# Short Course Program

**RELATIVE PERMEABILITY**

**MONDAY, AUGUST 22, 2016**

## RELATIVE PERMEABILITY

<table>
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<tr>
<th>Time</th>
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<tr>
<td>8:00-9:00 a.m.</td>
<td>Relative Permeability - Theory</td>
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<tr>
<td>9:00–9:15 a.m.</td>
<td>Break</td>
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<tr>
<td>9:15-10:45 a.m.</td>
<td>Relative Permeability - Measurements</td>
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<tr>
<td>10:45–11:00 a.m.</td>
<td>Break</td>
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<tr>
<td>11:00–11:30 p.m.</td>
<td>Relative Permeability – Field Class</td>
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<tr>
<td>11:30 – 12:00 p.m.</td>
<td>Relative Permeability – Digital Rock</td>
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## Workshop Program

**SCAL Roadmap**

**MONDAY, AUGUST 22, 2016**

The workshop has been kindly sponsored by FEI

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<th>Time</th>
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<tr>
<td>1:00 - 2:30 p.m.</td>
<td>SCAL Roadmap</td>
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<tr>
<td>2:30 – 3:00 p.m.</td>
<td>Coffee Break</td>
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<tr>
<td>3:00 - 4:30 p.m.</td>
<td>SCAL Roadmap</td>
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**Technical Program**

**TUESDAY, August 23, 2016**

8:00 - 8:15  Opening Remarks

8:15 – 10:00  Session 1: Improved SCAL - Methods  
Chairs: Ted Braun & Doug Ruth

SCA004  RECOMMENDED PROCEDURE FOR DETERMINATION OF RELATIVE PERMEABILITIES  
R. Lenormand, G. Lenormand

SCA001  A NOVEL LABORATORY METHOD FOR DETERMINING CAPILLARY PRESSURE AND WETTABILIT Y WHILE MEASURING STEADY-STATE RELATIVE PERMEABILITY  
R. Gupta, D. Maloney, D. Laverick, R. Longoria, L. Poore, J. Spitzenberger

SCA023  SCAL FOR GAS RESERVOIRS: A CONTRIBUTION FOR BETTER EXPERIMENTS  
A. Cense, J. Reed, P. Egermann

10:00 - 10:30  Coffee Break & Poster Session A  
Kindly Sponsored by: TOTAL

10:30 - 11:30  Session 2: Improved SCAL – Pore vs Core  
Chairs: Ted Braun & Doug Ruth

SCA012  GAS-WATER STEADY-STATE RELATIVE PERMEABILITY DETERMINATION WITH TWO APPROACHES: EXPERIMENTAL AND DIGITAL ROCK ANALYSIS, STRENGTHS AND WEAKNESSES  
R. Farokhpoor, E. Westphal, N. Idowu, P.E. Øren, B. Fletcher

SCA020  COLLABORATION BETWEEN DIGITAL ROCK ANALYSIS AND LABORATORY FOR GENERATION OF MULTIPHASE TRANSPORT PROPERTIES FOR RESERVOIR SAMPLES  
N. Idowu, A. Arena, B. Young, A. Mascini, K. Chawshin, C. Goodwin, S. Sommacal, S. Bakke, M. Knackstedt, P.E. Øren, M. Piri
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<th>Time</th>
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<th>Chair(s)</th>
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<tr>
<td>11:30 – 12:30</td>
<td>Poster Session A: Short Presentations</td>
<td>Chair: Josephina Schembre-McCabe</td>
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<td><strong>Chair: Josephina Schembre-McCabe</strong></td>
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<td>12:30 - 1:30</td>
<td>Lunch &amp; Poster Session A</td>
<td>Kindly Sponsored by: iRock Technologies</td>
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<td><strong>Lunch &amp; Poster Session A</strong></td>
<td>Kindly Sponsored by: iRock Technologies</td>
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<tr>
<td>1:30 – 3:15</td>
<td>Session 3: EOR – Low Salinity Waterflooding</td>
<td>Chairs: Marc Fleury &amp; Lesley James</td>
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<td>Chairs: Marc Fleury &amp; Lesley James</td>
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<td>SCA003 AN IMPROVED INSIGHT INTO LOW-SALINITY WATERFLOODING:</td>
<td>M. Khishvand, A.H. Alizadeh, I. Oraki Kohshour, M. Piri</td>
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<td></td>
<td>IN-SITU CHARACTERIZATION OF WETTABILITY ALTERATION AT ELEVATED</td>
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<td>PRESSURE AND TEMPERATURE CONDITIONS</td>
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<td>SCA011 WETTABILITY EFFECTS ON OSMOSIS AS AN OIL MOBILIZATION</td>
<td>S.B. Fredriksen, A.U. Rognmo, K. Sandengen, M.A. Fernø</td>
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<td>MECHANISM DURING LOW SALINITY WATERFLOODING</td>
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<td>ON THE PORE-SCALE FLUID DISTRIBUTION DURING FLOW</td>
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<td>3:15 – 3:45</td>
<td>Coffee Break &amp; Poster Session A</td>
<td>Kindly Sponsored by: TOTAL</td>
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<td>3:45 – 5:00</td>
<td>Session 4: CO2 and Natural Gas Storage</td>
<td>Chairs: Ryan Armstrong &amp; Jos Maas</td>
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<td><strong>Session 4: CO2 and Natural Gas Storage</strong></td>
<td>Chairs: Ryan Armstrong &amp; Jos Maas</td>
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<td>SCA008 EXPERIMENTAL CARACTERISATION OF THE RELATIVE GAS PERMEABILITY</td>
<td>F. Bignonnet, P. Egermann, Z. Duan, L. Jeannin, F. Skoczylas</td>
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<td>OF VERY LOW PERMEABILITY ROCKS</td>
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WEDNESDAY, August 24, 2016

8:00 - 9:45  Session 5: Improved SCAL – Pore Scale  
Chairs: Derrick Green & Josephina Schembre-McCabe

SCA009  FLOW REGIMES DURING IMMISCIBLE DISPLACEMENT  
R.T. Armstrong, J.E. McClure, M.A. Berill, M. Rücker, S. Schlüter, S. Berg

SCA018  IN-SITU, REAL TIME MICRO-CT IMAGING OF PORE SCALE PROCESSES, THE NEXT FRONTIER FOR LABORATORY BASED MICRO-CT SCANNING  
M. Boone, T. Bultreys, B. Masschaele, D. Van Loo, L. Van Hoorebeke, V. Cnudde

SCA024  ON THE ROLE OF SUB-CORE SCALE HETEROGENEITY DURING REPEATED DRAINAGE/IMBIBITION CYCLES IN A SANDSTONE  
R. Pini

9:45 - 10:15  Coffee Break

10:15 – 11:15  Session 6: Improved SCAL – Modeling  
Chairs: Ted Braun & Doug Ruth

SCA006  COMPARISON OF FOUR NUMERICAL SIMULATORS FOR SCAL EXPERIMENTS  
R. Lenormand, K. Lorentzen, J.G. Maas, D.W. Ruth
SCA007  MODELLING OF IMBIBITION RELATIVE PERMEABILITY BY DIRECT QUASI-STATIC APPROACH

S. Berg, M. Rücker, H. Ott, A. Georgiadis, H. van der Linde, F. Enzmann, M. Kersten, R.T. Armstrong, S. de With, J. Becker, A. Wiegmann

11:15 – 12:15  Poster Session B: Short Presentations

Chair: Lesley James

12:15 - 1:15  Lunch & Poster Switch

Kindly Sponsored by: iRock Technologies

1:15 – 3:00  Session 7: Pore Scale Imaging Methods

Chairs: Ryan Armstrong & Shreerang Chhatre

SCA015  CHEMICALLY-SELECTIVE 3D MRI OF LABORATORY OIL-WATER DISPLACEMENT PROCESSES


SCA019  MAGNETIC RESONANCE IMAGING OF CORE FLOODING IN A METAL CORE HOLDER

M. Li, D. Xiao, M. Shakerian, A. Afrough, F. Goora, F. Marica, L. Romero-Zerón, B.J. Balcom

SCA028  PHASE SATURATION VALIDATION AND TRACER TRANSPORT QUANTIFICATION USING MICROPET IN A HETEROGENEOUS SANDSTONE CORE

C. Zahasky, S.M. Benson

3:00 – 3:30  Coffee Break & Poster Session B

3:30 - 4:45  Sessions 8: Laboratory Core Analysis

Chairs: Joel Walls & Kevin Flynn
SCA013  RELATIVE PERMEABILITY EFFECTS OVERLOOKED
IN MICP MEASUREMENTS TRANSITION ZONES LIKELY TO BE SMALLER
J.G. Maas, N. Springer, A. Hebing

SCA032  QUANTIFYING MUD CONTAMINATION WITHOUT ADDING TRACERS
K.S. Årland, M. Bastow

5:30  – 11:00  Gala Dinner
   Kindly Sponsored by Weatherford Laboratories

THURSDAY, August 25, 2016

8:00 - 9:45  Session 9: Unconventionals & Shale
   Chairs: Shreerang Chhatre &  Ben Nicot

SCA025  MULTI-FREQUENCY NMR AND TGA CHARACTERIZATION OF TOC IN SHALES

SCA027  STRESSED PERMEABILITY IN SHALES: EFFECTS OF MATRIX COMPRESSIBILITY AND FRACTURES - A STEP TOWARDS MEASURING MATRIX PERMEABILITY IN FRACTURED SHALE SAMPLES
M.B. Rydzy, J. Patino, N. Elmetni, M. Appel

SCA033  QUANTIFYING SHALE MINERALOGY AND ANISOTROPY FROM LOW TEMPERATURE MAGNETIC SUSCEPTIBILITY MEASUREMENTS
V.T. Ebufegha, D.K. Potter

9:45 - 10:15  Coffee Break & Poster Session B

10:15 – 11:45  Session 10: Displacement Efficiency
   Chairs: Arjen Cense & Lesley James
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<td>SCA014</td>
<td>STUDY OF CO2 FOAM PERFORMANCE IN A CCS CONTEXT</td>
<td>G. Batôt, M. Fleury, L. Nabzar</td>
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<td>SCA022</td>
<td>POLYMER FLOODING IN SANDPACKS WITH A DUAL-POROSITY</td>
<td>I. Ringen, H. Stiegler, O. Nødland, A. Hiorth, A. Stavland</td>
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<td>SCA029</td>
<td>MATRIX-FRACTURE INTERACTIONS DURING GAS INJECTION: A PORE-SCALE EXPERIMENTAL STUDY</td>
<td>M. Sabti, A.H. Alizadeh, M. Piri</td>
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11:45 – 12:15  Business Meeting

12:15 - 1:00  Lunch & Poster Session B

Kindly Sponsored by: iRock Technologies

1:00 – 2:00  Session 11: Improved SCAL

Chairs: Arjen Cense & Kevin Flynn

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<th>SCA005</th>
<th>MATCHING EXPERIMENTAL SATURATION PROFILES BY NUMERICAL SIMULATION OF COMBINED AND COUNTER-CURRENT SPONTANEOUS IMBIBITION</th>
<th>D.W. Ruth, M.A. Fernø, Å. Haugen, B. Brattekås, R. Arabjamaloei</th>
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<td>SCA002</td>
<td>APPLICATION OF AN OPTIMIZATION METHOD FOR RESTORATION OF CORE SAMPLES FOR SCAL EXPERIMENTS</td>
<td>E. Sripal, L.A. James</td>
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2:00 – 2:30  Coffee Break & Poster Session B

2:30 - 4:00  Sessions 12: Pore Scale - Laboratory Core Analysis

Chairs: Derrick Green & Olivier Lopez

| SCA026  | MICRO-SCALE EXPERIMENTAL INVESTIGATION OF THE EFFECT OF HYDROSTATIC STRESS ON PORE-SPACE DEFORMATION AND FLUID OCCUPANCY | M. Asadollahkhan Vali, A.H. Alizadeh, M. Piri, J. Wallace      |
SCA030  4D MULTI-SCALE IMAGING OF REACTION IN CARBONATES: THE IMPACT OF HETEROGENEITY ON DISSOLUTION REGIMES AT THE CORE AND PORE SCALES WITH APPLICATIONS TO CO2 STORAGE

SCA031  QUICK CORE ASSESSMENT FROM CT IMAGING: FROM PETROPHYSICAL PROPERTIES TO LOG EVALUATION

4:00  Closing Remarks
SCA016 MEASUREMENTS OF ROCK CORE DISPERSIVITY AND TORTUOSITY FOR MULTI-PHASE SYSTEMS

SCA038 FLUID-FLOW DURING EOR EXPERIMENTS IN CHALK: INSIGHTS USING SEM-MLA, EMPA AND NANOSIMS APPLICATIONS
M.W. Minde, U. Zimmermann, M.V. Madland, R. Inge Korsnes, B. Schulz, J.-N. Audinot

SCA039 THE IMPACT OF MINERAL DISSOLUTION ON THE CHARACTERIZATION OF PORE STRUCTURE AND MULTIPHASE FLOW PROPERTIES IN CARBONATES
B. Niu, S. Krevor

SCA041 EVALUATION OF GAS BUBBLE DURING FOAMY OIL DEPLETION EXPERIMENT USING CT SCANNING
W. LV, Z. Leng, X. Li, H. Chen, J. Yang, N. Jia

SCA044 COMPARATIVE CORE ANALYSIS FROM A WOLFCAMP FORMATION WELL; A CASE STUDY
J. Walls, A. Morcote, T. Hintzman, M. Everts

SCA045 EVALUATION OF THE IMPULSE HAMMER TECHNIQUE FOR CORE MECHANICAL PROPERTIES PROFILING
P. Gramin, R. Fisher, R.A. Frooqnia, A. Ai, P. Hojnacki, G. Boitnott, L. Louis, J. Hampton

SCA046 A CASE STUDY FOR EFFECTIVE LABORATORY EVALUATION OF MEOR TECHNOLOGY IN SULFIDE CONTAMINATED MATURE OIL FIELDS
R. Cicha-Szot, S. Falkowicz, P. Launt P. S. Nelson, J. Grzesiak

SCA048 INACCESSIBLE POROSITY – INSIGHT TO PORE DEVELOPMENT AND SOLUTIONS TO MICP DATA INTERPRETATION
G. Leśniak, P. Such, K. Komorowska
SCA049 INJECTIVITY AND RETENTION OF NANOCELLULOSE DISPERSIONS IN BEREA SANDSTONE
R.C. Aadland, K.R. Aurand, O. Torsæter, E. Bævre Heggset, K. Syverud

SCA051 INVESTIGATION OF THE PHYSICS OF INERTIAL EFFECTS AND THE FORCHHEIMER EQUATION UTILIZING THE LATTICE BOLTZMANN METHOD
R. Arabjamaloei, D.W. Ruth

SCA052 STUDY OF THE THREE-PHASE FLUID FLOW MECHANISM IN LOW PERMEABILITY AND HIGH GOR RESERVOIRS
N. Jia, W. LV, Q. Liu, J. Qin, C. Xu, D. Li, Z. Leng

SCA053 EFFECT OF SAMPLE SIZE AND SOLVENT EXTRACTION ON BASIC PROPERTIES OF THE MONTNEY FORMATION OF WESTERN CANADA
B. Salimifard, D.W. Ruth, M. Zaoral

SCA054 AN EXPERIMENTAL INVESTIGATION OF PERFORMANCE EVALUATION FOR SEAWATER AND CO2 INJECTION USING DUAL CORES METHODOLOGY AT RESERVOIR CONDITIONS
X. Zhou, F. AlOtaibi, A. Alhashboul, S. Kokal

SCA056 RESIDUAL OIL DISTRIBUTION IN SANDSTONE WITH DIFFERENT PERMEABILITY SCALE DURING WATER FLOODING PROCESS
X. Wang, Q. Zhang, J. Yao, Y. Yang, Z. Zhou, L. Duan

SCA057 RAPID ESTIMATION OF HYDRAULIC FLOW UNIT PARAMETERS RQI AND FZI FROM MAGNETIC MEASUREMENTS IN SOME SHOREFACE RESERVOIRS
C. Egiebor, D.K. Potter

SCA061 ALTERNATIVE APPROACHES FOR TRANSIENT-FLOW LABORATORY-SCALE PERMEAMETRY
M.J. Hannon, Jr.

SCA062 CORE ANALYSIS AS A KEY TO UNDERSTANDING FORMATION DAMAGE AFTER HYDRAULIC FRACTURING TREATMENT
K. Wilk, P. Kasza, K. Labus
SCA063  TORTUOSITY PREDICTION FROM OXYGEN DIFFUSION VIA T2 (z, t) RELAXATION NMR
I. Shikhov, C.H. Arns

SCA065  PORE-LEVEL SIMULATION OF HEAVY OIL AND BITUMEN RECOVERY USING THE STEAM ASSISTED GRAVITY DRAINAGE (SAGD)
A. Behrang, S. Etemad, P. Mohammadmoradi, A. Kantzas

SCA066  KLINKENBERG PERMEABILITY BY PRESSURE DECAY ON TIGHT ROCKS
X. Zhang, A. Hebing

SCA067  FRACTURE-MATRIX INTERACTION DURING POLYMER FLOOD
A.F. Alajmi, M.K. Algharaib

SCA069  FRACTAL DIMENSION: AN INDICATOR TO CHARACTERIZE THE MICROSTRUCTURE OF SHALE AND TIGHT GAS SANDS CONSIDERING DISTINCT TECHNIQUES AND PHENOMENA.
M. Schmitt, M. Halisch, C.P. Fernandes, V.S.S. dos Santos, A. Weller

SCA071  WATER-SOLUBLE SILICATE GELANTS FOR DISPROPORTIONATE PERMEABILITY REDUCTION: IMPORTANCE OF FORMATION WETTING AND TREATMENT CONDITION
R. Askarinezhad, D.G. Hatzignatiou

SCA072  A FAST METHOD FOR HOMOGENEOUS DISSOLUTION OF CHALK SPECIMENS FOR LABORATORY EXPERIMENTS – DOCUMENTATION BY X-RAY CT- SCANNING AND SCANNING ELECTRON MICROSCOPY
C. Kjøller, L. Sigalas, H.F. Christensen, M. Minde

SCA076  CONTACT ANGLE AND IFT MEASUREMENTS AT ELEVATED TEMPERATURES FOR EVALUATING WETTABILITY IN A SELECTED CARBONATE RESERVOIR IN THE UAE
H. Al-Attar, J. Abubacker, A. Zekri, M. Khalifi, E. Lwisa

SCA077  CHARACTERIZATION OF INTERACTION BETWEEN OIL/BRINE/ROCK UNDER DIFFERENT ION CONDITIONS BY LOW FIELD SOLID-STATE NMR
S. Xu, X. Wang, W. LV, Q. Liu, J. Wu, N. Jia
SCA078  ANALYZING RETENTION VIA PARTICLE MOBILITY COREFLOODING
        K.R. Aurand, V. Flatås, R.C. Aadland

SCA079  FRACTAL DIMENSION OF PORE SPACE IN CARBONATE SAMPLES FROM TUSHKA AREA (EGYPT)
        A. Weller, Y. Ding, Z. Zhang, M. Kassab, M. Halisch

SCA084  EFFECT OF BEDDING PLANES ON ROCK MECHANICAL PROPERTIES ANISOTROPY OF SANDSTONE FOR GEOMECHANICAL MODELING
        D. Moronkeji, R. Shouse, U. Prasad

SCA085  FRACTURE STRATIGRAPHY: PREDICTING FRACTURES FROM SMALL-SCALE LITHOLOGIC AND TEXTURAL CHANGES
        L. Kennedy, J. Beuthin, J. Kostelnik

SCA089  DRILL CUTTINGS AS AN ECONOMIC TOOL TO UNDERSTAND THE PETROLEUM SYSTEM FOR EXPLORATORY AND DEVELOPMENT WELLS
        R. Ali, I. Ghiniwa

SCA091  GEOMECHANICAL SIMULATION OF CORE MICROFRACTURES WHILE PULLING OUT OF HOLE
        R. Ashena, G. Thonhauser, W. Vortisch, M. Prohaska, R. Arabjamaloei

SCA094  MANUFACTURE OF WATER WET ARTIFICIAL CORE BY CHEMICAL MODIFICATION METHOD
        Haojun Xie, Aifen Li, Jianfei Qin, Bonifasi Lazaro

SCA098  OFFSHORE WIRELINE CORING – CLOSING TECHNICAL AND ECONOMIC GAPS
        D. Whitby

Poster Session B

SCA021  ROCK WETTABILTY EVALUATION BY IMMERSION CALORIMETRY
        D. Korobkov, V. Pletneva, E. Dyshlyuk
SCA034  ANALYTICAL GAS-OIL RELATIVE PERMEABILITY INTERPRETATION METHOD FOR IMMISCIBLE FLOODING EXPERIMENTS UNDER CONSTANT DIFFERENTIAL PRESSURE CONDITIONS

H. Nekouie, J. Cao, L.A. James, T.E. Johansen

SCA035  INVESTIGATION OF IMBIBITION SATURATION EXPONENT UNDER MIXED SALINITY ENVIRONMENT

F. Pairoys, M. Alexander, V. Odu, J. Ramos, K. Bohn

SCA036  THE ROLE OF FILM FLOW AND WETTABILITIES IN IMMISCIBLE GAS ASSISTED GRAVITY DRAINAGE

H. Khorshidian, L.A. James, S.D. Butt

SCA037  PORE SCALE INVESTIGATION OF CARBONATED WATER INJECTION WITH AND WITHOUT GRAVITY

S. Mahdavi, L.A. James, T.E. Johansen

SCA040  A LATTICE BOLTZMANN APPROACH TO WETTABILITIES AND RATE EFFECTS ON RELATIVE PERMEABILITY USING DIGITAL CORE ANALYSIS

L.K. Gbayan, C.H. Arns

SCA042  HYDROGEN INDEX MEASUREMENTS OF HIGHLY SALINE BRINES UNDER PRESSURES UP TO 15,000 PSI AND TEMPERATURES UP TO 300°F

S.A. Hertel, B.C. Anger, K. Smith, M. Appel

SCA043  EFFECT OF POROSITY CHANGES ON COMPLEX ELECTRICAL CONDUCTIVITY IN SHALY SANDS

F. Börner, E. Müller-Huber

SCA047  IMPROVING LAB NMR PETROPHYSICAL ESTIMATIONS BY INCORPORATING THE SURFACE RELAXIVITY PARAMETER


SCA055  NEW SATURATION FUNCTION FOR TIGHT CARBONATES USING ROCK ELECTRICAL PROPERTIES AT RESERVOIR CONDITIONS

O. Raheem, H. Belhaj
SCA058 A LATTICE-BOLTZMANN BASED METHOD APPLIED TO DIGITAL ROCK CHARACTERIZATION OF PERFORATION TUNNEL DAMAGE

SCA059 SURFACE RELAXIVITY ESTIMATION AND NMR-MICP MATCHING IN DIFFUSIONALY COUPLED ROCKS

SCA060 A NOVEL RELATIVE PERMEABILITY MODEL - A TWO-FLUID APPROACH ACCOUNTING FOR SOLID-FLUID AND FLUID-FLUID INTERACTIONS
D.C. Standnes, S. Evje, P.Ø. Andersen

SCA064 STUDY OF THE EFFECT OF HEAVY OIL COMPOSITION AND TEMPERATURE ON WETTABILITY OF RESERVOIR ROCKS
S. Wang, A. Li, R. Peng, M. Yu, S. Fu

SCA068 HOW WETTING CONDITIONS DICTATE CHALK MECHANICS AT UNIAXIAL STRAIN CONDITIONS – INSIGHTS FROM EXPERIMENTS PERFORMED AT IN-SITU STRESS, TEMPERATURE AND PORE PRESSURE
J.S. Sachdeva, A. Nermoen, M.V. Madland, R.I. Korsnes

SCA070 UNDERSTANDING FRACTURES AND PORE COMPRESSIBILITY OF SHALES USING NMR
D. Green, T. Braun, M. Dick

SCA073 LONGITUDINAL DISPERSION COEFFICIENT CALCULATION DURING MISCIBLE FLOW IN HETEROGENEOUS POROUS MEDIA USING PORE SCALE SIMULATION
S. Afshari, A. Heydari Beni, S. Taheri, H. Hejazi, A. Kantzas

SCA074 DETERMINING THE SATURATION EXPONENT BASED ON NMR PORE STRUCTURE INFORMATION
H. Xu, Y. Fan, C. Zhou, F. Hu, C. Li, J. Yu, C. Li
SCA075  EXPERIMENTAL ASSESSMENT OF THE HYDROCARBONS YEILDS FROM BAZHENOV SHALE FORMATION BY KEROGEN CONVERSION IN THE PRESENCE OF SUPERCRITICAL WATER
T. Bondarenko, E. Popov, A. Cheremisin, I. Karpov, N. Morozov

SCA080  TESTING OF THE CIRCLE AND LINE ALGORITHM IN THE SETTING OF MICRO-CT
A. Katsevich, M. Frenkel

SCA081  ON THE INFLUENCE OF MIXED WETTABILITY ON THE SIMULATION OF MULTI-PHASE TRANSPORT PROPERTIES OF CORE SAMPLES
J.-O. Schwarz, S. Linden, J. Becker, C. Wagner, A. Wiegmann

SCA082  PERMEABILITY MEASUREMENTS ON HYDRATE-BEARING SANDSTONE CORES WITH EXCESS WATER
S. Almenningen, H. Juliussen, G. Ersland

SCA083  AFFECTING WETTABILITY ON RELATIVE PERMEABILITY PARAMETERS FOR QUARTZ SANDSTONES
P. Such, G. Leśniak

SCA086  COUPLING LATTICE BOLTZMANN AND FINITE VOLUME METHODS FOR SIMULATION OF REACTIVE TRANSPORT
M. Liu, P. Mostaghimi

SCA087  TO WHAT DEGREE THERMAL CYCLES AFFECT CHALK STRENGTH
T. Livada, A. Nermoen, R. Inge Korsnes, I. Lykke Fabricius

SCA088  NMR FLUID TYPING USING INDEPENDENT COMPONENT ANALYSIS APPLIED TO WATER-OIL-DISPLACEMENT LABORATORY DATA
P.A. Romero, Geoneurale, M.M. Rincón

SCA090  MICRO-SCALE MODELING OF MATRIX-FRACTURE INTERACTIONS IN FRACTURED POROUS MEDIA
S. Kazmouz, M. Arshadi, A. Aghaei, M. Piri

SCA092  EFFECTIVE THERMAL CONDUCTIVITY ASSESSMENTS OF AN OIL SAND RESERVOIR
J. Arthur, E. Skripkin, S. Kryuchkov, A. Kantzas
SCA093  PORE SHAPES AND PORE GEOMETRY OF RESERVOIR ROCKS FROM $\mu$-CT IMAGING AND DIGITAL IMAGE ANALYSIS
M. Halisch, M. Schmitt, C. Peres Fernandes

SCA095  EXPERIMENTAL STUDY ON DYNAMIC FRACTURES INDUCED BY WATER FLOODING IN LOW PERMEABILITY RESERVOIRS
J. Gao, Z. Zhang, Q. Liu, Chenxu, Y. Qian, N. Jia, X. Tan

SCA096  STUDY OF PORE SIZE EVALUATION FOR LOW PERMEABILITY ROCK CORE SAMPLE
M. Shimokawara, Y. Akita, Y. Mino, S. Takahashi

SCA097  NEW APPROACH TO EVALUATION OF COAL PERMEABILITY IN UNDERGROUND COAL MINES (CBM)
P. Budak, T. Szpunar, G. Leśniak, R. Cicha-Szot

SCA099  FLUID SATURATION, STORAGE AND RECOVERY CHARACTERIZATION OF NANO-SCALE PORE MEDIA USING NMR-BASED TECHNIQUES
Aleksandr Denisenko