

SMU Energy, Environment, and Natural Resources Colloquium*

Moody Auditorium, Frances Anne Moody Hall SMU, Dallas, TX Friday, May 3, 2024 8:30 am - 5:00 pm

SMU Dedman School of Law Huffington Dept. of Earth Sciences, SMU Dedman College of Humanities and Sciences Civil and Environmental Engineering Dept., SMU Lyle School of Engineering

with major support from

SMU Dedman College Interdisciplinary Institute Subsurface Resources & Energy and Environmental Systems Research Clusters

8:30 am - 8:40 am: Welcome and Opening Remarks

Monika Ehrman, Professor of Law & Professor of Engineering (by courtesy) SMU Dedman School of Law SMU Lyle School of Engineering, Civil & Environmental Engineering Dept.

Alexander Chase, Assistant Professor SMU Dedman College of Humanities & Science, Huffington Dept. of Earth Sciences

Karisa Cloward, Associate Professor & Director SMU Dedman College of Humanities & Science, Dept. of Political Science Dedman College Interdisciplinary Institute

8:40 am - 9:25 am: Session 1, Environmental Justice Initiatives Session Moderator: Monika Ehrman, SMU

Cheryl Seager, Director, Enforcement and Compliance Assurance Division Environmental Protection Agency Region 6

Suzanne Russo, Fellow & Environmental Justice Initiative Director Resources for the Future

9:25 am - 10:15 am: Panel, Environmental Justice & Community Lawyering Panel Moderator: Wendi Hammond, Legal Aid of NorthWest Texas

 $^{^*}$ Speakers express their own views and not necessarily the views of SMU or the Dedman College Interdisciplinary Institute. Texas MCLE Credit 4.00 hours CLE /0.75 hour Ethics CLE (application in process, not yet confirmed).

SMU

Wendi Hammond, Attorney, Community Revitalization Project Legal Aid of NorthWest Texas

Letitia Wilbourn, Community Leader Echo Heights & Stop Six Environmental Coalition

Detra Newhouse, Community Leader Sandbranch, TX

Michael Bates, Attorney, Community Revitalization Project Legal Aid of NorthWest Texas

10:15 am - 10:30 am: Break

10:30 am - 11:30 am: Session 2, Natural Resource Science, Law & Markets *Moderator:* Monika Ehrman, SMU

Managing Metals Derivatives Markets Capriciousness and the Energy Transition Colleen Baker, Associate Prof. of Legal Studies & Zinke Chair in Energy Management The University of Oklahoma Price College of Business

Ownership Rights and Challenges in the Next Frontiers of Mining—Sea and Space **Monika Ehrman**, Professor of Law SMU Dedman School of Law

Soil Memories: Stable Carbon Isotopes of Coexisting Calcite and Organic Matter in Soil Profiles Across California State

Neil Tabor, Professor

SMU Dedman College of Humanities & Science, Huffington Dept. of Earth Sciences

11:30 am - 12:00 pm: Lunch

[Boxed lunches available for pick up to eat in Atrium]

12:00-12:45 pm: Lunch Keynote

Food Justice and Economic Vitalization in South Dallas

Owen Hanley Lynch, Associate Professor & Director of Honors Program

Doric Earle, Professor of Practice

SMU Meadows School of the Arts

12:45 pm - 1:00 pm: Break



1:00 pm - 2:15 pm: Session 3, Envtl. Issues & Interdisciplinary Solutions *Moderator:* Alexander Chase, SMU

Ups and Downs of Beverly Hills, California – InSAR Reveals Three-Decades of Human-Induced Deformation

Yujie Zheng, Assistant Professor – Geophysics

The University of Texas at Dallas

Interactions Between Industry, Government, and Academia to Mitigate Induced Earthquakes from Oil and Gas Operations

Brian Stump, Professor

SMU Dedman College of Humanities & Science, Huffington Dept. of Earth Sciences

Potential and Limitations of Peatlands as Natural Climate Solutions Moira Hough, Post-Doctoral Researcher

Dept. of College of Forest Resources & Envtl. Science at Michigan Tech University

Environmental Hazards Necessitate Interdisciplinary Collaborations: A Test Case on Methane Remediation

Alexander Chase, Assistant Professor

Dedman College of Humanities & Science, Huffington Dept. of Earth Sciences

2:15 pm-2:30 pm: Break

2:30 pm - 4:00 pm: Session 4, Carbon Management *Moderator:* Christopher Hill, SMU

Defining Carbon Management and Identifying Research Opportunities Christopher Hill, Adjunct Professor & CEO and Principal Consultant SMU Lyle School of Engineering, Civil & Environmental Engineering Dept. KC Hill Consulting

Building Safe, Permanent Carbon Storage for Tomorrow's World Alicia Summers, Chief Development Officer Frontier Carbon Solutions

Defining the Future of Carbon Management **Tracy Evans**, CEO CapturePoint

The Future of Carbon Negative Materials **Purva Chawla**, Founder & Adjunct Professor

MaterialDriven & SMU Lyle School of Engineering

Carbon Sequestration Legal Issues in Pore Space Acquisition



James Coleman, Professor of Law SMU Dedman School of Law

4:00-4:15 pm: Break

4:15-5:00 pm: SMU Grad Student Lightning Round Presentations

Moderator: James Coleman, SMU

Development of Low-Cost Sensor Methane Detection Units for Continuous Monitoring **Sergio A. Escudero**, International Research Assistant & PhD Candidate SMU Lyle School of Engineering, Civil and Environmental Engineering Department

The Destiny of the Democratic Republic of the Congo: The Resource Curse and Charting a Course Towards Prosperity **Jaime Collazo**, JD Candidate SMU Dedman School of Law

Unraveling Natural Gas Migration Rate and Extent from Leaking Underground Pipelines under Varying Environmental Conditions

Navodi Jayarathne, PhD Candidate

SMU Lyle School of Engineering, Civil and Environmental Engineering Department

Impact of Weather Conditions on Residential Gas Leak Detection **Venkata Rao Gundapuneni**, Postdoctoral Researcher SMU Lyle School of Engineering, Civil & Environmental Engineering Department

Owning History: The Repatriation of Cultural Property in Texas Mary Taylor Stanberry, JD Candidate SMU Dedman School of Law

Sophia Yusuff, Graduate Student

SMU Lyle School of Engineering, Civil & Environmental Engineering Department

Hyperspectral Remote Sensing and Machine Learning Unleash New Horizons of Lake Water Quality Monitoring

MD Mamun, Postdoctoral Researcher

Dedman College of Humanities & Science, Huffington Dept. of Earth Sciences

5:00 pm: Concluding Remarks*

James Coleman, Professor of Law SMU Dedman School of Law

^{*} Note: The program is subject to change.