

Alem Teklu
Department of Physics & Astronomy
College of Charleston, 9 Liberty Street
Charleston, SC 29424

Phone: (843) 953-7187

Fax: (843) 953-4824

Email: teklua@cofc.edu

Web: <http://teklua.people.cofc.edu>

Citizenship: US Citizen

EDUCATION

- 2000 Ph.D. in Physics, Louisiana State University and A&M College (LSU),
(Thesis: "Magnetic Measurements of Rare Earth Hexaborides")
Advisor: Prof. R. G. Goodrich
- 1995 M.Sc. in Physics, Louisiana State University and A&M College (LSU)
- 1988 M.Sc. in Physics, University of Addis Ababa (AAU), Addis Ababa, Ethiopia
- 1985 B.Sc. in Physics, University of Asmara (UA), Asmara, Eritrea

PROFESSIONAL HISTORY

- 2009 – Present Associate Professor
Department of Physics and Astronomy, College of Charleston
- 2003 – 2009 Assistant Professor
Department of Physics and Astronomy, College of Charleston
- 2002 – 2003 Research Scientist
National Center for Physical Acoustics (NCPA), The University of
Mississippi, Oxford, MS
- 2000 – 2002 Postdoctoral Fellow
National Center for Physical Acoustics (NCPA), The University of
Mississippi, Oxford, MS
- 1993 – 2000 Graduate Teaching/Research Assistant
Department of Physics and Astronomy, Louisiana State University
- 1991 – 1993 Senior Lecturer III, Department of Physics, University of Asmara,
Asmara, Eritrea
- 1987 – 1988 Graduate Teaching Assistant, Department of Physics, Addis Ababa
University, Addis Ababa, Ethiopia
- 1986 – 1987 Assistant Lecturer I, Department of Physics, University of Asmara,
Asmara, Eritrea
- 1985 – 1986 Graduate Assistant, Department of Physics, University of Asmara,
Asmara, Eritrea

AWARDS/HONORS

2015 – present	Mebane Chair of Physics, College of Charleston
2014 – present	Full Member, Acoustical Society of America
2013	Ten year service award, College of Charleston
2012	Summer Faculty Research Program, Office of Naval Research (Award amount = \$14,000 for ten weeks)
1993 – 2000	Teaching Assistantship, Louisiana State University
1996 – 97	Research Assistantship, Louisiana State University
1993 – 95	Graduate Tuition Award, Louisiana State University
1990	Summer workshop on High Energy and Cosmology, International Center for Theoretical Physics (ICTP), Trieste, Italy
1988	M. Sc. In Physics with Very Great Distinction, University of Addis Ababa
1985	B. Sc. In Physics with Great Distinction, University of Asmara

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

American Physical Society (APS), since 1993
Acoustic Society of America (ASA), since 2000
South Carolina Academy of Sciences (SCAS), since 2005
Southeastern Section of the APS (SESAPS), since 2003
American Association of Physics Teachers (SCAS-AAPT), since 2003
African Physical Society (AFPS), since 2008

PROFESSIONAL COMMUNITY SERVICES

2015 – present	Research Liaison for the South Carolina Alliance for Minority Participation (SCAMP)
2016	Reviewed Publication for AIP Journal of Applied Physics
2015	Reviewed Publication for Nanotechnology Journal
2014	Reviewed Publications for Journal of Physics: Condensed Matter Ultrasonics - Elsevier
2012	Reviewed Publication for Journal of the Acoustical Society of America
2011	Book Chapter Reviewer (Modern and Atomic Physics), W. H. Freeman & Company
2010	Reviewed Publication for Journal of the Acoustical Society of America
2005	Reviewed Publication for Ultrasonics - Elsevier
2008 – 2009	Publication Reviewer, IOP Publishing
2008	Book Chapter Reviewer (Sound), McGraw Hill
2009-present	GRE Physics Test (write 5 problems), ETS
2006-present	Grant Reviewer, Oak Ridge Associate Universities (ORAU)

RESEARCH EXPERIENCE

RELEVANT EXPERIENCE IN INSTRUMENTATION FOR PHYSICS

- Resonant Ultrasound Spectroscopy (RUS), and Ultrasound Pulse-Echo (PE): measurements on single crystals of thermoelectrics (such as $\text{Ba}_8\text{Ga}_{16}\text{Ge}_{30}$, $\text{Eu}_8\text{Ga}_{16}\text{Ge}_{30}$, and $\text{Sr}_8\text{Ga}_{16}\text{Ge}_{30}$), Fe-15Cr-15Ni (stainless), and magnetostrictive materials.
- Acoustic Bragg Imaging for organic and inorganic materials.
- Design and operation of Schlieren and Speckle photographic system for non-intrusive diagnostics of flow fields for aeroacoustics and material characterization and NDE/NDT for nonlinear acoustics.
- Scanning Electron Microscopy (SEM) to study nanomaterials
- Atomic Force Microscopy (AFM) to study nanomaterials
- Real Time Laue Camera (X-ray) to orient single crystals.
- Operation of a new cryo-system, Physical Property Measurement System (PPMS) from Quantum Design, used for temperature dependent RUS and PE measurements, AC&DC magnetization, transport, and heat capacity measurements.
- Designed a new probe that fits into the PPMS system for RUS measurements at low temperatures.
- Performed magnetoresistance and STM measurements on selected heavy-fermion materials.

THEORY

University of Asmara, Asmara, Eritrea

1991-92 Computational Studies of Equation of State for NaCl up to 300 kbar using C programming language.

University of Addis Ababa, Addis Ababa, Ethiopia

1988-89 On the Theory of Superconductivity and Some Electron Pairing Mechanisms (master's thesis).

COMPUTER EXPERIENCE

Labview programming and instrumentation interface, experience in data analysis software like Igor Pro, Mathematica, Matlab, Origin, C, Latex, Excel.

RESEARCH INTERESTS:

My research interest focuses on

- characterization of new and novel nanomaterials (especially nanomaterials/nanostructures of thermoelectrics and nanomagnetic magnetostrictive materials) using ultrasonic nondestructive evaluation (NDE) techniques, magnetic (such as de Haas van Alphen effect, AC/DC magnetization, and magnetoresistance), and transport measurement techniques.
- nonlinear acoustics and underwater acoustics
- acousto-optics: interactions between ultrasound and light.

RESEARCH GRANTS/PROPOSALS

In preparation

1. NSF/MRI (2016): *Acquisition of a Confocal Raman Microscope for Research and Education (pending)*
2. NSF/EPSCoR: South Carolina Materials Genome Center (SC-MGC) with the focus of controlling and assembling molecular, crystalline, and macromolecular entities into organized, designed-heterogeneous multi-dimensional materials with desired properties *(to be re-submitted in June 2016)*
3. NSF/MRI (2015)
Acquisition of Physical Property Measurement System (PPM S-9T EC-II)
(to be re-submitted in 2016)

Approved Proposals

- Major Academic Year Support (Internal grant with undergraduate student, 2014)
Resolving Airborne Particulate Concentration Inhomogeneities with a Schlieren Optical Technique
Award amount = \$2,500
- Academic Year Research Grant (Internal grant with undergraduate student, 2014)
Thin Film Characterization Through Resonant Ultrasound Spectroscopy
Award amount = \$200
- Faculty R&D Grant (internal grant, 2012)
Visualization of the Invisible using Low-cost Schlieren Imaging Method
Award amount = \$3,447
- NSF/NUE (2006)
Understanding Optical Nanomaterials: Research-based Experiments in Upper Division Undergraduate Physics Courses (Awarded \$200k)
- NATO Science Program Grant, EURO 15k (Renewed for the year 2005 and awarded additional EURO 10k).
Diffraction and Scattering of Ultrasound at an Inhomogeneous (an)isotropic Solids.

Proposal Submitted but not Approved

- NSF/MRI (2015): *Acquisition of a Renishaw inVia Raman Microscope for Research and Education*
- NSF/MRI (2013): *Acquisition of a Collaborative Physical Property Measurement System (PPM S-9T) for Undergraduate Research and Teaching at the College of Charleston*
- NSF/TUES (2012): *Development of cutting-edge undergraduate research projects involving novel materials for energy production at the College of Charleston*
- NSF/EPSCoR (2013)
South Carolina Transportation Technology Laboratories (SCT2L) for Science Based Manufacturing
- NSF/MRI (2012)
Acquisition of Physical Property Measurement System (PPM S-9T EC-II)
- NSF/DOE Thermoelectric Partnership (2010)
Elastic, Electric, and Thermal properties of Thermoelectric materials
- NSF/DUE (2010)

- Development of an undergraduate concentration program in energy production at the College of Charleston*
- NSF/RUI (2009)
Acoustic, Optical, and Thermal Properties of Nanocrystals, Nanostructures, and Thermoelectric materials
 - NSF/CCLI-Type I (2008)
Activity-based implementation of introductory physics laboratories
 - NSF/RUI (2008)
Acoustic, Optical, and Thermal Properties of Nanocrystals, Nanostructures, and Thermoelectric materials
 - NSF/RUI (2007)
Acoustic, Optical, and Thermal Properties of Nanocrystals, Nanostructures, and Thermoelectric materials
 - Characterization of the Effects of Pressure, Temperature, and Stress on Composite Materials by Means of Ultrasonic NDE" (a letter of intent submitted to ONR, 2006)
 - NSF/RUI/NIRT (2006)
Acquisition of Instruments for the nondestructive characterization of optical, thermal, and elastic properties of rare earth doped nanoparticles and bulk materials.
 - Oak Ridge Associate Universities (ORAU) for the Powe E. Ralph Junior Faculty Award
Investigation of the backward ultrasonic beam shift reflected from composite Materials
 - NSF/NIRT (2006)
Nanoacoustic and fabrication of Nanophase Ferroelectrics: Active Ferroelectric Nanostructures.

TEACHING EXPERIENCE

SUMMARY OF COURSES TAUGHT AT THE COLLEGE OF CHARLESTON

2009 - Present

Introductory Physics I (phys101), Introductory Physics I Lab (phys101L), Introductory Physics II (phys102) Introductory Physics II Lab (phys102L), General Physics I (phys111), General Physics I Lab (phys111L), General Physics II (phys112), General Physics II Lab (phys112L), Honors Physics II (hons158), Honors Physics II Lab (hons158L), Introduction to Modern Physics (phys230), Methods of Applied Physics (phys272), Classical Mechanics (phys301), Introduction to Quantum Mechanics (phys403), Research Seminar (phys419), Introduction to Solid State Physics (phys408), Introduction to Nanoscience and Nanotechnology (phys399), Energy Production, lecture and lab, (phys350).

Contributions to Newly Developed Course and Curricula during Evaluation Period:

- Methods of Applied Physics
- Introduction to Nanoscience and Nanotechnology
- Added three new experiments to Introductory Physics 101 Lab
- Proof read Phys 101 and 102 lab manuals cover to cover
- Added two chapters, one on Superconductivity and the other on Nanotechnology to solid state physics.

- Working on a project with Dr. N. Kuthirummal to upgrade our Advanced lab and strengthen the Energy Production concentration. We are writing a lab manual for the Advanced lab.

PUBLICATIONS

In preparation

1. Acoustic and Optical Properties of Er-doped LiNbO₃ (submitted to AJP; under review)
2. Possible mechanism of triboelectric nanogenerator (TEG) (to be submitted to nanoletters)

Refereed Journal Articles

1. A. Teklu, N. F. Declercq, and M. McPherson, 2014. "Acousto-optic Bragg imaging of biological tissue". *J. Acoust. Soc. Am.*, vol. **136** (2), p. 634-637.
2. Nico F. Declercq, Michael S. McPherson, Mack A. Breazeale, and Alem A. Teklu, 2010. "Optical Bragg Imaging of Acoustic Fields after Reflection". *J. Acoust. Soc. Am.*, vol. **127** (6), p. 3466 – 3469.
3. Ana Oprisan, Sorinel Oprisan, and Alem Teklu, 2010. "Experimental Study of Nonequilibrium Fluctuations During Free Diffusion in Nanocolloids Using Microscopic Techniques". *Applied Optics*, vol. **49**, No. 1, pp. 86-98.
4. A. Teklu, Michael S. McPherson, M. A. Breazeale, Roger D. Hasse, and Nico F. Declercq, 2009. "Authors' Response to Strasburg's "Comments on 'Measurement of the Frequency Dependence of the Ultrasonic Parametric Threshold Amplitude for a Fluid-Filled Cavity'"". *J. Acoust. Soc. Am.*, vol. **126** (6), p. 2854-2855.
5. M. McPherson, M. A. Breazeale, and A. Teklu, 2007. "Stability Zones and Acoustic Parametric Oscillation". *Proceedings of the 19th International Congress on Acoustics*, Madrid, Spain.
6. A. Teklu, H. Ledbetter, S. Kim, and L. A. Boatner, V. Keppens, M. McGuire, 2007. "Single Crystal Elastic Constants of 70Fe-15Ni-15Cr Alloy". *Metallurgical and Materials Transactions A*, vol **35**, pp. 3149-53 (electronic publication: SpringerLink date April 07, 2007).
7. A. Teklu, M. S. McPherson, M. A. Breazeale, R. D. Hasse, and N. F. Declercq, 2006. "Measurement of the Frequency Dependence of the Ultrasonic Parametric Threshold Amplitude for a Fluid-Filled Cavity". *J. Acoust. Soc. Am.*, vol. **120** (2), p. 657 – 660.
8. A. Teklu, M. A. Breazeale, N. F. Declercq, R. Hasse, and M. McPherson, 2005. "Backward Displacement of Ultrasonic Waves Reflected from a Periodically Corrugated Interface". *Journal of Applied Physics*, vol.**97**, p. 084904-084907.
9. N. F. Declercq, A. Teklu, M. A. Breazeale, R. D. Hasse, J. Degrieck, and O. Leroy, 2005. "Detection of Fiber Direction in Composites by Means of a High-Frequency Wide-Bounded Beam and Schlieren Photography". *Research in Nondestructive Evaluation*, vol. **16**, No. 2, p. 55-64.
10. N. F. Declercq, A. Teklu, M. A. Breazeale, R. Briers, O. Leroy, J. Degrieck, and G. N. Shkerdin, 2004. "Study of the Scattering of Leaky Rayleigh Waves at the Extremity of a Fluid-loaded Thick Plate". *Journal of Applied Physics (JAP)*, vol. **96**, No. 10, pp 5836-5840.

11. A. Teklu, H. Ledbetter, S. Kim, and L. A. Boatner, V. Keppens, M. McGuire, 2004. "Single Crystal Elastic Constants of 70Fe-15Ni-15Cr Alloy". Metallurgical and Materials Transactions A, vol **35**, pp. 3149-53.
12. V. Keppens, M. McGuire, A. Teklu, C. Laermans, B. C. Sales, D. Mandrus, and B. C. Chakoumakos, 2002. "Glasslike Excitations in Single Crystalline $\text{Sr}_8\text{Ga}_{16}\text{Ge}_{30}$ Clathrates". Physica B, **316-317**, pp. 95-100.
13. D. Hall, D. P. Young, Z. Fisk, T. P. Murphy, E. C. Palm, A. Teklu and R. G. Goodrich 2001. "Fermi Surface Measurements on the Low Carrier Density Ferromagnet $\text{Ca}_{1-x}\text{La}_x\text{B}_6$ and SrB_6 ". Physical Review B, vol. **64**, 233105.
14. N. Harrison, L. Balicas, A. Teklu, R. G. Goodrich, J. S. Brookes, J. L. Smith and J. Cooley, 2001. "Mixed Valence of U determined using the de Haas-van Alphen Effect: Application to $\text{U}_x\text{Th}_{1-x}\text{Be}_{13}$ ". Physical Review B, vol. **63**, 081101-1(R).
15. N. Harrison, R. G. Goodrich, A. Teklu, L. Balicas, J. S. Brookes, D. Young, Z. Fisk, J. C. Cooley, and J. L. Smith, 2001. "The Kondo effect to Heavy Fermions Studied using the de Haas – van Alphen effect". Physica B, **294-295**, pp. 234-239.
16. A. Teklu, R. G. Goodrich, N. Harrison, D. Hall, D. Young, and Z. Fisk 2000. "Fermi Surface Properties of Low Concentration $\text{Ce}_x\text{La}_{1-x}\text{B}_6$ Alloys". Physical Review B, vol. **62**, No. 19, 12875.
17. R. G. Goodrich, N. Harrison, A. Teklu, D. Young and Z. Fisk 1999. "Development of High Field Heavy Fermion Ground State in $\text{Ce}_x\text{La}_{1-x}\text{B}_6$ Intermetallics". Physical Review Letters, vol. **82**, No. 18, 3669.
18. R. G. Goodrich, N. Harrison, J. J. Vuillemin, A. Teklu, D. W. Hall, Z. Fisk, D. Young and J. Sarrao 1998. "Fermi Surface of Ferromagnetic EuB_6 ". Physical Review B, vol. **58**, No.22, 14896.

Conference Proceedings

Conference Papers

19. A. Oprisan, S. A. Oprisan, A. Teklu, J. J. Hegseth, 2011. "Estimate effective interaction potentials from the static structure factor in pure fluids and nanocolloids, NanoTech conference proceeding, Boston, NSTI-Nanotech 2011, Vol 1, 2011.
20. A. Oprisan, S. A. Oprisan, and A. Teklu, 2010. "Dynamics of Intermediate to Late Stage Concentration Fluctuations During Free Diffusion Experiments". NSTI-Natech, vol **1**, pp. 71-74.
21. Nico F. Declercq , A. Teklu, M. A. Breazeale, Roger D. Hasse, Joris Degrieck, Oswald Leroy, 2005. "Fiber direction determination in composites by means of Schlieren photography ", **Proc. SPIE Int. Soc. Opt. Eng.** 5828, 123.
22. Nico F. Declercq , A. Teklu, M. A. Breazeale, Joris Degrieck, Oswald Leroy, 2005. "Schlieren Photography as a great tool to study wave diffraction at the end of a plate", **Proc. SPIE Int. Soc. Opt. Eng.** 5828, 117.
23. Efreem Dawit, K. P. Thakur, Kidane Belay, Alem Abraha Teklu, F. Habte, and Tquabo T/Michael, 1992. "Equation of state for sodium Chloride up to 300 kb", Proc. Eritrean Chem. Soc., Asmara, Eritrea.

Conference Abstracts, Poster and Oral Presentations (myself and co-authors)

24. Matthew Palumbo, Alem Teklu, Narayanan Kuthirummal, Nicole Levi-Polyachenko, 2016. "Nanoindentation of Chitosal Doped with Silver Nanoparticles", APS March Meeting 2016, Baltimore, MD.
25. Alem Teklu, Nico, F. Declercq, and Michael McPherson, 2015. "Cost-effective Potential Application of Acousto-Optic Bragg Imaging of Biological Tissue", Acoustical Society of America (ASA), 125thJacksonville, FL.
26. Alexis Payne, Alem Teklu, and Michael Larsen, 2015. "Resolving airborne particulate concentration inhomogeneities with a Schlieren optical technique", 46th Annual Meeting of the APS Division of Atomic, Molecular, Optical Physics, vol. 60, No. 7.
27. Luther Meyer and Alem Teklu, 2014. "Triboelectric Power Generation", Department of Physics & Astronomy, College of Charleston, Charleston, SC.
28. Luther Meyer and Alem Teklu, 2014. "Triboelectric Power Generation", School of Sciences and Mathematics (SSM) Poster Session, College of Charleston, Charleston, SC.
29. Alem Teklu, 2013. "Characterization of Magnetostrictive Galfenol and Device Development for Energy Harvesting", *Sabbatical Presentation*, Department of Physics & Astronomy, College of Charleston, Charleston, SC.
30. Shea McSween and Alem Teklu, 2013. "Using Schlieren Optical Methods to Image Changes in the Refractive Index of Transparent Media", Celebration of Summer Scholars, College of Charleston, Charleston, SC.
31. Stacy D. Varner and Alem Teklu, 2012. "Elastic Constants of Epoxy Using Resonant Ultrasound Spectroscopy", School of Sciences and Mathematics (SSM) Poster Session, College of Charleston, Charleston, SC.
32. Agrest Michael and Alem Teklu, 2010. "Principles, Reasoning, Rules of Thumb and Mnemonics; Advantages and Disadvantages" American Association of Physics Teachers (AAPT), Washington DC.
33. Alem Teklu and Joseph Niehaus, 2010. "Resonant Ultrasound Spectroscopy in Gamma Brass and Doped Cobalt Antimony", School of Sciences and Mathematics (SSM) Poster Session, College of Charleston, Charleston, SC.
34. Tim Faugl and Alem Teklu, 2010. "Resonant Ultrasound Spectroscopy in Thermoelectric Materials and Heavy Fermion Superconductors", School of Sciences and Mathematics (SSM) Poster Session, College of Charleston, Charleston, SC.
35. Alem Teklu, Michael S. McPherson, M. A. Breazeale, and Nico F. Declercq, 2010. "Frequency dependence of the ultrasonic parametric amplitude for a fluid-filled cavity" 159th ASA meeting/NOISE-CON 2010 meeting, Baltimore, MD
36. Alem Teklu, Michael S. McPherson, M. A. Breazeale, and Nico F. Declercq, 2010. "Theoretical and experimental investigation of the backward beam displacement" 159th ASA meeting/NOISE-CON 2010 meeting, Baltimore, MD
37. Michael S. McPherson, M. A. Breazeale, Nico F. Declercq, and Alem Teklu, 2010. "Optical Bragg imaging of acoustic fields after reflection", J. Acoust. Soc. Am. 127, 1845, 2010. Abstract in **Journal of the Acoustical Society of America** 127, 1845, 2010.
38. S. A. Oprisan, A. Oprisan, and A. Teklu, 2010. "Determination of Planck's constant using photoelectric effect with monochromatic light emitting diodes sources", Southern Atlantic Coast Section of the American Association of Physics Teachers (SACS-AAPT), University of South Carolina, Aiken, SC
39. Mikhail M. Agrest and Alem Teklu, 2010. "Principles, Reasoning, Rules of Thumb, and Mnemonics; Advantages and Disadvantages", April Meeting of APS-AAPT, Washington, DC.

40. A. Oprisan, S.A. Oprisan, A. Teklu, J. Hegseth, Y. Garrabos, and D. Beysens, 2009. "Searching for a possible universal character of non-equilibrium fluctuations", APS March Meeting, Pittsburg, PA.
41. A. Teklu, N. Kuthirummal, D. Morall, and J. Dandrea, 2008 "Acoustic and Optical Properties of Er-doped LiNbO₃", APS March Meeting, New Orleans, LA.
42. N. Kuthirummal, A. Dean, R. Smith, and A. Teklu, 2008 "Photo formation of Gold Nanoparticles in Au(III)-Chitosan Silica Aerogels: Dependence on Wavelength and Duration of Exposure, APS March Meeting, New Orleans, LA.
43. A. Oprisan, S. Oprisan, and A. Teklu, 2008. "Imaging Density Fluctuations in Liquids using Schlieren Photographic Technique", APS March Meeting, New Orleans, LA.
44. S. A. Oprisan, A. Oprisan, and A. Teklu, 2007. "Physics experiments using PASCO", Physics colloquium series, Department of Physics and Astronomy, College of Charleston, Charleston, SC.
45. Alem Teklu, Nico F. Declercq, Mack A. Breazeale, Roger Hasse, M. McPherson, 2005. "Measurement of the Frequency Dependence of the Ultrasonic Parametric Threshold Amplitude for a Fluid-filled Cavity", Physics colloquium series, Department of Physics and Astronomy, College of Charleston, Charleston, SC.
46. A. A. Teklu, Mack A. Breazeale, M. McPherson, Roger Hasse, Nico F. Declercq, "On the frequency dependence of the threshold amplitude for the ultrasonic parametric oscillator", Poster Presentation TuPpm4-01, at the World Congress on Ultrasonics - Ultrasonics International, 29 August - 1 September 2005, Friendship Hotel, Beijing, China.
47. Nico F. Declercq , A. Teklu, M. A. Breazeale, Roger D. Hasse, Joris Degrieck, Oswald Leroy, 2004. "Fiber direction determination in composites by means of Schlieren photography " Proceedings of 51st open seminar on Acoustics, Joint with 9th School of Acousto Optics and Applications , Gdansk, Poland , 6-10/09.
48. Nico F. Declercq, A. Teklu, M. A. Breazeale, Joris Degrieck, and Oswald Leroy, 2004. "The Schoch effect as a means to detect the principal axes of a piezoelectric crystal", J. Acoust. Soc. Am. **115**, 2569.
49. Alem A. Teklu, Nico F. Declercq, and Mack A. Breazeale, 2004. "Measurement of the frequency dependence of the ultrasonic parametric threshold Amplitude" J. Acoust. Soc. Am. **115**, 2533.
50. Nico F. Declercq, A. Teklu, M. A. Breazeale, Rudy Briers, Oswald Leroy, and Joris Degrieck, 2004. "The diffraction of leaky Rayleigh waves at the extremity of a fluid-loaded plate" J. Acoust. Soc. Am. **115**, 2472.

LIST OF REFERENCES

Dr. Narayanan Kuthirummal
Department of Physics & Astronomy
College of Charleston
58 Coming Street, Room 101
Charleston, SC 29424

kuthirummal@cofc.edu
(843) 953-7457

Dr. Nico Declercq
Georgia Institute of Technology
UMI Georgia Tech - CNRS 2958
George W. Woodruff School of
Mechanical Engineering Georgia Tech
Lorraine Laboratory for Ultrasonic
Nondestructive Evaluation "LUNE"
Office 304, GT-Lorraine Building,
2 rue Marconi, 57070 Metz-Technopole, France

nico.declercq@me.gatech.edu
33-387-203924

Dr. Abebe Kebede
Physics Department
NC A&T State University
Office Location: 320-B Marteena
1601 E. Market Street
Greensboro, NC 27411

gutaye@ncat.edu
(336) 285-2113

Dr. Michael McPherson
General Sciences
NorthWest Mississippi Community College
4975 Hwy 51N
Senatobia, MS 38668.

mmcpherson@northwestms.edu
(662) 562-3565