Trondheim, Norway

Aug 27 – 31, 2018

Final Program

SOCIETY OF CORE ANALYSTS 2018 TRONDHEIM NORWAY

"Unconventionals, Carbonates… what core analysis can do for complex

From the 2018 President

Dear Colleagues,

On behalf of the Society and the Board of Directors, I am delighted to welcome you to the 2018 International Symposium of the Society of Core Analysts (SCA). This year's symposium theme is "Unconventionals, Carbonates… What Core Analysis can do for Complex Reservoirs?" The symposium is being held at the Radisson Blu Royal Garden Hotel designed after traditional river buildings situated directly on the Nidelva river in historic Trondheim, Norway. Trondheim is home of NTNU, SINTEF, and Equinor research offices and is a technology hub for Norway and the oil and gas industry.

We'll start the week off with a short course on, " Wettability, Measurements and Impacts". This is especially relevant as we strive to better understand the fluid-rock interactions in chemical enhanced oil recovery methods such as low-salinity and smart water EOR. A special thanks to Christoph Arns, Jules Reed, Marc, Fleury, Matthew Andrew and James Howard for organizing the short course. Technical sessions start Monday afternoon and there's a full lineup of exciting talks from core analysis and measurement techniques to digital rocks to interpretation methods.

This year's SCA would not be possible without the tireless commitment of our VP Arrangements, Carl Fredrik Berg. Carl Fredrik and the local organizing committee negotiated and organized the venue, welcome concert and ice breaker reception at the beautiful Nidaros Cathedral, gala dinner, field trip, young professionals' night, and accompanying activities. I would also like to thank our Secretary/Treasurer, Christa Vindum, for her help and advice during the planning of the event. Of course, Melanie Young keeps everyone organized and things flowing just like single phase Darcy flow in high permeability cores!

The technical program requires much effort on the part of the VP Technology, Benjamin Nicot and the members of the Technical Committee. For the past year, Ben coordinated the rankings of submitted abstracts and the peer reviews of manuscripts tirelessly and with much enthusiasm! Ben and the Technical Committee – Thank you. I would also like to acknowledge the authors and reviewers contributions and their commitment to a high caliber technical and respectful review process. All reviews that I have seen have been respectful and have added value to the research and manuscripts.

One observation that strikes me at every SCA is the integration of all participants; academic, oil and gas operators, and service companies. I have personally seen how client feedback and demands are heard one year and then brought forward at the next SCA! Thank you to the service companies for continuing to be such an integral and important part of the SCA and our R&D advancements! Please take time to check out and speak with the service companies about how they can help with your research.

The SCA would not be such a technically and socially robust community without its members and SCA Board who participate, discuss, and collaborate at all levels making the SCA a true success. Thanks you to all!

I wish all of you the very best time in Trondheim.

Tusen Takk and Skål,

Lesley James

President

From the 2018 VP Arrangements

Velkommen til Trondheim!

On behalf of the Organizing Committee, I would like to welcome the attendees of the 2018 SCA Annual Symposium to the medieval city of Trondheim. We hope that this former viking capital will stimulate both young and seasoned colleagues from all around the world under our Symposium theme "Unconventionals, Carbonates… what core analysis can do for complex reservoirs?".

The conference will be held in the heart of Trondheim, at the Radisson Blu Royal Garden Hotel, which is situated alongside the Nidaros River. We hope that you will enjoy the city encircling the venue, including local landmarks such as the Nidarosdomen cathedral and the Archbishop's Palace.

Trondheim is the technology capital of Norway, being home to Norway's largest university - the Norwegian University of Science and Technology (NTNU), Scandinavia's largest private research organization SINTEF, and the R&D center of the national oil company Equinor (former Statoil). The city is also home to a vibrant oil industry, including offices of several oil companies and service companies. Trondheim therefore seems like a natural place for a conference on core analysis.

With a large variety of vendors, technical veterans, industry leaders, and rising young professionals, the SCA meeting is a great opportunity for professional interaction, to share ideas, innovations, knowledge, best practices, products and services. In the exhibition halls the vendors showcase their latest technical innovations and offerings in equipment and services.

On the Sunday before the technical sessions, there will be the traditional Golf outing, while on Monday morning we will start with a half day workshop on "Wettability, measurements and impacts". Following the workshop, the first technical sessions with oral presentations will be carried out in the afternoon. On Monday evening, we will enjoy a short concert in the Nidarosdomen cathedral, before enjoying some snacks and drinks during the Icebreaker Reception at Herresalen (the men's auditorium) at the Archbishop's Palace.

The following three days will continue with an extensive technical program. Additionally, there will be an opportunity for the accompanying spouses to join a full day excursion to the Inderøy peninsula on Tuesday. Also on Tuesday, the "Young Professionals" will test out their curling skills at Leangen Curlinghall. On Wednesday we all have the opportunity to celebrate during our Gala Dinner at Clarion Hotel and Congress by the Trondheim fjord. The traditional "post conference field trip" is on Friday, where we will combine a geological field trip along the Trondheim fjord together with visits to laboratories in Trondheim.

I would like to thank the sponsors and vendors for their support, despite the aftermaths of the oil price drop still affecting the industry. Their financial support is critical, but also the industrial perspective is an essential part of the conference. I would like to thank all presenters, including presenters at the short course and for the posters. Their contributions is the core of

the conference and vital for further advances in core analysis. Thanks also to students from the Geoscience and Petroleum Department at NTNU helping out during the conference. Last, but not least, I would like to thank the local organizing committee, consisting of representatives from Trondheim based industry and academia involved with core analysis.

Welcome to Trondheim!

Carl Fredrik Berg,
VP Arrangements

From the 2018 Technology VP

Welcome to the 2018 SCA International Symposium in Trondheim, Norway!

We are going to work together these four days on core analysis in general but also try to focus this year on "unconventionals, carbonates… what core analysis can do for complex reservoirs?" We started this year with a total of 146 abstracts submitted. I want to thank all the authors that submitted abstracts whether they were accepted or not, your contribution is the heart of our conference. After a careful selection and review of all the papers we have 36 Orals and 31 Posters planned for this year. I want to thank the entire technical committee for their commitment, their attention to details, their willing to make every single paper a better paper after the review than it was before. Thank you all, authors and reviewers, you are the technical excellence of SCA.

In the short course this year we will cover "Wettability, measurements and impacts". I want to thank the entire team who prepared this course: Christoph Arns, Jules Reed, Marc, Fleury, Matthew Andrew and James Howard. I hope this course will be interesting and pedagogic for the youngest among us.

Special thanks for Melanie Young, our SCA Executive Director. She has been invaluable in putting together the program this year.

I look forward to seeing you in Trondheim!

Benjamin NICOT, PhD
VP Technology

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2018 Technical Committee

A very special thanks to the SCA Technical Committee. The technical committee members are so committed to the society and betterment of the technical content that we collectively represent. The culture of the society led by the Board and technical committee is evident through the tireless commitment, helpful and thoughtful feedback, many back and forth discussions with the authors, as well as the respectful questioning during the oral presentations. Sincere acknowledgements go to this year's technical committee members:

Adam Moss
Arjen Cense
Benjamin Nicot
Carl Songergeld
Christoph Arns
Cyril Caubit
Dan Maloney
David Potter
Derrick Green
Doug Ruth
Evren Unsal
Eric Withjack
Fabrice Pairoys
Gerald Hamon
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Ole Torsæter
Olga Vizika
Olivier Lopez
Patrick Egermann
Roland Lenormand
Ryan Armstrong
Shreerang Chhatre
Souhail Yussef
Stefano Pruno
Steffen Berg
Ted Braun
Will Richardson

Technical Achievement Darcy Award Recipient

Olga Vizika

• Olga Vizika holds a Chemical Engineering Diploma and a PhD degree in Chemical Engineering, from the University of Patras, Greece. She is Geosciences Director of IFP Energies Nouvelles since 2013. She has authored or co-authored more than 85 conference papers and 40 papers in peer reviewed journals on various aspects of multiphase flow in porous media: experimental investigation and modeling of transport properties of gravity drainage, gas injection processes, Water Alternate Gas (WAG) processes, gas condensate, geological storage of CO_2, and effects of microstructure and heterogeneities at different scales on the displacement mechanisms and macroscopic flow properties of sandstones and carbonates.

• She joined in 1990 IFP (presently IFP Energies nouvelles) as a research engineer in Roland Lenormand's group, and she has held different positions:

• Reservoir Engineering Director, IFP Energies Nouvelles (2006-2012)

• Head of the Petrophysics Department (2002-2006)

• She is SPE and SCA member. She has served as Technical editor of the Society of Petroleum Engineers publications, member of the organizing, scientific and technical Committees of several SPE ATW and SPE Forums, Chairman of the Technical Committee of the 2003 SCA meeting (Society of Core Analysts), Member of the Fluid Mechanics and Oil Recovery Processes Committee of the Society of Petroleum Engineers, Member of the Management Board of the Society of Core Analysts from 2003 to 2006, where she occupied successively the positions of Vice President Technical, President Elect, President and Past President.

• She has led several European projects as well as bilateral projects with industrial funding.

Conference at a Glance

Monday – August 27	
8:00 a.m. – 5:00 p.m.	Registration Desk Open
8:00 a.m. – 12:00 p.m.	Exhibitor / Poster Set-up (Session 1)
9:00 a.m. – 10:40 a.m.	Short Course: Wettability, measurements and impacts (Kindly Sponsored by: ZEISS Microscopy)
10:40 a.m. – 11:00 a.m.	Coffee Break (Kindly Sponsored by TOTAL)
11:00 a.m. – 12:30 p.m.	Short Course: Wettability, measurements and impacts (Kindly Sponsored by: ZEISS Microscopy)
12:30 p.m. – 1:30 p.m.	Lunch (Kindly Sponsored by: Petricore)
1:30 p.m. – 3:15 p.m.	Opening Remarks Technical Session 1 – Laboratory Core Analysis #1
3:15 p.m. – 3:30 p.m.	Coffee Break (Kindly Sponsored by TOTAL)
3:30 p.m. – 5:30 p.m.	Technical Sessions 1 – Laboratory Core Analysis #2
6:00 p.m. – 09:00 p.m.	Opening "Icebreaker Reception" – Concert in Nidarosdomen cathedral, followed by snacks and drinks in Herresalen in the Archbishop's Palace
Tuesday – August 28	
7:30 a.m. – 5:00 p.m.	Registration Desk Open
8:15 a.m. – 10:00 a.m.	Technical Session 2 – Improved SCAL techniques and Interpretations #1
10:00 a.m. – 10:30 a.m.	Coffee Break (Kindly Sponsored by Bruker microCT)
10:30 a.m. – 12:00 p.m.	Technical Session 2 – Improved SCAL Techniques and Interpretations #2
12:00 p.m. – 1:00 p.m.	Lunch

1:00 p.m. – 2:30 p.m.	Poster Session (Even numbers) (Kindly Sponsored by: Premier Oilfield Group)
2:30 p.m. – 3:30 p.m.	Coffee Break and Poster Session Break (Coffee Break: Kindly Sponsored by Bruker microCT Poster Session: Kindly Sponsored by Premier Oilfield Group)
3:30 p.m. – 5:00 p.m.	Technical Session 2 – Improved SCAL techniques and Interpretations #3
5:30 p.m. – 11 p.m.	Young Professionals Event – Curling at Leangen Curlinghall. Taxi will leave from Royal Garden at 18.00. Pizza and drinks will be served after the game at the curling hall.
Wednesday – August 29	
8:30 a.m. – 5:00 p.m.	Registration Desk Open
9:00 a.m. – 10:00 a.m.	Technical Session 3 – Wettability #1
10:00 a.m. – 10:30 a.m.	Coffee Break (and poster switch)
10:30 a.m. – 12:00 a.m.	Technical Session 3 – Wettability #2
12:00 a.m. – 1:00 p.m.	Lunch (and poster switch)
1:00 a.m. – 1:50 p.m.	Technical Session 4 – Unconventionals and Shale #1
1:50 p.m. – 3:00 p.m.	Poster Session (Odd numbers) (Kindly Sponsored by: Premier Oilfield Group)
3:00 p.m. – 4:00 p.m.	Coffee Break and Poster Session Break (Poster Session: Kindly Sponsored by Premier Oilfield Group)
4:00 p.m. – 4:50 p.m.	Technical Session 4 – Unconventionals and Shales #2
05:30 p.m. – 11:00 p.m.	Awards Gala Dinner at Clarion Hotel & Congress Trondheim. (Kindly Sponsored by: Thermo Fisher Scientific)
Thursday – August 30	
8:00 a.m. – 4:00 p.m.	Registration Desk Open
8:00 a.m. – 9:45 a.m.	Technical Session 5 – Displacement Mechanisms / EOR #1

9:45 a.m. – 10:15 a.m.	Coffee Break
10:15 a.m. – 12:00 p.m.	Technical Session 5 – Displacement Mechanisms / EOR #1 Business Meeting 2017 Young Professionals and Best Paper Awards
12:00 p.m. – 1:00 p.m.	Lunch
1:00 p.m. – 2:40 p.m.	Technical Session 6 – Pore Scale Imaging and Modeling #1
2:40 p.m. – 3:10 p.m.	Coffee Break
3:10 p.m. – 4:00 p.m.	Technical Session 6 – Pore Scale Imaging and Modeling #1
4:05 p.m.	Closing Remarks
Friday – August 31	
8:30 a.m. – 4:00 p.m.	Optional Field Trip. Bus for the field trips leaves from the conference hotel (Royal Garden) at 09.00, and will arrive back at the hotel at 16.00. The first part is a geological field trip along the Trondheim fjord. The second part is visits to laboratories in Trondheim involved with core analysis work. (Kindly Sponsored by: PoreLab)

- Delegate Bags kindly sponsored by Vindum Engineering
- Lanyards kindly sponsored by Green Imaging Technologies and Oxford Instruments
- Pens and Pads kindly sponsored by Core Specialist Services
- USBs kindly sponsored by Green Imaging Technologies and Oxford Instruments
- Friendly Donation kindly given by CYDAREX
- Speaker gifts kindly sponsored by Weatherford Labs Norway

Short Course – Monday 27th, 9:00 a.m. – 1:30 p.m.

The short course is on, " Wettability, Measurements and Impacts". This is especially relevant as we strive to better understand the fluid-rock interactions in chemical enhanced oil recovery methods such as low-salinity and smart water EOR. A special thanks to Christoph Arns, Jules Reed, Marc, Fleury, Matthew Andrew and James Howard for organizing the short course.

Coffee and tea will be available during breaks. Lunch will be provided to attendees.

Short Course is Kindly Sponsored by: ZEISS Microscopy

Opening Reception –Monday 27th, 6:00p.m. - 9:00 p.m.

The Opening "Icebreaker" Reception will start with a visit and concert to the Nidarosdomen cathedral. The cathedral will be open for visit from 18.00, with the concert starting at 18.15. After the concert we will move over to "Herresalen" (the men's auditorium) in the Archbishop's palace right beside the cathedral. There we will be served snacks and drinks in to foster a atmosphere to meet and greet both old and new colleagues.

Dress Code: Business Casual

Technical Sessions – Monday 27th, Tuesday 28th, Wednesday 29th and Thursday 30th , 8 a.m.- 5 p.m.

(With the exception for start at 1:30 p.m. on Monday and end at 4:05 p.m. on Thursday).

Oral presentations: The Symposium will offer 36 oral presentations, 20 minute presentations followed by 5 minutes for discussion.

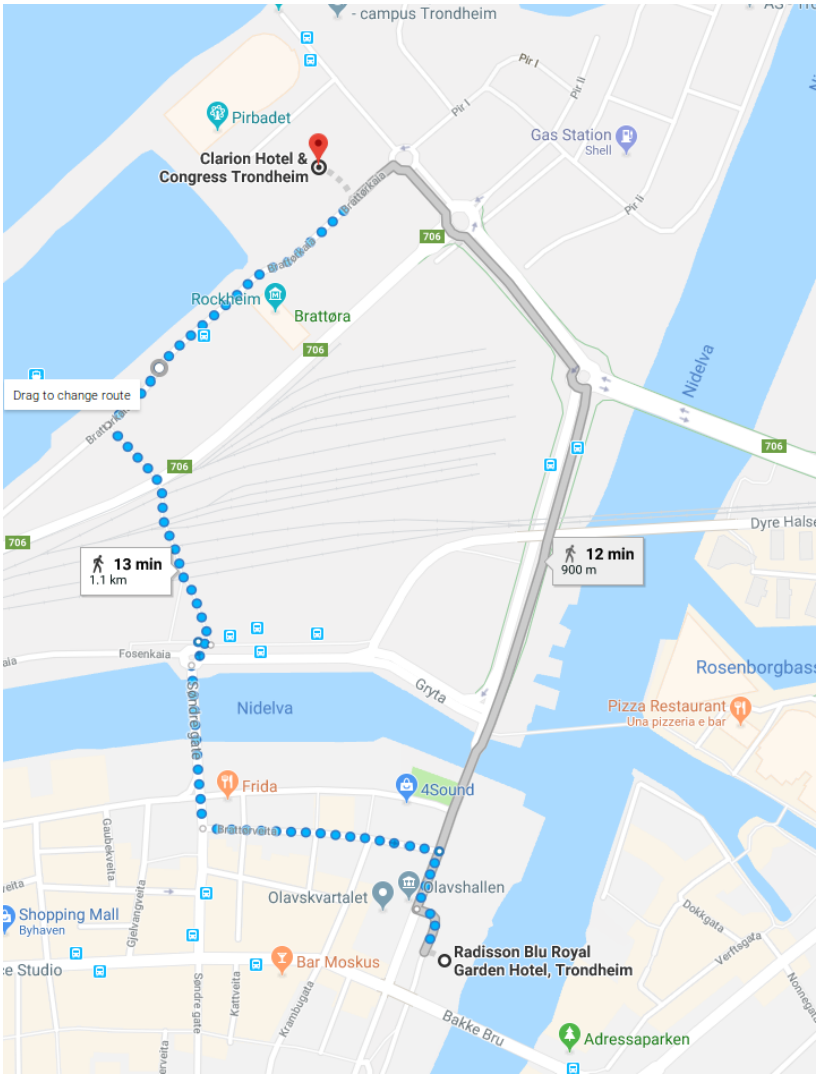
Poster sessions: The symposium will offer 31 posters, distributed in two poster sessions. Authors of posters will present their work in 2 minutes presentation format on Tuesday (Poster session Even) and Wednesday (Poster Session Odd).

Young Professionals Event – Tuesday 28th, 6:00-10:00 p.m.

This years' Young Professionals Event will be curling. A taxi will leave from Royal Garden at 18.00 and bring the participants to Leangen Curlinghall. The curling will start with a short theoretical introduction, thereafter some technique and practice on the ice. When everyone are ready, you will be divided into teams for a couple of games. Curling-shoes and ice-brushes will be provided at the location. We recommend warm and loose clothing, e.g. workout or leisure clothes. It is around 8-10 degrees Celsius in the curling hall, however there are normal temperature in the theoretical and social room. Skirts or tight jeans are not recommended. Pizza and drinks will be served after the game at the curling hall.

Awards Gala Dinner – Wednesday 29th, 5:30 - 11:00 pm

The gala dinner will be at the newly build Clarion Hotel and Congress, which is situated close to the fjord, a short walk from the conference hotel (Royal Garden). There we will enjoy a welcome drink in the hall, before a 3-course menu is served.



While not a part of the official program, this hotel also has a nice rooftop bar with view over the fjord.

Dress code: (Smart) Casual dress code.

Gala Dinner is Kindly Sponsored by: Thermo Fisher Scientific

Accompanying Persons Tours and Activities

Monday, August 27th

5:00 PM - Opening Reception

Wednesday, August 29th

5:30 PM – Gala Dinner

Thursday, August 30th

13.00-15.00 - City walk. The walk starts and ends at Royal Garden. The local guide will take you on a walk through town and introduce the historical Trondheim.

Optional Field Trip – Friday September 1st, 8:30 a.m.- 4:00 p.m.

This post-Symposium Field Trip takes you on a geological field trip along the Trondheim fjord before returning to Trondheim for laboratory visits. We will observe turbidite and conglomerate successions, yielding insight into various depositional types that can be found in deep water environments. The outcrops gives information on detailed as well as semi-regional distribution of various depositional systems.

The field trip will mainly be along roads and there will be no long or strenuous walks. However, walks will be along rocky shores and we may stay away from the bus for prolonged times. Hiking boots covering the ankle is mandatory. You should dress according to weather. You will find a local weather forecast here:

https://www.yr.no/place/Norway/Trøndelag/Stjørdal/Stjørdal/

Directly after the geological field trip we will visit several laboratories in Trondheim that conducts core analysis. These laboratories will at least include the core analysis laboratory of SINTEF and NTNU.

The field trip will include lunch.

Field Trip is Kindly Sponsored by: PoreLab

Publication of Proceedings

The proceedings are prepared in USB format and will be given at the Symposium to all registered participants. Additional USBs may be ordered the SCA web site:

www.SCAweb.org

The SCA has decided to no longer carry printed copies of the proceedings.

Exhibition Hours

Monday: 8:00 a.m. – 5:30 p.m.	*Exhibition Build-up starts at 8am and must be completed by 1 pm.
Tuesday: 8:30 a.m. – 5:00 p.m.	
Wednesday: 9:00 a.m. – 5:00 p.m.	
Thursday: 8:00 a.m. – 4:05 p.m	*Exhibition Break-down can start after the afternoon break and complete by 6pm.

Exhibitors

AMETEK Chandler Engineering – AMETEK Chandler Engineering produces the highest quality instruments and measurement systems for the Oil and Gas Industry. Our portfolio includes Quizix precision pumps used in core flooding (NEW models available!), SCAL, EOR, and other fluid delivery applications, the 6100 Formation Response (formation damage) systems, Core flood/EOR flow systems, custom core flow systems for Steady State/Unsteady State permeability measurements, and the Chandler 3000 Series PVT systems for phase behavior studies.

Bruker microCT - Bruker microCT develops and produces a wide range of high-end microtomography instruments for life science, material research and in-vivo preclinical studies.
The company is market-leader in the field of desktop micro-CT systems, bringing high-resolution 3D images straight to your desk.
In July, Bruker's latest high resolution nanotomography system was launched: the SKYSCAN 2214 features up to 4 X-ray detectors, integrated in a maintenance-free and intuitive to use system.

Core Specialist Services - Core Specialist Services Limited are a consultancy who provide experienced based design and management support to all those involved in coring, core analysis, formation evaluation & reservoir management studies. Our ability to provide these services effectively is based upon our team's pre-consultancy direct hands on experience at wellsite and in the laboratory – amounting to more than 100 years. This experience is critical to pre-empt issues arising during coring and core analysis and in effective quality control of current and heritage data. Our team have a passion for all things core related and believe that effective communication between all stake holders involved in coring and core analysis is key to a successful outcome. Our strength is in our team. Our team work with your team to ensure a seamless journey of your core from planning to wellsite, lab, reservoir model and beyond.

CYDAREX - Since 2005, CYDAREX provides expertise in the domain of core and cuttings analysis. CYDAREX is a spin-off company of the French Institute of Petroleum (IFPEN), and is now a completely independent company. CYDAREX provides consulting and training services, commercializes laboratory and training equipment, and develops the software CYDAR™.

Teaching: We are commercializing this year a series of teaching equipment, designed to demonstrate rapidly flooding experiments (permeability measurements, two-phase flow, porous-plate and electrical experiments) in a safe laboratory setting.

Equipment: DarcyPress™ allows measurements of gas permeability under confining pressure on small rock samples (5 to 10 mm), with permeabilities ranging from 0.1 nanoDarcy (10-2 m2) to 10 Darcy. DarcyPress™ is ideal for measurements on shales. DARCYLOG™ allows measurements of permeability on drill cuttings, with sample size ranging from 1 to 5 mm, and permeability ranging from 0.05 to 100 mDarcy.

Software: CYDAR™ is designed for interpretation of conventional and special core analysis, including mercury injection experiments (MICP), absolute permeability, and two-phase flow experiments (steady-state and unsteady-state, centrifuge, history matching of capillary pressure and relative permeability, etc…). We have recently implemented two new modules: a module for tracer experiment analysis, and a module for Two-Phase Flow experiments with EOR (Enhanced Oil Recovery) capabilities for polymer flooding, low salinity, and surfactants injection experiments. Among recent additions: the LET function for capillary pressure curves, and an automatic import function of projects from Excel files.

DCI Corporation - DCI offers innovative solutions to your core testing requirements. From turnkey systems to system components we can help you with your laboratory needs. DCI designs and manufactures both custom and standard core holders, accumulators, syringe pumps, acoustic separators, core flood systems, electrical resistivity systems, rock mechanics systems and much more. Stop by our booth to see how DCI can help you make better measurements on core properties.

EPSLOG - Epslog is an independent company founded in 2005 by scientists and engineers with a unique expertise in rock cutting and drilling mechanics. Epslog specializes in delivering expert core testing services with a mobile and multi-sensor test frame, the Wombat. Services offered worldwide include rock strength logging with the Scratch Test, ultrasonic compression and shear wave velocity logging, ultra-high resolution core imaging but also core and well-log data intergration services, and drilling data interpretation services.

Dassault Systèmes - SIMULIA DigitalROCK provides computational modeling technology for

core analysis to determine pore size distribution, absolute permeability, capillary pressure, and relative permeability curves, using 3D scans of rock samples as input. We have extensively validated technology is available as an efficient, automated cloud-based service at DigitalROCK.com

FloXlab - Floxlab is an engineering firm specialized in the design and manufacture of an ample range of products encompassing advanced geotechnical testing equipment, high precision syringe pumps and compression frames. Whether a unique lab-scale unit or a complete turnkey system is required, our clients will benefit from our unrivaled depth of technological knowledge and experience as well as unparalleled customer service. With over 90% of our operations lying outside of France, Floxlab systems have become a standard in all major laboratories, with a strong presence in the U.S., Europe, the Middle East, China, and Russia. Our customers would agree that we are surely the world's foremost pump designer and manufacturer. Sectors benefiting from our devices' precision in pressure, volume and flow rate include: Petroleum research, reactant feeding, supercritical fluids, geoscience etc. At Floxlab, our philosophy is continuous improvement through constant market demand monitoring, higher quality material prospection, and meticulous customer feedback collection and analyses.

Green Imaging Technologies, Inc – Green Imaging Technologies is the industry leader in NMR rock core analysis. Our software is the back bone of the GeoSpec line of NMR Rock Core Analyzers, which are used by all major oil producers, oil service companies and the most active research institutes worldwide. Our customers have access to exclusive, patented measurements including NMR capillary pressure and quantitative saturation profiles. For those that don't have their own laboratory, or service companies who want to add NMR to their product offerings, H2 Laboratories, a subsidiary of Green Imaging, leverages our expertise and patented technologies to offer NMR rock core analysis services both directly to customers, and via industry partners. Our team of experts are completely focused on rock core analysis, and as such have developed relationships with the most respected researchers and experts in the NMR rock core analysis field. At this years SCA we will be showcasing new applications, including a new method for measuring wettability and a new method for relative permeability determination. Stop by the Green Imaging/Oxford Instruments booth in the exhibit hall to find out what is new in NMR rock core analysis.

Math2Market GmbH - Our vision is to replace laboratory analysis of material properties by material models and software. The mission is to offer a complete solution for Digital Rock Physics (DRP). For that mission, we develop our own software GeoDict and provide it to our clients together with hardware consulting, customized software development and support, and user training. The DRP suite of GeoDict is a purpose-built tool for the specific needs of core analysts. In combination with imaging capabilities, GeoDict enables you to perform the entire DRP workflow in-house, representing an alternative to service providers' solutions. GeoDict comprises a broad portfolio of DRP parameters, provides tools for the automation of workflows, and is offered as a service on request. In combination with its unmatched fast

runtimes and low hardware requirements, GeoDict is designed to bridge the gap between "hand-made" and automated generation of DRP data.

Oxford Instruments – Oxford Instruments will display GeoSpec12, the latest addition to the renowned GeoSpec line of NMR rock core analysers. GeoSpec12 includes Oxford Instruments' unique Q-Sense technology, and offers ten times greater sensitivity and 100 times faster measurements on tight rocks and low porosity samples. The GeoSpec range measures standard core parameters such as pore size distributions, BVI, FFI, porosity, and T2 cut-off on a single instrument, and can perform advanced measurements such as capillary pressure and spatially resolved T2 distributions with the exclusive use of Green Imaging Technologies' software. Also on display will be the P5 Cell for high pressure and temperature studies of petroleum reservoir rock core plugs. The P5 Cell provides NMR users with the technology to pressurize rock core samples up to 5,000 psi and heat them to 100°C, allowing them to make measurements as close to reservoir conditions as possible.

PanTerra – PanTerra is an integrated laboratory, geosciences, and engineering consultancy serving the international oil and gas industry for more than 25 years. Our services include conventional and special core analysis, PVT, production chemistry, EOR, subsurface evaluation and modelling, field development, souring studies and project management services. Capitalising on our in-house expertise, PanTerra also specialises in recruitment and secondment of subsurface professionals and additionally offers a unique blend of E&P learning customised to individual needs. For more information please visit www.panterra.nl or connect via LinkedIn, Twitter and YouTube.

Petricore - The Petricore Group of Companies is offering the oil industry quality services extending from the initial wellsite operations through the life of your reservoir. Headed by seasoned veterans with decades of experience in servicing the oil industry, we thrive on answering question that can help our clients to get the most out of their reservoirs. With a clear vision of the company becoming a worldwide leader in the rock characterization, Petricore is entering the 21th century by developing the new generation of integrated digital characterization services.

Premier Oilfield Group - At Premier we help oil and gas companies make better exploration and production decisions by connecting the dots from samples to simulations and solutions. Premier integrates reservoir rock and fluid measurements across multiple disciplines to deliver completions and reservoir solutions in unconventional and conventional plays. Our proven workflows deliver timely, relevant data by doing the right experiments, doing those experiments right, and providing client-ready, fit-for-use results. Additionally, Premier utilizes its vast expertise to answer critical questions through analysis and simulation. Finally, Premier

integrates diverse measurements to diagnose and match actual well performance, and to design future development strategies.

Qmineral - Qmineral is an independent material test laboratory providing third-party analytical services to a large range of worldwide industrial partners. Qmineral has won the biennial "Reynolds cup", aka the "world championship of quantitative mineralogy" in 2016 and was responsible for its organization in 2018. With our experienced personal and specialty equipment, we provide highly accurate and reliable data for the analysis of your cores, cuttings, scalings or other samples.

Rotunda Scientific Technologies LLC - Rotunda Scientific Technologies LLC provides innovative radiation measurement and protection products to the energy industry. This year we will be demonstrating the JCS GMS312 Rolling Gamma Spectrum Core Analyzer, which is based on the field proven design of the GMS310 Gamma Spectrum Core Logger handheld. Both the GMS310 and GMS312 are designed for core sample analysis (spectral gamma and API) in the rugged environment of the exploration site and will be available at our booth for you to evaluate. In addition to the GMS310 & GMS312 we offer many other state of the art radiation detection and protection products for use during exploration or nondestructive testing. Several of the radiation detection products are intrinsically safe for potentially explosive atmospheres. You are invited to see these products at our booth #8 during the SCA Annual Meeting. We look forward to meeting you for the first time or seeing you again and catching up.

Spectra-Map - Spectra-Map provides unique mineral analysis services to the upstream O&G sector, using visible and infrared reflectance imaging spectroscopy (IRS). IRS identifies a range of minerals including all clay polytypes, carbonates and sulphates, as well as solid and liquid hydrocarbons. It is well suited to analysis of cores, cuttings and plugs, generating continuous high density mineral data (at mm scale) without sample preparation or damage. Imaging provides the ability to see spatial relationships between different minerals and oils. The company has invested heavily in other spectroscopy techniques in order to expand our range of services, with a view to providing comprehensive non-destructive whole rock mineralogy on sub millimetre to metre scales.

Strata Technology – Strata Technology is one of the industry's leading specialist engineering companies. Strata designs, manufactures, commissions, inspects and maintains bespoke laboratory equipment, skid mounted rigs and pilot plants. Our equipment is used to undertake critical experiments into enhanced oil recovery, drilling operations and other Oil & Gas related research and development activities. In addition to the bespoke engineering services we offer, Strata's team of highly trained and skilled designers, engineers and technicians have developed a number of standard, CE Marked products including:

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Vinci Technologies - Vinci Technologies is a well-established engineering firm specializing in the manufacture of equipment for the Petroleum, mining and geology sectors. We operate in over one hundred countries and our clientele ranges from research universities to the most well-known service companies. The company comprises three business divisions, namely: Exploration & Production, Geophysical Tools and the Pilot Plants. We work in E&P field and the number of products that we offer exceeds 200. These are arranged in five major categories: Conventional Rock Analysis, Advanced Rock Analysis, Fluid Analysis, Geochemistry and Pumps.

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Volume Graphics GmbH - Volume Graphics develops leading software for the analysis and visualization of industrial computed tomography (CT) data. Companies around the world use Volume Graphics software in research, development, production, quality control, and damage analysis. The high-end software VGSTUDIO MAX with the Transport Phenomena Module makes it possible to perform virtual flow and diffusion experiments at a microstructure level, including mercury injection capillary pressure (MICP) experiments directly on CT scans of porous and multi-component materials such as drill cores. Without meshing, you can calculate homogenized material properties such as the absolute permeability, tortuosity, formation factor, molecular diffusivity, electrical resistivity, thermal conductivity, porosity, or capillary pressure. Since 1997, Volume Graphics has been developing software for industrial CT at its headquarters in Heidelberg, Germany. Employees in offices in the USA, Japan, China, and Singapore offer sales and support in their respective regions

Voxaya - We at Voxaya are passionate about two things: imaging and rocks. Our mission is to make digital rock analysis efficient and affordable to the greatest number of industries.
Voxaya develops Voxilon, the workflow numerical analysis software designed for engineers studying porous materials. Its high performance computing design allows to make digital rock analysis an industrial process.

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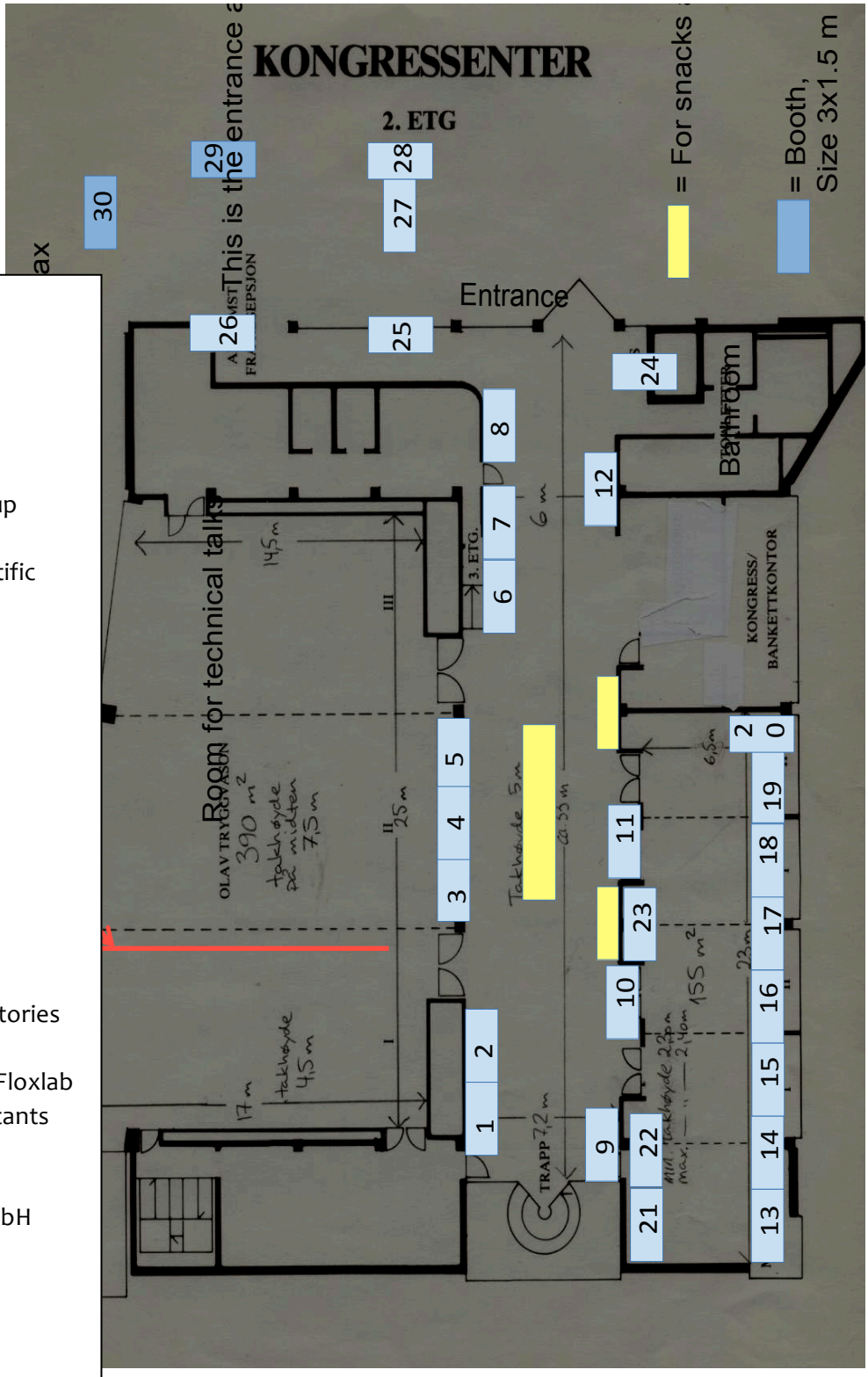

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Short Course Program

Wettability, measurements and impacts

MONDAY, AUGUST 27, 2018

Wettability, measurements and impacts	
9:00 – 9:10	Welcome and Safety Briefing – Carl Frederic Berg
9:10 – 9:40	1. Definition of wettability? Chris Arns
9:40 – 10:40	2. Classical petrophysical measurements of wettability - Jules Reed
10:40 – 11:00	Coffee Break **Kindly Sponsored by: TOTAL**
11:00 – 11:25	3. Advanced measurements of wettability: NMR and dielectric - Marc Fleury
11:25 – 11:55	4. Advanced measurements of wettability: Pore scale imaging - Matthew Andrew
11:55 – 12:15	5. Impact of wettability on our business - James Howard
12:15 – 12:30	Closing Remarks – Benjamin NICOT
12:30 – 1:30	Lunch **Kindly Sponsored by: Petricore Ltd**

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Unconventionals, Carbonates… what core analysis can do for complex reservoirs?

Technical Program

Monday, August 27, 2018

1:30 - 1:45	**Opening Remarks**	
1:45 – 3:15	**Session 1: Laboratory Core Analysis #1** **Chairs: Arjen Cense and Benjamin Nicot**	
	SCA001	017 RECONSIDERING KLINKENBERG'S PERMEABILITY DATA Douglas Ruth and Rasoul Arabjamaloei
	SCA002	018 VALIDATION OF PERMEABILITY AND RELATIVE PERMEABILITY DATA USING MERCURY INJECTION CAPILLARY PRESSURE DATA Rasoul Arabjamaloei, David Daniels, Einar Ebeltoft, Egil Boye Petersen, Richard John Pitman, Douglas Ruth
	SCA003	022 An Investigation of Three Phase Recovery Mechanisms for Oil Field Optimization by Three-Phase Core Flood and Simulation Studies C. Jones, J. Brodie, M. Spearing, S. Lamb, K. Sadikoglu
3:00 – 3:15	**Exhibitor Presentations (x5)**	
3:15 - 3:30	**Coffee Break** **Kindly Sponsored by: TOTAL**	
3:30 – 3:35	**Exhibitor Presentations (x5)**	
3:30- 5:30	**Session 1: Laboratory Core Analysis #2** **Chairs: Matthias Halisch and Mike Spearing**	
	SCA007	081 IN SITU SATURATION MONITORING (ISSM) – RECOMMENDATIONS FOR IMPROVED PROCESSING Jules Reed, Arjen Cense

	SCA005	063 INSIGHTS, TRENDS AND CHALLENGES ASSOCIATED WITH MEASURING COAL RELATIVE PERMABILTIY Dylan Shaw, Peyman Mostaghimi, Furqan Hussein and Ryan T. Armstrong
	SCA006	076 DOS AND DON'TS WHEN DEVELOPING A SYSTEM TO INVESTIGATE SPONTANEOUS IMBIBITION IN UNCONSOLICDATED POROUS MEDIA Bergit Brattekås, Tore L. Føyen, Trond Vabø, Håkon Haugland, Simon I. Reite, Anders S. Saunes and Martin A. Fernø
	SCA004	029 Determination of Electrical Parameters in Carbonates with Micro-CT, NMR and Gas Displacement Experiments Wang Kewen, Li Ning, Wu Hongliang, Zhang Gong, Feng Zhou,Yu jun
6:00 - 9:00		**Opening Reception**

Tuesday, August 28, 2018

8:15 – 8:30	**Exhibitor Presentations (x5)**
8:30 - 10:00	**Session 2: Improved SCAL techniques and Interpretation #1** **Chairs: Josephina Schembre and Jules Reed**
SCA008	009 CHARACTERIZATION OF HYSTERETIC MULTIPHASE FLOW FROM THE MM TO M SCALE IN HETEROGENEOUS ROCKS Samuel J. Jackson and Samuel Krevor
SCA009	034 Measurement of Spontaneous Imbibition Capillary Pressure, Saturation and Resistivity Index by Counter Current Technique at Net Reservoir Stress and Elevated Temperature. Stefano Pruno, Hans Erik Rodvelt and Ola Skjæveland
SCA010	043 An Investigation into Different Correlation Methods between NMR T2 Distributions and Primary Drainage Capillary Pressure Curves Using an Extensive Sandstone Database Adam K Moss, Tim Benson and Tony Barrow
10:00 - 10:30	**Coffee Break** **Kindly Sponsored by: Bruker microCT**
10:30 – 10:45	**Exhibitor Presentations (x5)**
10:30 – 12:00	**Session 2: Improved SCAL techniques and Interpretation #2** **Chairs: Derrick Green and Holger Ott**
SCA011	044 A FAST METHOD FOR TRAPPED GAS DETERMINATION Pierre Faurissoux, Moeata Lutui-Tefuka, Cyril Caubit, Bruno Lalanne and Benjamin Nicot
SCA012	057 EXPONENTIAL CAPILLARY PRESSURE FUNCTIONS IN SEDIMENTARY ROCKS Armin Afrough, Mehdi Bahari Moghaddam, Laura Romero-Zerón1and Bruce J. Balcom
SCA013	078 IMPACT OF BRINE COMPOSITION AND CONCENTRATION ON CAPILLARY PRESSURE AND RESIDUAL OIL SATURATION IN LIMESTONE CORE SAMPLES F. Feldmann, A. M. AlSumaiti, S. K. Masalmeh, W. S. AlAmeri, S. Oedai

12:00 - 1:00	**Lunch**
1:00 – 1:15	**Exhibitor Presentations (x5)**
1:00 – 2:30	**Poster Session (Even Numbers)** **Chair: Lesley James**
2:30 - 3:30	**Coffee and Poster Session Break** **Kindly Sponsored by: Bruker microCT**
3:30 – 3:45	**Exhibitor Presentations (x5)**
3:30 – 5:00	**Session 2: Improved SCAL techniques and Interpretation #3** **Chairs: Olivier Lopez and Will Richardson**
SCA014	080 MONITORING CORE MEASUREMENTS WITH HIGH-RESOLUTION TEMPERATURE ARRAYS James J. Howard and Keith C. Hester
SCA015	083 Obtaining High Quality SCAL Data: Combining Different Measurement Techniques, Saturation Monitoring, Numerical Interpretation and Continuous Monitoring of Experimental Data Yingxue Wang and Shehadeh K. Masalmeh
SCA016	127 IN-SITU INVESTIGATION OF AGING PROTOCOL EFFECT ON RELATIVE PERMEABILITY MEASUREMENTS USING HIGH THROUGHPUT EXPERIMENTATION METHODS Matthieu Mascle, Souhail Youssef, Hervé Deschamps, Olga Vizika
5:30 – 11:00 p.m.	**Young Professional Event**

Wednesday, August 29, 2018

9:00 – 10:00 **Session 3: Wettability #1**

Chairs: Jos Maas and Josephina Schembre

SCA017 035 A REVIEW OF 60 YEARS OF NMR WETTABILITY

Andrea Valori and Benjamin Nicot

SCA018 050 Spatially Resolved Wettability Measurements Using NMR Wettability Index

M.J. Dick, D. Veselinovic and D. Green

10:00 - 10:30 **Coffee Break**

10:30 – 12:00 **Session 3: Wettability #2**

Chairs: Carl Sondergeld and Mike Spearing

SCA019 085 THE ROLE OF FERROUS CLAYS IN THE INTERPRETATION OF WETTABILITY – A CASE STUDY

Velazco M.A, Bruce A., Ferris M, Reed J., Kandasamy R.

SCA020 117 A LABORATORY SCALE APPROACH TO WETTABILITY RESTORATION IN CHALK CORE SAMPLES

Jaspreet S. Sachdeva, Edison A. Sripal, Anders Nermoen, Reidar I. Korsnes, Merete V. Madland, Lesley A. James

SCA021 118 TOWARD A MECHANISTIC UNDERSTANDING OF WETTABILITY ALTERATION IN RESERVOIR ROCKS USING SILICA NANOPARTICLES

Saeed Jafari Daghlian Sofla, Lesley Anne James , Yahui Zhang

12:00 - 1:00 **Lunch**

1:00 – 1:50	**Session 4: Unconventionals and Shales #1** **Chairs: Carl Sondergeld and Doug Ruth**
SCA022	059 LINKS BETWEEN GEOCHEMISTRY, TOTAL ORGANIC CARBON, MAGNETIC PROPERTIES AND ANISOTROPY IN SHALE CORE SAMPLES FROM THE HORN RIVER GROUP, BRITISH COLUMBIA, CANADA Vivian T. Ebufegha and David K. Potter
SCA023	093 LOADING EFFECTS ON GAS RELATIVE PERMEABILITY OF A LOW PERMEABLE SANDSTONE F. Agostini1, P. Egermann2, L. Jeannin2, E. Portier3, F. Skoczylas1, Y. Wang1
1:50 – 3:00	**Poster Session (Odd Numbers)** **Chair: Matthias Appel**
3:00 – 4:00	**Coffee and Poster Session Break**
4:00 - 4:50	**Session 4: Unconventionals and Shales #2** **Chairs: Derrick Green and Benjamin Nicot**
SCA024	114 A FIRST STEP IN EVALUATING THE ROLE OF DIFFUSION IN EOR IN TIGHT SHALE FORMATIONS Son T. Dang, Carl H. Sondergeld, Chandra S. Rai, Ali O. Tinni, Nicolas Drenzek
SCA025	116 Monitoring Gas Hydrate Formation with Magnetic Resonance Imaging in a Metallic Core Holder Mojtaba Shakerian, Armin Afrough, Sarah Vashaee, Florin Marica, Yuechao Zhao, Jiafei Zhao,Yongchen Song and Bruce J. Balcom
5:30 – 11:00	**Gala Dinner** **Kindly Sponsored by: Thermo Fisher Scientific**

Thursday, August 30, 2018

8:00 - 9:45 **Session 5: Displacement Mechanisms / EOR #1**

Chairs: Doug Ruth and Arjen Cense

SCA026 001 RHEOLOGY-BASED METHOD FOR CALCULATING POLYMER INACCESSIBLE PORE VOLUME IN

CORE FLOODING EXPERIMENTS

Ferreira, V. H. S. and Moreno, R. B. Z. L.

SCA027 012 Impact of injection rate on transient oil recovery under mixed-wet conditions: a microfluidic study

Magali Christensen, Xanat Zacarias-Hernandez, Yukie Tanino

SCA028 054 EFFECTS OF IONS ON THE CHARACTERISTICS OF MONOLAYER AT BRINE/OIL INTERFACES

Mohammed B. Alotaibi, Dongkyu Cha, Karam Chand and Ali A. Yousef

9:45 - 10:15 **Coffee Break**

10:15 – 11:30 **Session 5: Displacement Mechanisms / EOR #2**

Chairs: Jos Maas and Olga Vizika

SCA029 087 A novel experimental approach for studying spontaneous imbibition processes with alkaline solutions.

T. Chevalier, J. Labaume, A. Delbos, T. Clemens, V. M. Waeger,

B. Bourbiaux, M. Fleury

SCA030 125 REVIEW OF THE INTERCEPT METHOD FOR RELATIVE PERMEABILITY CORRECTION USING A VARIETY OF CASE STUDY DATA

Jules Reed, Jos Maas

SCA031 074 CO_2-BRINE INJECTIVITY TESTS IN HIGH CO_2 CONTENT CARBONATE FIELD, SARAWAK BASIN, OFFSHORE EAST MALAYSIA

A Giwelli, MZ Kashim, MB Clennell, L Esteban, R Noble, C White, S Vialle, M Ghasemiziarani, M Myers, A Saeedi, S Salwani Md Shah

11:30 – 12:00 **Business Meeting**

12:00 - 1:00	**Lunch**	
1:00 – 2:40	**Session 6: Pore Scale Imaging and Modeling #1**	
	Chairs: Olivier Lopez and Chris Arns	
SCA032	041 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, O. B. Wilson	
SCA033	072 ADDED INSIGHT FROM IMAGE-BASED WETTABILITY CHARACTERIZATION	
	Rudolf Held, Norbert Schleifer, Luis Genolet, Andrew Fogden	
SCA034	095 UNCERTAINTY QUANTIFICATION IN IMAGE SEGMENTATION FOR IMAGE-BASED ROCK PHYSICS IN A SHALY-SANDSTONE	
	James Howard, Sam Lin, Shawn Zhang	
2:40 – 3:10	**Coffee Break**	
3:10 - 4:00	**Session 6: Pore Scale Imaging and Modeling #2**	
	Chairs: Holger Ott and Olga Vizika	
SCA035	124 A DIGITAL ROCK PHYSICS APPROACH TO EFFECTIVE AND TOTAL POROSITY FOR COMPLEX CARBONATES: PORE-TYPING AND APPLICATIONS TO ELECTRICAL CONDUCTIVITY	
	Christoph H. Arns, Han Jiang, Hongyi Dai, Igor Shikhov, Nawaf Sayedakram, and Ji-Youn Arns	
SCA036	126 CAPILLARY DESATURATION CURVES AND INSIGHTS ON TRAPPED OIL AT THE PORE SCALE, IN WATER-WET AND OIL-WET SANDSTONES	
	Hélène Berthet, Mathilde Hebert, Prisca Andriamananjaona, Sandra Barbouteau, Remi Farwati, Redouane Meftah, Gerard Quenault, Jean-Philippe Chaulet, Regis Brugidou, and Richard Rivenq	
4:05	**Closing Remarks**	

Posters

SCA037	002 NON-DESTRUCTIVE PORE-SCALE APPROACH TO EVALUATE ELASTIC PROPERTIES OF SHALE SAMPLES BY IMAGING, MODELING AND SIMULATION Weifeng Lv, Langqiu Flora Sun
SCA038	006 ROCK ELECTRICAL PROPERTIES FROM POROUS PLATE AND RESISTIVITY EXPERIMENTS: TIPS TO MAXIMIZE DATA QUALITY F. Pairoys
SCA039	008 INSIGHTS INTO LOW SALINITY WATER FLOODING Hasan N. Al-Saedi; Ralph E. Flori; Patrick V. Brady
SCA040	011 RESIDUAL OIL SATURATION UNDER MIXED-WET CONDITIONS: OPTIMAL WETTABILITY REVISITED Magali Christensen, Yukie Tanino
SCA041	014 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, P. Egermann
SCA042	015 MEASUREMENT OF THE ORGANIC SATURATION AND ORGANIC POROSITY IN SHALE Qian Sang, Shaojie Zhang, Yajun Li, Mingzhe Dong Steven Bryantb
SCA043	016 FORMATION DAMAGE IN THE INTER-WELL ZONES: EXPERIMENTS AND ADVANCED ANALYTICS Denis Orlov, Dmitry Koroteev
SCA044	019 CONTINUOUS CORE MEASUREMENTS: APPLICATIONS FOR OPTIMIZED PETROPHYSICAL AND GEOMECHANICAL MODELLING IN SNE FIELD, SENEGAL. C. Germay, T. Lhomme, C. McPhee, Mike Starcher
SCA045	025 NUMERICAL SIMULATION OF NANOFLUID INJECTION IN OIL SATURATED POROUS MEDIA WITH ENVIRONMENTAL APPLICATIONS Alexandra Sikinioti-Lock, Katerina Terzi, Maria Theodoropoulou, Christos Tsakiroglou

SCA046	026 A METHODOLOGY TO PREDICT THE GAS PERMEABILITY PARAMETERS OF TIGHT RESERVOIRS FROM NITROGEN SORPTION ISOTHERMS AND MERCURY POROSIMETRY CURVES Christos D. Tsakiroglou, Adnan Al Hinai, Reza Rezaee
SCA047	032 AVOIDING ROUTINE CORE ANALYSIS PLUG DAMAGE BY PROPER EVALUATION OF CORE GAMMA-RAY, CORE DESCRIPTION AND WELLSITE CORE SAMPLING Norbert Schleifer, Emmanuel Kesse and George Lawrence
SCA048	033 LIQUID VAPOR ISOTHERMS IN NANO-POROUS MEDIA UNDER NMR OBSERVATION Aleksandr Denisenko
SCA049	036 X-RAY COMPUTED TOMOGRAPHY SUPPORTED BY NUCLEAR MAGNETIC RESONANCE AND MERCURY POROSIMETRY AS NOVEL APPROACH IN PORE SPACE CHARACTERIZATION OF TIGHT SANDSTONES Krakowska P., Puskarczyk E., Jędrychowski M., Habrat M., Madejski P., Dohnalik M
SCA050	039 CORE-FLOODS ON SITE: ASSESSING THE OPTIONS FOR WATER TREAMENT IN FIELDS WITH ACTIVE EOR APPLICATIONS T. Gumpenberger, P. Toplack, Ch. Pripfl, W. Vollnhofer, Ch. Einzinger, M. Marx and R. Grillneder
SCA051	040 AN EXPERIMENTAL SETUP FOR THE ASSESSMENT OF EFFECTS OF CARBONATE ROCK DISSOLUTION ON COMPLEX ELECTRICAL CONDUCTIVITY SPECTRA Matthias Halisch, Sarah Hupfer, Andreas Weller, Raphael Dlugosch, Hans-Peter Plumhoff
SCA052	045 HIGH FIELD MRI OF HYDRATE PHASE TRANSITIONS IN SANDSTONE S. Almenningen, J. Gauteplass, V.F. Veland, G.L. Aastveit, P. Fotland, and G. Ersland
SCA053	047 CHARACTERIZATION OF FLUID-ROCK INTERACTION BY ADSORPTION CALORIMETRY D. Korobkov, V. Pletneva, E. Dyshlyuk
SCA054	049 MEASURING RELATIVE PERMEABILITY WITH NMR M.J. Dick, D. Veselinovic, T. Kenney and D. Green

SCA055	051 SUPERCRITICAL METHANE DIFFUSIVITY IN POROUS MEDIA Nicholas J. Drenzek, Prem K. Bikkina, Jarred H. Kelsey, Clint P. Aichele, Jeffery L. White
SCA056	056 OVERVIEW OF THE LET FAMILY OF VERSATILE CORRELATIONS FOR FLOW FUNCTIONS Frode Lomeland
SCA057	060 PROBE MAGNETICS AS A RAPID, NON-DESTRUCTIVE SCREENING TOOL FOR CONSOLIDATED AND UNCONSOLIDATED CORE IN CONVENTIONAL AND UNCONVENTIONAL RESERVOIRS Toan H. To, David K. Potter, Aminat Abiola, and Vivian T. Ebufegha
SCA058	064 DYNAMIC ADSORPTION-DIFFUSION MODEL FOR SIMULATING GAS PRODUCTION IN SHALE Zehao Yang, Qian Sang, Yajun Li, Steven Bryant, Mingzhe Dong
SCA059	065 TOPOLOGICAL PERSISTENCE OF HETEROGENEOUS SANDSTONE Anna L Herring, Vanessa Robins, Mohammad Saadatfar, BenjaminYoung, Mark Knackstedt, Adrian Sheppard
SCA060	066 UNIVERSAL, FLOW DEPENDENT RELATIVE PERMEABILITY SCALING FOR STEADY-STATE TWO-PHASE FLOWS IN POROUS MEDIA Marios S. Valavanides
SCA061	068 EXPERIMENTAL INVESTIGATION OF STABILITY OF SILICA NANOPARTICLES AT RESERVOIR CONDITIONS FOR ENHANCED OIL RECOVERY APPLICATIONS Shidong Li, Nanji J. Hadia, Ng Yeap Hung, Hon Chung Lau, Ole Torsæter, Ludger P. Stubbs
SCA062	075 INVESTIGATION OF THE EFFECT OF TEMPERATURE AND PRESSURE ON INTERFACIAL TENSION AND WETTABILITY Taha M. Okasha
SCA063	096 INFLUENCE OF ASPECT RATIO AND WETTABILITY ON RESIDUAL OIL SATURATIONS AFTER WATERFLOODING AND IMMISCIBLE GAS FLOODING: A MICROFLUIDICS BASED STUDY SUSHOBHAN PRADHAN, GBEU KONE, RYAN ANTLE, CLINT AICHELE, HAIFENG JIANG AND PREM BIKKINA

SCA064	101 STUDY OF THE SULPHATE ION EFFECT ON OIL RECOVERY DURING LOW SALINITY WATER INJECTION IN DOLOMITES GUILHERME BUENO AQUINO DE OLIVEIRA, EDDY RUIDIAZ MUÑOZ, ALESSANDRA WINTER, OSVAIR VIDAL TREVISAN
SCA065	105 CHARACTERISTICS OF CARBONATE ROCK TYPES IN THE MIDDLE EAST MOUSTAFA DERNAIKA, BASHAR MANSOUR, OSAMA AL JALLAD
SCA066	113 CONTINUOUS VS DISCONTINUOUS CAPILLARY DESATURATION AND IMPLICATIONS FOR IOR/EOR RUI XU, BERND CROUSE, DAVID M. FREED, ANDREW FAGER, GARY R. JERAULD, NATHAN LANE, QIANG SHENG,
SCA067	123 TAXONOMY OF STEADY-STATE TWO-PHASE FLOWS IN POROUS MEDIA MARIOS S. VALAVANIDES

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Notes

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