

Dr Hank Rawlins



Dr Hank Rawlins is the Technical Director of eProcess Technologies with 25 years' experience in the upstream oil & gas industry. Hank is responsible for development programs in facilities sand management, produced water treatment, and compact separations systems. He received B.S., M.S., and Ph.D. degrees in Metallurgical Engineering from the University of Missouri-Rolla/Missouri S&T and is a registered professional engineer. Dr. Rawlins has fifty-one publications and is an active member of SPE where he served as past chair of the Separations Technology Technical Section (STTS). Hank also serves as adjunct professor at Montana Tech of the University of Montana.

Dr Simon Judd



Dr Simon Judd occupies the Maersk Oil Professorial Chair in Environmental Engineering at Gas Processing Center, Qatar University. He has over 25 years' post-doctorate experience in academic and industrial applied R&D incorporating all aspects

The Gas Processing Center, Cordially invites you to the Pre-Symposium Workshop:

PRODUCED WATER TECHNOLOGY WORKSHOP

DAY & DATE: Nov 27, 2016

TIME: 8:00 AM to 2:00 PM

VENUE: NRC (H10), room F101

About the Course:

Produced water (PW) generated by the oil and gas industry represents the largest volume by-product of petroleum production, with a water:oil ratio which increases with the age of the well. The increased volumes of water pumped as the well ages along with the increasingly stringent environmental standards imposed for its safe discharge impose ever greater challenges regarding treated water quality.

Course Content

The workshop is intended to provide an insight into the technologies currently available for produced water treatment both onshore and offshore, and to stimulate a discussion amongst the participants based on ongoing and projected developments in meeting the produced water management challenge. The underpinning unit process fundamentals, physical characteristics and overall performance in terms of water purification, along with other key facets such as system robustness, are provided for a range of treatment technologies. In the case of offshore technologies an analysis of the unit process footprint is also included, with reference to estimated hydraulic residence time.

of water and wastewater treatment technology, with a recent specific focus on produced water treatment technology. He is primarily focused on membrane separation technology, and membrane bioreactors in particular. He has authored/co-authored six books five textbooks in membrane and MBR technology and two in general water/wastewater treatment technology, along with more than 160 papers covering a wide range of water technologies and applications.

Dr Muftah El-Naas



Dr. Muftah El-Naas is QAFCO Chair Professor at the Gas Processing Center, Qatar University. He previously served as Chair of the Chemical & Petroleum Engineering Department and Director of Research Funding at the UAE University. He obtained a B. A. Sc. in Chemical Engineering from the University of British Columbia, Canada, M. Eng. and PhD in Chemical Engineering from McGill University. His areas of expertise include biotechnology, water treatment and purification, CO₂ capture and sequestration, membrane separation, and plasma technology. His recent research work has focused developing new, environmental-friendly technologies for the Oil and Gas industry; his research team have recently developed a patent-pending technology for refinery wastewater treatment.

You will learn:

The physicochemical characteristics of produced water are outlined, and key differences between water from gas and oil fields briefly explained. Treatability of the water both in terms of its physico-chemistry and biodegradability (using classical aerobic biological treatment processes is considered). The limitation of particle and droplet size is specifically considered for the classical physical separation processes.

Eligibility Criteria:

The workshop is appropriate for problem holders, consultants, contractors, regulators and other stakeholders in the oil and gas sector, and will include a forum to allow participants to engage in discussions around the various topics and issues raised in the course of the presentations.

Why you should attend

Unit processes considered range from the classical off-shore produced water treatment technologies based on enhanced gravitational separation (hydrocyclones), gas-assisted separation (induced gas flotation and compact flotation units) and media filtration (nut shell filters) to more advanced and novel processes such as membrane filtration. On-shore technologies include less spatially intensive processes such as classical aerobic biological treatment for removal of dissolved organic carbon. Onshore and offshore reuse opportunities are identified, with case studies outlined.

Gas Processing Center Certificate:

All the attendee will receive a certificate for attending this pre-symposium workshop.