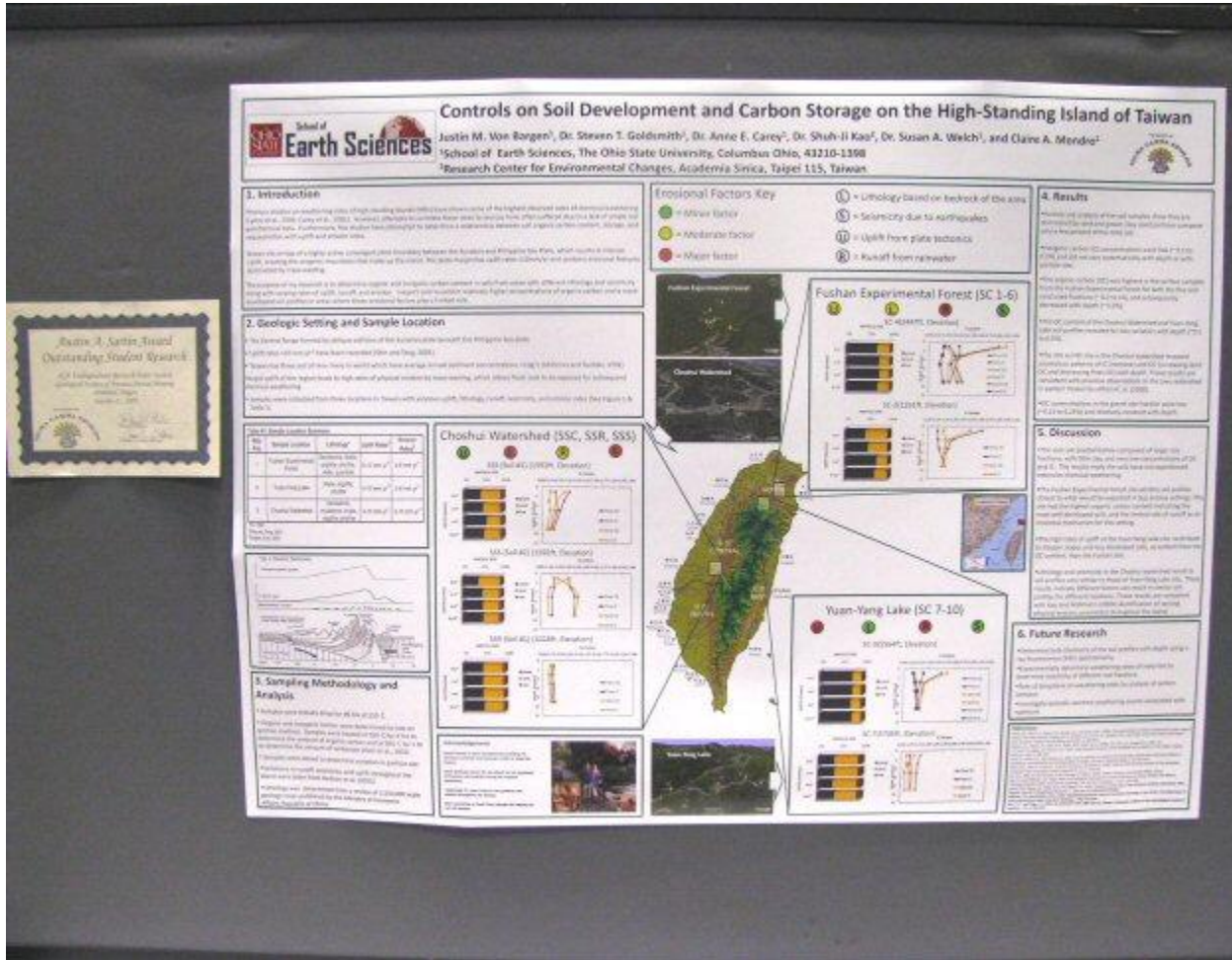


# SGE Student Research

## Poster Session at 2009 GSA Meeting

Congratulations to:



**Justin Von Borgen** (*Sigma Chapter, The Ohio State University*) - winner of the Austin A. Sartin Award.



**Jennifer Shepeck** (*Gamma Sigma Chapter, University of Northern Iowa*) and



**Kirby Gimson**, (*Zeta Beta Chapter, West Chester University*) winners of the National Council Award.

Below are all of the titles and authors of the papers - a total of 62 papers were presented!

**LOW STREAM-FLOW MEASUREMENT AND STREAM CO<sub>2</sub> EMISSION CALCULATIONS, KONZA PRAIRIE LTER SITE, NORTHEASTERN KANSAS, USA OHMES, Karen S.1, MACPHERSON, G.L.2, and HUFF, Breanna L.1**, (1) Dept. of Geology, University of Kansas, 1475 Jayhawk Blvd, Rm. 120, Lindley Hall, Lawrence, KS 66045, kawen@ku.edu, (2) Dept. of Geology, University of Kansas, 1475 Jayhawk Blvd, Lindley Hall, Room 120, Lawrence, KS 66045-7613

**REFORESTATION OR RESPONSE TO RISING ATMOSPHERIC CO<sub>2</sub>: INVESTIGATING TWO POSSIBLE MECHANISMS FOR THE INCREASE IN GROUNDWATER CO<sub>2</sub> AT THE KONZA PRAIRIE, NORTHEASTERN KANSAS HUFF, Breanna L.**, Dept. of Geology, University of Kansas, 1475 Jayhawk Blvd, Rm. 120, Lindley Hall, Lawrence, KS 66045, blhuff@ku.edu and MACPHERSON, G.L., Dept. of Geology, University of Kansas, 1475 Jayhawk Blvd, Lindley Hall, Room 120, Lawrence, KS 66045-7613

**SANDBOX EXPERIMENTS AS ANALOGUES FOR CONTINENTAL RIFTS: IMPACT OF**

*ROCK STRENGTH IN EXTENSIONAL STRESS REGIMES* **BROWNE, Cassandra**, Geological Sciences and Engineering, Missouri University of Science and Technology, 129 McNutt Hall, Rolla, MO 65409, cmb4zd@mst.edu, **LANSBERY, Leslie Ann**, Geology, Missouri University of Science and Technology, 1870 Miner Circle, 125 McNutt Hall, Rolla, MO 65409-0140, and **HOGAN, John**, Geological Sciences and Engineering, Missouri University of Science and Technology, 127 McNutt Hall, Rolla, MO 65401

*TRANSPORT OF DISSOLVED ORGANIC CARBON IN MOUNTAINOUS RIVERS OF DOMINICA, LESSER ANTILLES* **MONDRO, Claire A.1**, **GOLDSMITH, Steven T.1**, **CAREY, Anne E.1**, **TRIERWEILER, Annette M.1**, **JOHNSON, Brent M.2**, and **WELCH, Susan A.1**, (1) School of Earth Sciences, The Ohio State University, 275 Mendenhall Laboratory, 125 S Oval Mall, Columbus, OH 43210, cmondro@gmail.com, (2) Department of Geology, San Jose State University, San Jose, CA 95192

*GEOLOGICAL CARBON SEQUESTRATION IN THE OHIO RIVER VALLEY: AN EVALUATION OF POSSIBLE TARGET FORMATIONS* **DALTON, Terra**, Geological Sciences, The Ohio State University, 275 Mendenhall, 125 South Oval Mall, Columbus, OH 43210, terra.dalton@gmail.com

*CONTROLS ON SOIL DEVELOPMENT AND CARBON STORAGE ON THE HIGH-STANDING ISLAND OF TAIWAN* **VON BARGEN, Justin M.1**, **GOLDSMITH, Steven T.1**, **CAREY, Anne E.1**, **KAO, Shuh-Ji2**, **WELCH, Susan A.1**, and **MONDRO, Claire A.1**, (1) School of Earth Sciences, The Ohio State University, 275 Mendenhall Laboratory, 125 S Oval Mall, Columbus, OH 43210, von-bargen.2@osu.edu, (2) Research Center for Environmental Changes, Academia Sinica, 128 Academia Road, Section 2, Nankang, Taipei, 115, Taiwan

*A SALINIZATION STUDY WITHIN THE SAN ACACIA REGION, SEVILLETA NATIONAL WILDLIFE REFUGE, NEW MEXICO* **REYES, Francisco**, Department of Environmental Sciences, University of Texas at El Paso, El Paso, TX 79968, frreyes@miners.utep.edu, **ADELBERG, Samantha**, Department of Geological Sciences, Brown University, Providence, RI 02912, **WILLIAMS, Amy J.**, Earth and Planetary Sciences, University of New Mexico, Albuquerque, NM 87131, **CROSSEY, Laura J.**, Earth & Planetary Sciences, University of New Mexico, Northrop Hall, Albuquerque, NM 87131, and **KARLSTROM, Karl E.**, Earth and Planetary Science, University of New Mexico, Northrop Hall, Albuquerque, NM 87131

*GEOMICROBIOLOGY OF THE SEVILLETA NATIONAL WILDLIFE REFUGE SPRINGS AND WELLS: PREDICTING THE METABOLIC ENERGY AVAILABLE TO MICROORGANISMS* **ADELBERG, Samantha**, Department of Geological Sciences, Brown University, Providence, RI 02912, Samantha\_Adelberg@brown.edu, **REYES, Francisco**, Department of Environmental Sciences, University of Texas at El Paso, El Paso, TX 79968, **WILLIAMS, Amy J.**, Earth and Planetary Sciences, University of New Mexico, Albuquerque, NM 87131, and **CROSSEY, Laura J.**, Earth & Planetary Sciences, University of New Mexico, Northrop Hall, Albuquerque, NM 87131

*CHEMICAL ANALYSIS AND COMPARISON OF ARIDISOLS BASED ON VEGETATION AND ROCK TYPE IN THE WHITE MOUNTAINS, EASTERN CALIFORNIA* **MYERS, Brittany R.**, Geological Sciences, Albion College, 5499 Kellogg Center, Albion, MI 49224, brm12@albion.edu and **VAN DE VEN, Christopher**, Geological Sciences, Albion College,

Albion, MI 49224

*CONSTRUCTIVISM-BASED ACTIVITIES USING HALLWAY GEOLOGY DISPLAYS IN INFORMAL SCIENCE EDUCATION* **HUBSCHER, Rodney M.**, Earth Science, University of Northern Iowa, Cedar Falls, IA 50614-0335, Walters@uni.edu and **WALTERS, James C.**, Earth Science, The University of Northern Iowa, Latham Hall, Cedar Falls, IA 50614

*STREAM BANK STABILITY AND TURBIDITY OF DRY RUN CREEK, CEDAR FALLS, IOWA* **SHEPECK, Jennifer M.**, Earth Science, University of Northern Iowa, Cedar Falls, IA 50614, jshepeck@uni.edu and **WALTERS, James**, Earth Science, The University of Northern Iowa, Latham Hall, Cedar Falls, IA 50614

*QUANTITATIVE MEASUREMENTS AND SPATIAL STATISTICS OF IGNEOUS LAYERING IN THE MORGANTOWN SHEET, SE PA* **GIMSON, Kirby**, LUTZ, Tim, and SROGI, LeeAnn, Department of Geology/Astronomy, West Chester University, West Chester, PA 19383, kg608109@wcupa.edu

*A TWO-DIMENSIONAL, LINEAR-ELASTIC MODEL TO EXPLAIN RADIAL EXTENSIONAL FRACTURES, PANTHEON FOSSAE, CALORIS BASIN, MERCURY* **MCDONOUGH, Brianne M.** and **CICERONE, Robert D.**, Earth Sciences, Bridgewater State College, Bridgewater, MA 02325, bmcdonough@bridgew.edu

*SEDIMENTARY PETROLOGY OF THE TEDDY CREEK GROUP, BLACKTAIL MOUNTAINS, MT: IMPLICATIONS FOR PROVENANCE & LANDSCAPE EVOLUTION* **HOLT, Renée S.** and **KROL, Michael A.**, Earth Sciences, Bridgewater State College, Bridgewater, MA 02325, rholt@bridgew.edu

*ESTIMATING MIDDLE DEVONIAN SOIL AGES USING POINT-COUNTING OF PEDOGENIC CLAYS IN PALEOSOLS* **WRIGHT, Thomas Colby**, MINTZ, Jason S., and **DRIESE, Steven G.**, Department of Geology, Baylor University, One Bear Place #97354, Waco, TX 76798-7354, fishmato@gmail.com

*AGE AND EMPLACEMENT TEMPERATURE OF A FELSIC PORPHYRY DIKE NEAR BALLARD, COUNTY GALWAY* **SUTHERLAND, Christopher L.**, Department of Geology and Environmental Science, James Madison University, MSC 6903, Harrisonburg, VA 22807, suthercl@gmail.com, **JOHNSON, Elizabeth A.**, Department of Geology and Environmental Sciences, James Madison University, MSC 6903, Harrisonburg, VA 22807, **LOGAN, M. Amelia V.**, Dept. of Mineral Sciences, Smithsonian Institution, NHB-119, Washington, DC 20560-0119, **SAMSON, Scott D.**, Department of Earth Sciences, Syracuse University, Syracuse, NY 13244, and **FEELY, Martin**, Department of Earth and Ocean Sciences, National University of Ireland, University Road, Galway, Ireland

*GEOCHEMICAL INVESTIGATION OF POTENTIAL TOXIC METAL RELEASES FROM TVA COAL ASH SURFACE IMPOUNDMENTS INTO NEARBY RIVER WATERS AND SEDIMENTS* **WYLIE, Miller<sup>1</sup>**, **PICKERING, Jennifer<sup>1</sup>**, **JONES, Matt<sup>2</sup>**, **CROMBIE, Scott<sup>3</sup>**, **SHANNON, Caitlin<sup>1</sup>**, and **CRIBB, Warner<sup>1</sup>**, (1) Geosciences, Middle Tennessee State University, MTSU PO Box 9, Murfreesboro, TN 37132, emw2t@mtsu.edu, (2) Siegel High School, Murfreesboro, TN 37129, (3) Chemistry, Ravenwood High School, Brentwood, TN 37027

*CHEMICAL EVOLUTION AND HYDROLOGY OF NORTHERN SIERRA NEVADAN MINERAL SPRINGS COLAFRANCESCO, Kaitlen C.1, RADEMACHER, Laura K.1, BURMEISTER, Kurtis C.1, GIOVANNONI, Steven C.1, KIEF, Jerome M.1, and SUTER, Jordan B.2, (1) Department of Earth and Environmental Sciences, University of the Pacific, 3601 Pacific Avenue, Stockton, CA 95211, k\_colafrancesco@pacific.edu, (2) Sierra College, 5000 Rocklin Road, Rocklin, CA 95677*

*SOURCES OF WATER QUALITY IMPAIRMENTS IN THE LINCOLN CREEK WATERSHED, LEWIS COUNTY WASHINGTON MCLAUGHLIN, Win N.1, BROWN, Christopher J.1, and RADEMACHER, Laura K.2, (1) Department of Earth and Environmental Science, University of the Pacific, 3601 Pacific Ave, Stockton, CA 95211, w\_mclaughlin1@pacific.edu, (2) Dept of Geosciences, Univ of the Pacific, 3601 Pacific Avenue, Stockton, CA 95211*

*RADIOCARBON DATING TERRESTRIAL GASTROPODS: ASSESSING OPEN-SYSTEM BEHAVIOR MCGIMPSEY, Chelsea, Department of Geology, Miami University, Oxford, OH 45056, mcgimpn@muohio.edu, RECH, Jason A., Geology, Miami University, 114 Shideler Hall, Oxford, OH 45056, and PIGATI, Jeffrey S., Geologic Division, U.S. Geological Survey, 520 N. Park Avenue, Tucson, AZ 85719*

*TOO MUCH, TOO LITTLE, OR JUST RIGHT? AN INVESTIGATION OF CONFIDENCE, DEMOGRAPHICS, AND CORRECTNESS JORDAN, Sarah C.1, LIBARKIN, Julie C.2, and CLARK, Scott K.1, (1) Geological Sciences, Michigan State University, 206 Natural Science Building, East Lansing, MI 48824, jordans4@msu.edu, (2) Geocognition Research Laboratory, 206 Natural Science Building, Michigan State University, East Lansing, MI 48824*

*REFLECTED LIGHT IMAGE ANALYSIS METHOD: APPLICATION TO MAGNETIC MINERAL SPO MEASUREMENTS LINER, Tiffany and WATERS-TORMEY, Cheryl, Geosciences and Natural Resources, Western Carolina University, 331 Stillwell Building, Cullowhee, NC 28723, cherylwt@wcu.edu*

*ARE SILICLASTIC NODULES IN THE UPPER JURASSIC MORRISON FORMATION (EASTERN BIG HORN BASIN, WYOMING) ACCRETIONARY LAPILLI? MURRAY, Abigail P.1, PEDRICK, Jane N.2, MATHISON, Mark E.2, and DAWSON, M. Robert2, (1) Dept of Geological & Atmospheric Sciences, Iowa State University, Ames, IA 50011-3212, abigail.murray30@gmail.com, (2) Dept of Geological & Atmospheric Sciences, Iowa State University, Ames, IA 50011-3212*

*WATERSHED EROSION ASSESSMENT IN THE RAPPAHANNOCK USING ISOTOPIC AND SPATIAL ANALYSIS ANDREUCCI, Stephanie, Earth and Environmental Sciences, University of Mary Washington, 1301 College Ave, Fredericksburg, VA 22401, sandreuc@umw.edu and KISILA, Ben Odhiambo, Earth and Environmental Sciences, University of Mary Washington, Jepson Science Center, 1301 College Ave, Fredericksburg, VA 22401*

*QUANTIFYING COASTAL HAZARDS: RANKING CONTROLS ON DAMAGE IN PUERTO RICO FROM HURRICANE GEORGES PETRUCCELLI, Rochelle F., Geosciences, University of West Georgia, Carrollton, GA 30118, rlegasp1@my.westga.edu, JACKSON, Chester W., Department of Geology, University of Georgia, Athens, GA 30602, and BUSH, David M., Department of Geosciences, University of West Georgia, Carrollton, GA 30118*

*THE SURPRISING LACK OF RELIABLE HISTORICAL HURRICANE STORM SURGE DATA*  
**JOHNSON, Jacques R.1**, MALOOF, Andrew1, PETRUCCELLI, Rochelle F.1, YOUNG, Robert S.2, and BUSH, David M.1, (1) Department of Geosciences, University of West Georgia, Carrollton, GA 30118, jjohns38@my.westga.edu, (2) Program for the Study of Developed Shorelines, Western Carolina University, Belk 294, Cullowhee, NC 28723

*INORGANIC ARSENIC AND OTHER PARAMETERS TESTED IN WELL WATER OF WEST GEORGIA*  
**AYASH, K. Hope**, COOK, Kimberly E., WOLFE, Cameron G., BOATMAN, Michael L., and HOLLABAUGH, Curtis L., Geosciences, University of West Georgia, Carrollton, GA 30118, kayash1@my.westga.edu

*ANALYSIS OF TWO KNOWN SECONDARY DRINKING WATER CONTAMINANTS, SULFATE AND HARDNESS, IN WEST GEORGIA GROUNDWATER*  
**HUNT, Lindsey Elise**, KRUEGER, Daniel W., and HOLLABAUGH, Curtis L., Geosciences, University of West Georgia, Carrollton, GA 30118, lhunt4@my.westga.edu

*MEASUREMENT OF NITRATES AND SILICA IN LOCAL WELLS OF CARROLL COUNTY, GEORGIA*  
**PETRUCCELLI, Rochelle F.**, NICKLE, Cassandra, HOLLABAUGH, Curtis L., and HARRIS, Randa R., Geosciences, University of West Georgia, Carrollton, GA 30118, rlegasp1@my.westga.edu

*LEAD AND COPPER IN DOMESTIC WELLS IN WEST GEORGIA*  
**SKINNER, Tina M.**, AYASH, K. Hope, and HOLLABAUGH, Curtis L., Geosciences, University of West Georgia, Carrollton, GA 30118, tskinne1@my.westga.edu

*A LOCAL ASSESSMENT OF IMPROPERLY ABANDONED WELLS IN LINN AND BENTON COUNTIES, OREGON*  
**FULTON, Will1**, CARTER, Deron T.1, and STEBBINS, Adam2, (1) Department of Physical Science, Linn Benton Community College, 6500 Pacific Blvd. SW, Albany, OR 97321, willfulton@yahoo.com, (2) Benton County Water Projects, Benton County Board of Commissioners Office, 408 SW Monroe Ave, Suite 111, Corvallis, OR 97339

*LEAD, ZINC, AND COPPER METAL DISTRIBUTION IN SEDIMENT INVENTORIES IN THE HUDSON RIVER ESTUARY*  
**LUCE, Elise**, Geoscience and Environmental Studies, Eckerd College, #1119 4200 54th Ave S, St. Petersburg, FL 33711, ms.lucee@gmail.com, NITSCHKE, Frank, Lamont-Doherty Earth Observatory, of Columbia Univ, Palisades, NY 10964, and KENNA, Timothy C., Lamont-Doherty Earth Observatory, P. O. Box 1000, Palisades, NY 10964

*DEFINING SPATIAL AND TEMPORAL VARIATIONS IN THE HYPORHEIC ZONE OF A LOW GRADIENT, MEANDERING AGRICULTURAL STREAM USING CONSERVATIVE TRACERS*  
**HAHN, David** and VAN DER HOVEN, Stephen J., Geography-Geology, Illinois State University, Campus Box 4400, Normal, IL 61790, hahn\_87@hotmail.com

*QUANTIFYING THE EFFECTS OF GROUNDWATER ON NITROGEN CYCLING IN CONSTRUCTED WETLANDS RECEIVING AGRICULTURAL TILE DRAINAGE*  
**TRELA, Jarek**, VAN DER HOVEN, Stephen J., and LOVE, Jonathan, Geography-Geology, Illinois State University, Campus Box 4400, Normal, IL 61790, jtrela@ilstu.edu

*A PRELIMINARY GEOCHEMICAL ANALYSIS OF SPATIAL AND TEMPORAL VARIATIONS*

*IN THE SURFACE WATER CHEMISTRY OF RICE COUNTY MINNESOTA USING ArcGIS*  
**HOLSCHUH, Nicholas Donald1**, HAILEAB, Bereket1, NEGA, Tsegaye2, and FU, Wei-Hsin2, (1) Geology, Carleton College, One North College Street, Northfield, MN 55057, holschun@carleton.edu, (2) ENTS, Carleton College, One North College Street, Northfield, MN 55057

*PHYSICAL AND CHEMICAL CONNECTIONS BETWEEN SURFACE AND GROUND WATER IN THE ANCHORAGE WATERSHED, ALASKA* **CARDENAS, Megan E.**, Geological Sciences, University of Alaska Anchorage, 3211 Providence Drive, Anchorage, AK 99508, asmec47@uaa.alaska.edu, **MUNK, LeeAnn**, Department of Geological Sciences, University of Alaska Anchorage, 3211 Providence Drive, Anchorage, AK 99508, **MUNK, Jens**, School of Engineering, University of Alaska Anchorage, 3211 Providence Drive, Anchorage, AK 99508, and **HAGEDORN, Birgit**, Applied Science and Technology Laboratory, University of Alaska Anchorage, 3211 Providence Drive, Anchorage, AK 99508

*INFLUENCE OF DECIMETER-SCALE VARIABILITY ON DNAPL INFILTRATION AND MIGRATION IN A GLACIAL SAND AQUIFER* **SHERMAN, Janelle R.**, Department of Geology, Wayne State University, 0224 Old Main, 4841 Cass Ave, Detroit, MI 48202, at4653@wayne.edu and **LEMKE, Lawrence D.**, Department of Geology, Wayne State University, 0224 Old Main, 4841 Cass, Detroit, MI 48202

*SOURCING ELEMENTAL ALUMINUM IN SURFACE WATERS IN THE SWIFT RIVER WATERSHED, NEW HAMPSHIRE: A PRELIMINARY REPORT* **ALLEN, Justin M.**, **CALDWELL, Matthew P.**, and **BALOGH-BRUNSTAD, Zsuzsanna**, Hartwick College, Oneonta, NY 13820, allenj@hartwick.edu

*INVESTIGATING THE POTENTIAL FOR MICROBIAL IRON REDUCTION IN A HYDROLOGICALLY DYNAMIC RESERVOIR SYSTEM, VILLA PARK DAM, VILLA PARK, CA* **CORCORAN, Andrew M.**, Geological Sciences, California State University Fullerton, 800 North State College Blvd, Fullerton, CA 92834, a\_m\_c\_1987@yahoo.com and **KNEESHAW, Tara A.**, Department of Geological Sciences, California State University Fullerton, Fullerton, CA 92834-6850

*EARTHQUAKE MAGNITUDE AND RECURRENCE FROM SCARP MORPHOLOGY, EUREKA VALLEY FAULT ZONE, EASTERN CALIFORNIA* **SCHLOM, Tyanna M.**, Geological Sciences, California State University, Fullerton, McCarthy Hall 254, P.O. Box 6850, Fullerton, CA 92834-6850, tschlom@gmail.com and **KNOTT, Jeffrey R.**, Department of Geological Sciences, California State Univ, Fullerton, Box 6850, Fullerton, CA 92834

*ARE THE MOAT MOUNTIAN VOLCANIC ROCKS OF NEW HAMPSHIRE REALLY OF VOLCANIC ORIGIN? MOAT MAYBE, KEARSARGE NO* **TIMM, Sarah L.**, Geology and Environmental Science, Hartwick College, Oneonta, NY 13820, TimmS@hartwick.edu

*PETROGENETIC EVOLUTION OF LAVAS FROM THE CASITAS SHIELD, DESCABEZADO GRANDE- CERRO AZUL VOLCANIC COMPLEX, CHILEAN ANDES* **DOWNEN, Matthew R.**, **WULFF, Andrew**, **KRAMER, Kelly**, and **MOYERS, Austin**, Geography and Geology, Western Kentucky University, 1906 College Heights Blvd. #31066, Bowling Green, KY 42101-1066, matthew.downen325@wku.edu



*LASER ABLATION INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY OF THE PLEISTOCENE WILSON CREEK ASH BEDS, INYO COUNTY, CALIFORNIA*  **DIAZ, Nathan**, Geological Sciences, California State University Fullerton, 800 N. State College Blvd, Fullerton, CA 92834, anima@csu.fullerton.edu, **KNOTT, Jeffrey R.**, Department of Geological Sciences, California State Univ, Fullerton, Box 6850, Fullerton, CA 92834, **NEFF, Hector**, Anthropology/IIRMES, California State University Long Beach, 1250 Bellflower Blvd, Long Beach, CO 90840, **WAN, Elmira**, U.S. Geological Survey, 345 Middlefield Rd, MS-975, Menlo Park, CA 94025, **WAHL, David**, USGS, 345 Middlefield Rd. MS-975, Menlo Park, CA 94025, and **SARNA-WOJCICKI, Andrei M.**, U.S. Geological Survey, 345 Middlefield Rd, Menlo Park, CA 94025

*MAFIC MICROGRANULAR ENCLAVES WITHIN SHEARED GRANITIC ROCKS IN MOUNTAIN, WI*  **SIEGNER, Michael**, Geography/Geology Department, University of Wisconsin-Whitewater, 800 Main Street, Whitewater, WI 53190, siegnerml15@uww.edu and **BHATTACHARYYA, Prajukti**, Geography and Geology, University of Wisconsin - Whitewater, 120 Upham Hall, 800 Main Street, Whitewater, WI 53190

*AGE AND CHEMISTRY OF MEGACRYSTIC ZIRCONS FROM ZIRCONIA, NORTH CAROLINA*  **BRAUN, Steven A.**, **BREAM, Brendan R.**, and **GUALDA, Guilherme A.R.**, Earth and Environmental Sciences, Vanderbilt University, 2301 Vanderbilt Place, Station B 35-1805, Nashville, TN 37235-1805, steven.a.braun@vanderbilt.edu

*FINGERPRINTING CU-BEARING TOURMALINE USING TRACE ELEMENTS AND LI AND B STABLE ISOTOPES*  **SHABAGA, Brandi**, Geological Sciences, University of Manitoba, 240 Wallace Bldg, Winnipeg, MB R3T2N2, Canada, brandishabaga@gmail.com, **FAYEK, Mostafa**, Geological Sciences, Univ. Manitoba, 240 Wallace Bldg, Winnipeg, MB R3T2N2, Canada, and **HAWTHORNE, Frank**, Geological Sciences, University of Manitoba, 240 Wallace Bldg, 125 Dysart Road, Winnipeg, MB R3T 2N2, Canada

*STRUCTURAL GEOLOGY AND METAMORPHIC PETROLOGY OF THE FRIES THRUST SHEET, BLUE RIDGE THRUST COMPLEX, WESTERN NC AND EASTERN TN*  **MCHUGH, Andrea C.1**, **HAMIL, A. Brooke**1, **TRUPE, Charles H.2**, and **ASHER, Pranoti M.3**, (1) Department of Geology and Geography, Georgia Southern University, P.O. Box 8149, Statesboro, GA 30460, amchugh1@georgiasouthern.edu, (2) Department of Geology and Geography, Georgia Southern University, Statesboro, GA 30460, (3) Department of Geology and Geography, Georgia Southern University, Statesboro, GA 30460-8149

*OSL DATING PROPERTIES OF MG-CARBONATE: A RECENTLY DISCOVERED MINERAL IN MARTIAN SEDIMENTS*  **GORZ, Andrew J.**, Geosciences, North Dakota State University, P.O. Box 6050, Dept. 2745, Fargo, ND 58108, Andrew.Gorz@ndsu.edu and **LEPPER, Kenneth**, Optical Dating and Dosimetry Lab, North Dakota State University, Department of Geosciences, P.O. Box 6050, Dept. #2745, Fargo, ND 58108-6050

*COASTAL TERRACE TECTONIC GEOMORPHOLOGY, TRINIDAD, WEST INDIES*  **MORELL, Mallory A.**, Grand Valley State, 230 STU 1 Campus Dr, Allendale, MI 49401, morellm@mail.gvsu.edu, **WEBER, John**, Geology, Grand Valley State University, 1 Campus Drive, 125 Padnos, Allendale, MI 49401-9403, and **LLERANDI-ROMÁN, Pablo A.**, Geology Dept, Grand Valley State University, Padnos Hall of Science, Allendale, MI 49401-9403

*GROUNDWATER AND SURFACE WATER INTERACTIONS IN AN ACTIVE KARST AREA UNDER DIFFERENT FLOW CONDITIONS, CARTER COUNTY, TENNESSEE* **CONDE, Rachel** and GAO, Yongli, Geosciences, East Tennessee State University, Johnson City, TN 37614, zrac13@goldmail.etsu.edu

*DEVELOPING HIGH PRECISION TIME SERIES OF ISOTOPIC RECORDS ON SPELEOTHEMS FROM EASTERN TENNESSEE* **BURNHAM, Taylor<sup>1</sup>**, GAO, Yongli<sup>1</sup>, WANG, Xianfeng<sup>2</sup>, and ROWE, Harold<sup>3</sup>, (1) Geosciences, East Tennessee State University, Johnson City, TN 37614, ztgb5@goldmail.etsu.edu, (2) Department of Geology and Geophysics, University of Minnesota, 310 Pillsbury Dr. SE, Minneapolis, MN 55455, (3) Earth and Environmental Sciences, University of Texas at Arlington, Arlington, TX 77019

*LAND COVER ANALYSIS UTILIZING GEOGRAPHIC INFORMATION SYSTEMS AND HISTORIC AERIAL PHOTOGRAPHY: A CASE STUDY OF RIPARIAN ZONES IN THE LUCKIAMUTE RIVER BASIN, CENTRAL OREGON COAST RANGE* **STANLEY, Ryan** and TAYLOR, Stephen B., Earth and Physical Science Dept, Western Oregon University, 345 N. Monmouth Ave, Monmouth, OR 97361, rstanley06@wou.edu

*ON THE USE OF STREAMBED TEMPERATURES FOR ESTIMATING BASEFLOW VELOCITY* **HAZEN, Anna George**, Department of Geology, Appalachian State University, ASU Box 32067, Boone, NC 28607-2067, georgear@appstate.edu and **ANDERSON, William P.**, Department of Geology, Appalachian State University, ASU Box 32067, Boone, NC 28608-2067

*USE OF A DIGITAL ELEVATION MODEL TO MEASURE DEFLATION OF A ROCK GLACIER IN OPABIN BASIN, YOHO NATIONAL PARK* **ADAMS, Kristyn<sup>1</sup>**, **TENNANT, Christina<sup>2</sup>**, **VALLIS, Vanessa<sup>3</sup>**, **MENOUNOS, Brian<sup>2</sup>**, and **OSBORN, Gerald<sup>1</sup>**, (1) Geoscience, University of Calgary, Calgary, AB T2N 1N4, Canada, kaadams@ucalgary.ca, (2) Geography Program, University of Northern British Columbia, Prince George, BC V2N 4Z9, Canada, (3) Department of Geography, University of Calgary, 2500 University Drive N.W, Calgary, AB T2N 1N4, Canada

*MAGNETOSTRATIGRAPHY OF THE EARLY MIOCENE KULU AND HIWEGI FORMATIONS ON RUSINGA ISLAND (LAKE VICTORIA, KENYA)* **ANDREWS, Alexandra L.**, Department of Geology and Geophysics, Yale University, New Haven, CT 06511, alexandra.andrews@yale.edu, **PEPPE, Daniel J.**, Department of Geology, Baylor University, One Bear Place #97354, Waco, TX 76798-7354, **MCNULTY, Kieran P.**, Department of Anthropology, University of Minnesota, 395 Hubert H. Humphrey Center, 301 19th Avenue South, Minneapolis, MN 55455, **HARCOURT-SMITH, Will**, Department of Vertebrate Paleontology, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024, **DUNSWORTH, Holly M.**, Department of Anthropology, Northeastern Illinois University, 5500 North St. Louis Avenue, Chicago, IL 60625, **DEINO, Alan L.**, Berkeley Geochronology Ctr, 2455 Ridge Road, Berkeley, CA 94709, and **FOX, David L.**, Department of Geology and Geophysics, University of Minnesota, 310 Pillsbury Drive SE, Minneapolis, MN 55455-0219

*GRAIN SIZE CHARACTERISTICS & POTENTIAL MOBILITY OF ROAD TRACTION SAND IN WORCESTER, MASSACHUSETTS* **HARKINS, Renee Helen**, College of the Holy Cross, 1

College St, PO Box 1040, Worcester, MA 01610, rhhark10@holycross.edu and MITCHELL, Sara Gran, Department of Biology, College of the Holy Cross, PO Box B, 1 College St, Worcester, MA 01610

*UNDERGRADUATE CREATIVE INQUIRY: GEOLOGIC MAPPING IN THE CLEMSON EXPERIMENTAL FOREST* **WARNER, Richard D.**, DEAN, W. Gray, BRAME, Scott, HESSE, Shannon, RITCHIE, Amber, DOUGLAS, Scott, FIELDS, Ian, LAURSEN, Charles, LEE, Robert, and TROXLER, W. Finch, Environmental Engineering and Earth Sciences, Clemson University, 340 Brackett Hall, Clemson, SC 29634-0919, wrichar@clemson.edu

*IMPROVING APPROXIMATIONS OF THE MOHR-COULOMB FAILURE ENVELOPE* **AMUNDSEN, Jesse** and JOHNSON, Sarah, Physics and Geology, Northern Kentucky University, SC 204, Nunn Dr, Highland Heights, OH 41099, amundsenj1@nku.edu

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