



Western Australian Section

# Society of Petroleum Engineers WA Continuing Education Training

## Formation Damage and Productivity Enhancement in Oil & Gas Reservoirs

*SPE Distinguished Lecturer Pavel Bedrikovetsky (U. of Adelaide)*

7-8 February 2017, 0830-1730hrs

78 Murray St, Perth WA 6000, Curtin Graduate School of Business

Pricing	Early bird*	Regular
SPE members	\$200	\$250
Non-members	\$300	\$350
Students	\$100	

Course fees includes

- 2 days' training
- Complimentary registration to SPE
- Distinguished Lecture Lunch at Hilton (Feb 8)
- Snacks and lunches
- Hardcopy of training material

Tickets at [www.spe-wa.org](http://www.spe-wa.org)

### Who should attend

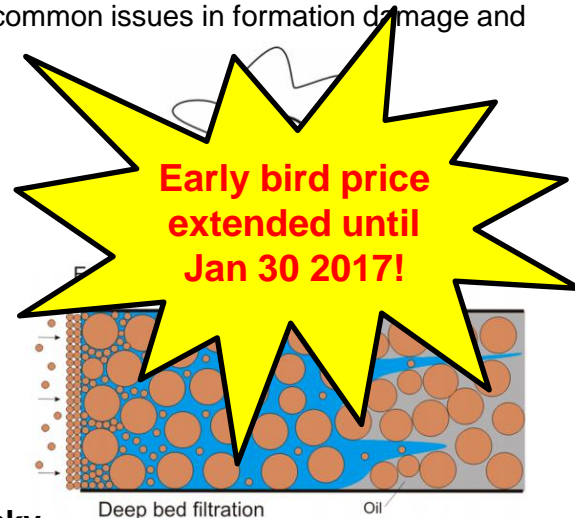
The course is aimed at drilling, production, and reservoir engineers, simulation and laboratory specialists involved in exploitation of oil and gas fields, water flooding, EOR, drilling, and well stimulation.

### Course objectives

The course will provide an overview at awareness level of common issues in formation damage and well stimulation, with coverage of waterflooding and EOR.

### Course outline

1. Introduction: General formation damage concepts
2. Formation damage in water injection and disposal wells. Mathematics, Laboratory study. Injectivity test. Field cases. Example exercises.
3. PWRI and RWI. Waterflood above fracture gradient. Exercises: depth of particle penetration; prediction of skin in fractured well.
4. Production formation damage (e.g. fines migration, scaling, sanding). Laboratory studies. Fines-migration test. Chemical compatibility test. Mathematical modelling. Exercises: calculate maximum retention function; predict productivity decline.
5. Formation-damage-assisted technologies: low-salinity and smart waterflooding, water-production control, cost-effective EOR. Incremental recovery due to wettability alteration and additional sweep due to induced damage. Field cases.
6. Lessons learned (Russia, Brazil, Germany, China).



### Instructor: Prof. Pavel Bedrikovetsky

**Pavel Bedrikovetsky** is an author of a seminal book in reservoir engineering and 215 technical papers in international journals and SPE. His research covers formation damage, unconventional resources, waterflooding and EOR. He holds MSc in Applied Mathematics, PhD in Fluid Mechanics and DSc in Reservoir Engineering from Moscow Oil-Gas Gubkin University. In 1991-1994 he was a Visiting Professor at Delft University of Technology and at Imperial College of Science and Technology. From 1994 and until now Pavel is a Petrobras Staff Consultant. He boasts 40-year industrial experience in Russia, Europe, Brazil and Australia. Currently he holds Chair in Petroleum Engineering at Australian School of Petroleum at the University of Adelaide. He served as Section Chairman, short course instructor, key speaker and Steering Committee member at many SPE Conferences. He is 2008-2009 and 2016-2017 SPE Distinguished Lecturer.

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### Course sponsors



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\*Early bird pricing until Jan 30, 2017