in Introductory Physics Courses through the Use of Peer Instruction, SCALE-UP, and Lesson Study

Sponsor: Wright State University Teaching Innovation Grant Program

Wright State University Department of Physics

2010 New Physics and Astronomy Faculty Reunion Workshop

Sponsor: American Association of Physics Teachers

American Center for Physics, College Park, MD, November, 2010.

NSF Regional Grants Conference

Sponsor: National Science Foundation

Cleveland, OH, March, 2010.

2007 Workshop for New Physics and Astronomy Faculty

Sponsor: American Association of Physics Teachers

American Center for Physics, College Park, MD, November, 2007.

COURSES TAUGHT

Course Title	Level	Description
<i>Courses taught at WSU under the quarter-based calendar</i>		
Applied Optics (PHY 322/622, EP 322/622)	Undergraduate/Graduate	Lecture & Lab
Ultrafast Optics (PHY 799)	Graduate	Lecture
Ph.D. Dissertation Research (EE 898)	Graduate	Ph.D. Engineering Program Advising
Sounds and Colors (PHY 105)	Undergraduate	General Education Lecture
Introduction to Modern Physics (PHY 260)	Undergraduate	Lecture, Lab, & Writing Intensive
Teaching Modern Physics (PHY 799)	Graduate	Lecture, Lab, & Writing Intensive
Physics Seminar (PHY 800)	Graduate	Seminar course
Intro. to Nanoscience/Nanotech. (PHY 440/640)	Undergraduate/Graduate	Lecture
Physics Research (PHY 899)	Graduate	M.S. Thesis Advising
Senior Project (PHY 494)	Undergraduate	Senior Thesis Project Advising
Special Topics – Photonics (PHY 470)	Undergraduate/Graduate	Lecture
General Physics II (PHY 242)	Undergraduate	Recitation
General Physics III (PHY 244)	Undergraduate	Lecture & Recitation
<i>Courses taught at WSU under the semester-based calendar</i>		
General Physics I (PHY 2400)	Undergraduate	Lecture, Lab, Recitation (Taught in Scale-Up environment during Summer 2013)
Undergraduate Physics Seminar (PHY 1000/1010)	Undergraduate	Lecture, Lab, Seminar
Physics of How Things Work (PHY 1050)	Undergraduate	Lecture
Experimental Nanomaterials/Nanoscience (CHEM 4680/6680) (ME 4680/6680)	Undergraduate/Graduate	Lab

PROFESSIONAL SOCIETIES AND ACTIVITIES

Memberships

Optical Society of America, OSA
Institute of Electrical and Electronics Engineers, IEEE
IEEE Photonics Society
American Physical Society, APS
American Association of Physics Teachers, AAPT
Council on Undergraduate Research, CUR
Sigma Pi Sigma National Honorary Society, ΣΠΣ

Service

- Committee Chair, OSA Optical Sensors Meeting 2012 “Terahertz Sensors” Program Committee
- Member, OSA Optical Sensors Meeting 2011 “Terahertz Sensors” Program Committee
- Member, Editorial Board of the International Journal of Infrared, Millimeter, and Terahertz Waves
- Organizing Committee, “Materials Research for Terahertz Technology Development Symposium,” Spring 2009 Materials Research Society Meeting
- Member, Local Planning Committee, Fall 2008 Meeting of the Ohio Section of the American Physical Society (hosted by Wright State University).
- Member, Program Committee, Comsol Users Conference 2007
- Montgomery County Educational Service Center STEM (Science, Technology, Engineering, Mathematics) Higher Education Fellow (2008, 2010)
- Ohio Innovation Summit 2009, Poster Program Committee
- Reviewer: *Optics Express*, *Electronics Letters*, *Applied Physics Letters*, *IEEE Journal of Selected Topics in Quantum Electronics*, *IEEE Photonics Technology Letters*, *Proceedings of the IEEE*, *Optics Communications*, *IEEE Sensors Journal*, *IOP Journal of Physics D: Applied Physics*, *International Journal of Infrared, Millimeter, and Terahertz Waves*, *SPIE Optical Engineering*, *Journal of the Optical Society of America B*, *IEEE Journal on Terahertz Science and Technology*, *Optics Communications*, *Applied Optics*.
- Grant reviewer: *US Defense Threat and Reduction Agency*, *Canada Foundation for Innovation Leaders Opportunity Fund* & *US Civilian Research and Development Foundation*, *U.S. National Science Foundation*

WRIGHT STATE UNIVERSITY SERVICE

Wright State University Activities

Higher Learning Commission Accreditation Review Panel (Sept. 2013 – March 2014)
Ad hoc Committee on First Year Seminars, Member (September 2012 – August 2013)
Faculty Senate Information Technology Committee, Member (August 2012 – May 2013)
Writing Across the Curriculum Committee, Member (August 2012 – May 2013)

College of Science and Mathematics (CoSM) Activities

Co-Author/Developer CoSM Interdisciplinary Applied Sciences and Mathematics
Ph.D. Program Proposal (August 2013 -)
College Curriculum Committee (August 2014 -)
Strategic Plan 2012 “Core-Interdisciplinary Capabilities” Sub-Committee, Member (2012).

WSU Department of Physics Activities

Undergraduate Studies Committee, Member (2012 -), Chair (August 2013 -)
Faculty Advisor, WSU Chapter of the Society of Physics Students (2007 – 2012)
Faculty Supervisor, Department of Physics Student Computer Lab (2007 – 2010)
Engineering Physics Program Committee, Member (2007 - 2012)
Graduate Studies Committee, Member (2010 – 2011)
Ohio Research Scholar Faculty Search Committee, Member (2009 – 2010)
Faculty Search Committee, Member (2010)

OUTREACH ACTIVITIES

- Faculty Advisor, WSU Chapter of the Society of Physics Students (2007 – 2012).
- Guest speaker at Boonshoft Museum of Discovery “NanoDays” Event, April 5th and 6th, 2008.
- Guest speaker at Boonshoft Museum of Discovery “NanoDays” Event, March 28th, 2009.
- Advised and assisted with WSU Society of Physics Students conducting demonstrations at Boonshoft Museum of Discovery “NanoDays” Event, March 28th, 2009.
- Advised and assisted with WSU Society of Physics Students conducting demonstrations at Boonshoft Museum of Discovery “WSU Physics Day” Event, September 18th, 2010.
- Guest speaker at Boonshoft affiliated “Pub Science Talks,” presented seminar on *Ultrafast Science*, to general audience, December 14th, 2010.
- Guest speaker at Boonshoft Museum of Discovery “NanoDays” Event, April 2-3, 2011.
- Advised and assisted with WSU Society of Physics Students conducting demonstrations at Boonshoft Museum of Discovery “NanoDays” Event, April 2-3, 2011.
- Advised and assisted with WSU Society of Physics Students conducting demonstrations at Boonshoft Museum of Discovery “WSU Physics Day” Event, October 8th, 2011.

GRADUATE AND UNDERGRADUTE STUDENT ADVISEES

Ph.D. Engineering Program Thesis Advisor

- Ryan Hendrix, Thesis Topic TBD, Graduation TBD.
- Satya Ganti, "Characterization and Modeling of Laser Micro-Machined Periodically Corrugated Metallic Terahertz Wire Waveguides," Summer 2012.

M.S. Physics Thesis Advisor

- Hannah Jones, Thesis Topic TBD, Summer 2015.
- Andrew Niklas, "Characterization of Structured Nanomaterials using Terahertz Frequency Radiation," Summer 2012.
- Justin Wheatcroft, "Terahertz Time Domain Spectroscopy and Fresnel Reflection Based Material Parameter Extraction", Summer 2012.
- Lindsay Owens, "Characterization of Ceramic Composite Materials using Terahertz Non-Destructive Evaluation Techniques," Spring 2012.
- Lt. Roberto Acosta, "Ostwald Ripening of Fe Catalyst Nanoparticles on Al₂O₃ Surfaces for the Growth of SWNTs," Winter 2010. (Co-Advisor with Dr. Benji Maruyama)

Physics Senior Thesis Projects

- Chenoa Courtney, "Finite Element Method Simulations of Extraordinary Optical Transmission at Terahertz Frequencies in Plasmonic Metallic Aperture Arrays," 2013 – 2014.
- Kent Weaver, "Atmospheric Pressure Growth of Graphene from Liquid Precursors," 2011 - 2012. (Co-Advisor with Dr. Benji Maruyama)
- Arda Cakmacki, "Diagnostic Analysis of JP8 Jet Fuel and Steam Jet Using Terahertz Spectroscopy," 2010 - 2011.
- Zachary Gault, "Simulation, Fabrication, and Characterization of Terahertz Wire Waveguides," 2009 – 2010.
- Lindsay Owens, "Terahertz Time Domain Spectroscopy with Parallel Plate Waveguides," 2009 – 2010.
- Scott Eilerman, "Simulation of Terahertz Metamaterials," 2007 – 2008.

Engineering Physics Senior Design Projects

- Alyssa Fosnight, Hannah Jones, and Ryan Shaver, "Terahertz Metamaterial Device Design, Fabrication, and Characterization," 2011 - 2012.
- Aaron Archibald and Ian Fuller, "Solar Pumped Laser," 2009 – 2010.
- Michael Moulton, "Terahertz Generation and Detection," 2008 – 2009.

M.S. Physics Thesis Committee Member

- Jack Owsley, "Characterization of Doped GaN," November 2012.
- Matthew Bischoff, "Characterization Of Ceramic Matrix Composites Materials Using Millimeter-Wave Techniques," November 2012.
- Lingbo Qian, "Comparing US and Chinese High-School Physics Teaching in Terms of the Use of Inquiry," Summer 2012.
- Jay Patel, "Growth and Characterization of Carbon Nanomaterials," Winter 2011.
- John Bulmer, "Temperature and Frequency Dependent Conduction Mechanisms within Bulk Carbon Nanotube Materials," Fall 2010.
- Rhett Lindsey, "The Derivation and Testing of Three-Dimensional Line Equations that Predict the Location Of Brachytherapy Sources in Three-Dimensions," Summer 2010.
- John Cetnar, "Atmospheric Effects on the Propagation of mmW and Sub-mmW Radiation," Spring 2010.
- Izaak Kemp, "Sub-mm Wave Imaging And Waveguiding Techniques For Non-Destructive Materials Evaluation," Summer 2009.

Visiting Students

- Meagan Bechel, AFRL Summer Intern, The Ohio State University, June – September 2010.
- Molique Reese, AFRL Human Effectiveness Dir. Intern, Summer 2009.
- Finn Eichhorn, Ph.D. Candidate, Technical University of Denmark, August – December 2008.
- Stanley Smith, Intern, Beaver Creek High School, June – August 2008.

PUBLICATIONS AND PRESENTATIONS

Refereed Journals (* Denotes WSU undergraduate student, ** Denotes WSU graduate student)

1. S. Ganti**, Z. Gault*, S. Smith*, J.A. Deibel, I. Kemp, N. Schroeder, C. Druffner, "Characterization and Modeling of Laser Micro-Machined Periodically Corrugated Metallic Terahertz Wire Waveguides," *Journal of Infrared, Millimeter, and Terahertz Waves* **33**, 1104 – 1116 (2012). DOI: 10.1007/s10762-012-9926-6.
2. B. Scherger, M. Reuter, M. Scheller, K. Altmann, N. Vieweg, R. Dabrowski, J. A. Deibel, and M. Koch, "Discrete Terahertz Beam Steering with an Electrically Controlled Liquid Crystal Device," *Journal of Infrared, Millimeter, and Terahertz Waves* **33**, 1117 – 1122 (2012). DOI: 10.1007/s10762-012-9927-5.
3. S.T. Fiorino, J.A. Deibel, P.M. Grice, M. H. Novak, J. Spinoza, L. Owens**, and S. Ganti**, "A Technique to Measure Optical Properties of Brownout Clouds for Modeling Terahertz Propagation," *Applied Optics* **51**, 3605-3613 (2012). DOI: 10.1364/AO.51.003605.

-----The articles below have either been submitted, are under revision, or in preparation-----

4. S. Tosa, D.T. Petkie, J.A. Deibel, "Lesson study as an effective professional development model to impact university physics faculty's beliefs towards the use of research-based instructional strategies," submitted for publication in *Physical Review Special Topics - Physics Education Research*, November 2014.
5. H. Huang, I. Pavel Sizemore, S. Higgins, and J.A. Deibel, "Experimental Nanomaterials and Nanoscience: Syntheses, Characterizations, and Applications - Teaching Nanotechnology through an Interdisciplinary Laboratory Course," to be submitted for publication in the *Journal of Nano Education*, December 2014.
6. S. Ganti**, H. R. Jones*, R. Jacobsen, and J.A. Deibel, "Terahertz Imaging and Simulation of the Radiation Emitted From Corrugated and Tapered Wire Waveguides, " to be submitted for publication in *Optics Communications*, Feb. 2015.

-----The above articles have Wright State University as Jason Deibel's affiliation-----

7. J.A. Deibel, M. Escarra, N. Berndsen, K. Wang, and D.M. Mittleman, "The excitation and emission of terahertz surface plasmon polaritons on metal wire waveguides," *Proceedings of the French Academy of Science (Comptes Rendus Physique)* (**invited** article), **9**, 215-231 (2008).
8. H. Zhan, V. Astley, M. Hvasta, J. A. Deibel, D. M. Mittleman, and Y. -S. Lim, "The metal-insulator-transition in VO₂ studied using terahertz apertureless near-field microscopy," *Applied Physics Letters*, **91**, 162110 (2007).
9. J.A. Deibel, M. Escarra, N. Berndsen, K. Wang, and D.M. Mittleman, "Finite element method simulations of guided wave phenomena at terahertz frequencies," *Proceedings of the IEEE* (**invited** article), **95**, pp. 1624-1640 (2007).
10. W.L. Chan, J.A. Deibel, and D.M. Mittleman, "Imaging with Terahertz Radiation," *Reports on Progress in Physics* (**invited** article), **70**, pp. 1325-1379 (2007).

11. H. Zhan, J.A. Deibel, J. Laib, H. Munekata, J. Kono, and D.M. Mittleman, "Temperature dependence of terahertz emission from InMnAs," *Applied Physics Letters*, **90**, p. 012103 (2007).
12. J.A. Deibel, D.M. Mittleman, N. Berndsen, K. Wang, N.C.J. van der Valk, and P.C.M. Planken, "Frequency-dependent radiation patterns emitted by THz plasmons on finite length cylindrical metal wires," *Optics Express*, **14**, No. 19, pp. 8772-8778 (September 2006).
13. J. Pearce, K. Doyle, Z. Jian, J.A. Deibel, and D.M. Mittleman, "Non-stationary time-domain statistics of multiply scattered broadband terahertz pulses," *Journal of the Optical Society of America B*, Vol **23**, No. 8, pp 1506-1510 (August 2006).
14. J.A. Deibel, K. Wang, M. Escarra, and D.M. Mittleman, "Enhanced coupling of terahertz radiation to cylindrical wire waveguides," *Optics Express*, Vol **14**, No. 1, pp. 279-290 (January 2006).
15. J.A. Deibel, M. Escarra, and D.M. Mittleman, "Photoconductive terahertz antenna with radial symmetry," *Electronics Letters*, Vol. **41**, 9 (2005).
16. H.J. Yang, J.A. Deibel, S. Nyberg, and K. Riles, "High-precision absolute distance and vibration measurement with frequency scanned interferometry," *Applied Optics*, Vol. **44**, No. 19, pp. 3937-3944 (July 2005).

Published Proceedings and Presentations

(* Denotes WSU undergraduate student, ** Denotes WSU graduate student)

1. Hendrix, R.M., Deibel, J.A., Fairchild, S.B., Maruyama, B., Urbas, A., Walker, M., and Brown, D., "Laser Assisted Electron Emission from Free Standing Carbon Nanotube Paper," submitted for consideration for oral presentation at the 2015 Conference on Lasers and Electro-Optics (CLEO), May 2015.
2. Hendrix, R.M., Middendorf, J.R., Cetnar, J.S., Deibel J.A., Brown E.R., "Broadband Characterization of THz Frequency High Fill-Factor Substrate-Based Wire-Grid Polarizers with High Extinction Ratios," presented an oral presentation at the 2014 39th International Conference on Infrared, Millimeter, and Terahertz Waves, September, 2014.
3. Hendrix, R.M., Jones H.R., Fosnight A., Shaver R., Best E., Shockey B., Coutu R.A., Langley D., Starman, L.A., Deibel, J.A., "Bending Induced Tuning of the Resonant Response of a Flexible THz Metamaterial Device," presented as a poster at the 2014 39th International Conference on Infrared, Millimeter, and Terahertz Waves, September, 2014.
4. Deibel, J.A., Jones, H.R.*, Fosnight, A.*, Shaver, R.*, Best, E.*, Langley, D., Starman, L.A., and Coutu, R.A.: 'Flexible Terahertz Metamaterials for Frequency Selective Surfaces', in Shaw Iii, G., Prorok, B.C., Starman, L., and Furlong, C. (Eds.): '*MEMS and Nanotechnology, Volume 5*' (Springer International Publishing, 2014), pp. 129-134.

5. L. Owens**, D. T. Petkie, and J. A. Deibel, "Non-Destructive Evaluation of Aerospace Materials using Terahertz Time-Domain Imaging," in *Optical Sensors, OSA Technical Digest (online)* (Optical Society of America, 2012), paper SW4C.4.
<http://www.opticsinfobase.org/abstract.cfm?URI=Sensors-2012-SW4C.4>
6. L. Owens**, M. Bischoff**, A. Cooney, D. Petkie, and J.A. Deibel, "Characterization of Ceramic Composite Materials using Terahertz Reflection Imaging Technique," in *2011 36th International Conference on Infrared, Millimeter, and Terahertz Waves, Volumes 1 and 2* (IEEE 2011), paper W2C.2.
7. M. Bischoff**, L. Owens**, A. Cooney, J.A. Deibel, and D. Petkie, "Characterization of Composite Materials using Millimeter-wave Techniques," in *2011 36th International Conference on Infrared, Millimeter, and Terahertz Waves, Volumes 1 and 2* (IEEE 2011), paper W2C.3.
8. L. Ma, S. B. Zhang, W. Cai, J. R. Gord, S. Roy, N. Schroeder*, S. Ganti**, S. Smith, IV*, and J. A. Deibel, "Demonstration of Tomographic Imaging of Chemical Species Using THz Time-Domain Absorption Spectroscopy," in *Laser Applications to Chemical, Security and Environmental Analysis, OSA Technical Digest Series* (CD) (Optical Society of America, 2010), paper LWA4. <http://www.opticsinfobase.org/abstract.cfm?URI=LACSEA-2010-LWA4>
9. F. Eichhorn, P. U. Jepsen, N. Schroeder*, G. Kozlowski, J. A. Deibel, and K. K. Koziol, "Scattering of Terahertz Radiation from Oriented Carbon Nanotube Films," in *Conference on Lasers and Electro-Optics/International Quantum Electronics Conference*, OSA Technical Digest (CD) (Optical Society of America, 2009), paper IThC7.
<http://www.opticsinfobase.org/abstract.cfm?URI=IQEC-2009-IThC7>
10. Douglas T. Petkie, Izaak V. Kemp**, Carla Benton*, Christopher Boyer*, Lindsay Owens*, Jason A. Deibel, Christopher D. Stoik, Matthew J. Bohn, "Nondestructive terahertz imaging for aerospace applications," SPIE Europe Remote Sensing Meeting, Aug. – Sept. 2009, Berlin, Germany, Proceedings Vol. 7485, Millimetre Wave and Terahertz Sensors and Technology II, Keith A. Krapels; Neil A. Salmon, Editors.

-----The above proceedings have Wright State University as Jason Deibel's affiliation-----

11. H. Zhan, M. Hvasta, V. Astley, J. Deibel, D. Mittleman, F. Hao, P. Nordlander, and Y. Lim, "Terahertz Spectroscopy in the Near Field," in *Laser Science*, OSA Technical Digest (CD) (Optical Society of America, 2007), paper LThE1.
12. J. Deibel, J. Kono, D. Mittleman, W. Fan, P. C. Upadhyaya, A. Sengupta, J. Cunningham, E. H. Linfield, G. Davies, and H. MuneKata, "Temperature Dependent and Magnetic Field Dependent Terahertz Spectroscopy of $\text{In}_{1-x}\text{Mn}_x\text{As}$," in *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference and Photonic Applications Systems Technologies*, OSA Technical Digest Series (CD) (Optical Society of America, 2007), paper JFB4.
13. J. A. Deibel, N. Berndsen, K. Wang, D. Mittleman, N. C. J. van der Valk, and P. C. M. Planken, "Frequency-Dependent Radiation Patterns Emitted by THz Plasmons on Cylindrical Metal Wires," in *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference and Photonic Applications Systems Technologies*, OSA Technical Digest Series (CD) (Optical Society of America, 2007), paper CTuJJ1.

14. M. Mbonye, V. Astley, W. L. Chan, J. Deibel, and D. Mittleman, " A Terahertz Dual Wire Waveguide," in *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference and Photonic Applications Systems Technologies*, OSA Technical Digest Series (CD) (Optical Society of America, 2007), paper CThLL1.
15. H. Zhan, M. Hvasta, V. Astley, J. A. Deibel, D. M. Mittleman, and Y. S. Lim, " Terahertz Apertureless Near-Field Aicroscopy of a Vanadium Dioxide Thin Film," in *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference and Photonic Applications Systems Technologies*, OSA Technical Digest Series (CD) (Optical Society of America, 2007), paper CTuJJ6.
16. J. P. Laib, H. Zhan, J. A. Deibel, D. M. Mittleman, J. Worne, and D. Natelson, " Photoconductive Properties of Regioregular Poly(3-hexylthiophene)," in *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference and Photonic Applications Systems Technologies*, OSA Technical Digest Series (CD) (Optical Society of America, 2007), paper CWH4.
17. J. A. Deibel, N. Berndsen, K. Wang, D. Mittleman, N. C. van der Valk, and P. C. Planken, "Frequency-Dependent Radiation Patterns Emitted by THz Plasmons on Cylindrical Metal Wires," in *Optical Terahertz Science and Technology*, OSA Technical Digest Series (CD) (Optical Society of America, 2007), paper WC4.
18. H. Zhan, J. A. Deibel, J. Laib, C. Sun, J. Kono, D. Mittleman, and H. Munekata, " Temperature Dependence of Terahertz Emission from InMnAs," in *Optical Terahertz Science and Technology*, OSA Technical Digest Series (CD) (Optical Society of America, 2007), paper WA5.
19. H. Zhan, M. Hvasta, V. Astley, J. A. Deibel, D. Mittleman, F. Hao, P. Nordlander, and Y. Lim, "Plasmon-Enhanced Terahertz Near-Field Spectroscopy," in *Optical Terahertz Science and Technology*, OSA Technical Digest Series (CD) (Optical Society of America, 2007), paper ME3.
20. J.A. Deibel, K. Wang, M. Escarra, and D.M. Mittleman, "Mode matching of terahertz radiation to cylindrical wire waveguides using radially symmetric photoconductive antennas," *IEEE Antennas and Propagation Society International Symposium Digest* (IEEE, Piscataway NJ 2006), presentation 354.6 (**invited**).
21. Z. Jian, J.A. Deibel, and D.M. Mittleman, "Broadband group velocity anomaly in transmission through a photonic crystal slab," in *Conference on Lasers and Electro-Optics*, OSA Technical Digest (Optical Society of America, Washington DC, 2006) presentation CMS7.
22. J.A. Deibel, H. Zhan, J.P. Laib, C. Sun, J. Kono, D.M. Mittleman, and H. Munekata, "Terahertz emission spectroscopy of p-In_{1-x}Mn_xAs," in *Quantum Electronics and Laser Science Conference*, OSA Technical Digest (Optical Society of America, Washington DC, 2006), presentation QTuH4.
23. J.A. Deibel, K. Wang, M. Escarra, and D.M. Mittleman, "Mode matching of terahertz radiation to cylindrical wire waveguides," in *Conference on Lasers and Electro-Optics*, OSA Technical Digest (Optical Society of America, Washington DC, 2006), presentation CMS3.

24. J.A. Deibel, K. Wang, M. Escarra, and D.M. Mittleman, "FEM characterization of terahertz wave propagation on metal wire waveguides," *FEMLAB Conference 2005*, Boston, MA, pp. 245-250, October 2005.
25. J.A. Deibel, M. Escarra, and D.M. Mittleman, "Photoconductive terahertz antenna with radial symmetry," in *Conference on Lasers and Electro-Optics*, OSA Technical Digest (Optical Society of America, Washington DC, 2005), presentation JWB23.
26. J.A. Deibel, M. Escarra, and D.M. Mittleman, "Photoconductive terahertz antenna with radial symmetry," in *Optical Terahertz Science and Technology Topical Meeting on CD-ROM* (Optical Society of America, Washington DC, 2005), presentation MB3.
27. J.A. Deibel, K. Wang, and D.M. Mittleman, "FEM simulation of sub-THz propagation on metal wires," post-deadline presentation in *Optical Terahertz Science and Technology Topical Meeting on CD-ROM* (Optical Society of America, Washington DC, 2005), presentation MD5.
28. J.A. Deibel and J.F. Whitaker, "A fiber-mounted polymer electro-optic-sampling field sensor," *IEEE LEOS Annual Meeting Conference Proceedings*, Piscataway, NJ: IEEE, pp. 786-787, Oct. 2003.
29. J.A. Deibel, J.F. Whitaker, and D.C. Martin, "Pockels effect in solution-evaporation-electrically-poled poly(γ -benzyl-L-glutamate)," in *Organic Thin Films for Photonics Applications*, James P. Armistead, James R. Heflin, Alex K-Y. Jen, and Robert A. Norwood, eds. (OSA, Washington D.C.2001) ,TOPS Vol. 64, pp. 138-144.

Unpublished Conference Presentations

Presented by Jason Deibel

1. Jason A. Deibel, James Caplinger, Lindsay Owens, Matthew Bischoff, Douglas T. Petkie, Adam Cooney, "Non-Destructive Evaluation Using Terahertz Imaging," presented as an **invited** oral presentation at the 2014 Nano and Giga Challenges in Electronics, Photonics and Renewable Energy Conference, March 2014, Phoenix, AZ.
2. Jason A. Deibel, Hannah R. Jones*, Alyssa Fosnight*, Ryan Shaver*, Erin Best, Derrick Langley, L.A. Starman, R.A. Coutu, "Flexible Terahertz Metamaterials for Frequency Selective Surfaces," presented as an **invited** oral presentation at the 2013 Society for Experimental Mechanics Annual Conference & Exposition on Experimental & Applied Mechanics, June 2013, Chicago, IL.
3. Jason A. Deibel, "Dayton Area Collaborative Development of Terahertz Waveguides and Metamaterial Devices, presented as an oral presentation at the Ohio Innovation Sensor Summit, June 2012, Dayton, OH.
4. Jason A. Deibel, Nicholas Schroeder*, Satya Ganti**, Stanley Smith IV*, Douglas Petkie, Lin Ma, Sebastian B. Zhang, Weiwei Cai, James R. Gord, and Sukesh Roy, "Chemical sensing and imaging in combustion environments using terahertz spectroscopy and imaging," presented as an **invited** talk at the 2010 42nd ACS Central Regional Meeting - June 16-19, 2010, Dayton, OH.

5. Jason A. Deibel, Lin Ma, Sebastian B. Zhang, Weiwei Cai, James R. Gord, Sukesh Roy, Nicholas Schroeder*, Satya Ganti**, Stanley Smith IV*, and Douglas Petkie, “Tomographic Imaging of Combustion Events Using THz Time-Domain Spectroscopy,” presented as an **invited** talk at the 2010 Augmentor Design Systems Conference, March 2010, Jacksonville, FL.
6. Jason Deibel, Finn Eichhorn, Nicholas Schroeder*, Gregory Kozlowski, Peter Jepsen, Krzysztof Koziol, “The Scattering of Terahertz Radiation from Oriented Carbon Nanotube Films,” presented as an oral presentation at the 2009 Nanoelectronic Devices for Defense and Security Conference, September 2009, Ft. Lauderdale, FL.
7. F. Eichhorn, P. Jepsen, N. Schroeder*, G. Kozlowski, J. A. Deibel, and K. Koziol, “Scattering of Terahertz Radiation from Oriented Carbon Nanotube Films,” presented as an oral presentation at the 2009 Conference on Lasers and Electro-Optics and the International Quantum Electronics Conference, June 2009, Baltimore, MD.
8. J. A. Deibel and D. T. Petkie, “Terahertz and Near-Millimeter-wave Technologies and Aerospace Applications,” presented as a tutorial session at the National Aerospace and Electronics Conference 2008, July 16th, 2008, Fairborn, OH.
9. J.A. Deibel and J. Wilgus, “Institute for the Development and Commercialization of Advanced Sensor Technology (IDCAST) - THz Sensor R&D in Dayton, Ohio,” presented at the 2008 Southern Universities Research Association Terahertz Applications Symposium, June 5th, 2008, Washington D.C.

-----The above presentations have Wright State University as Jason Deibel’s affiliation-----

10. J.A. Deibel and D.M. Mittleman, “Terahertz spectroscopy in the near-field,” presented at the 2007 Southern Universities Research Association Terahertz Applications Symposium, June 7th, 2007, Washington D.C.
11. J.A. Deibel, N. Berndsen, K. Wang, D.M. Mittleman, N.C.J. van der Valk, and P.C.M. Planken, “Frequency-dependent radiation patterns emitted by THz plasmons on cylindrical metal wires,” presented as an oral presentation at the 2007 OSA Optical Terahertz Science and Technology Topical Meeting, March 2007, Orlando, FL.
12. J.A. Deibel, “Simulating the generation and guided propagation of terahertz radiation using COMSOL Multiphysics,” presented as a **keynote** address at the 2006 COMSOL Multiphysics Conference, October 2006, Boston, MA.
13. J.A. Deibel, K. Wang, M. Escarra, and D.M. Mittleman, “Mode matching of terahertz radiation to cylindrical wire waveguides using radially symmetric photoconductive antennas,” presented as an **invited** talk at the special session on Terahertz Technology and Applications at the 2006 IEEE Antennas and Propagation Society International Symposium, June 2006, Albuquerque, NM.
14. J.A. Deibel, K. Wang, M. Escarra, and D.M. Mittleman, “Mode-matching of terahertz radiation to cylindrical wire waveguides,” presented as an oral presentation at the 2006 OSA/IEEE/APS Conference on Lasers and Electro-Optics (CLEO), May 2006, Long Beach, CA.

15. J.A. Deibel, K. Wang, H. Zhan, M. Escarra, and D.M. Mittleman, "Generating, guiding, and detecting terahertz radiation," presented as an **invited** talk at the 2005 IEEE LEOS Terahertz Systems Workshop, October 2005, Lexington, MA.
16. J.A. Deibel, K. Wang, M. Escarra, and D.M. Mittleman, "FEM characterization of terahertz wave propagation on metal wire waveguides," presented at the FEMLAB Conference 2005, October 2005, Boston, MA.
17. J.A. Deibel, K. Wang, M. Escarra, and D.M. Mittleman, "Advances in terahertz imaging," presented at the 2005 Director of Central Intelligence Postdoctoral Research Fellowship Colloquium, April 2005, McLean, VA.
18. J.A. Deibel, K. Wang, and D.M. Mittleman, "FEM simulations of sub-THz wave propagation on metal wires," presented at the post deadline session at the 2005 OSA Optical Terahertz Science and Technology Topical Meeting, March 2005, Orlando, FL.
19. J.A. Deibel, M. Escarra, and D.M. Mittleman, "Photoconductive terahertz antenna with radial symmetry," presented at the 2005 OSA Optical Terahertz Science and Technology Topical Meeting, March 2005, Orlando, FL.
20. J.A. Deibel and D.M. Mittleman, "Terahertz emission spectroscopy/current research activities in the terahertz research group at Rice University," presented as an **invited** paper at the SPIE Optics East 2005 Meeting, October 2004, Philadelphia, PA.
21. J.A. Deibel and D.M. Mittleman, "Advances in terahertz imaging," presented at the 2004 Director of Central Intelligence Postdoctoral Research Fellowship Colloquium, April 2004, McLean, VA.

Presented by Co-Authors

1. Satya Ganti**, Lindsay Owens**, Stanley Smith IV*, and Jason A. Deibel, "Terahertz Spectroscopic Reflection and Scattering Measurements of Aligned CNT Arrays as a Function of Carbon Nanotube Length," presented as a poster presentation at the 7th Annual Dayton Engineering Sciences Symposium (DESS 2011), held in Dayton OH, October 24th, 2011.
2. Ryan Shaver*, Hannah Jones*, and Jason A. Deibel, "Ceramic Coating Analysis Using THz Spectroscopy," presented as a poster presentation at the 7th Annual Dayton Engineering Sciences Symposium (DESS 2011), held in Dayton OH, October 24th, 2011.
3. Hannah Jones*, Satya Ganti*, Jason A. Deibel and Ronald Coutu, "Characterization of Metamaterial Devices Using Terahertz Time-Domain Spectroscopy," presented as a poster presentation at the 7th Annual Dayton Engineering Sciences Symposium (DESS 2011), held in Dayton OH, October 24th, 2011.
4. Mithun Bhowmick, Giti A. Khodaparast, Lindsay Owens**, and Jason A. Deibel, "Terahertz Absorption in MOVPE Grown Ferromagnetic InMnAs and InMnSb," presented as a poster presentation at the 15th International Conference on Narrow Gap Systems (NGS15), held at Virginia Tech University, August 1-5, 2011.

5. Satya Ganti**, Lindsay Owens**, and Jason A. Deibel, “The Scattering of Terahertz Radiation from Aligned CNT Arrays as a Function of Carbon Nanotube Length,” presented as a poster presentation at the 15th International Conference on Narrow Gap Systems (NGS15), held at Virginia Tech University, August 1-5, 2011.
6. Satya R. Ganti**, Lindsay Owens*, Stanley Smith IV*, and Jason A. Deibel, “Terahertz Spectroscopic Reflection and Scattering Measurements of Aligned CNT Arrays as a Function of Carbon Nanotube Length,” presented as a poster presentation at the International Workshop on Optical Terahertz Science and Technology, 2011 held in Santa Barbara, CA March 13-17.
7. Satya R. Ganti**, Zachary Gault*, Stanley Smith IV*, Jason A. Deibel, Izaak Kemp, Nicholas Schroeder, and Carl Druffner, “Simulation, Fabrication, and Characterization of Periodically Corrugated Metallic THz Wire Waveguides,” presented as an oral presentation at the International Workshop on Optical Terahertz Science and Technology, 2011 held in Santa Barbara, CA March 13-17.
8. Satya Ganti**, Nicholas Schroeder*, Gregory Kozlowski, Jason A. Deibel, Finn Eichhorn, Peter U. Jepsen, and Krzysztof K. Kozioł, “Scattering of Terahertz Radiation from Oriented Nanotubes,” presented as an oral presentation at the Joint Fall 2010 Meeting of the APS Ohio Section and AAPT Appalachian and Southern Ohio Sections October 8-9, 2010 at Marietta College, Marietta, OH.
9. Lindsay Owens** and Jason A. Deibel, “Non Destructive Evaluation using Terahertz Time Domain Spectroscopy and Imaging,” presented as an oral presentation at the Joint Fall 2010 Meeting of the APS Ohio Section and AAPT Appalachian and Southern Ohio Sections October 8-9, 2010 at Marietta College, Marietta, OH.
10. Meagan Bechel, Jason Deibel, Saber Hussian, Stanley Smith*, Sayta Ganti**, and Michael Moulton**, “Characterization of Biological Molecules with Time-Domain Terahertz Spectroscopy,” presented as a poster presentation at the Joint Fall 2010 Meeting of the APS Ohio Section and AAPT Appalachian and Southern Ohio Sections October 8-9, 2010 at Marietta College, Marietta, OH.
11. Meagan Bechel, Jason Deibel, Saber Hussian, Stanley Smith*, Sayta Ganti**, and Michael Moulton**, “Characterization of Biological Molecules with Time-Domain Terahertz Spectroscopy,” presented as a poster presentation at the Ohio State Biomedical Engineering Conference, Friday Sept. 24th, 2010.
12. Zachary Gault* and Jason A. Deibel, “Optimization of Terahertz Wire Waveguides through Finite Element Simulations,” presented as an oral presentation at the WSU UROP 2010 Celebration of Research, Scholarship, and Creative Activities, April 16, 2010, WSU.
13. Ian Fuller*, Aaron Archibald*, and Jason A. Deibel, “Solar Pumped Laser,” presented as a poster presentation at the WSU UROP 2010 Celebration of Research, Scholarship, and Creative Activities, April 16, 2010, Wright State University.
14. Lindsay Owens* and Jason A. Deibel, “Terahertz Time Domain Spectroscopy with a Parallel Plate Waveguide,” presented as an oral presentation at the WSU UROP 2010 Celebration of Research, Scholarship, and Creative Activities, April 16, 2010, Wright State University.

15. Satya Ganti** and Jason A. Deibel, "Characterization of laser micro machined terahertz metallic wire waveguides," presented as an oral presentation at the WSU UROP 2010 Celebration of Research, Scholarship, and Creative Activities, April 16, 2010, Wright State University.
16. F. Eichhorn, P. Jepsen, N. Schroeder*, G. Kozlowski, J. A. Deibel, and K. Koziol, "Investigation of Scattering and Doping in Carbon Nanotubes with THz Time-Domain Spectroscopy," presented an oral talk at the OSA 2009 International Conference on Optical Terahertz Science and Technology, March 2009, Santa Barbara, CA.
17. N. Schroeder*, Finn Eichhorn, and J. A. Deibel, "Combustion Diagnostics with Terahertz Tomography," presented as an oral presentation at the Fall 2008 Meeting of the Ohio Section of the American Physical Society, October 2008, Dayton, OH.
18. L. Owens*, S. Smith*, D. Petkie, and J. A. Deibel, "Non-Destructive Corrosion Detection Using Terahertz Time-Domain Spectroscopy and Imaging," presented as an oral presentation at the Fall 2008 Meeting of the Ohio Section of the American Physical Society, October 2008, Dayton, OH.
19. Z. Gault*, S. Eilerman*, and J. A. Deibel, "FEM Simulation of a Terahertz Metamaterial using Short/Long Metal Wire Pairs," presented as an oral presentation at the Fall 2008 Meeting of the Ohio Section of the American Physical Society, October 2008, Dayton, OH.
20. S. Smith*, L. Owens*, D. Petkie, and J. A. Deibel, "Improving Corrosion Diagnostics with Terahertz Sensors," presented as a poster presentation at the Fall 2008 Meeting of the Ohio Section of the American Physical Society, October 2008, Dayton, OH.
21. R. Acosta**, D. C. Liptak, R. Rao, P. Caceres-Valencia, J. A. Deibel, B. Maruyama, "A SWNT Synthesis Apparatus for Multivariate Analysis of Nucleation and Growth Factors," presented as an oral presentation at the Fall 2008 Meeting of the Ohio Section of the American Physical Society, October 2008, Dayton, OH.
22. J. A. Deibel and S. Eilerman*, "Finite Element Method Simulations of Metamaterial Devices at Terahertz Frequencies," presented as a poster presentation at the Spring 2008 Meeting of the Ohio Section of the American Physical Society, March 2008, Youngstown, OH.
23. H. Zhan, M. Hvasta*, V. Astley, J. A. Deibel, and D. M. Mittleman, "Terahertz apertureless near-field microscopy of a vanadium dioxide thin film" presented as a poster talk at the OSA 2009 International Conference on Optical Terahertz Science and Technology, March 2009, Santa Barbara, CA.

-----The above presentations have Wright State University as Jason Deibel's affiliation-----

24. H. Zhan, M. Hvasta*, V. Astley, J. Deibel, D. Mittleman, F. Hao, P. Nordlander, and Y. Lim, "Terahertz Spectroscopy in the Near Field," presented as an oral presentation at the Laser Science Conference (Optical Society of America Annual Meeting), September 2007, San Jose, CA.
25. D. M. Mittleman, H. Zhan, J. Deibel, J. Laib, C. Sun, and H. Munekata, "Temperature-dependence of terahertz emission from dilute magnetic semiconductors," presented at the 2007 Spring Meeting of the Materials Research Society, April 2007, San Francisco, CA.

26. H. Zhan, J.A. Deibel, J.P. Laib, C. Sun, J. Kono, D.M. Mittleman, and H. Munekata, "Temperature dependence of terahertz emission from InMnAs," presented at the 2007 OSA Optical Terahertz Science and Technology Topical Meeting, March 2007, Orlando, FL.
27. M. Escarra, J.A. Deibel, K. Wang, and D.M. Mittleman, "Development of antennas for radially polarized terahertz radiation," presented at the Joint Fall Meeting of the Texas Section of the American Physical Society, October 2005, Houston, TX.
28. K. Wang, J.A. Deibel, and D.M. Mittleman, "Time-domain analysis of terahertz propagation on metal wire waveguides," presented at the 2005 OSA Optical Terahertz Science and Technology Topical Meeting, March 2005, Orlando, FL.
29. H.J. Yang, J.A. Deibel, S. Nyberg, and K. Riles, "High-precision absolute distance measurement by using frequency scanned interferometry," presented at the American Linear Collider Physics Group 2004 Winter Workshop at SLAC, Stanford University, January 7-10, 2004.
30. H.J. Yang, J.A. Deibel, S. Nyberg, T. Blass, and K. Riles, "Frequency scanned interferometer demonstration system," presented at the American Linear Collider Workshop, Cornell University, Ithaca, New York, July 13-16, 2003.

Invited Colloquia and Seminars

1. "Developing and Implementing Writing-Based Curriculum for Science Majors," presented at the Central State University Faculty Retreat on May 7th, 2013.
2. "NDE of Materials and Components using Terahertz Spectroscopy and Imaging," Composite Workshop at United Technologies Research Center on April 8th, 2011.
(Presented with Douglas Petkie)
3. "The scattering of terahertz radiation by oriented nanostructures," The University of Cincinnati and AFRL Nanotechnology Materials and Devices Workshop on June 11th, 2009.
4. "Terahertz plasmonics," presented at the Virginia Tech Physics Department Condensed Matter Seminar on December 8th, 2008.
5. "Terahertz plasmonics and metamaterials," presented at the Wright Patterson Air Force Base Air Force Research Laboratory Materials and Manufacturing Directorate Nonmetallic Materials Division (RXB) Seminar on July 10th, 2008.
6. "Terahertz spectroscopy, imaging, and plasmonics," presented at the Department of Physics Colloquium at Marietta College on April 18th, 2008.
7. "Terahertz plasmonics," presented at the Department of Engineering Physics Seminar at the Air Force Institute of Technology (WPAFB) on March 13th, 2008.

-----The above colloquia/seminars have Wright State University as Jason Deibel's affiliation-----

8. "Terahertz science and technology –collaborative research between Rice University and the University of Leeds," presented at a luncheon seminar at the British Consulate-General in Houston, Texas on December 18th, 2006.
9. "Terahertz spectroscopy of InMnAs," presented at the Condensed Matter Seminar in the Department of Physics at Case Western Reserve University on November 13th, 2006.
10. "Terahertz spectroscopy of InMnAs," presented at the Department of Physics at Durham University on October 4th, 2006.
11. "Terahertz wire waveguides," presented at the Research Council of the United Kingdom Terahertz Basic Technology Meeting at the University of Leeds on September 11th, 2006.
12. "Terahertz wire waveguides," presented at the Department of Physics at the University of Oxford on September 8th, 2006.
13. "Terahertz wire waveguides," presented at the Department of Electrical and Computer Engineering seminar at the University of Delaware on February 22nd, 2006.
14. "Generating, guiding, and detecting terahertz radiation," presented at the Department of Physics and Astronomy seminar at Trinity University on January 31st, 2006.

HONORS, AWARDS, AND PUBLICITY

- Recognition for Faculty Contribution to the University General Education Program at Wright State University (Nominated by students), April 2014.
- Co-Recipient of Wright State University Learning Community 2013 award for Outstanding Collaboration between a faculty member and a peer instructor.
- Recognition for Faculty Contribution to the Writing Across the Curriculum Program at Wright State University (Nominated by students), April 2013.
- Recognition for Faculty Contribution to the University General Education Program at Wright State University (Nominated by students), April 2013.
- Terahertz waveguide research highlighted in the December 2006 issue of *Laser Focus World* in “Terahertz Optics: Wire waveguide simulation matches experiment,” by John Wallace.
- Invitation to give a keynote presentation at the 2006 COMSOL Multiphysics Conference in Boston, MA, entitled “Simulation of the generation and guided propagation of terahertz radiation using COMSOL Multiphysics.”
- “Designing and simulating THz wire waveguides using FEM modeling,” by Jason Deibel and Daniel Mittleman appearing in the August 2006 issue of *RF Design* magazine.
- *Royal Society North America Incoming Short Visit Award* (~\$8000). This fellowship, sponsored by the UK Foreign and Commonwealth Office and the UK Department of Trade and Industry’s Office of Science and Technology and administered by the Royal Society of the UK, provided grant money to conduct research on novel organic and inorganic semiconductor materials at terahertz frequencies with Professors Giles Davies and Edmund Linfield at the University of Leeds for two months in the fall of 2006. Part of this award was used to visit and present research results at seminars and colloquia at other academic and research institutes in the UK.
- Simulation and experimental research results recognized by COMSOL, a software company specializing in multiphysics modeling, as a “Success Story” in “COMSOL Multiphysics Helps Explore the Last Frontier in the Electromagnetics Spectrum,” by Paul Schreier. This article can be found at <http://www.comsol.com/stories/terahertz> and was published in COMSOL’s electronic newsletter, *COMSOL e-News*, December 2005 and in their print magazine, *COMSOL NEWS* in January 2006.
- Intelligence Community Postdoctoral Fellowship, February 2004 – December 2006. (Formerly known as the Director of Central Intelligence Postdoctoral Fellowship)
- University of Michigan Applied Physics Fellowship, September 1997 – August 1999.

EXTERNAL RESEARCH COLLABORATORS (Current)

- Berriehill Research Corporation
- Adam Cooney, *Air Force Research Laboratory Materials and Manufacturing Directorate*
- Ron Coutu, *Air Force Institute of Technology*
- Steven Fairchild, *Air Force Research Laboratory Materials and Manufacturing Directorate*
- Timothy Hagan, *Air Force Research Laboratory Aerospace Systems Directorate*
- Ron Jacobsen, *Mound Laser and Photonics Center*
- Giti Khodaparast, *Virginia Tech University*
- Benji Maruyama, *Air Force Research Laboratory Materials and Manufacturing Directorate*
- The Proctor and Gamble Company
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