

## Dr. Denis Schiozer's Energi Simulation Industrial Research Chair Renewed [Denis José Schiozer](#)

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A three-year funding package from *Energi Simulation* is the focus of an Industrial renewed Research Chair in Reservoir Management through Digital Fields Concepts, in the University of Campinas, UNICAMP, Brazil.

*Energi Simulation* will support a Research Chair in reservoir engineering, which will be led by Dr. Denis Schiozer at UNISIM (CEPETRO/FEM/UNICAMP). The Chair will support a team of research associates and students in undertaking leading edge research in innovative methods for closed-loop reservoir managements, integrating models and data.

The central idea of the Chair is to improve an existent methodology for short-term and life-cycle optimization of petroleum fields based on UNICAMP's 12-steps methodology, using data and simulation models of different fidelities. This methodology is being prepared to be used in digital reservoir management.

The concept of model-based closed-loop field development and management, which is the basis for the current research lines of the group, will be used with a focus in shorter cycles and faster decisions based on models and data.

To achieve the general objective above, some important intermediate goals are set:

- Integrating life-cycle and short-term decisions;
- Use hybrid models (based on models and data) for field management;
- Study of the influence of model fidelity for each case (reservoir) and decision (stage of field development);
- Improve techniques to accelerate model responses;
- Develop new short-term dynamic data assimilation techniques;
- Improve the decision-making process of

control variables and field revitalization using models and data;

- Comparison of decisions based on different fidelity models and data.

UNISIM is a research group with more than 50 financed projects from the oil industries and government agencies created 23 years ago to develop new methodologies and innovation about petroleum reservoir simulation and management.

Founded in 1978, *Energi Simulation* (former Foundation CMG) was initially developed at the University of Calgary in the Chemical and Petroleum Engineering Department. *Energi Simulation* promotes and financially supports research and development and students through research grants at universities around the world, focusing on energy resource modelling. *Energi Simulation* plans to be the catalyst for an investment of \$250 million in the training of 2,000 graduate students and energy resource research by 2030. *Energi Simulation* has formed partnerships with governments, industry players, and universities to drive unique multi-year support of student education and world leading researchers at universities in Europe, Asia, Australia, South America, and North America.

### About the autor:

Dr. Denis José Schiozer has over 30 years of experience in the area of reservoir management and simulation. Schiozer joined the faculty at UNICAMP in 1988 and holds a Ph.D. degree in Petroleum Engineering from Stanford University, an M.S. degree in Petroleum Engineering from University of Campinas (UNICAMP), a B.S. in Aeronautical Engineering from the Technological Institute of Aeronautics (ITA) and an M.B.A. in Administration from Getúlio Vargas Foundation (FGV).

### UNISIM opportunities:

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Research in Reservoir Simulation and Management Group

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