

EMILY CHATMAS

2023 Esperanza Crossing #2023
Austin, TX 78758

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HIGHER EDUCATION

M.S. in Geological Sciences

Expected May 2016

The University of Texas at Austin, Jackson School of Geosciences, Austin, TX
Graduate Advisor: Dr. Wonsuck Kim
GPA: 3.602/4.00
Thesis Title: Experimental Investigation of Terminal Fans on Salt Substrate: 3-dimensional Physical Experiments

B.S. in Geological Sciences

May 2014

University of St. Thomas, St. Paul, MN
Thesis Advisor: Dr. Tom Hickson
GPA: 3.30/4.00,
Deans list: *Spring 2014*
Senior Thesis Title: Experiments Evaluating the Interaction between Deformable Substrates and Prograding Clinoforms

RESEARCH EXPERIENCE

UNIVERSITY OF TEXAS AT AUSTIN

Jackson School of Geosciences

Graduate Research Assistant

Fall 2014 - Present

- In conjunction with Shell and Nexen, designed and conducted 3-dimensional physical experiments to model the interactions of a drylands system [terminal fan] with a mobile [salt] substrate
- Analyzed the data and related findings to active exploration within the Jurassic Norphlet play in the eastern Gulf of Mexico
- Combined observations with modern analog examples (Mojave River Wash, CA) to enhance the accuracy of the physical experiments

UNIVERSITY OF MINNESOTA – TWIN CITIES

St. Anthony Falls Laboratory

Intern

May 2013 – February 2014

- Original research project based on the behavior of deformable substrates in experimental settings, including analysis on clinoform progradation, diaper activity and sediment stratigraphy
- Performed 2-dimensional flume experiments and completed a quantitative analysis using ImageJ, Adobe and Microsoft programs
- Primary author on poster presented at AGU December 2013

UNIVERSITY OF ST. THOMAS

Undergraduate Research Assistant

May 2012 – September 2012

- Geochemical and sedimentological analyses of a 4-meter core taken from Pahranaagat Lake, Nevada
- Performed x-ray fluorescence and powder x-ray diffraction and analyzed quantitative data
- Presented poster as primary author at GSA October 2012

TEACHING AND WORK EXPERIENCE

The University of Minnesota – Twin Cities

Jan. 2014 – May 2014

Research Assistant, Geology Department, Minneapolis, MN

- Programming Assistant
 - Assisted in image processing for a new online resource for improving delta classification

The University of St. Thomas

Spring 2014

Teaching Assistant, Geology Department, St. Paul, MN

- **GEO111: Intro Physical Geology**
 - Faculty Advisor: Dr. Rebecca Clotts

The University of St. Thomas

Sept. 2011 – May 2014

Night access and front desk, Residency Hall Association, St. Paul, MN

- **Night Access Attendant**
 - Responsible for monitoring students entering the dorm after a certain time
 - Responsible for closing the building at the end of the night
- **Desk Attendant**
 - Manage administrative tasks; greet students, manage phone calls and organize rooms for meetings
 - Respond to student inquiries involving campus events and renting dorm property

FIELD EXPERIENCE

Field Experience

- **University of St. Thomas Regional Field Geology & Methods Course** January 2012
Southwestern USA Geology 260 Grade: A-
 - Independent field mapping through the Lake Mead area mapping sedimentary rocks.
 - Measured section with a Jacob's staff and took strike and dip measurements with a Brunton compass
 - Produced geologic maps, cross sections, stratigraphic columns, description of geologic units for each field site
- **Fluvial Terminal Fans / Aeolian Systems class field work** Spring 2015
Mojave Desert, California Geology 391 Grade: A
 - Took grain size samples and performed grain size analysis of different areas of terminal fan and Kelso dune field
 - Overall bedform analysis performed of different geologic features of the system
 - Field guide book was produced by class and main results were related to masters thesis project

SKILLS

Adobe Suite, Photoshop and Illustrator

Microsoft Office

ImageJ

Kingdom Seismic and Geological Interpretation Software (Currently taking course, Fall 2015)

Proficient in American Sign Language

Matlab (introductory proficiency)

DecisionSpace

ArcGIS 10.2

PANalytical X'Pert Pro MPD X-ray Diffractometer

PANalytical PW2400 X-ray Fluorescence Spectrometer

PROFESSIONAL SERVICE AND VOLUNTEER ACTIVITIES

Graduate

- **Austin Pets Alive!** May 2015 - Present
Volunteer, Austin, TX
 - Data management for fostering kittens on the APA! website
 - Upload photos and profiles weekly for new arrivals

Undergraduate

- **Colleges Against Cancer** Spring 2015
Board member & team leader, St. Paul MN
 - Raised awareness and funding for participation for the annual Relay For Life event in the St. Paul area
 - Team leader of 10 people participating in Relay For Life
 - Organized activities and vendors for the annual Relay For Life event
- **Second Harvest Heartland**
Student Volunteer, 10 hours/month, St. Paul, MN
 - Deliver food packages to low – income people throughout the Twin Cities

POSTERS, PRESENTATIONS AND PUBLICATIONS

- Chatmas, E. & Kim, W. (2015, December). Experimental Investigation of Terminal Fans Prograding on a Salt Substrate: 3-d Physical Experiments. Abstract submitted for poster at the American Geophysical Union (San Francisco, CA).
- Chatmas, E., Foreman, B., Abeyta, A., & Paola, C. (2014, December). Experiments Evaluating the Interaction between Deformable Substrates and Prograding Clinoforms Poster session presented at The American Geophysical Union Annual Meeting.
- Chatmas, E., Hermann, N., Kennedy-Harper, A., & Theissen, K. (2012, October). Lower Pahranaagat Lake as a Modern Analog for Ancient Lacustrine Microbialite facies of Miocene Horse Spring Formation in Southern Nevada. Poster session presented at The Geological Society of America Annual Meeting.
- Hermann, N.W., Theissen, K., & Chatmas, E. (2012, October). The Good, the Bad, and the Hypereutrophic: A Historical Sedimentary and Geochemical Analysis of Two Connected Suburban Lakes in Scott County, MN. Poster session presented at The Geological Society of America Annual Meeting.

PROFESSIONAL AFFILIATIONS

American Association of Petroleum Geologists	Fall 2014 --- Present
Association for Women Geoscientists	Fall 2013 --- Present
American Geophysical Union	Fall 2013 --- Present
The Geological Society of America	Fall 2012 --- Present

