



UNCONVENTIONAL RESERVOIR ENGINEERING PROJECT
COLORADO SCHOOL OF MINES



Introductions & Review of the Agenda

Erdal Ozkan, Colorado School of Mines



UNCONVENTIONAL RESERVOIR ENGINEERING PROJECT
Advisory Board Meeting, November 13&14, 2014, Golden, Colorado

Introductions

UREP MEMBERS

Baker Hughes
BHP Billiton
Cimarex Energy
ConocoPhillips
EOG Resources
Hess Corporation
Kappa Engineering
Noble Energy
Petrobras
Saudi Aramco
Shell
Total



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Introductions

UREP RESEARCH TEAM

RESEARCH AFFILIATES:

R. Raghavan

C. Ozgen, T. Firincioglu, B. Savage, C. Karacaer (Nitec)

CSM TEAM

FACULTY: E. Ozkan, X. Yin, K. Neeves

RESEARCH ASSOCIATE: H Sarak

RESEARCH ASSISTANTS:

PhD: E. Parsa, A. Albinali, W. Assiri, R. Holy,
J.C. Carratu, G. Gul, L. Wang

MS: J. Greenwood, O. Ozcan, F. Geren, C. Komurcu,
C. Yesiltepe, A. Marsahala Lumban Gaol, T. Calisgan

RESEARCH SUPPOT: Emilia Clayton



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Agenda – Nov. 13, 2014

08:30 am – 09:00 am Continental Breakfast

09:00 am – 09:45 am Opening Remarks

09:00 am – 09:15 am Introductions & Review of the Agenda – *E. Ozkan*

09:15 am – 09:45 am Phase I Summary – *E. Ozkan*

09:45 am – 10:45 am Session 1: Theoretical and Experimental Study of Flow and Transport in Nanoporous Reservoirs

09:45 am – 10:15 am Hydrocarbon Phase Behavior in Confinement
T. Firincioglu & E. Parsa

10:15 am – 10:45 am Nanofluidics Experiments of Phase Behavior
E. Parsa & X. Yin

10:45 am – 11:15 am Coffee Break

11:15 am – 11:45 am Experimental Study and Modeling of the Effect of Pore Size Distribution on Phase Behavior in Nanopores
L. Wang & X. Yin

11:45 am – 12:15 pm Steric Hindrance and Coupled Flows
F. Geren, T. Firincioglu, & C. Karacaer

12:15 pm – 01:30 pm Lunch Break (Marquez Hall Atrium)



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Agenda – Nov. 13, 2014

01:30 pm – 03:00 pm Session 2: Analytical Models of Flow in Nanoporous Reservoirs

01:30 pm – 02:00 pm Anomalous Diffusion in SRV

O. Ozcan & H. Sarak

02:00 pm – 02:30 pm Modeling Flow in Fractured Nanoporous Reservoirs

A. Albinali

02:30 pm – 03:00 pm Fractured Horizontal Wells in Composite Reservoirs

C. Greenwood

03:00 pm – 03:30 pm Coffee Break

03:30 pm – 04:30 pm Session 3: Well Performances in Unconventional Reservoirs

03:30 pm – 04:00 pm Superposition Time for Pressure-Dependent Rock & Fluid Properties in Tight-Gas Reservoirs

C. Komurcu & L. Thompson

04:00 pm – 04:30 pm Analysis of Transient Tight-Gas Well Data with Pressure-Dependent Rock and Fluid Properties

G. Gul, M. Ahmadi, & H. Sarak

04:30 pm – 05:00 pm Wrap up of Day 1

06:00 pm – 08:30 pm Dinner (Table Mountain Inn, Golden)



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Agenda – Nov. 14, 2014

08:30 am – 09:00 am Continental Breakfast

09:00 am – 10:30 am Session 4: Numerical Models for Unconventional Reservoirs

09:00 am – 09:30 am Numerical Modeling of Linear Anomalous Diffusion

R. Holy

09:30 am – 10:30 am COZSim-UREP Simulator

C. Ozgen (NITEC)

10:30 am – 11:00 am Coffee Break

11:00 am – 12:00 am DSMC Method for Nanoscale and Microscale Gas Flow

D. VanGilder (CRAFT-Tech)

12:00 pm – 01:00 pm Lunch Break (Marquez Hall Atrium)

01:00 pm – 01:45 pm UREP Phase I Discussion

01:00 pm – 01:45 pm Group Discussion of UREP Phase I Results

01:45 pm – 03:00 pm UREP Phase II Discussion

01:45 pm – 2:15 pm UREP Phase II Proposal

E. Ozkan

02:15 pm – 03:00 pm Group Discussion of UREP Phase II Proposal

03:00 pm End of Meeting



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