

Alfredo Battistelli

Alfredo Battistelli is a senior reservoir engineer at Saipem SpA and a member of UGI, IGA, and SPE. His area of expertise is reservoir engineering and modeling applied to geothermal, greenhouse gas storage, acid gas disposal, and environmental applications. He has been involved in geothermal projects in Italy, Djibouti, Saint Lucia, China, Ethiopia, Poland, Indonesia, Dominica, Kenya, and Turkey. He is coauthor of EWASG, T2VOC, TMVOC, TMVOCBio, and TMGAS codes of the TOUGH2 family of reservoir simulators.

#### 1. Geothermal reservoir engineering

- conceptual models of geothermal systems
- thermodynamic state and fluid properties
- reservoir hydraulic properties & pressure transient analysis
- completion tests
- well production characteristics
- well logging & wellbore flow modeling
- building of conceptual model

#### 2. Geothermal reservoir modeling

- Mass and energy balance equations
- space discretisation and numerical solution
- EOS modules for geothermal applications
- building of a 3D numerical model
- natural state modeling
- modeling of reservoir exploitation
- production and reinjection Wells