

The 56th Annual
**Laurance Reid Gas Conditioning
Conference**



February 26-March 1, 2006

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**Laurance
Reid
Gas
Conditioning
Conference**

February 26-March 1, 2006

Presented by
**The University of Oklahoma
OUTREACH
Engineering and Geosciences**

Norman, Oklahoma

**Laurance Reid Gas
Conditioning Conference
Advisory Committee**

Ardeshir Azodi	Michael A. Huffmaster	Harvey M. Malino
Ralph Eguren	Jags N. Iyengar	Dan McCartney
Nate Hatcher	Bill Judd	Elmo Nasato
Vanessa B. Hodge	Betty A. Kettman	Rupert Wagner
Patrick E. Holub	Lance L. Lobban	

**2006 LRGCC Conference
Poster Sessions**

Again this year, the poster session will be an integral part of the 2006 LRGCC program. Papers accepted for the 2006 poster session are required to meet the same criteria as papers accepted for the general conference.

At the poster session, text and supporting illustrations will be displayed. Poster authors will be present during the session to discuss their papers and answer questions. The schedule for poster sessions will be announced in the LRGCC program agenda. The poster sessions will not conflict with the schedule of papers presented in the general sessions. All poster papers will be included in the 2006 LRGCC proceedings.

**WASTE HEAT RECOVERY FOR AMINE REBOILING AND UTILIZATION
OF THAT HEAT IN A CLOSED STEAM SYSTEM**

Thomas H. Russell and Derrick D. Oneal, Thomas Russell Co.

SIZING COALESCING SEPARATORS

The purpose of this poster is to discuss the importance of the sizing criteria for single and multi stage coalescing separators.

Dani Fadda and James Jordan, Peerless Mfg., Co.

Registration

Online registration is now available at www.lrgcc.org

All persons planning to attend the conference can register online, or by mailing or faxing the attached registration. The \$350 fee includes 2 lunches and a copy of the conference proceedings which will be distributed at the conference. Also included are CD-ROMs of the proceedings for the years of 1988-2006.

Questions?

For program information contact Betty Kettman at (405) 325-3136, by FAX at (405) 325-7329, or by e-mail bettyk@ou.edu.

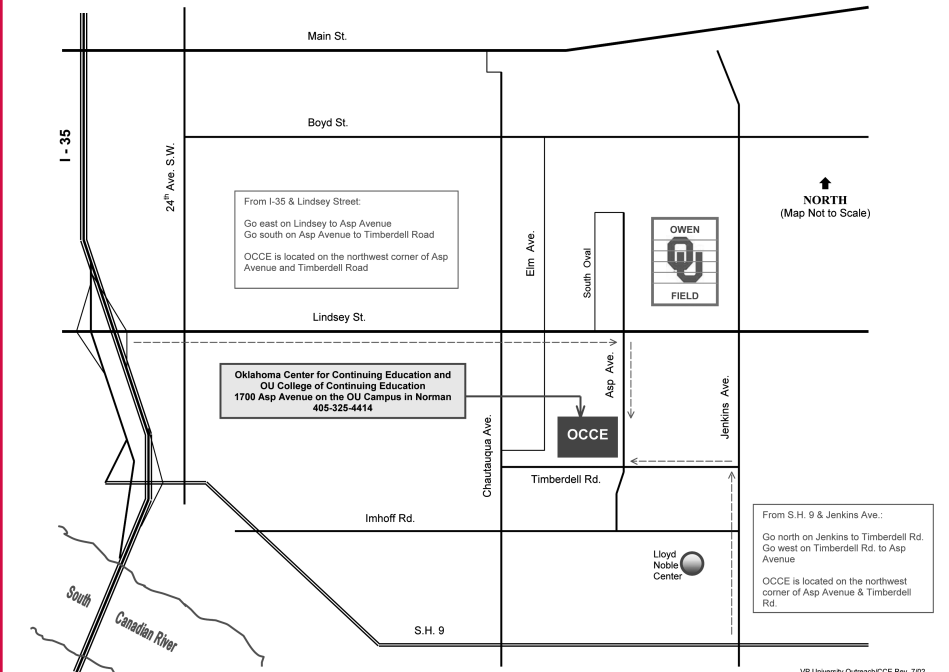
**See our Web site:
<http://www.lrgcc.org>**

Conference Accommodations

A self-contained educational facility located at the south edge of the University of Oklahoma's Norman campus, the Oklahoma Center for Continuing Education is designed for the comfort and convenience of its program participants. Housing is available in the Sooner Hotel near the Forum Building. The Commons Restaurant is only a few steps away. Ample free parking is available. For overnight accommodations at the Sooner Hotel, call Denise Upchurch at (405) 329-2270.

Other Local Accommodations:

Hampton Inn	(405) 366-2100
LaQuinta Inn	(405) 579-4000
Marriott Residence Inn	(405) 366-0900



**Register online at:
<http://www.lrgcc.org>**

The 56th Annual Laurance Reid Gas Conditioning Conference

SUNDAY, FEBRUARY 26

2 - 5:30 p.m. FUNDAMENTALS – GAS SWEETENING

This session will provide an overview of Acid Gas Absorption processes focusing on amine based solvents; including amine basics, process and equipment design recommendations and operational experiences.
Rupert Wagner, BASF; Bill Judd, Dow Chemical Canada Inc.; Elmo Nasato, Goar Allison Ltd.; Michael Huffmaster, Shell Global Solutions

MONDAY, FEBRUARY 27

7 a.m. - 5 p.m. Registration Forum Building

8 a.m. - 12:15 p.m. MORNING SESSION

Welcome: Richard Little, Associate Vice President University of Oklahoma Outreach
Welcome: Jags Iyengar, Conference Chair
LRGCC History - John Morgan
Moderator: Vanessa Hodge

MERCAPTAN REMOVAL FROM A GAS STREAM USING MOLECULAR SIEVE AND SELEXOL

This paper describes the configuration that Marathon has chosen to use at the Indian Basin Gas Plant for mercaptan removal from a process gas stream in addition to the problems that were encountered during the implementation of this process.
Mark Treesh and Richard Aves, Marathon Oil Company

FEASIBILITY STUDY FOR A NEW SOUR GAS FIELD DEVELOPMENT

This paper presents a feasibility study determining optimum gas processing and sulfur disposal options for a new 15% CO₂ / 3% H₂S medium-size sour gas field development with the sour gas containing COS and mercaptans.
Justin Lamar, David Stevens, Mark Tonjes, Kay Wong and Bill Breckenridge, Black and Veatch; Jaroslav Konecny, OMV Austria

Break

LOW TEMPERATURE SCOT – A NEW HORIZON IN TAIL GAS TREATING

Shell's LT-SCOT process offers energy requirements and operational simplicity utilizing a high activity catalyst with reactor bed inlet temperatures less than 450 degrees F.
Steve Massie, Criterion; Michael Huffmaster and Patrick McGillycuddy, Shell Global Solutions

DEA CONVERSION TO THE MDEA SOLVENT RESULTS IN ENERGY SAVINGS AND INCREASED TREATING CAPACITY WITHOUT EQUIPMENT MODIFICATIONS

Energy savings, improved reliability, space capacity: The benefits of a solvent swap from DEA to a formulated MDEA in NGL treating.
Bryan Danmier and Kevin Roesler, Energy Transfer; James Daughtry, INEOS Oxide, LLC

12:15 - 1:30 p.m. Lunch

1:30 - 5:00 p.m.

AFTERNOON SESSION

2005 LRGCC SURVEY RESULTS: NATE HATCHER

Moderator: Ralph Eguren

IRON SULPHIDE – FRIEND OR FOE?

This paper will serve to define the how, why, advantages and disadvantages of the ingress and formation of various iron Sulphides in amine systems.
Ben Spooner, Mike Sheilan, David Street, and Egbert vanHoorn, Amine Experts Inc.

DYNAWAVE WET GAS SCRUBBING: A NEW ALTERNATIVE FOR CLAUS UNIT TAIL GAS CLEAN-UP

Sinclair recently installed three DynaWave Wet Gas Scrubbing Systems as SRU TGCUs. This paper will discuss the installation, as well as the operation and performance of the system.
Steve Meyer, Monsanto Enviro-Chem; Nick Watts and Ed Juno, Sinclair Oil Corporation

Break

HANDLING TRACE OXYGEN AT THE SAUNDERS GAS PROCESSING FACILITY

Description of steps taken to reduce the impact of oxygen on the amine unit and efforts to eliminate trace amounts of oxygen in the gas gathering system.
Tim Jordan and Paul Nozal, Targa Resources, Inc.; Ardeshir Azodi, Chevron Energy Technology Company

THE KVT SULFOX PROCESS – PRODUCTION OF SULFURIC ACID FROM WASTE GASES

The paper will introduce the process technology and present the practical experience of 2 different types of SULFOX plants which are suitable for the gas & oil industry.
Gernot Amlacher, Kanzler Verfahrenstechnik Process Technology

POSTER SESSION AND RECEPTION

Sam Noble Oklahoma Museum of Natural History
Students from the School of Chemical Engineering and Materials Science will present posters on current research projects in the school.

5:30 - 8:00 p.m.

6:30 p.m.

MUSEUM TOUR

TUESDAY, FEBRUARY 28

8 a.m. - 12:15 p.m. MORNING SESSION

Moderator: Dan McCartney

MYTHBUSTERS ANALYZE THE EFFECTIVENESS OF LEAN AMINE / SOUR GAS DIFFERENTIAL TEMPERATURE CONTROL

This paper is a review of cases of foaming caused by hydrocarbon contamination in amine units operating with lean amine/sour gas differential temperature control to prevent hydrocarbon condensation. This control method is shown to be ineffective for amine solution soluble C6+ hydrocarbons.
Al Keller, Nate Hatcher, Jim Thompsen and Justin Weatherford, ConocoPhillips Co.

SULFUR PLANT TAIL GAS CATALYST EVALUATION

This paper examines the COS and CO equilibrium conversion reactions in the hydrogenation reactor versus plant data, relating the impact of reactor space velocity on the ability of the catalyst to achieve equilibrium.
John Corley, ExxonMobil Research and Engineering Co.

Break

ONLY RAW SOUR GAS AVAILABLE FOR ENGINE FUEL? PROVEN MEMBRANE PROCESS CLEANS GAS FOR ENGINES

Poor quality fuel gas is encountered for engines for gas production at remote locations. MTR's proven membrane system improves fuel quality to acceptable engine standards.
Ankur Jariwala and Kaaeid Lokhandwala, Membrane Technology and Research, Inc.

A COMPARISON OF DIFFERENT MODELS FOR THE PREDICTION OF ACID GAS SOLUBILITY IN ALKANOLAMINE SOLUTIONS

A comparison of (semi)-empirical, Excess Gibbs energy and Equation of State Models for the prediction of the acid gas solubility in aqueous Alkanolamine solutions.
P.J.G. Huttenhuis, Procede Group B.V.; G.F. Versteeg, University of Twente, Dept of Chemical Engineering

12:15 - 1:30 p.m. Lunch

1:30 - 5 p.m.

AFTERNOON SESSION

Moderator: Bill Judd

ARE YOUR SIMULATION AMINES TOO CLEAN?

Head-to-head comparisons between simulations and plant data for sodium- and heatstable-salt contaminated amines show regeneration determines performance, and simulation reliability depends on accurate solvent analysis.
Nate Hatcher and Al Keller, ConocoPhillips; Ralph Weiland and M.S. Sivasubramanian, Optimized Gas Treating, Inc

IMPROVING STRETFORD UNIT OPERATION BY REMOVING SULFUR MELTER

An oil refinery removed the sulfur melter from its Stretford unit. Thiosulfate accumulation was eliminated without incurring additional operating or capital costs. New operating methods allowed record sulfur plant run.
J.A. Stavros, ConocoPhillips, Bayway Refinery

Break

EXPERIENCE WITH DEBOTTLENECKING OF GAS DEHYDRATION PLANTS

Gas dehydration plants consist in essence of an inlet scrubber, a contactor and an outlet scrubber. Advanced separation and contacting swirltube technology provides all that is necessary to maximize the gas handling capacity of each of these process steps.
H.G. Polderman, G. Konijn and J.L. Nooijen, Shell Global Solutions International; D. Egger, Sulzer Chemtech

AMINE RECLAMATION WITH MINIMAL OPERATIONAL IMPACT THROUGH ELECTRODIALYSIS

The UCARSEP™ is a proven process for economic removal of heat stable salts from amine solutions. Results with negligible operational amine unit impact are presented.
Paul Parisi, ElectroSep Technologies Inc.; Sid Bosen, Dow Chemical Inc.

WEDNESDAY, MARCH 1

8 a.m. - 12:45 p.m. **MORNING SESSION LRGCC ROUNDTABLE**
John Morgan, Johnny Johnson, Elmo Nasato, Vanessa Hodge

LRGCC HOSPITALITY POLICY

The LRGCC has instituted a number of common sense entertainment rules that are designed to promote the serious purpose of this conference. The principal requirements applicable to conference entertainment are:

- Hospitality rooms are to remain closed during any scheduled conference functions;
- Private parties in excess of 40 persons are not permitted during the conference dates;
- Operating equipment is not permitted on campus.

All attendees are the guests of Oklahoma University and will, by default, be looked upon as role models by the student body. Consequently, a certain minimum standard of decorum by all attendees is expected. The LRGCC requests that the companies hosting the hospitality suites use their discretion when serving alcoholic beverages.

All questions pertaining to hospitality suites, including the schedule of conference functions, should be directed to Betty Kettman at (405) 325-3136 or bettyk@ou.edu.

To retain the conference schedule, please duplicate this registration form.

Please return registration to:

College of Continuing Education
Registration
The University of Oklahoma
1700 Asp Avenue
Norman, OK 73072-6400
FAX your registration to
(405) 325-7164
or call (405) 325-2248

Attendance for 2½ days
qualifies for 2.0 CEUs
(Continuing Education Units)
Check here if interested

Mr. Ms. Dr. _____
Last First M.I.
E-mail: _____
Company Name: _____
Work Address: _____
Mailing Address _____
City State Zip
Home Telephone: _____
Work Telephone: _____
Amount Enclosed _____
 Check Make checks payable to the University of Oklahoma. American Express
 VISA MasterCard Discover

Credit Card No. _____ Exp. Date _____
All payments must be in U.S. funds. Please bill my company or agency. A copy of the purchase order or letter of authorization is attached.

Participant Signature _____ Date _____
Please check your career involvement with gas treating:

Gas Operating Company Refinery Operating Company Engineering/Construction Service/Supply Company Consultant Academic
The number of times I have attended the Gas Conditioning Conference are (please check): 1 2-5 5+

Gender and Demographics (please check) Male Female

US Canada Mexico Europe Asia/Pacific Central America South America C.I.S. Middle East Africa Australia

The College of Continuing Education is committed to making its activities as accessible as possible. The College and the University provide a range of special services for persons with disabilities. If you anticipate a need for some of these services, please indicate this by checking this item.

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