

# 2014 STUDENT RESEARCH DAY & ALUMNI/INDUSTRY OPEN HOUSE

## ABSTRACT VOLUME

### ORAL PRESENTATIONS

Speaker	Title
Matt Cannon	Internal Deformation of the Himalayan Thrust Wedge Revealed by Regional Mapping and Stream Channel Analysis
Dan Coleff	Geomechanical and acoustic properties measurements on reconsolidated mudrock constituents at reservoir stresses
Shawn Wright	Absolute dating of source rocks using rhenium and osmium isotopes
Xin Lan	Atmospheric mercury measurements in the Barnett shale area, Texas: Implications for oil and gas emissions
Yuribia Munoz	Analysis of sedimentation rates in the Antarctic Peninsula throughout the Holocene: Comparing results from millennial and centennial timescales
Jiangbo Yu	Is there deep-seated subsidence in the Houston-Galveston area?
Marie De Los Santos	The Lobo Formation of southern New Mexico: A Laramide syn-tectonic deposit
Xuan Qin	Modeling organic-rich shale with different maturity levels
Crystal Saadeh	A reconstruction of climate change and orbital cyclicity using stable isotopic analysis from the Shada Basin, southwestern Tibetan Plateau
Harold Trammell	Atmospheric variations of Jupiter and Saturn
Ryan Jeffcoat	In situ microanalytical analysis of CAIs in meteorites: Constraints on models of early solar system evolution
Proma Battacharya	Paleo-channel reconstruction and grain size variability in Ferron Sandstone, Hanksville, Utah

Speaker	Title
Jiannan Wang	Marine guided-waves: Applications and filtering using physical modeling data
Eren Dongel	Sequence stratigraphy and well log interpretation of the Bakken Formation, North Dakota
Eray Kocel	Near-surface geophysical investigation of the 2010 Haiti earthquake epicentral area Léogâne, Haiti.
Joey Rodriguez	Wildfire Emissions from the 2006 El Nino and its implications for interannual variability
Sercan Pisen	Reservoir characterization via Amplitude Versus Offset (AVO) analysis and impedance inversion, Thrace Basin, northwestern Turkey
Lijun Diao	Underpredicted anthropogenic isoprene emissions in Houston during 2013 DISCOVER-AQ Houston Campaign
Johnny Seales	3D numerical investigation of oceanic core complex formation
Laura Judd	The effects of Nox and VOCs on ozone production during DISCOVER-AQ Houston 2013
Jen Campo	Glacial geomorphology of the eastern Antarctic Peninsula
Alex Kotsakis	The meteorological influences on ozone production during DISCOVER-AQ 2013
Zhao Li	Source mechanism inversion in an anisotropic physical model
Oyem Arnold	Layer thickness estimation from the frequency spectrum of seismic reflection data

## STUDENT POSTER SESSION

## UNDERGRADUATE STUDENTS

Presenter	Title
Batbayar, Kherlen	Changes in Late Cretaceous-Quaternary Caribbean plate motion directions inferred from paleostress measurements from striated fault planes
Borgman, Barry	Processing and analysis of 2D seismic data acquired on a glacial bench in Red Lodge, MT
Casso, Monica	Kabul basin, Afghanistan: A pull-apart basin marking the northeastern end of the 850-km-long Chaman left-lateral strike-slip fault and its linkage to the sub-parallel Herat strike-slip fault zone
Dowla, Naila	Quantitative restoration in the Gulf of Corinth, central Greece, over 1 million years
Erickson, Stephanie	FTIR Analysis of Ethiopian xenoliths: water abundance evidence for an unaltered, ancient mantle source
Haynie, Kirstie	Shallow subsurface detection of buried, weathered hydrocarbons using integrated geophysical techniques
Krupnik, Diana	Hydrocarbon Microseepage and geobotanical anomalies
Meado, Andrea	Mantle melting relationships recorded by abyssal peridotite trace element abundances
Sammons, Sterling	Mapping Chaman Fault in Southern Pakistan

## GRADUATE STUDENTS: MS

Presenter	Title
Bartschi, Nicolas	Linking Campanian foreland deposition to Sevier hinterland source regions in Book Cliffs, Utah
Castillo, Karilys	Cenozoic paleogeography of the easternmost part of the Eastern Venezuelan Basin based on seismic data and well information
Conklin, Tucker	Evolution of a Continental Shelf Margin Mini-basin, Northern Gulf of Mexico
Crews, Corbin	Geologic controls on hydrocarbon production in the Bakken Petroleum System: A field level study
Hasan, Murad	Stages of Jurassic rifting, magmatism and salt deposition in the eastern Gulf of Mexico inferred from a grid of deep-penetration seismic reflection data tied to wells
Kerekyarto, Andy	Stable and radiogenic magnesium isotope variation in Melilite mantle of Allende type B1 CAI EK 459-5-1
Li, Zhiyang	Evaluating along-strike variation using thin-bedded facies analysis, Upper Cretaceous Ferron Notom Delta, Utah
Loureiro, Patrick	Miocene to recent opening direction of the Virgin Islands basins from offshore seismic data, high resolution bathymetry, onland faulting and GPS measurements
Mejia, Carolina	Sequential stages of the fold-thrust belt of the Eastern Cordillera, Colombia, Inferred from a deep exploration well tied to seismic reflection data
Privalova, Irina	Oil detection within the Middle Jurassic sediments in the southern part of Western Siberia
Rusakov, Pavel	A permeability prognosis within the middle Jurassic sediments in the southern part of western Siberia based on 3D seismic and log data
Snyder, Casey	Remote sensing of thin-bedded reservoir analogs in an ancient delta using high-resolution, ground-based, hyperspectral and LiDAR technologies, Cretaceous Notom Delta, Utah

## STUDENT POSTER SESSION

## GRADUATE STUDENTS: MS

Presenter	Title
Staszyc, Alicia	Investigation of the grain size, shape and texture of the Perseverance Drift, Antarctic Peninsula: transport history and Holocene variability
Sun, Lei	Remote Sensing of Hydrocarbon-Induced Rock Alterations at Cement Field, Oklahoma
Zong, Jingjing	Salt anisotropy: ultrasonic lab experiments and traveltime ramifications

## GRADUATE STUDENTS: PhD

Presenter	Title
Abir, Ismail	Could normal fault basement ramps control salt movement in Northern Pakistan?
Arnold, Oyem	Application of Constrained least squares spectral analysis
Aziz, Azizuddin	GPR modeling and imaging of burials at the historic Mueschke Cemetary, Texas
Barnard, Alex	Identification and Analysis of Subsea Gas Emission Sites using Multibeam Sonar Data from the Barbados Accretionary Complex
Biber, Kivanc	3-D Geologic Outcrops with Laser Scanning, Photogrammetry and Hyperspectral Imaging: Recent Developments and Applications
Blanco, Joan	Petroleum Prospectivity of the La Vela area north of the inverted Falcon Basin, Venezuela
Bradley, Deborah	Chemical zonation of garnet in lawsonite eclogite from south of the Monagua Fault Zone, Guatemala: evidence for a complex growth history
Caicedo, Vanessa	Study of Houston's Planetary Boundary Layer using LIDAR Measurements
Chen, Xinyang	Petrologic and geochemical constraints on the origin of authigenic euhedral quartz crystals in the Edwards Formation, Central Texas
Cuchiara, Gustavo	Intercomparison of planetary boundary later parameterizations in the WRF Model for a case study in Houston, Texas
Dave, Riddhi	Shear Wave Structure in the Crust and Upper Mantle Beneath the Wyoming Craton
Huang, Jingqui	Integrated Geophysical Study of Faults Neat the Pierce Junction Salt Dome, Houston
Huang, Long	Fluid substitution effects on seismic anisotropy
Kao, Angela	Influence of Global Warming on Cloud Variability and Precipitation
Kapur, Sunil	Automatic Arrival Picking Using Super-Gaussian Minimum Uncertainty Wavelets
Liu, Lei	A Meteorological Climatology for the past 23 years to Quantify Potential Changes in Air Flow and Ozone in the Houston Area
Liu, Yiduo	Early-stage extension and synthetic dip panel in the Abiquiu Embayment, northern Rio Grande Rift
Luchen, Li	Investigation of MOHO structure in Basin and Range Area and Colorado Pleateau using receiver functions
Munoz, Yuribia	Analysis of sedimentation rates in the Antarctic Peninsula throughout the Holocene, comparing results form millennial and centennial timescales
Okayay, Unal	Remote Detecting of Hydrocarbon Microseepage-induced Rock Alterations in the Garza Oil Field, Texas
Pan, Shuai	Simulated impacts of stagnation on surface O3 and PM2.5 over southeast Texas
Rueber, Kyle	Are along-strike Alternations of Symmetrical and Non-symmetrical South Atlantic Conjugate Margins Controlled by Volcanics vs. Non-volcanic Rifting Processes?
Sanchez, Javier	Structure and basin analysis of the Honduras Berderlands and Western Nicaraguan Rise, Northwestern Caribbean
Sundell, Kurt	Neogene uplift of the central Andean Plateau
Wright, Shawn	Re-Os Geochemistry and Geochronology of the Permian Brushy Canyon Formation, Delaware Basin, West Texas
Zhang, Xin	Permeability estimation and fluid flow