

## Theses, M.S. in Geosciences

| YEAR | TERM   | NAME                | TITLE   |
|------|--------|---------------------|---|
| 2015 | Spring | Kiger, Amber        | <i>Changing Bacterial Growth Efficiencies across a Natural Nutrient Gradient in an Oligotrophic Estuary</i>   |
| 2015 | Spring | Hua, Yujie          | <i>Changes of Soil Biogeochemistry under Native and Invasive Plant Species</i>  |
| 2015 | Summer | Beck, Kimberly      | <i>Investigation of the Lead Isotope Signatures of Marine Sediments in Relation to the Lead Isotope Signatures of Northern Andean Ores</i>                                  |
| 2015 | Summer | Linden, Edward      | <i>Hydrologic Controls for Coastal Groundwater Discharge in Southern Taylor Slough, Everglades National Park, FL</i>  |
| 2014 | Spring | Gonzalez, Israel    | <a href="#"><u>Linear and Nonlinear Motion of a Barotropic Vortex</u></a>   |
| 2014 | Summer | Ceron, Cristobal    | <a href="#"><u>Operational Actual Wetland Evapotranspiration Estimation for the Everglades Using MODIS Imagery</u></a>  |
| 2014 | Summer | Delgado, Sandy      | <a href="#"><u>Re-analysis of the 1954-1963 Atlantic Hurricane Seasons</u></a>  |
| 2014 | Summer | Hernandez, Javiera  | <a href="#"><u>Does the Pareto Distribution of Hurricane Damage Inherit Its Fat Tail from a Zipf Distribution of Assets at Hazard?</u></a>                                  |
| 2014 | Summer | Washam, Peter       | <a href="#"><u>Recent Changes in Central and Eastern Pacific El Nino</u></a>  |
| 2013 | Spring | Furst, Jonathan     | <a href="#"><u>An Investigation of Vertical Turbulent Transport Processes in Coastal Regions Using Tower Observations</u></a>   |
| 2013 | Spring | Sandoval, Estefania | <a href="#"><u>Ten Year Study on Water Flushing Times and Water Quality in Southern Taylor Slough – Everglades National Park, FL, USA</u></a>                               |
| 2013 | Summer | Garcia, Sade        | <a href="#"><u>Lattice Boltzmann Modeling and Specialized Laboratory Techniques to Determine the Permeability of Megaporous Karst Rock</u></a>                              |
| 2013 | Summer | Tucker, Nicole      | <a href="#"><u>Analyzing Tidal Fluctuations in the Big Pine Key Freshwater Lens with Time-Lapse Resistivity</u></a>   |
| 2012 | Spring | Cotto, Amaryllis    | <a href="#"><u>Intermittently Forced Vortex Rossby Waves</u></a>  |
| 2012 | Summer | Zagrodnik, Joseph   | <a href="#"><u>Comparison and Validation of Tropical Rainfall Measuring Mission (TRMM) Rainfall Algorithms in Tropical Cyclones</u></a>                                     |
| 2011 | Spring | Brens, Raul         | <a href="#"><u>U-Th-Ba Elemental Fractionation During Partial Melting of Crustal Xenoliths and its Implications for U-Series Disequilibria in Continental Arc Rocks</u></a> |

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|------|--------|-------------------------|---|
| 2011 | Summer | Ngachin, Merlin         | <a href="#"><i>Simulation of Rising Bubbles Dynamics Using the Lattice Boltzmann Method</i></a>   |
| 2011 | Fall   | Nielsen, Shauna         | <a href="#"><i>Sediment Dynamics of a Shallow Hypereutrophic Lake: Lake Jesup, Florida, USA</i></a>   |
|      |        |                         |   |
| 2009 | Summer | Chau, Kevin             | <a href="#"><i>Mineral Chemistry and Origin of the Olivine-rich Zone of the Palisades Sill</i></a>  |
| 2009 | Fall   | Menelaou, Konstantinos  | <a href="#"><i>Impact of the Planetary Boundary Layer on Eyewall Mesovortices in Hurricanes</i></a>   |
| 2009 | Fall   | Stodolka, Bret          | <a href="#"><i>"The Structural and Kinematic Development of Microboudinage in Blueschists of Eastern Jamaica"</i></a>   |
| 2009 | Fall   | Zapata-Rios, Xavier     | <a href="#"><i>Groundwater/Surface Interactions in Taylor Slough, Everglades National Park</i></a>  |
|      |        |                         |   |
| 2008 | Summer | Nigro, Phillip          | <a href="#"><i>A Rock-Magnetic Study of Coral Skeletons: A Possible Tool for Documenting African Dust Deposition in the Tropical Atlantic</i></a>   |
| 2008 | Fall   | Smith, Carly            | <a href="#"><i>Biogeographic Comparisons of Neogene Benthic Foraminifera of Venezuela, Costa Rica, Panama, and Ecuador</i></a>  |
|      |        |                         |   |
| 2007 | Spring | Horst, Tiffany          | <a href="#"><i>Determining Magmatic Processes from Analysis of Phenocrysts and Gabbroic Xenoliths Contained in Calbuco Andesites</i></a>  |
| 2007 | Spring | Leon-Rodriguez, Lizette | <a href="#"><i>Benthic Foraminiferal Record of the Pleistocene Uplift of the Sedimentary Deposits of the Burica Peninsula (Costa Rica – Panama) as a Result of Cocos Ridge Subduction Beneath the Central American Arc"</i></a> |
| 2007 | Summer | Alvarez, Pedro          | <a href="#"><i>Lattice Boltzmann Modeling of Fluid Flow to Determine the Permeability of a Karst Specimen</i></a>   |
| 2007 | Summer | Glaccum, Katie          | <a href="#"><i>Paleomagnetic Study of Cretaceous Arc Terranes in Central of Hispaniola: Paleogeographic Implications</i></a>  |
|      |        |                         |   |
| 2006 | Summer | Guerrero, Camilo        | <a href="#"><i>Aptian Deposits from the Mexican versus the Provençal (France) Platform: Paleoenvironmental Implications</i></a>   |
| 2006 | Summer | Pal, Pallov             | <a href="#"><i>Mechansisms of Microboudinage Formation: An Example from Blueschists of Eastern Jamaica</i></a>  |
|      |        |                         |   |
| 2005 | Summer | Aich, Sumanjit          | <a href="#"><i>Analysis of Fractured Terrain Using Remote Sensing and Geographic Information Systems: Establishing a Correlation Between Fracture Network Properties and Vegetation</i></a>                                     |
| 2005 | Summer | Carroll, Bryan          | <a href="#"><i>Paleolimnological Investigation of Recent Sediments from Lake Monroe, Florida, USA</i></a>   |

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|------|--------|-------------------------|--|
| 2005 | Summer | Hernandez-Cordon, Sonia | <a href="#"><i>Automated Classification of Land Cover from Orthoimagery and Lidar Data, South East Florida</i></a>   |
| 2005 | Summer | Manda, Alex Kapolo      | <a href="#"><i>"Quantitative Characterization and Distribution of Macroporosity from Borehole and Core Images of the Karstic Biscayne Aquifer, SE Florida, Using Image Analysis and GIS"</i></a> |
| 2005 | Summer | Molina, Carlos          | <a href="#"><i>Fluid Flow Modeling Through Bed-Confined Fracture Networks in Layered Rocks with an Emphasis on Cross Joints and Throughgoing Fracture Zones</i></a>                              |
| 2005 | Summer | Serpa, Carmen           | <a href="#"><i>Lattice Boltzmann Method Simulations of Flow in Idealized Intersections of Systematic Fractures and Cross Joints</i></a>  |
|      |        |                         |  |
| 2004 | Spring | Velez, David            | <a href="#"><i>Identifying Areas of Hydrothermal Alteration in Tropical Vegetation Using Remote Sensing</i></a>  |
|      |        |                         |  |
| 2003 | Spring | Ghosh, Kajari           | <a href="#"><i>Characterizing Fracture Distribution in Layered Rocks Using Geographic Information System-Based Techniques</i></a>  |
|      |        |                         |  |
| 2002 | Spring | Montane, Juana Maria    | <a href="#"><i>Geophysical Analysis of a Central Florida Karst Terrain Using Light Detection and Ranging (LIDAR) and Ground Penetrating Radar (GPR) Derived Surfaces</i></a>                     |
| 2002 | Spring | Robertson, William      | <a href="#"><i>The Use of Airborne Laser Altimetry to Measure Shoreline Position in North and South Carolina</i></a>   |
| 2002 | Fall   | Lao Davila, Daniel      | <a href="#"><i>Middle Tertiary to Recent Tectonics of Western Puerto Rico: Paleostress and Paleomagnetic Study</i></a>   |
|      |        |                         |  |
| 2001 | Summer | Atlas, Zachary          | <a href="#"><i>Melt Inclusions from Volcan de Colima, Mexico: Complex Examples of Magmatic Differentiation</i></a>   |
| 2001 | Summer | Jean-Poix, Claude       | <a href="#"><i>Environmental Geology and Hydrogeologic Resources of the Metropolitan Area of Port-au-Prince, Haiti</i></a>   |
|      |        |                         |  |
| 2000 | Spring | Gangopadhyay, Amitava   | <a href="#"><i>An Experimental Petrologic Study of Basalts From Selected Formations of the Deccan Traps, India</i></a>   |
| 2000 | Spring | Memberg, Steven J       | <a href="#"><i>A Comparison of Methods Used to Determine Porosity in the Gray Limestone Aquifer of South Florida</i></a>   |
| 2000 | Spring | Wassum, Lynn Debra      | <a href="#"><i>Lithostratigraphic and Hydrologic Evaluation of the Upper Biscayne Aquifer in North-Central Miami-Dade County, Florida</i></a>  |

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|------|--------|-----------------------------|---|
| 2000 | Summer | Finn, Martin Damian         | <a href="#"><i>The Kinematic and Structural Development of Throughgoing Fracture Zones, Monterey Formation, California</i></a>  |
| 2000 | Summer | Kamenov, George<br>Dimitrov | <a href="#"><i>Sources of Metals in San Cristobal, and Pulacayo Mining Districts Southwest Bolivia: A Lead Isotope Study</i></a>  |
| 2000 | Summer | Powell, Jacqueline Bowen    | <a href="#"><i>A Microfacies Analysis of Lower Cretaceous (Aptian-Albian) Deposits in the Sierra del Caloso, Sonora, Mexico</i></a>   |
|      |        |                             |   |
| 1999 | Spring | Wood, Sharon                | <a href="#"><i>Chemical Tracing of Geothermally-modified Interbasin Transfer at La Selva Biological Station, Costa Rica</i></a>   |
| 1999 | Fall   | Yuhr, Lynn Benson           | <a href="#"><i>Measurement of Salt Water Intrusion in South Florida: Comparing Traditional Water Samples with Geophysical Techniques</i></a>  |
| 1999 | Summer | Wilkins, Scott              | <a href="#"><i>The Influence of Mechanical Layering on the Evolution of Brittle Structures: Fracture Partitioning and Fault Growth in the Glen Canyon Sandstone, Split Mountain, Utah</i></a> |
|      |        |                             |   |
| 1998 | Fall   | Powell, Linda               | <a href="#"><i>Multispectral Land Cover Classification and Land Cover Change Near Orlando, Florida from Landsat Thematic Mapper Imagery</i></a>   |
| 1998 | Fall   | Sjovall, Marta Kristina     | <a href="#"><i>Integrated Studies of the Suva Marl, Fiji: Biostratigraphy, Stable Isotope Signals, and Carbonate Fluctuations</i></a>   |
|      |        |                             |   |
| 1997 | Spring | LaFemina, Peter             | <a href="#"><i>Monitoring of Soil Mercury and Soil Gas Radon and Carbon Dioxide at two Active Volcanoes: Cerro Negro and Telica, Nicaragua</i></a>  |
| 1997 | Summer | Merkel, Robert              | <a href="#"><i>Sediment and Elemental Accumulation in Everglades Excavation</i></a>   |
| 1997 | Summer | Tao, Gujin                  | <a href="#"><i>The Influence of Colloids and Physicochemical Factors on the Transport of Hydroxyatrazine Through the Aquifer</i></a>  |
|      |        |                             |   |
| 1996 | Spring | Guardiaro, Jose             | <a href="#"><i>Determination of Hydraulic Conductivity and Dispersivity in the Biscayne Aquifer, Taylor Slough, Everglades National Park</i></a>  |
| 1996 | Spring | Zhou, Leifeng               | <a href="#"><i>Cyclostratigraphy of Cretaceous Sediments in Northeast Mexico: An Assessment of Milankovitch Orbital Modulation</i></a>  |
|      |        |                             |   |
| 1996 | Fall   | Bai, Taixu                  | <a href="#"><i>Theoretical Analysis of Cross Joint Geometries and Their Classification</i></a>  |
| 1996 | Fall   | Slater, Eric                | <a href="#"><i>Flow and Water Budgets in the C-111 and L31W Canals near the Everglades National Park, Dade County, Florida</i></a>  |

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|------|--------|------------------------|---|
| 1996 | Summer | Bandopadhyay, Indranil | <a href="#"><i>Investigation of Spatial Patterns of Groundwater Exchange with Lakes, Using a Three-Dimensional Numerical Model, VOL I-II</i></a>                                    |
| 1996 | Summer | Poetisi, Ewald         | <a href="#"><i>Magnetostratigraphic Significance of Middle Cretaceous Limestones Exposed at La Boca and Santa Rosa Canyons Northeastern Mexico</i></a>                              |
| 1996 | Summer | Yang, Zhong            | <a href="#"><i>The Surface Magnetic Enhancement Effect in the Miami Limestone Exposed in the Everglades, Florida</i></a>  |
|      |        |                        |   |
| 1995 | Spring | Cuevas, Elba           | <a href="#"><i>The Radiolarian Biostratigraphy of the Oceanic Formation, Conset Bay, Barbados, West Indies</i></a>  |
| 1995 | Spring | Ramirez, Maria         | <a href="#"><i>Neotectonic Structures and Paleostress in the Azua Region, South-Central Hispaniola</i></a>  |
| 1995 | Spring | Song, Xiaodan          | <a href="#"><i>Atmospheric Forcing Effect on Volcanic Degassing at Colima, Long Valley and Kilauea Volcanoes</i></a>  |
| 1995 | Fall   | Arfstrom, Cleone       | <a href="#"><i>Areal and Vertical Distribution of Total Soil-Mercury and Total Phosphorus in the Southern Half of Water Conservation Area 3-A, Everglades, Southern Florida</i></a> |
|      |        |                        |   |
| 1994 | Spring | Chen, Zhuoning         | <a href="#"><i>Vent Alignments in San Francisco Volcanic Field, Arizona: Statistical Analysis and Assessment of Structural Controls</i></a>   |
| 1994 | Spring | Sierra, Luz Loresley   | <a href="#"><i>Paleomagnetic Studies of a Geomagnetic Polarity Transition Recorded in the Suva Marl Formation, Fiji</i></a>   |
|      |        |                        |   |
| 1994 | Fall   | Malek, Alireza         | <a href="#"><i>Gravity and Magnetic Anomalies near Homestead, Florida</i></a>   |
| 1994 | Summer | Anam, Khandaker        | <a href="#"><i>Petrology and Geochemistry of Some High Pressure Rocks from Northern Part of Rio San Juan Complex, Dominican Republic</i></a>  |
|      |        |                        |   |
| 1993 | Fall   | Geier, Lois J.         | <a href="#"><i>The Biostratigraphy of the Beloc Formation, Southern Peninsula of Haiti, and the Changes in Planktonic Foraminifera Through Time</i></a>                             |
| 1993 | Summer | West-Thomas, Jennifer  | <a href="#"><i>Monitoring Changes of Soil Geochemistry in Response to Volcanic Activity - Volcan Colima, Mexico</i></a>   |
| 1993 |        | Arfstrom, John David   | <a href="#"><i>A Model of the Hydrothermal System at Casa Diablo in Long Valley, California, Based on Resistivity Profiles and Soil Mercury Analyses</i></a>                        |
| 1993 |        | Lane, Samantha         | <a href="#"><i>Magnetic Field Variation as a Constraining Factor in Convective and Conductive Heat Flow Modeling: Volcan Colima, Mexico</i></a>                                     |
|      |        |                        |   |
| 1992 |        | Booth, Donna Wade      | <a href="#"><i>Depth Related Variations of Trace Metal Abundances in South Florida Sediment</i></a>   |

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| 1992 |  | Mandel, Goutam      | <a href="#"><i>Geochemical Characteristics of Volcanic Rocks from the West Mariana Ridge</i></a>  |
|      |  |                     |   |
| 1991 |  |                     |   |
| 1991 |  | Gao, Zimin          | <a href="#"><i>Phase Relationships in CaO-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> in Plagioclase Lherzolite Field</i></a>   |
| 1991 |  | Whitley, Joseph     | <a href="#"><i>The Effects of Diagenesis on the Hydrology of the Surficial Aquifer, Broward County, Florida</i></a>   |
|      |  |                     |   |
| 1990 |  | Abdollahi, Mohammad | <a href="#"><i>Petrological and Geochemical study of Crustal Xenoliths from Calbuco Volcano, Chile (Latitude) 41o20'S</i></a>   |
|      |  |                     |   |
| 1989 |  |                     |   |
| 1989 |  | Chen, Zhuoning      | <a href="#"><i>Vent Alignments in San Francisco Volcanic Field, Arizona: Statistical Analysis and Assessment of Structural Controls</i></a>   |
| 1989 |  | Cohen, Tobi         | <a href="#"><i>An Experimental Petrologic and Geochemical Study of Deccan Trap Basalts: Part I. Deccan Traps from Tamia, Central India; Part II Crystallization- Relationship of Deccan Basalts at 6.35 kbars</i></a> |