



## 8<sup>th</sup> Delft Summer School

29 June - 3 July 2020, Department of Geosciences and Engineering, Delft, The Netherlands

# Enhanced Oil Recovery for Carbonate Reservoirs

This school covers the basics of enhanced oil recovery processes, with special emphasis on carbonate formations. The course also covers characterization of carbonate reservoirs and highlights the complexity involved. The EOR processes are discussed from pore-level mechanisms to field-scale application, with an emphasis on simple, practical reservoir engineering design tools and fitting simulation parameters to laboratory and field data.

## Instructors

**Prof. G. Bertotti**  
(Delft University of Technology)

**Prof. M. Delshad**  
(University of Texas at Austin)

**Prof. G.J. Hirasaki**  
(Rice University)

**Dr. S. Masalmeh**  
(Shell)

**Prof. W.R. Rossen**  
(Delft University of Technology)

## Topics Covered

- Introduction and status of EOR for carbonate fields
- Rock characterization, carbonate petrophysics, residual oil and wettability, with focus on impact on EOR
- Heterogeneity and sweep efficiency in carbonates
- Gas, Solvent, Chemical EOR methods for carbonate fields
- Pore-level mechanisms of EOR processes in carbonate rocks
- Modeling of EOR methods in carbonates with focus on geochemical reactions and potential scale
- Guidelines for selection of EOR methods for carbonate fields

## Registration fee

- \$2500 attendees from industry
- \$1000 academic staff and post-doc researchers
- \$600 PhD students and Post doc researchers

We can admit limited number of participants. People who register earlier will have priority. Registration deadline is 15 April 2020.

For more information, visit [www.delftsummerschool.citg.tudelft.nl](http://www.delftsummerschool.citg.tudelft.nl)

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## Registration

For registration please send an email to  
[delftsummerschool-citg@tudelft.nl](mailto:delftsummerschool-citg@tudelft.nl)

## Instructors:

**Giovanni Bertotti** is a structural geologist with wide experience in the field. He is Professor of Geology in the Dept. of Geoscience and Engineering at the Delft University of Technology. He holds a MSc in Geology and a PhD from ETHZ. From 1991 to 2011 he worked at the Vrij Universiteit Amsterdam focusing on the (de)formation of sedimentary basins. Prof. Bertotti he has developed research lines on multiscale analysis of fractured reservoirs and on the tectono-sedimentary of rifted continental margins.

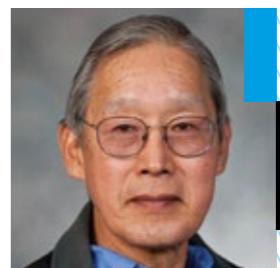


**Prof. G. Bertotti**  
Delft University  
of Technology



**Prof. M. Delshad**  
University of Texas  
at Austin

**Mojdeh Delshad** is a research professor in the department of Petroleum and Geosystems Engineering at the University of Texas-Austin. She served as the president/CEO of Ultimate EOR Services, LLC from 2014-2019. Her expertise and research interests are in petrophysical property modeling, chemical, gas, thermal, conformance control, and low-salinity EOR methods, and simulation of EOR field projects, CO<sub>2</sub> storage, and development of screening tools for EOR methods. She has about 90 refereed journal publications and co-authored 130 conference papers and 2 book chapters all about EOR processes. She was awarded the SPE rank of "A Peer Apart" for reviewing more than 100 technical papers. She received the SPE distinguished member Award in 2014.



**Prof. G.J. Hirasaki**  
Rice University

**George J. Hirasaki** had a 26-year career with Shell Development and Shell Oil Companies before joining the Chemical Engineering faculty at Rice University in 1993. At Shell, his research areas were reservoir simulation, enhanced oil recovery, and formation evaluation. At Rice University, his research interests are in NMR well logging, reservoir wettability, surfactant enhanced oil recovery, foam mobility control, emulsion separation, and proppant transport in hydraulic fracturing. He received the SPE Lester Uren Award in 1989. He was named an Improved Oil Recovery Pioneer at the 1998 SPE/DOE IOR Symposium. In 2016 he was awarded the Offshore Technology Conference Heritage Award and the Lucas Medal from the SPE/AIME. He was the 1999 recipient of the Society of Core Analysts Technical Achievement Award. He is a member of the National Academy of Engineering and The Academy of Medicine, Engineering, and Science of Texas (TAMEST).



**Dr. S. Masalmeh**  
Shell

**Shehadeh Masalmeh** is currently working as the EOR and SCAL Expert with ADNOC. Previously, he worked as a senior advisor reservoir engineer in ADNOC and a principal EOR reservoir engineer at Shell Technology Oman. Masalmeh holds a PhD in Physics from Leiden University and joined Shell in 1997 where he worked in the SCAL team and then had several international assignments. His research interests include fluid flow in porous media, wettability, hysteresis, chemical and gas EOR. Masalmeh has authored and co-authored more than 70 papers for symposiums and journals and holds several patents. Masalmeh is Shell principal technical expert in SCAL and subject matter expert in EOR. Masalmeh is the recipient of the 2015 SPE Regional Reservoir Description and Dynamics Award.



**Prof. W.R. Rossen**  
Delft University  
of Technology

**William R. Rossen** is professor of reservoir engineering in the Department of Geoscience and Engineering, Delft University of Technology. He has more than 100 journal publications and has delivered invited lectures and taught courses worldwide. Prof. Rossen's research focuses on the use of foams for diverting fluid flow in porous media and sweep improvement in EOR and network modeling of flow in porous media, including fracture networks. Prof. Rossen was named Best Instructor at Delft University of Technology in 2011. In 2012 he was named an IOR

## Organizing committee

**Dr. Rouhi Farajzadeh**  
**Prof. William R. Rossen**  
**Dr. Denis Voskov**

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