

PREFACE

The **2018 International Symposium of the Society of Core Analysts (SCA)** was held in Trondheim, Norway between August 27th and 31st. The theme for the Symposium in 2018 was “*Unconventionals, Carbonates... What Core Analysis can do for Complex Reservoirs?*”. The symposium was attended by 210 representatives from industry, academia and organizations and 28 vendors. With a large variety of vendors, technical veterans, industry leaders, and rising young professionals, the Annual meeting of the Society of Core Analysts is a great opportunity for professional interaction, to share ideas, innovations, knowledge, best practices, products and services.

The collection of articles published in the SHS Web of conferences consists of 24 articles prepared for oral presentations. Twelve (12) proceedings presented in this symposium, published in *Petrophysics* or other journals, and (31) posters are not included in this collection. Here is the list of articles with full text available in www.scaweb.org and/or other journals

Papers presented at the 2018 SCA Symposium published in other journals

Reconsidering Klinkenberg's Permeability Data

D. Ruth and R. Arabjamaloei

In situ saturation monitoring (ISSM) - Recommendations for Improved Processing

Jules Reed, Arjen Cense

Monitoring Core Measurements with High Resolution Temperature Arrays

J. J. Howard and K. Hester

In-Situ Investigation of Aging Protocol Effect on Relative Permeability Measurements using high throughput experimentation methods

M. Mascle, S. Youssef, H. Deschamps and O. Vizika

A review of 60 years of NMR Wettability

A. Valori and B. Nicot

Links between Geochemistry, Total Organic Carbon, Magnetic Properties and Anisotropy in Shale Core Samples from the Horn River Group, British Columbia, Canada

V. T. Ebufegha and D. K. Potter

Loading Effects on Gas Relative Permeability of a Low Permeable Sandstone

F. Agostini, P. Egermann, L. Jeannin, E. Portier, F. Skoczylas, and Y. Wang

A First Step in Evaluating the Role of Diffusion in EOR in Tight Shale Formation

S. T. Dang, C. H. Sondergeld, C. S. Rai, A. O. Tinni, and N. Drenzek

Review of the Intercept Method for Relative Permeability Correction using a Variety of Case Study Data

J. Reed and J. Maas

A New Waterflood Initialization Protocol for Pore-Scale Multiphase Flow Experiments

Q. Lin, B. Bijeljic, S. C. Krevor, M. J. Blunt, S. Berg, A. Coorn, H. van der Linde, A. Georgiadis, and O. B. Wilson

Uncertainty Quantification in Image Segmentation for Image-based Rock Physics in a Shaly-Sandstone

J. Howard, S. Lin, and S. Zhang

Capillary Desaturation Curves and Insights on Trapped Oil at the Pore Scale, in Water-Wet and Oil-Wet Sandstone

H. Berthet, M. Hebert, P. Andriamananjaona, S. Barbouteau, R. Farwati, R. Meftah, G. Quenault, J-P Chaulet, R. Brugidou, and R. Rivenq

Papers presented in Poster Sessions

Non Destructive Pore Scale Approach To Evaluate Elastic Properties Of Shale Samples By Imaging, Modeling And Simulation

W. Lv And L. F. Sun

Rock Electrical Properties Form Porous Plate And Resistivity Experiments: Tips To Maximize Data Quality

F. Pairoys

Insights Into Low Salinity Water Flooding

H. N. Al-Saedi; R. E. Flori And P. V. Brady

Residual Oil Saturation Under Mixed-Wet Conditions: Optimal Wettability Revisited

M. Christensen, Yukie Tanino

A New Chemical Remediation Product To Prevent Sand Production From Unconsolidated Porous Media

B. Marchand, C. A. Davy, F. Agostini, F. Skoczylas, A. Lange, L. Jeannin, And P. Egermann

Measurement Of The Organic Saturation And Organic Porosity In Shale

Q. Sang, S. Zhang, Y. Li, M. Dong, And S. Bryant

Formation Damage In The Inter-Well Zones: Experiments And Advanced Analytics

D. Orlov And D. Koroteev

Continuous Core Measurements: Applications For Optimized Petrophysical And Geomechanical Modelling In Sne Field, Senegal.

C. Gernay, T. Lhomme, C. Mcphee, And M. Starcher

Numerical Simulation Of Nanofluid Injection In Oil Saturated Porous Media With Environmental Applications

A. Sikinioti-Lock, K. Terzi, M. Theodoropoulou, And C. Tsakiroglou

A Methodology To Predict The Gas Permeability Parameters Of Tight Reservoirs From Nitrogen Sorption Isotherms And Mercury Porosimetry Curves

C. D. Tsakiroglou, A. Al Hinai, And R. Rezaee

Avoiding Routine Core Analysis Plug Damage By Proper Evaluation Of Core Gamma-Ray, Core Description And Wellsite Core Sampling

N. Schleifer, E. Kesse And G. Lawrence

Liquid Vapor Isotherms In Nano-Porous Media Under Nmr Observation

A. Denisenko

X-Ray Computed Tomography Supported By Nuclear Magnetic Resonance And Mercury Porosimetry As Novel Approach In Pore Space Characterization Of Tight Sandstones

P. Krakowska, E. Puskarczyk, M. Jędrychowski, M. Habrat, P. Madejski, And M. Dohnalik

Core-Floods On Site: Assessing The Options For Water Treatment In Fields With Active Eor Applications

T. Gumpenberger, P. Toplack, Ch. Pripfl, W. Vollnhofer, Ch. Einzinger, M. Marx And R. Grillneder

An Experimental Setup For The Assessment Of Effects Of Carbonate Rock Dissolution On Complex Electrical Conductivity Spectra

M. Halisch, S. Hupfer, A. Weller, R. Dlugosch, H.-P. Plumhoff

High Field Mri Of Hydrate Phase Transitions In Sandstone

S. Almenningen, J. Gauteplass, V.F. Veland, G.L. Aastveit, P. Fotland, And G. Ersland

Characterization Of Fluid-Rock Interaction By Adsorption Calorimetry

D. Korobkov, V. Pletneva, And E. Dyshlyuk

Measuring Relative Permeability With Nmr

M. J. Dick, D. Veselinovic, T. Kenney And D. Green

Supercritical Methane Diffusivity In Porous Media

N. J. Drenzek, P. K. Bikkina, J. H. Kelsey, C. P. Aichele, And J. L. White

Overview Of The Let Family Of Versatile Correlations For Flow Functions

F. Lomeland

Probe Magnetics As A Rapid, Non-Destructive Screening Tool For Consolidated And Unconsolidated Core In Conventional And Unconventional Reservoirs

T. H. To, D. K. Potter, A. Abiola, And V. T. Ebufegha

Dynamic Adsorption-Diffusion Model For Simulating Gas Production In Shale

Z. Yang, Q. Sang, Y. Li, S. Bryant, And M. Dong

Topological Persistence Of Heterogeneous Sandstone

A. L. Herring, V. Robins, M. Saadatfar, B. Young, M. Knackstedt, And A. Sheppard

Universal, Flow Dependent Relative Permeability Scaling For Steady-State Two-Phase Flows In Porous Media

M. S. Valavanides

Experimental Investigation Of Stability Of Silica Nanoparticles At Reservoir Conditions For Enhanced Oil Recovery Applications

S. Li, Nanji, J. Hadia, N. Y. Hung, H. C. Lau, O. Torsæter, And L. P. Stubbs

Investigation Of The Effect Of Temperature And Pressure On Interfacial Tension And Wettability

T. M. Okasha

Influence Of Aspect Ratio And Wettability On Residual Oil Saturations After Waterflooding And Immiscible Gas Flooding: A Microfluidics Based Study

S. Pradhan, G. Kone, R. Antle, C. Aichele, H. Jiang And P. Bikina

Study Of The Sulphate Ion Effect On Oil Recovery During Low Salinity Water Injection In Dolomites

G. Bueno Aquino De Oliveira, E. Ruidiaz Muñoz, A. Winter, And O. Vidal Trevisan

Characteristics Of Carbonate Rock Types In The Middle East

M. Dernaika, B. Mansour, And O. Al Jallad

Continuous Vs Discontinuous Capillary Desaturation And Implications For Ior/Eor

R. Xu, B. Crouse, D. M. Freed, Alfager, G. R. Jerauld, N. Lane, And Q. Sheng

Taxonomy Of Steady-State Two-Phase Flows In Porous Media

M. S. Valavanides