

SERDAR KAYA

Advisor Geologist - Geomodeller

E-mail : serdar@grenergylc.com Skype : Kayaka63

Mobile: +90 (539) 4772377

Objective

With all my skills, talents and technical experience, as a senior geo-modeler, I am ready to consult my clients for their ever-rising financial and operational goals under all kind of complexity, competition and significant challenges as never happened in the history of oil industry before. I will be fully committed for a work environment with a high standard of technical and social values, respect for equitable rights, communication and cooperation for success, integrity and advancement of all.

Summary

- Expertise in Integrated Reservoir Characterization/Modeling, development planning
 - Specifically, in heterogeneous carbonate reservoirs with Petrel/Eclipse,
 - Completed 26 reservoir full geological models,
 - Participated in 9 Full Field Development Project,
 - Instructed basic and advanced geomodeling courses
- Twenty-nine (29) years of experience in industry with 12 years in industrial management and business development
- Excellent team-work, corporate program development and management skills obtained from various size of projects, built broad business network and government relations in USA, GCC, West Africa and Turkey
- Experienced in developing, implementation and managing customized engineering methodology/models/software/workflows
- Highly advanced skills in teaching/mentoring/coaching/supervising/managing of projects
- Currently Studying MBA, obtained BSc and MSc in Petroleum Engineering,

Education

2000-2001	Distance Education – Cornell University, USA Management Program
1996-1998	MS in Petroleum Engineering, The University of Tulsa, Oklahoma USA <i>Thesis: “Comprehensive Mechanistic Modeling Of Two Phase Flow In Deviated Pipes”</i>
1988-1992	BS in Petroleum Engineering, Middle East Technical University, Ankara, Turkey <i>Thesis: “Environmentally Hazardous Materials Discharged in Oil Industry”</i>

Work Experiences

Dec2022 – Present BAPCO Bahrain, Advisor Geomodeller-Geologist,

- Supervision of all geomodeling projects, Awali Field
- Instructing development program of junior geologist/geomodellers

Feb2015 – Dec2022 Grenergy LLC USA, Principal Consultant Leading Geomodeller-Geologist,

- Redevelopment of abandoned Chrystal Field, Michigan USA
- Development of short course content for reservoir modeling and instruction

- Development of workflows and approaches for uncertainty analysis and block evaluation, reservoir rock typing
 - Preparation of project proposals for various subsurface projects
- Sep2014 – Feb2015 X Systems LLC / Halliburton UAE, Principal Consultant Leading Geomodellers Team, Client: ADCO Bab Gas Team
- Generate workflow, delegate tasks among team members for integrated geological modeling
 - Build/update structural model, reservoir characterization of tight gas reservoir and development plan (FFDP) with more than 300 wells
 - Updating data base with all available seismic, well, and analogue data using and incorporating latest technologies, tools and workflows
 - Integration and troubleshooting of data from different disciplines: geophysics, petrophysics, reservoir engineering and drilling engineering at various stage of modeling workflow.
 - Evaluate previous and current volumetric results, perform stochastic, deterministic or combined volumetric calculation workflows
 - Generate uncertainty analysis workflow and modeling scenarios, capture all parameters impose various size of uncertainty envelop
- Aug2014 - Sep2014 GNPOC, Instructor / Modeling Coach, Istanbul, Turkey
- Instructed course for geological modeling with Petrel and trained geologist and geophysicist to use PETREL to be advanced user
- June2014 - Aug2014 US Oil and Gas PLC USA, Geoscience Manager, Hot Creek Valley Concession
- Evaluation of Appraisal activities, Basin Modeling, Prospect evaluation
 - Evaluation of development plan
- Jan2014 - June2014 Halliburton UAE, Principal Consultant Senior Geomodeller, Client: ADCO ASAB Team
- Workflow development to update framework model for a highly faulted carbonate reservoir with 53 stacked reservoirs and more than 700 wells
- Aug2013 - Jan2014 Baker Hughes UAE, Principal Consultant Senior Geomodeller, Client: Confidential Client Entire Onshore Abu Dhabi Fields
- Evaluation of entire onshore hydrocarbon portfolio,
- Oct2012 - Jul2013 Halliburton UAE, Principal Consultant Senior Geomodeller, Client: ADCO Bab Field Thamama C
- 3D geological modeling, saturation and production history match of a giant carbonate gas reservoir,
 - Coaching geologist team to perform the modeling work
- Jan2012 - Oct2012 Halliburton, Principal Consultant Senior Geomodeller, Client: ADCO Bab Field Thamama A
- Mentoring, Coaching, Training, Performing reservoir characterization and static modeling,
 - Structural modeling, reservoir characterization of tight reservoir and development plan (FFDP) of a field with more than one thousand wells
- Mar2011 - Dec2011 Halliburton, Principal Consultant Senior Geomodeller, Client: ADCO Bab Field Habshan 1 and 2
- 3D geological modeling, saturation and production history match of a giant carbonate oil reservoirs
 - Combining two reservoirs for testing commingled production simulation

- Mar2010 - Mar2011 Proearth, Geoscience Manager, Client: AGECO, KOC, Messla, Waha, Zagut Fields
- Prospect Evaluation of following blocks/fields in 3D environment, UNIOIL USA
 - North West Block in Ethiopia, Block VII.b, Supsa Field in Georgia, Block OML_277 in Nigeria, Block 3254, Kurtkiraci Prospect in Turkiye, 2006
 - Project Planning and Sub-surface study resource management
 - KOC Aquathermoloysis tests, biostratigraphy study, ADCO onshore exploration modeling and analysis, various WAHA AGECO projects,
- Aug2009 - Mar2010 Qatar Petroleum, Principia Consultant Senior Geomodeller,
- Review of Static Models, Refinement of 3D Properties, Rock Type Modeling
 - Qatar Mid Jurassic Reservoirs in BH and MM fields. Qatar Petroleum, Sep
- Sep2008 - Aug2009 Halliburton, Senior Geomodeller, Client: SONATRACH
- Structural modeling, reservoir characterization of tight gas reservoirs and field development plan (FFDP) of very faulted fields:
 - Algeria Ahnet Basin GF, BH and BZ fields
 - Structural modeling and reservoir characterization of following fields/reservoirs:
 - Upside North Hassi Massaoud Algeria,
- Aug2008 - Sep2008 IPR, USA Senior Geomodeller,
- Passive Seismic Application and data integration of Nurzhanova, Koturtas and Moldobek fields in Kazakhstan KAZMUNAYGAS November 2007
- Apr2008 - Jul2008 GDR, ITALY Geoscience Coordinator,
- Tando Alam Field Structural modeling, Property Modeling and Support of Simulation.
- Sep2004 - Apr2008 ADCO, Geomodeller,
- Field development planning, reservoir management, structural and property models of following undeveloped fields/reservoirs have been completed in 2 years period
 - Hail Field, Qusahwira Field (highly faulted), Bida Al Qemzan Thamama B and G, Bab Field Habshan Reservoirs (Tight, fractured) UAE, Booker Field, OK USA
 - Develop and publish innovative techniques for 3D permeability modeling which incorporates dynamic data, J function and correlation to 3D porosity.
- 2002 - 2004 Reservoir Engineer, Kelkar and Associates, Inc., Tulsa, OK
Consulting clients in reservoir characterization and simulation
- Conceptual field development plan with high level static and dynamic modeling of following reservoirs:
 - Qusahwira Field, LBM reservoir, Bida Al Qemzan, Habshan reservoir, Asab Field, Habshan Reservoir, Abu Dhabi UAE
 - Reservoir characterization and property ranking for defining best production locations, Antelope Field, OK USA
 - Field redevelopment planning, Integrated Reservoir Characterization and Flow Simulation Study – Morrow Field - Self Unit, Oklahoma, USA
 - Incorporation of seismic data to porosity prediction, 4D seismic integration
 - Integrated Reservoir Structural Modeling of Shah Simsima Reservoir– Shah Field – ADCO, UAE
- 1998 - 2002 Development and Support Engineer, CEALC – Tulsa – OK
- Customer support, training and consulting for production facility optimization
 - Code development of production/artificial lift modules in C/C++ and Fortran
- 1997 – 1998 Research Assistant, The University of Tulsa - Dept. of Petroleum Engineering
Development and implementation of research programs

- Implementation of 5 master/PhD research results as computer program.
- 1996 - 1997 Fluid Flow Project Group of TU, Research Assistant
- Implementation, testing and documentation of fluid flow models in Fortran language
- 1994 - 1996 In-Service Training Department,
- Instructor for Computer Programming / Applications
- 1992 - 1993 Firat Bilgi, Network Team Supervisor, Ankara, Turkey
- Object Oriented programming of Oil Industry Software
- 1991 Summer Summer Intern Engineer, Research Center, TPAO, Ankara, Turkey
- Carried out routine analysis of PVT, Core and Mud, participated in research
- 1989 Summer Intern Drilling Engineer, TPAO, Ankara, Turkey
- Actively participated in drilling and fishing operations

Short Courses Attended

Desktop VIP, Landmark Dynamic Simulation Program
 Career Development Center
 BP Field: The Future Technology
 Enterprise Project Mgt (EPM)
 SCAL: Saturation Function
 IDEA Training
 Mud Logging
 Reservoir Risk Assessment Modeling JACTA

Short Courses Instructed

Seismic Interpretation and Integration to Reservoir Characterization
 Workflow development and implementation in Petrel
 Introduction to Petrel and Geomodeling
 Artificial Lift Techniques and Training of CEALC Programs
 CPU Technologies and Assembler Language
 Effective team work methodologies

Honor/Award

- 1997 Award of Dr. J.P. Brill.
- 1996 Turkish Petroleum Corporation Sponsorship for graduate education

Skill

- Computer Programming : C/C++ (MS Visual C++), FORTRAN
- Reservoir Modeling Software : PETREL (Expert level), GOCAD (Intermediate), KINGDOM (Beginner)
- Geostatistics Software : GSLIB, COSIM
- Flow Simulator : ECLIPSE
- PC-Software : MS Office Suites

Languages

- Fluent in English
- Beginners in Arabic
- Native Speaker of Turkish

Publications

- Makhous M, Ernst D. RODE, Akrawi K, and Kaya, A. S.: “Application Of The Infrasonic Passive Differential Spectroscopy (IPDS) For Hydrocarbon Direct Detection And Reservoir Monitoring In Fields Of The North-Caspian Basin: Achievements And Challenges” Presented in SPE/EAGE Reservoir Characterization & Simulation Conference 2009, Abu Dhabi (SPE 125385-PP)
- Al Zaabi N., Soroka W.L., Abousetta A.A, and Kaya, A. S.: “Neural Net Prediction of Porosity from Seismic to Improve the Reservoir Model Away from Well Control,” Presented in ADIPEC 2008, Abu Dhabi.
- Makhous M, Ernst D. RODE, Akrawi K, and Kaya, A. S.: “Geospectra Infrasonic Passive Differential Spectroscopy (IPDS®): A Revolutionary Proven Technology For Direct Hydrocarbon Discovery In Structural and Non-Structural Traps” Presented in GEO 2008, Bahrain.
- Kaya, A. S., Ernst D. RODE, Karim AKRAWI, Dylan KIER “Integrated Application of Passive Seismic Technology For Trapped Oil Detection in Mature Fields and Hydrocarbon Discoveries in Adjacent Compartments”, Presented in Congress of the Brazilian Geophysical Society Rio de Janeiro, November 2007, Brazil
- Kaya, A. S., Maskry S., Ramos L., Sayed, A.R.: “Dynamically Modified Permeability Modeling from 1D to 3D,” Selected for GEOMODELING 2006, Russia.
- Ramos L., Maskry S., Block G. and Kaya, A. S.: “Geology guided static modeling with innovative property modeling approach,” Presented in GEO 2006, Bahrain.
- Kaya, A. S., Chen, X. T., Sarica, C. and Brill, J. P.: “Investigation of Transition from Annular to Intermittent Flow in Pipes,” Presented in ETCE 1998, Houston.
- Kaya, A. S., Sarica, C. and Brill, J. P.: “Comprehensive Mechanistic Modeling of Two-Phase Flow in Deviated Wells,” presented in ATCE, 1999.
- Tengesdal, J. O., Kaya A. S., Sarica C.: “An Investigation of Churn Flow: Flow Pattern Transition and Hydrodynamic Modeling Considerations,” SPEJ December 1999.