Curriculum Vitae

ROBERT C. TRENTHAM

Director, Center for Energy and Economic Diversification (CEED)
Senior Lecturer in Geology
University of Texas of the Permian Basin
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Education

January 1970B.S., GeologyCity College of New YorkJune 1976M.A., GeologyCity College of New YorkAugust 1981D.G.S., GeologyUniv. Texas at El Paso

Academic Experience (recent)

April 2001- Present

Director of CEED, Senior Lecturer in Geology at UTPB.

CEED director duties include coordinating with local industry and governmental entities to study oil and gas and alternative energy issues and promote economic development and diversification. Work with industry and faculty to develop research in state-of-the-art Enhanced Oil Recovery and Carbon Capture and Storage. Teach part of Industry classes: CO2 Flooding School, Young Professional Field Trip, Carbon Capture, Utilization, and Storage (CCUS) classes.

Revised and taught Graduate Courses in Advanced Subsurface Methods, and Petroleum Geology. Developed and taught Arid Lands Hydrology, and Exploration and Production Logging. Added to the curriculum and taught Undergraduate Courses in Geology of the Permian Basin, Sample Description, Core Description, Sequence Stratigraphy, and Sedimentary Rocks for Engineers. Revised and taught Sedimentary Rocks for Geologist included adding Lab.

January - April 2001 Adjunct Lecturer, Oceanography, UTPB.

Industry Experience

August 1992 – April 2001	Consulting Geologist, DBA Muskoka Consultants	,Midland, TX
July 1985 - July 1992	Senior Geologist, Chevron, U.S.A.	Midland, TX
February 1980 - June 1985	Project Geologist, Gulf Oil Co. Midland	& Odessa, TX

Significant Professional Achievements and Areas of Specialization

- Expertise in CO2 Flooding and Residual Oil Zones
- Instructor at numerous Petroleum Industry CO2 Flooding schools, including international schools
- Instructor at numerous CO2 Carbon Capture Storage and Utilization school.
- Principal Investigator or Investigator for several Department of Energy/Research Partnership to Secure Energy for America Residual Oil Zone CO2 related projects.
- Member Permian Basin FutureGen Task Force 2005-2008
- Manager and Principal Investigator. Department of Energy, Class II Shallow Shelf Carbonate Study, Foster-South Cowden (Grayburg and San Andres) Field, Ector Co., TX. 1994 2000.
- Principal Investigator DOE "Using Next Generation CO2 EOR Technologies to Optimize the Residual Oil Zone CO2 Flood at Goldsmith Landreth Unit, Ector County, Texas"
- Co- Principal Investigator RPSEA DOE Recovery Act: Regional Sequestration Technology Training

- Co- Principal Investigator "Carbon Capture and Storage in the Permian Basin, A Regional Technology Transfer and Training Program."
- Co- Principal Investigator DOE Recovery Act: "A Modular Curriculum for Training University Students in Industry Standard CO2 Sequestration and Enhanced Oil Recovery Methodologies".
- Co- Principal Investigator, RPSEA. Application to Improved Oil Recovery for Small Producers. "Commercial Exploitation and the Origin of Residual Oil Zones: Developing a Case History in the Permian Basin of New Mexico and W. TX".
- Co- Principal Investigator, RPSEA. Application to Improved Oil Recovery for Small Producers. "Identifying and Developing Technologies for Enabling Small Producers to Pursue the residual Oil Zones (ROZ) Fairways in the Permian Basin, San Andres"
- Exploration Pathfinder, Chevron with exploration experience in Permian, Palo Duro, Dalhart, and Hardeman Basins of West Texas and SE New Mexico.
- Discovered Wolf Flat Field in Pennsylvanian (Cisco) carbonates, Motley Co., TX, and W. A. Estes (Holt) Field and Monahans, N.W. (San Angelo) Field, Ward Co., TX
- Reservoir Geologist at Sand Hills (San Andres, Tubb, Ellenburger) Crane Co., TX; Wagon Wheel (Canyon & Cisco) and North Ward Estes (Yates & Queen) Ward Co., TX. Project
- Core and reservoir studies of numerous Upper Permian Reservoirs:
 - Leamex Field, Lea Co., NM, for Phillips Petroleum
 - McCamey Field, Upton Co., TX, for Burlington Resources
 - East Cowden Field Field, Ector Co., TX, for Conoco
 - Fuhrman Mascho Field, Andrews Co., TX, for Conoco
 - Sand Hills Field, Crane Co., TX, for Burlington Resources
- Outcrop study of the Apache Mountains, Culberson Co. TX. Studying outcrop analogs to producing Permian Basin fields. 1998 2003.
- Local expertise in Karsted Reservoirs (Ellenburger, Pennsylvanian, and Permian)
- Board Member, Annual CO2 Flooding Conference 2001-Present

Recent Grant Activity

National Energy Technology Laboratory. Number: DE FOA 0000312. Unconventional Fossil Energy Funding Opportunity. "Using Next Generation CO2 EOR Technologies to Optimize the Residual Oil Zone CO2 Flood at Goldsmith Landreth Unit, Ector County, Texas" PI: Robert Trentham. Period of Performance: Dec 1, 2010- June 30, 2015. Start date 2/23/2011. Funds Requested: \$1,198,547.00, Industry Match \$654,563.00.

Department of Energy,

DE_FOA_0000080. Recovery Act: Regional Sequestration Technology Training

"Carbon Capture and Storage in the Permian Basin, A Regional Technology Transfer and Training Program." Co-PI's: Petroleum Technology Transfer Council, American Association of Petroleum Geologists, Applied Petroleum Technology Academy. Total Funding Requested: \$994,998, UTPB/CEED as Subcontractor: \$84,270, for 3 years. Funding Approved. Start date, Nov 1, 2009, Completed 09,30,2013.

Department of Energy

DE_FOA_0000032. Recovery Act: "A Modular Curriculum for Training University Students in Industry Standard CO2 Sequestration and Enhanced Oil Recovery Methodologies". Co-PI's: Dr Emily Stoudt, Dr Robert Trentham, Funds Requested \$ 296,000, for 3 years. Funded Approved, Start date Dec 1, 2009, completion 05, 31, 2013..

The Research Partnership to Secure Energy for America (RPSEA) Number: RFP2008SP001. Application to Improved Oil Recovery for Small Producers. "Commercial Exploitation and the Origin of Residual Oil Zones: Developing a Case History in the Permian Basin of New Mexico and W. TX". Co-PI's Robert C. Trentham, Steve Melzer. Period of Performance: 4/01/09 - 3/31/11. Start date July 9, 2009

Funds Requested: \$961,934.00. RPSEA Share: \$630,934.00. Industry Match: \$331,000.00

The Research Partnership to Secure Energy for America (RPSEA). Number: RFP2010SP001. Application to Improved Oil Recovery for Small Producers. "Identifying and Developing Technologies for Enabling Small Producers to Pursue the residual Oil Zones (ROZ) Fairways in the Permian Basin, San Andres"

Co-PI's Robert C. Trentham, Steve Melzer Period of Performance: 05/01/11 - 11/01/13. Funds Requested: \$1,243,369.98, RPSEA Share \$859,269.98. Industry Cost Share \$ 374,100.00. Awaiting start date.

Awards

Dedicated Service Award, West Texas Geological Society, 2005

Honorary Life Member Permian Basin Section S. E. P. M, 2008.

Honorary Life Member, West Texas Geological Society, 2008.

Distinguished Educator Award by the Southwest Section of the American Association of Petroleum Geologists, April 8, 2013. It is given "in recognition of distinguished and outstanding contributions to geological education with respect to petroleum geology in the Southwest Section area."

Volunteer of the Year Award, West Texas Geological Society, 2015

Publications

A total of over 70 publications and numerous oral presentations on Permian Basin Reservoirs, including Queen, Grayburg and San Andres (Guadalupian), Pennsylvanian and Ellenburger (lower Ordovician) reservoirs. Additional studies of uranium in volcanics and volcanoclastics and feldspar geochemistry. See Publications.

Professional Societies Membership

American Association of Petroleum Geologists (AAPG); Sedimentary Society (SEPM); West Texas Geol. Soc.(WTGS) – Honorary Life Member; Permian Basin Section-SEPM - Honorary Life Member; Geological Soc. Amer.(GSA).

Professional Society/Organization Activities

Board, Annual CO2 Flooding Conference 2001 to Present.

Board, Applied Petroleum Technology Academy, 2002 to Present.

Member, PBS-SEPM Road Log Committee, PBS-SEPM 1996 – Present

Member, PBS-SEPM Stratigraphic Committee, PBS-SEPM 1996 – Present

Past-President (2004 - 2008), Midland Energy Library, Board 1997 - Present.

Co-Technical Chair 2008 West Texas Geological Society, Fall Symposium, Midland.

Past President (2005-2006), West Texas Geological Society.

Past President (2004-2005), Permian Basin Section of Society of Sed Geology (SEPM).

Chairman, One-Day Field Trips, PBS-SEPM 1995 – 2007.

Southwest Section AAPG, Midland, Texas, Geo2000 Field Trip Co-Chairman.

General Chairman, West Texas Geological Society Fall 2000 Symposium.

Editor, West Texas Geological Society Fall Symposium, 2004.

Military

1970 – 1976, New York Army National Guard. 101st Armored Calvary, 42nd Division. Highest rank - Second Lieutenant. Assistant Squadron Training Officer and Platoon Leader. In part, responsible for scheduling and presenting unit classroom training. Platoon Leader of 32 man platoon.