

EDMUND O. MORRIS

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SUMMARY

Academic Instructor, Research Engineer, Petroleum Engineer, Engineering Manager, Consultant

Extensive experience covering technical, operational, planning, auditing, commercial and managerial aspects of multiphase and high-profile engineering projects. Able to address financial constraints and complicated logistics to overcome project challenges. Excel in collaborating with clients, contractors and government agencies to meet or exceed design, quality, timeline and budget expectations.

EDUCATION

- Completed coursework towards PhD, Industrial Engineering at University of Houston
- M.S., Petroleum Engineering (May 2001), University of Houston, Houston, Texas
- B.S., Electrical Engineering (Dec. 1987), University of Houston, Houston, Texas
- B.S., Civil Engineering (Aug. 1984), University of Houston, Houston, Texas

SUMMARY OF EXPERIENCE

Professor, Houston Community College System, NW Campus, Houston, TX

9/2019 -

Adjunct Professor, Houston Community College System, NW Campus, Houston, TX

9/2014 – 8/2019

- Teach courses in Engineering at a variety of times and locations.
- Plan, develop, and use a variety of teaching methods and materials that assist students in meeting course objectives
- Develop and use a syllabus for each course or laboratory within college, discipline, and departmental guidelines
- Courses include – Engineering Mechanics, Statics/Dynamics, Engineering Graphics, Computer Programming for Engineers and Introduction to Engineering.

President, Engrasol, Inc. Houston, Texas

3/2013 -

Engrasol, Inc., with headquarters in Houston, Texas is a global integrated Energy company engaged in engineering and industrial applications. We offer custom solutions in the field of oil & gas, refining and petrochemicals and power generation. Our area of operation ranges from Petroleum, Mechanical, Electrical & Instrumentation, special metals and industrial valves.

Sr. Reservoir Engineer, Osypetro Corp., Houston, Texas

3/2004 – 2/2013

- Plan strategies and implement work programs involving geologic modeling, reservoir performance evaluation, reservoir simulation, well optimization, and appraisal and development drilling.
- Co-ordinate integration of static and dynamic data into geological and simulation models.
- Carried out field and reservoir studies and performed reservoir engineering functions including decline curve analysis, material balance, volumetrics, waterflood studies, pressure transient analysis, nodal analysis, etc.
- Prepare reservoir management plans and surveillance plans. Investigate application of technology and reservoir management best practices to determine strategies for optimum recovery.
- Perform various CO₂, and N₂ flood design and simulation studies including reservoir data collection and evaluation, model preparation and initialization, history matching, reservoir performance and economic evaluation.
- Geographical areas include: offshore Gulf of Mexico, Permian Basin (West Texas), Kansas, Oklahoma, Bakersfield California, Nigeria, Canada.

Reservoir Engineer, Osypetro Corp., Houston, Texas

1/2000 – 3/2004

- Evaluated depletion strategies and optimized production for reservoirs by black oil and compositional simulation studies.
- Generated Low-Mid-High estimates of original hydrocarbon-in-place, production rates, and recoveries for unconventional reservoirs.
- Performed reservoir performance analysis for gas reservoir and water flood reservoir.
- Determined the production potential from: infill drillings, producers/injectors conversions, injection redistribution, horizontal well drillings, and oil recovery.

Field Operations Manager, Magnetic Pulse Inc., Houston, Texas

3/1994 – 1/2000

Planned, led and supervised field engineers and operators in performing all aspects of engineering works for the successful, cost effective and safe implementation of MPI's exploration, development, workover and wireline activities, both in domestic and international areas.

- Implemented new logging techniques to identify by-passed hydrocarbon and mechanical problems.
- Coordinating geologists, engineers and operations staff to sustain production and identify opportunities.
- Responsible for the overall planning and direction of system effectiveness areas of reliability, maintainability, system safety and human factors engineering.
- Coached and mentored junior engineers in line with staff development plans

Completion/Well Test Engineer, Schlumberger Well Services, Lake Charles, LA

2/1992 – 2/1994

Worked within the cased-hole intervention discipline and the duties of this position include performing services related to well testing, formation evaluation, perforating services, conveyance, and explosive / radioactive handling.

- Analyzed well conditions and provided advice on well completions regarding a stimulation design that optimized production with consideration for both cost and risk.
- Directed and monitored the completion and evaluation of wells, well testing, and well surveys.
- Analyzed data to recommend placement of wells and supplementary processes to enhance production.
- Developed perforation, flow back, and stimulation best practices and standards in specific areas and formations.
- Responsible for the design, planning and management of completion and well intervention operations, with the full integration of the Operations team and subsurface team members.

Senior Field Engineer, Schlumberger Well Services, Lake Charles, Louisiana

1/1989 – 2/1992

Responsible for the design, planning and management of completion and well intervention operations, with the full integration of the Operations team and subsurface team members.

- Supervising engineers and skilled operators involved in oilfield wireline logging and completion operations.
- Performed both open hole and production logging operations, and processing/interpretation of well data.
- Provided technical input to reservoir, production and operational concerns.
- Assured quality control of all surface and downhole electronic instrumentations.
- Responsible for failure analysis down to the component level to identify causes for equipment failure during all phases of logging and testing operations.

Project Engineer, Reliant Energy, Houston, Texas

1/1985 – 12/1988

- Provided engineering support for fossil and nuclear electric generating facilities.
- Provided site construction designs, drawings, procedures, schedules and requisitioned field-purchased materials and equipment.
- Provided design engineering review and project coordination during startup of the South Texas Nuclear Power plant.
- Performed failure investigations and determined cost effective test and measurement criteria to determine actual failure causes.
- Recommended disposition of nonconforming hardware and specific corrective actions to prevent recurrence.

Professional Skills:

- Programming Languages: C++/C/C#, Fortran, MATLAB
- Computer: Windows, Linus, and Unix operating systems
 - Word/Data management (M.S. Office, adobe Acrobat)
- Statistics: SAS, SPSS, Systat, and Startview
 - Geostatistics Package: Statistical autocorrelation, Isatis Geovariances, GSLIB
 - Basic statistical analysis (e.g. ANOVA, ANCOVA, Regression), Multivariate Statistical Analysis
- Reservoir Engineering Applications:
 - Reservoir Simulators: ECLIPSE (Schlumberger),
 - CHEARS (ChevronTexaco), EMpower (ExxonMobil), working knowledge of VIP (Landmark)
 - Geological Modeling and Gridding Software: RMS, Gocad, Petrel, FloGrid
 - Well Testing Software: SAPHIR, AUTOMATE
- CAD/CAE Applications: AutoCAD, PTC Creo, Siemens NX, CATIA, SOLIDWORKS.

STUDY AREAS:

Reservoir Simulation, Flow Modeling in Heterogeneous Reservoirs, Reservoir Engineering, Geostatistics, Integrated Reservoir Modeling, Optimization, Thermodynamics, EOR, Gas Injection, Well Testing, Geomechanics, Numerical Analysis, Finite Element Analysis, Computational Fluid Dynamics, C++ Object Oriented Programming.

HONORS AND AWARDS:

Alfred Sloan Fellowship Award. (2002 – 2005)

Alliance for Graduate Education and the Professoriate (AGEP) Award Fellowship (2005 – 2009)

Schlumberger “Engineer of the Year” Award, Gulf Coast region (1989, 1990, 1991)

RESEARCH SUBMITTED AND IN PREPARATION:

Next Generation Reconfigurable Open Architecture PC based Robot Workcell Controller.

Using Variable Frequency Drives to produce significant energy savings in industrial heating, ventilating & air-conditioning.

Product Lifecycle Management: Advances in collaborative digital manufacturing.

PAPERS PRESENTED AT CONFERENCES:

A Creative Approach to Modeling Real-time Production/Inventory system. Presented at the International Conference on Industrial Automation, Houston, TX, 2000.

Coupling Reservoir Simulation Technology with the Internet to provide Real-time Reservoir Management. Presented at the SPE Reservoir Simulation Symposium, Houston, TX, 2001.

Use of Material Balance to Enhance 3D Reservoir Simulation. Presented at the SPE Annual Technical Conference and Exhibition, Denver, Colorado, 2002.

PROFESSIONAL AFFILIATIONS:

- Society of Petroleum Engineers (SPE)
- Institute of Industrial Engineers (IIE)
- Society of Professional Well Log Analysts (SPWLA)