

IHRDC

International Human Resources Development Corporation



INSTRUCTIONAL PROGRAMS

2009/2010

Instructional Programs Catalog



“Excellent. Simply excellent.”

—2008 participant



For The Oil And Gas Industry



Welcome to IHRDC's 2009 Instructional Programs Catalog

Dear Colleague:

I invite you and your colleagues to come to Boston this year to attend one of the outstanding, time-tested "petroleum industry foundation programs" that are outlined in this catalog. As the Program Director I can assure you that, like many other attendees in the past, you will discover that it will **exceed your expectations**. That is our objective and what our attendees consistently say. When we ask them why they are so outstanding, here is what they say:

"The programs are designed to provide the knowledge and skills that energy industry managers and specialists need to know in today's challenging energy industry. I was really refreshed and ready to return to work with a new vision of our industry!"

"The interaction and networking opportunities were outstanding – I met and became friends with 50 other participants from 30 countries!"

"All of the instructors were outstanding – very knowledgeable and great communicators!"

"The program, with its challenging business game, was interactive and allowed participants, working in teams, to discuss key issues and then make the types of decisions that are made in real life. What a great way to learn!"

"I was impressed that the program continues into the evenings and weekends when the wonderful IHRDC Team took us on evening cultural and social events, weekend regional excursions and shopping opportunities."

"Boston is one of the world's great cities and the IHRDC Team made sure that we could travel with ease and security everywhere in the city without the need for a car."

So we encourage you to look through our catalog and pick the program that meets your greatest needs. There are many to choose from including our time-tested **International Petroleum Management Certificate Program**, which many senior managers in the industry today have attended with outstanding success. Or perhaps, you will find our newest program, **Unconventional Resources and Renewable Energy Alternatives**, to be especially attractive because you want to become "current" on these new energy forms. Whatever your selection we encourage you to make your decision early, enroll online and allow us to begin planning for your arrival. Enroll early by going to www.ihrdc.com.

To give you confidence in our offerings, you should know that we have been successfully teaching programs of all kinds for more than 40 years, to the international oil and gas industry throughout the world on both public and private bases, for all forms of clients - majors, independents, national oil companies, service companies and government agencies. We have also developed and marketed three outstanding e-Learning series and provided consulting services for many clients in the areas of competency development and assessment.

I look forward to personally welcoming you to Boston or one of our other locations in 2009!

Sincerely,

Dr. David A.T. Donohue Ph.D., J.D.
President and Program Director

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About IHRDC

IHRDC was founded in 1969 on a commitment to offer oil and gas companies the very best products and services to train and develop their workforce. In the nearly four decades since then – from both our Boston headquarters and our offices in Amsterdam, Cairo, Caracas, Jakarta and Lagos – we have set a worldwide standard of excellence through our **Instructional Programs, e-Learning Solutions and Training Services**. For more information go to www.ihrdc.com.

The IHRDC Experience Combines Learning Excellence and Attention to Your Needs

For 40 years, IHRDC has been a worldwide leader in training and competency development for the oil and gas industry. Our Instructional Programs have gained a reputation for excellence in the industry for all of these years because of their unique design, superior instructors and attention to participant needs throughout their stay.



Engaging Instructional Format

Our unique and highly-regarded instructional design combines lectures by experienced oil and gas business specialists with challenging proprietary IHRDC "business games." Classroom sessions include timely, comprehensive, practical and challenging topic matter. Our business workshops allow participants to internalize learning through team discussion and decision making that reflect real-life challenging business opportunities. All of our programs feature instructors and mentors who make it a priority to provide a first-rate learning experience.



Boston Public Gardens



Museum of Fine Arts tour



Weekend bus trip to Kittery

Exciting Historical and Cultural Location

IHRDC's Oil and Gas Management Programs are offered annually in Boston, Massachusetts, U.S.A. This friendly and attractive city boasts countless cultural and historic attractions, world-renowned academic institutions, exciting sporting venues, excellent restaurants and hotels and a wide variety of shopping opportunities. Plus, it's known as "the walking city" and has terrific public transportation – there's no need for a car!

Stimulating Social Events and Cultural Activities

We want you to feel at home during your stay in Boston. With this in mind, IHRDC provides a Program Coordinator to assist you with your non-program needs. The Program Coordinator will also organize social events during the evenings and bus tours to regional sites of interest on the weekends. IHRDC personnel will guide you on evening group tours of select Boston and Cambridge museums, Harvard and MIT universities, help you explore Charles River and Boston Harbor via boat rides, and facilitate weekend visits to mountains and seaports in Maine, New Hampshire and Rhode Island. Our planned social events include group dinners at favorite local restaurants, theater outings, concerts, sporting events and special shopping tours to regional outlet malls.

Invaluable Networking Opportunities

By attending both classroom and social events with colleagues from all over the world, you will have a wonderful chance to learn from and network with some of the brightest professionals in the industry.



Walking tour of Back Bay



Copley Square, Boston



Team discussion during the "business game"



Visit to Harvard University



16th Annual International Gas Business Management Certificate Program

OVERVIEW

Through a careful balance of formal lectures by leading experts and unique workshop sessions, this two-week program provides participants with a comprehensive exposure to the technology, economics, finance, and markets that shape and affect the international gas industry today. It also teaches the management skills needed to develop projects and increase performance within an integrated gas business environment. This program is frequently taught in-house for major companies and receives very high marks for its broad scope, challenge, realism, and "fun."

WHO SHOULD ATTEND

This program is intended for specialists in one or more functional areas of the international energy industry who seek a comprehensive understanding of the gas industry.

INSTRUCTORS

David A. T. Donohue, PhD, JD
Helen Currie, PhD
Bradford R. Donohue, MBA, CFA
Marshall E. Frank, BS
Maher Habbal, MBA
Samy H. Ibrahim, MS
John B. (Jack) King, MBA
Robert W. Taylor, MS

UNIT ONE

UPSTREAM GAS BUSINESS

Overview of the International Gas Industry

Gas measurements and units; the gas chain; market structures; worldwide natural gas economics; regulation and deregulation; major players; evolution of the integrated gas-power business.

Host Government Agreements

Typical host country exploration agreements: summary of the history and key provisions, including bonus payments, royalties, taxes; production sharing; participation arrangements.

Exploration Methods

The exploration process: petroleum geology, exploration geophysics, well logging, developing exploration prospects, preparing and interpreting geological maps; case studies.

Drilling and Well Completions

Planning the well; logistics; drilling functions; drilling procedures; formation evaluation methods; horizontal wells; improvements in drilling.

Energy Project Economics

Economic yardsticks; project cash flow before and after tax; tax expenses and benefits; net cash flow stream and payout; time value of money; opportunity cost and present value of net cash flow; discounted cash flow analysis and internal rate of return; risk assessment and sensitivity analysis; examples of the economic analysis of energy projects.

Gas Field Performance and Reserves Estimation

Overview of production and reservoir management in the gas system; production technology; well testing; reservoir performance; reserves estimation.

Gas Processing: Technology, Economics, LPG and Ethylene Markets

Overview of gas processing systems; liquid separation processes; LPG fractionation options; compression; engineering design and contracting methods; the market for LPGs; project feasibility/economics; ethylene processing, economics and markets.

Gas Pipeline Systems

Major considerations in the cost-effective design, construction, and operation of gas pipeline systems; system design variables: impact on cost and capacity; estimating project costs; pipeline load factors; typical pipeline tariff; examples of recent pipeline construction costs.

Load Balancing Systems and Tariffs

Needs for load balancing and system/customer benefits; storage options, capital and operating costs: underground, cavern and LNG facilities; operational procedures; new options for marketing storage service; case examples.

Gas Sales Contracts

Typical terms in gas sales contracts; price-volume; risk allocation; from gas contracts to tariffs; indexing; re-openers; typical contract examples.

Measuring Financial Performance

Review of financial statements: income statement, balance sheet, cash flow and shareholders equity; capital and operating costs; measurements of financial performance; benchmarking; utility accounting methods; taxation; the accounting and audit process.

International Gas Economics

Overview of natural gas in world energy markets: worldwide gas supply, demand, exports and reserves; economics of gas supply and gas transportation; role of gas in regional energy markets: the U.S. and Japan as examples.

FULL PROGRAM DATES:

MAY 11 – 22, 2009

MAY 17 – 28, 2010

OCT. 5 – 16, 2009

OCT. 4 – 15, 2010

UNIT TWO

DOWNSTREAM GAS BUSINESS

Gas Market Analysis and Pricing

The need to identify gas markets early; gas market analysis; netback pricing and interfuel competition; market segments and market opportunities.

Gas-Fired Power Plants

Overview of combined-cycle gas turbine power systems; technology: plant design, fuel efficiency, available packages; project feasibility: capital costs, economics, risk, financing, contracts, markets, capital and operating cost estimating; contracting for fuel supply and power sales; worldwide power trends; examples of recent and planned projects.

Overview of LNG Business

Overview of the role of LNG within the gas chain; technology: LNG plants, liquefaction, ship design and operations, LNG re-gasification units; LNG project feasibility: capital costs, economics, risk, financing, markets; LNG plant design: gas reserves to support a plant, contract prices, contracting; examples of recently completed and planned projects.

Petrochemical Uses for Natural Gas: Methanol, Ammonia and Gas-to-Liquid Conversion

Use of gas for ammonia and methanol and conversion to liquid fuels; processes for conversion of gas to methanol; markets and project economics; ammonia and fertilizers: source of supply, types of processes, intermediate and end products, markets; project economics; examples of recent and planned projects; gas-to-liquid conversion; available technology; major players; capital and operating costs; economic analysis.

Gas Distribution

Overview of the gas distribution system; classes of customers and load factors; competition from other fuels; sources of gas supply: gas

supply contracts, prices, character of gas supply; structure and regulation of local distribution companies (LDCs); marketing demands; design and construction of distribution systems; expansion; operations: load balancing, distribution planning, maintenance, environmental considerations, rate-making policies and practices.

Project Financing: Commercial Debt Structuring and Case Study

Corporate and project financing; sources of debt and equity financing; public and private sources of capital; multilateral and bilateral sources of financing; risk assessment and mitigation; structuring of financing; preparing the financing plan; negotiating the term sheet; preparing the financing documents; closing. Case Studies – Examples of Project Financing: Qatar Gas Project; Colombia Power Project; U.S. Gas Storage Project.

Industry Regulation, Deregulation and Convergence

The nature of regulation in the energy sector; history and current state of the gas industry deregulation process at the wholesale and retail markets: U.S., Europe and elsewhere; effect of deregulation on the structure of the industry; convergence of gas and power.

Marketing Natural Gas in an 'Open Access' Environment

U.S. market structure; basic deal types and where they are done; the commercial organization; and current issues in U.S. natural gas markets.

Managing Energy Price and Volume Risks: Futures and Hedging

The history of energy price risk management; physical, forward and futures markets; typical futures market transactions; hedging, swaps and options; volume risk management; weather derivatives.

ATLANTIC BASIN GAS BUSINESS GAME: EXPETRA

This "business game" is an integral part of the learning process. Participants, divided into teams, make real-life technical, financial and market decisions that commonly confront managers in the international gas business today. Team performance is measured on a financial basis and is catalyzed by healthy competition.

The challenging Atlantic Basin business game takes place in "Expetra," a small island country in the Caribbean, north of Trinidad. Gas and condensates are expected to be discovered in the deep offshore. Teams enter into exploration agreements, explore for and discover hydrocarbon resources, and then decide on the best way to market them over a 15-year production period. Markets include LNG exports to the U.S. and Europe, LPG and ethylene plants, gas pipeline to Miami, gas distribution and storage operations in the U.S., power plants in the U.S. and Expetra, and export-focused ammonia, methanol and gas-to-liquid plants in Expetra.



WORKSHOP SESSIONS INCLUDE:

- Introduction to the exploration opportunity
- Negotiation of the exploration and development agreement
- Seismic exploration and mapping of seismic results
- Exploration drilling and reserves estimation
- Gas processing, LPG and ethylene market decisions
- The gas field pipeline decisions
- Integrating load balancing and pipeline facilities
- Gas-fired power plant market decisions
- Acquiring a gas distribution business in the U.S.
- Assessment of methanol, ammonia & GTL markets
- Export pipeline from Expetra to Miami
- Assessing two LNG market opportunities
- Integrated field development and market decisions
- Decisions during the project life-cycle

UNIT ONE DATES:

May 11 – 15, 2009

October 5 – 9, 2009

May 17 – 21, 2010

October 4 – 8, 2010

UNIT TWO DATES:

May 18 – 22, 2009

October 12 – 16, 2009

May 24 – 28, 2010

October 11 – 15, 2010

HR Processes and Change Management Program

OVERVIEW

This program is ideal for those who seek a firm grounding in the HR challenges facing the international oil and gas industry today, and the ways in which HR can contribute to implementing strategic plans including the management of change typically required to implement these plans successfully.

WHO SHOULD ATTEND

This program is designed specifically for mid- to senior- managers and supervisors from all sectors of the oil and gas industry who wish to enhance their competencies in essential HR management areas.

INSTRUCTORS

David A. T. Donohue, PhD, JD
Benley Beaver, MBA
Bradford R. Donohue, MBA, CFA
Timothy D. A. Donohue, MS
Kevin Rohan, MBA
Joseph Schechtman, MS
Carol Ann Sharciz, PhD

UNIT ONE

HR MANAGEMENT FOR OIL & GAS MANAGERS & SUPERVISORS

Overview of the Petroleum Industry Today

Oil and gas measurements and units; the value chains; market structures; worldwide oil and gas economics; major players; evolution of the integrated oil and gas business.

Systems Thinking: Developing a Big Picture Vision

Benefits of systems thinking to HR professionals; thinking systemically; attitudes and behavior; and understanding complexity.

Building the Workforce Scorecard

Introduction of the Workforce Scorecard; methods to align workforce with corporate strategy; measuring workforce success through metrics; three challenges to successful implementation; integrating with the Balanced Scorecard.

Whole Brain Theory: The Benziger Model

Whole Brain Theory and the Benziger Model; thinking styles and the natural giftedness of each individual; falsifying type; personal and societal costs; and the four specialized functions of the brain.

Emotional Intelligence and the Corporate Culture

Organizational culture and change; emotional intelligence, and applying emotional intelligence in your organization.

Human Resource Management

HR Processes; HR strategy model; building a manpower plan; source of personnel; recruiting and compensation.

Developing Competent Managers, Specialists and O&M Personnel in the Oil and Gas Industry

Typical competency levels, competency assurance system and process; effective development options using traditional and technology-based learning methods.

"Excellent. Exceeded my expectations."

– 2008 Participant

UNIT ONE DATES:

June 1 – 5, 2009

June 7 – 11, 2010

FULL PROGRAM DATES:

JUNE 1 – 12, 2009

JUNE 7 – 18, 2010

UNIT TWO

CHANGE MANAGEMENT

Change Management Overview

Understand key principles, systematic framework and tools for an effective change. Elements of the overview include stakeholders; culture; values; HR target model; future vision; stakeholder model; organizational design; manpower and succession planning.

Change Strategy

Develop a strategic change plan that includes both risks and durability. Elements of change strategy include a seven-element grid for planning; stakeholder assessments; inquiry and feedback sessions and preliminary communications.

The Change Plan

Understand the blending of change elements into an overall strategic plan. Elements of the change plan include tactics by phase; how to by stakeholder; change communications and project plan vs. change plan.

Change Assessment

Understand how a proposed change will impact an organization, and how to create an approach to achieve the vision. Elements of change assessment include the change management measurement model; translating the change into phases and 3 x 3 change risk assessment.

Change Planning and Communication

Development of a sample tactical change plan that is easy to understand by all stakeholders. Elements of change planning include communication and engagement planning; project plan vs. change plan and integrating with day-to-day business.

Change Leadership

Understand that leaders will precede the emotional changes of stakeholders. Determine the support they will require. Elements of leaders in change include executive coaching before, during and after; emotional intelligence – Meyers Briggs, DISC and Seven Points; Performance Dip and Zero Sum Game.

Sustaining the Change

Validate that a change implementation plan is geared for sustainability. Elements of sustaining the change include measures and elements; survey and feedback techniques and the change management model.

DEVELOPING NICOIL'S HR AND STRATEGIC PLAN: NICOLA

This "business game" is an integral part of the learning process. Participants, divided into teams, make real-life strategic and HR decisions that commonly confront managers in the international petroleum business today.

Teams have been retained to work with a small U.S. company of exploration specialists, Nicoil, that has made a major oil and gas discovery on a shallow offshore block licensed by the Republic of Nicola, an island republic off the West Coast of Africa. Reports state that two major discoveries were made: an oil reservoir containing an estimated 50 million barrels in-place and a deeper gas discovery containing an estimated 5 TCF in-place. The team assignment is to develop a strategic plan, which includes a comprehensive HR plan.

A consultant has provided the company with a menu of options that it could pursue to maximize the value of its discoveries. It will be up to teams to decide on Nicoil's business strategy and then prepare and implement a Workforce Success Strategy to achieve strategic and business goals.



WORKSHOP SESSIONS INCLUDE:

- Identify Nicoil's strategic plan, vision and mission
- Prepare a big picture view of Nicoil's needs and opportunities
- Convert strategic plan to Balance Scorecard
- Adopt Balance Scorecard to implementation plan
- Planning the Nicoil organization and Workforce Scorecard
- Identify Nicoil's corporate culture
- Build the Workforce Scorecard
- Build Nicoil's leadership
- Add management and specialists functions
- Add O&M specialists
- Identify HR best practices for Nicoil
- Plan the merger of ManOil with Nicoil
- Team presentations of HR plans

Financial Modeling and Petroleum Project Economics

OVERVIEW

During these two units, you will gain an integrated and practical understanding of financial analysis tools and techniques for the oil and gas industry that are related to building proforma project analysis, learning different methods of financial analysis and applying different risk analysis tools to projects. The instructional format capitalizes on a careful balance of formal lectures by leading experts and specially developed workshops and business games.

WHO SHOULD ATTEND

This program is designed specifically for energy managers, supervisors and key employees from broad functional areas, such as finance, technology and project development who wish to expand their knowledge of financial modeling and petroleum project economics.

INSTRUCTORS

David A.T. Donohue, PhD, JD
Bradford R. Donohue, MBA, CFA
Maher Habbal, MBA
Michael Kraten, PhD

UNIT ONE

FUNDAMENTALS OF FINANCIAL MODELING

Overview of the Petroleum Industry Today

Oil and gas measurements and units; value chains; market structures; worldwide oil and gas economics; major players; evolution of the integrated oil and gas business.

Introduction to Accounting and Financial Statements

Basic financial and accounting concepts and standard technology; depreciation, impairment and acquisition accounting; financial statements; accounting for investments; equity methods and consolidations.

Financial Statement Analysis

Background needed to understand and build models of the four key corporate financial statements; review and discussion of key measures of financial performance; consideration of the measures used by major companies and of participant's companies; steps required to build proforma financial projections.

Overview of Oil and Gas Accounting

Definition of various industry terms; classification of reserves and resources; introduction of two major accounting options to account for oil and gas costs: successful efforts and full cost; GAAP filing and valuation methods to comply with SEC filing requirements, includes asset impairment and asset retirement obligations.

Project Financing: Commercial Debt Finance

Corporate and project financing; sources of debt and equity financing; public and private sources of capital; multilateral and bilateral sources of financing; risk assessment and mitigation; structuring of financing; preparing the financing plan; negotiating the term sheet; preparing the financing documents; closing; Case Studies – Examples of Project Financing: Qatar Gas Project; Colombia Power Project; U.S. Gas Storage Project.

Energy Project Economics and Measures of Performance

Project cash flow analysis, discounting cash flow to obtain present value and internal rate of return, the cost of capital and the effect of debt financing, other measures of project performance; sensitivity to changes in key variables.

The Business Model

Using the balanced scorecard framework, regression analysis, and flexible budgeting, how does the organization earn profits? What are the key strategic drivers of financial success?

Cost and Expenses

"True costs" of developing and delivering products and services; Using gross profit analysis, activity-based costing techniques, and cost variance schedules.

Financial Statements

Using the business model, volume, expense, and revenue data to construct and understand financial reports; Using balance sheets, income statements, cash flow statements, ratio analysis, and performance outcomes measurements.

UNIT ONE DATES:

June 1 – 5, 2009

September 14 – 18, 2009

June 7 – 11, 2010

FULL PROGRAM DATES:

JUNE 1 – 12, 2009

SEPTEMBER 14 – 25, 2009

JUNE 7 – 18, 2010

UNIT TWO

PETROLEUM PROJECT ECONOMICS AND RISK ANALYSIS

Introduction to Petroleum Economics

The fundamentals of economics: background of and its application to the oil and gas industries.

Energy Project Risk and Uncertainty

Identifying and quantifying energy projects risks and uncertainty into project analysis; using statistical measures to quantify risk; two key risk assessment methods: scenario analysis and sensitivity analysis.

Event Identification

Identifying "trouble spots" that threaten the organization's ability to generate profit and value. Using event inventories, target risk-return profiles, risk tolerance levels, and event tracking processes.

Probability Theory and Quantitative Analysis

Introduction to probability theory, including probability density functions, overview of typical probability distributions and definition of key terms; applying probability theory in decision analysis with emphasis on concept of expected value.

Decision Tree Analysis

Applying a structured method for investment decision analysis; understanding the implications of different sets of decisions; identifying areas to reduce risk and understand economic opportunity cost of capital; identifying implications of various forms of contracts; analyzing implications of incremental project decisions.

Risk Assessment

Prioritizing trouble spots by likelihood of occurrence and potential impact. Using likelihood / impact tables, inherent / residual risk charts, and "heat" maps.

Risk Response

Assessing the organization's ability to respond to trouble spot "flare-ups" on paper and in reality. Using avoidance, sharing, reduction, and acceptance practices, as well as portfolio analysis techniques.

Monte Carlo Simulation

Extending the decision tree analysis framework for situations that include continuous probability scenarios; identifying power and limitations of simulations, emphasis placed on relevance of expected value; Crystal Ball commercial software used to model risk in financial model.

Field Development, Reservoir Performance and Surface Facilities

Formation evaluation; estimating reserves; field development; inflow performance; surface facilities design for both onshore and offshore operations; integrated reservoir management; enhanced recovery.

Managing Energy Price and Volume Risks: Futures and Hedging

The history of energy price risk management; physical, forward and futures markets; typical futures market transactions; hedging, swaps and options; volume risk management; weather derivatives.

Portfolio Theory and Real Options

Introduction to and discussion of Real Options and Portfolio Optimization, two other key methods used extensively today by many oil companies to evaluate project opportunities; understanding how a collection of investments can decrease overall risk in the portfolio.

ASIA ONSHORE BUSINESS GAME: OCEANA

This "business game" is an integral part of the learning process. Participants, divided into teams, make real-life technical, financial, and market decisions that commonly confront managers today. Team performance is measured on a financial basis and is catalyzed by healthy competition.

Participants, working in teams, will evaluate an oil and gas business opportunity in the Republic of Oceana, near Indonesia. They build a financial model that will integrate various risks associated with the investment. This model will utilize a proposed Production Sharing Agreement and incorporate revenue, capital and operating costs financing costs, and tax projections for the life of the project.

Throughout the program teams will add layers of complexity to the model by incorporating different types of risk analysis tools presented in the lectures. The teams will present their project analysis to a decision review board by outlining the risk profile and expected performance measures of the project. They then learn the outcome of those decisions. Emphasis will be placed on the practical implementation of the tools presented in lecture and on developing practical financial modeling skills.



WORKSHOP SESSIONS INCLUDE:

- Modeling the production sharing agreement
- Building the base case proforma financial statements
- Calculating standard measures of performance
- Sensitivity and scenario analysis
- Decision trees and expected monetary value
- Monte Carlo simulation
- Project selections, stakeholder and financial analysis
- Simulation of team investments in the economic environment
- Evaluation of performance and presentation of results

E&P Project Development Workshop

FULL PROGRAM DATES:

JUNE 8 – 12, 2009

JUNE 14 – 18, 2010

OVERVIEW

The objective of this workshop is to teach the commercial, technical, economic and project management processes required by today's specialists to explore for and develop a challenging, deepwater offshore field. It covers all aspects of upstream project management, including seismic program design and analysis, exploration drilling decisions, and field development planning, including resource estimation, well and reservoir performance, uncertainty management, and project economics within the confines of the classical upstream project management process.

WHO SHOULD ATTEND

This timely program is ideal for commercial and technology specialists who seek a practical understanding of the processes required to explore for and develop an exploration prospect. Originally designed for the graduates of a major corporation's fast-track E&P development program, it incorporates all the skills needed by specialists to develop the subsurface plan for traditional and deepwater offshore prospects.

note:

IHRDC recommends that those attending this program have some background in upstream petroleum technology.

INSTRUCTORS

David A. T. Donohue, PhD, JD
Y. Serdar Dogulu, PhD
Kenneth C. Ogle, MS

note:

Participants who wish to attend two full weeks of programs may enroll in Unit One of the Financial Modeling and Petroleum Project Economics, offered during June 1-5, 2009 (featured on pages 10-11).

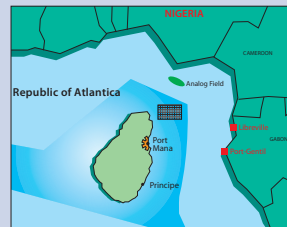
INSTRUCTIONAL FORMAT

This program features a mentor-based workshop environment where teams of participants methodically manage the exploration and development of a deepwater offshore prospect in West Africa. The major focus of the workshop is the Atlantica Business Game. During the business game, teams of participants make sequential decisions to move the prospect along a simulated timeline, from the execution of the exploration agreement to the end of the production. Presentations are made to mentors at key decision points during the week, and a final team presentation is made on their overall performance on the final day.

WEST AFRICA OFFSHORE E&P PROJECT BUSINESS GAME: ATLANTICA

This challenging digital workshop allows participants to learn the commercial, technical, economic, and project management processes (i.e., the Industry's stage-gate process) required to explore for and develop a modern, deepwater offshore field. It covers all aspects of a classical upstream project management process, from the design and interpretation of seismic programs, to specifying exploration and appraisal drilling decisions, from estimating resources in-place, to predicting well and reservoir performance and preparing field development plans. During each of these decisions participants are asked to identify and incorporate risks and uncertainty into robust project economic models to judge the viability of development.

Except for a few modest lectures, all workshop communications and analysis tools (including well logs, reservoir simulation, risk analysis and financial models, and decision analysis) are made available to the learner in a digital framework. This unique instructional format includes engaging mentors who guide teams of participants step-by-step through the exploration and development of a deepwater offshore prospect in West Africa. Teams are asked to make sequential decisions to move an attractive exploration opportunity along a simulated stage-gate timeline, from the execution of the exploration agreement to the field development decision. Each team's development decisions are captured, and the financial outcomes of those decisions are presented over a 20-year production period.



WORKSHOP SESSIONS INCLUDE:

- Review Atlantica exploration agreement
- Make seismic acquisition decision
- Evaluate seismic results, select location, plan and drill exploration well
- Design and drill appraisal wells
- Identify field development alternatives
- Study gas utilization options
- Analyze and optimize development well design
- Study field development plan under primary depletion
- Study the impact of improved recovery on field development
- Specify integrated field development decision and obtain approval
- Prepare optimal field development plan
- Review results and prepare team presentations

LECTURES

Oil and Gas Value Chains, Project Formulation and Development Process
Oil and gas business fundamentals along the value chains; key steps and decisions in the formation and commercialization of an energy project; screening and feasibility analysis; design and development; key project agreements; financial and risk analysis; project management; project definition; resource scheduling, cost estimating; and project controls.

Seismic Overview

Real-life seismic program issues; acquisition design, planning, contracting, cost, timeline; processing options, contracting, cost, timeline; re-processing considerations.

Offshore Drilling Overview

Rig types, logistics; government regulations – permitting process; well design, environmental issues; data acquisition; pore pressure and fracture gradients; potential loss zones; possibility of H₂S or CO₂; type of mud system; P&A, T&A considerations.

Practical Reservoir Modeling Issues

Scope of reservoir engineering; reservoir modeling tools; model selection considerations; types of models; objectives of reservoir simulation; uncertainty management; probabilistic forecasting; simulation study components; building and selecting the right model; recent trends in reservoir modeling.

Managing Uncertainty in Field Development

Decision making process and tools; reservoir management – team approach; subsurface uncertainty; uncertainties in surface facility and commercial operations; cumulative probability plots; Monte Carlo simulation; tornado diagrams; probabilistic forecasting; decision tree analysis; development planning; integrated reservoir characterization; portfolio management.

Offshore Well Completions in Field Development

Extended reach drilling; well types; completion types (sand control issues); wet versus dry tree considerations; AFE preparation; corrosion issues and method for treating; production issues - wax/plugging issues, high viscosity, H₂S, CO₂; stimulation requirements; cased hole or open hole completions; perforation requirements; artificial lift; workover requirements; downhole pressure monitoring.

Participants get the unique opportunity to learn from colleagues from all over the world. Here, teams work together on seismic decisions.



"Very good way of learning.

It's an excellent combination of theory and practice."

– 2008 Participant

Essential Skills for Oil and Gas Managers and Supervisors

OVERVIEW

This two-week program is designed for mid-to-senior managers and supervisors from all sectors of the oil and gas industry who seek to enhance four essential critical management skills: Leadership, Negotiation, Business Communication and Strategic Planning. The program is taught by highly regarded instructors who have had broad and practical management experience in the international oil and gas industry or as a specialist in the subject that he/she is teaching.

WHO SHOULD ATTEND

This program is designed specifically for mid- to senior- managers and supervisors from all sectors of the oil and gas industry who wish to enhance their competencies in four essential management areas.

INSTRUCTORS

David A. T. Donohue, PhD, JD
Elizabeth MacDonald, MA
Robert F. Ryan, MS
Kermit Walrond, PhD

Our lectures are lively, engaging, and full of real-world learnings.



UNIT ONE

LEADERSHIP SKILLS & ESSENTIAL NEGOTIATION

Leadership Skills Needed for High Performance Organizations

Effective individual and team leadership and management: motivation, managerial styles; organizational climate; goal setting and action planning; leading change methodology; simulation, presentation, discussion, case studies, small group work and assessment.

Leadership Case Study: Transforming the U.S. Marketing and Refining Division of a Major Oil Company

How a major oil company went from last to first in net margin per gallon in the marketing and refining of gasoline in the U.S. How strategic planning, leadership skills, and the use of the "Balanced Scorecard" were fundamental to this success.

Essential Negotiation Skills: A Process for Positive Results

The essentials of positive negotiation: the process of positive negotiation developed at the Harvard Negotiation Workshop applied to a petroleum case study. The key steps you will take to successful negotiations are:

Step One:

Discover Underlying Interests of the Parties

Underlying motivations, needs and concerns, fears and aspirations, understand your interests, understand the interests of the other side.

Step Two:

Generate Options to a Negotiated Solution

Inventing options to meet underlying interests; option as a possible agreement but not a commitment; obstacles that inhibit the invention of options.

Step Three:

Identify and Use Independent Standards

Making negotiation a joint search for independent standards, use standards to persuade and protect, distinguish which standards are appropriate.

Step Four:

Deal with People Problems

Separate the people from the negotiating problem; use people techniques to solve people problems: acknowledge emotions without blaming, improve communication- listen actively.

Step Five:

Generating Alternatives to a Negotiated Solution

Explore alternatives to the existing negotiated outcome; improve the terms of the negotiations; have an alternative solution in your "back pocket"; enhance the confidence of the negotiating process.

Step Six:

Reaching Closure

Think about closure before you begin negotiations, move toward closure gradually as negotiations proceed; start with a framework for agreement; only agree to everything at the end.

FULL PROGRAM DATES:

JUNE 15 – 26, 2009

JUNE 21 – JULY 2, 2010

UNIT TWO

EFFECTIVE BUSINESS COMMUNICATION & STRATEGIC PLANNING

Effective Business Communication

Setting a communication strategy: credibility, persuasion, and channel choice; Presentation Structure: writing vs. presentations vs. meetings vs. one-to-one conversations; writing more effectively; making effective presentations; running efficient meetings; speaking effectively one-on-one. Case studies and workshop sessions.

Strategic Planning and Implementation

Major trends and drivers of change within the international oil and gas industry: anticipating the future throughout the oil and gas value chains. Latest approaches to strategic planning and how important such plans are for setting company vision and goals; effective implementation of strategy; planning and implementation of the plan using the Balanced Scorecard. Historical structure of the international oil and gas industry. Examples of strategic planning by key international companies including Petrobras, Mobil Oil and others.

DEVELOPING NICOLIL'S STRATEGIC PLAN: NICOLA

This "business game" is an integral part of the learning process. Participants, divided into teams, make real-life strategic decisions that commonly confront managers in the international petroleum business today.

Teams have been retained to work with a small U.S. company of exploration specialists, Nicolil, that has made a major oil and gas discovery on a shallow offshore block licensed by the Republic of Nicola, an island republic off the West Coast of Africa. Reports state that two major discoveries were made: an oil reservoir containing an estimated 50 million barrels in-place and a deeper gas discovery containing an estimated 5 TCF in-place. The team assignment is to develop a strategic plan for the company.

A consultant has provided the company with a menu of options that it could pursue to maximize the value of its discoveries. It will be up to teams to decide on Nicolil's business strategy and then prepare and implement a strategic plan.



WORKSHOP SESSIONS INCLUDE:

- Identify Nicolil's strategic plan, vision and mission statement
- Convert strategic plan to Balance Scorecard
- Adopt Balance Scorecard to implementation plan
- Identify Nicolil's corporate culture

UNIT ONE DATES:

June 15 – 19, 2009

June 21 – 25, 2010

UNIT TWO DATES:

June 22 – 26, 2009

June 28 – July 2, 2010

NEW! Unconventional Resources and Renewable Energy Alternatives

FULL PROGRAM DATES:

JUNE 15 – 26, 2009

JUNE 21 – JULY 2, 2010

OVERVIEW

Every credible energy demand study projects that all forms of energy, including unconventional resources, will be required to meet worldwide demand over the next 25 years. This timely program will provide attendees with a comprehensive management overview of the technology, economics, markets, regulations, policy initiatives, project development fundamentals and comparative benefits of the non-traditional energy alternatives - the unconventional fuels and the various "renewables". This program is a must for those who wish to obtain a broad understanding of the role of each of these many forms of energy and how they can be developed on both a country-wide and a small-scale, community bases.

WHO SHOULD ATTEND

This program is intended for managers, specialists and government officials who seek a comprehensive and practical overview of the wide variety of non-traditional forms of energy that will be needed to meet energy demand growth worldwide between now and 2030. It is ideal for policy makers, strategic planners, project developers and all other decisions makers who wish to play a role in the future growth of the energy sector.

INSTRUCTORS

David A. T. Donohue, PhD, JD
Y. Serdar Dogulu, PhD
Richard A. Norman, MBA
Kenneth C. Ogle, MS
Rick Squires, MS
Martin R. Tallet, BS

UNIT ONE

UNCONVENTIONAL RESOURCES

Future Growth in Energy Demand

Drivers of energy demand; GDP growth, population growth, energy efficiency; demand projections in the various world markets; satisfying energy demand: traditional and non-traditional forms of energy; impact and need for non-traditional forms. Summary of various studies: IEA, EIA, others. Standard energy units and typical per capita transportation energy demand in different world markets.

Drivers of Renewable Energy: CO₂ Emissions and Global Warming

The case for global warming; government policies to limit emissions; country commitments to limit emissions; CO₂ trading in different world markets.

Drivers of Renewable Energy: The Challenge to Be More Energy Efficient

Measurement of energy efficiency; Options to become more energy efficient in our use of energy; impact of policies to reduce consumption.

Unconventional Oil

Unconventional oil resources – locations, resources and history of development; Mining of Athabasca tar sands: history of development, recovery processes including upgrading, project economics and typical development example; In situ production of tar sands: recovery technology, upgrading; project economics and case studies; Recovery of Venezuela heavy oil: history of development, recovery processes, upgrading, project economics, and typical development example. Recovery of oil from oil shales: history of work at Rifle, Colorado, plans for future development. Low Permeability oil: application of tight gas sand technology to low permeability oil recovery.

Unconventional Gas

Worldwide distribution of unconventional gas resources: tight gas sands, shale gas and coal bed methane; potential recovery factors. Overview of successful projects: technology, economics, project development processes and markets. Potential viability and current recovery technology for gas hydrates, gas-to-liquids and coal-to-gas.

Clean Fuels

The advantage of biofuels over traditional fuels; biofuel types and classification, biofuel crops options; principal biofuel crop growing areas and other sources of bioethanol and biodiesel; government policies with respect to usage of biofuels, supply, demand and expected market growth of biofuels in various world regions, crop prices and biofuel yields; blending of biofuels with traditional fuels to meet retail market specifications; biofuel manufacturing processes (first and second generation); biofuel project economics, tax incentives; recent history of the US market.

Transformation of Coal and Gas

The benefits and technology of transforming coal-to-gas or liquid fuels and the transformation of gas-to-liquid fuels; project fundamentals, project development and delivered energy costs; Case studies.

Hydrogen Fuel

Hydrogen as a potential transportation fuel: technology, current developments, and potential for the future; impediments to usage; the first filling station in California.

UNIT TWO

RENEWABLE ENERGY ALTERNATIVES

Power Industry Fundamentals and Market Demand

The power value chain – supply, transmission and distribution; Industry terminology and electric usage characterization; estimating demand of various classes of customers in different regions of the world; Traditional forms of power generation: processes, fuels, efficiencies and typical delivery costs. Traditional and open access market structures; typical per capita electricity demand in different world markets today and projections through 2030.

Renewable Energy Benefits and Government Policies to Encourage Its Usage

Global warming and the need to improve the environment; Opportunities to improve energy efficiencies – the no-cost initiatives; Government policy options to stimulate the use of renewable energy and demonstrated responses to date; considering both the small consumer and regional/country solutions from poor to wealthy nations.

CO₂ Sequestration: How Is It Achieved?

Options for disposing of CO₂ in a safe and effective manner; Progress to date and expectations for the future; Explanation of how it is done and at what cost

Nuclear Generation: The No-CO₂ Emissions Option

The nuclear power value chain from supply of fuel to its disposal; Innovations in plant design; government policies to shorten project development time; expected costs of new projects; Major players, recent development history and announced new projects. Potential of nuclear development as a major energy source.

Large Hydro and Micro Hydro Energy Opportunities

Historical development, technology and current energy delivered by traditional hydro generation projects; project development requirements; delivered energy costs; Micro hydro technology and typical installations; project development requirements and delivered energy costs; Case studies of recent applications.

Solar Energy Opportunities

Historical development of large and small solar energy projects (thermal and photovoltaic), technology, project development fundamentals and delivered energy costs of recent installations; Case studies of both large and small solar projects.

Geothermal Energy Opportunities

Historical development of and siting of geothermal energy projects; technology, project development fundamentals and delivered energy costs of recent installations; Case studies of both large projects and the single home installation.

Biomass Energy Opportunities

Historical development of biomass energy projects; technology, project development fundamentals and delivered energy costs of typical installations; Case studies of both large and small biomass projects.

Wind Energy Opportunities

Historical development of large and small wind energy projects (offshore and onshore), project development fundamentals and delivered energy costs of recent installations; Case studies of both large and small wind projects.

Ocean Energy Opportunities

Historical development of ocean energy (tidal, wave) projects; Technology, project development fundamentals and delivered energy costs of recent installations; Case studies of both large and small ocean energy projects.

ENERGY BUSINESS GAME: ENERGIA

Energia is a rapidly developing country, located in southern Africa, with a diverse geography: high mountains, fertile plains, areas of hot deserts, geothermal hot springs and modest streams and large rivers that empty into the Atlantic. It has an annual temperature cycle from hot summers in the north to cool winters in the south. Its GDP has been growing at the rate of 10% per annum; however, its only energy sources consist of imported petroleum products, coal-fired power plants, diesel peaking plants and an older hydroelectric facility. It does, however, have sizeable tight gas sand and deeper, heavy oil resources. Your team is asked to develop an energy plan to meet the needs of the country during the next 25 years that minimizes both CO₂ emissions and delivered costs.



WORKSHOP SESSIONS INCLUDE:

Introduction to the Republic of Energia and the President's challenge to plan the energy demand of the country.

ANALYZING ENERGIA'S:

- Energy demand growth expectations, government policies and the needs of individuals in rural areas
- Unconventional oil project opportunities
- Unconventional gas project opportunities
- Biofuel opportunities
- Coal transformation opportunities
- Gas-to-liquids opportunities
- Unit One Team Presentation

ANALYZING ENERGIA'S:

- CO₂ sequestration opportunities
- Small nuclear energy project opportunity
- Hydro project opportunities
- Solar project opportunities
- Geothermal project opportunities
- Biomass fired project opportunities
- Wind energy opportunities
- Ocean energy opportunities
- Prepare and present the Energia optimal energy plan

UNIT ONE DATES:

June 15 – 19, 2009

June 21 – 25, 2010

UNIT TWO DATES:

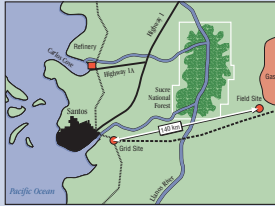
June 22 – 26, 2009

June 28 – July 2, 2010

19th Annual International Petroleum Management Certificate Program

LATIN AMERICA POWER WORKSHOP: SUCRE

During Unit Three, teams are asked to develop a realistic CCGT power project in the Republic of Sucre, a fictitious country in Latin America. Each team is asked to prepare a business plan for the project, which will include a set of decisions with respect to construction, fuel supply and power purchase agreements, EPC and O&M contracts, and financing. Then, decisions will be run over 15 years of simulated operations for the "business game" environment.



WORKSHOP SESSIONS INCLUDE:

- Project description, management and market analysis
- Project economics and proforma analysis
- Project schedule and management plan
- Identifying the project risks
- Reviewing the financing term sheet
- Design the project financing
- Review the fuel supply and power sales agreements
- Evaluation of performance and presentation of results

UNIT THREE PETROLEUM PROJECT DEVELOPMENT

The Process of Commercializing Energy Projects

Key steps in the formation and commercialization of an energy project – from opportunity to operation; screening and feasibility analysis; design and development; key project agreements; preparing proforma financial projections; risk analysis and risk management; project management; project definition; resource scheduling, cost estimating; project controls; cost engineering; detailed engineering; procurement; construction management; project accounting and auditing; environmental management. Project Management Institute (PMI) body of knowledge and certification requirements.

Project Planning and Management of Energy Projects

Steps in the development of a petroleum project: screening studies, feasibility studies; detailed engineering, environmental studies; financing construction and operation. Project management examples of energy projects: the integrated planning and development of an international combined-cycle power plant. Case study: Developing the Steuben Gas Storage Facility.

Health, Safety and Environmental (HSE) Challenges in Petroleum Operations

Worldwide developments in HSE performance, management and regulations; key technical, managerial and societal issues and responses; sustainable development, eco-efficiency, social impact; factors that affect cost; integration of HSE in the business; risk acceptance/tolerance, due diligence, accountability, liability; integrated health, safety, and environmental management systems, international standards, ISO 14001 certification, EMAS verification, audit, reporting and assurance to stakeholders.

Petroleum Law

Key legal issues in petroleum management; transnational and international oil and gas law; the role of law in commercial transactions; role of the legal system; role of the attorney; commercial relationships; host country agreements and government relations, joint venture agreements; oil and gas contracts and agreements; crude oil sales and transportation; risk management and dispute resolution.

Financing of Energy Projects

Financing petroleum projects; sources of debt and equity; preparing the financing proposal; negotiating financing; reaching the decision to proceed; project financing: structuring, role of multilateral and bilateral agencies; case studies: project financing of international oil, gas and power projects; case studies.

UNIT FOUR KEY SKILLS FOR THE PETROLEUM MANAGER

Leadership Skills Needed for High Performance Organizations

Effective leadership and management: motivation, managerial styles; organizational climate; goal setting and action planning; leading change methodology; simulation, presentation, discussion, case studies, small group work and assessment.

Leadership Case Study: Transforming the U.S. Marketing and Refining Division of a Major Oil Company

How a major oil company went from last to first in net margin per gallon in the marketing and refining of gasoline in the U.S. How strategic planning, leadership skills, and the use of the "Balanced Scorecard" were fundamental to this success.

Current HR Practices in International Oil and Gas

Current HR policies and procedures, organizational design, recruitment, manpower planning and development in the performance of the organization; defining job specific competency models and development plans.

Strategic Planning and Implementation

Major trends and drivers of change within the international oil and gas industry: anticipating the future throughout the oil and gas value chains. Latest approaches to strategic planning and how important such plans are for setting company vision and goals; effective implementation of strategy; planning and implementation of the plan using the Balanced Scorecard. Historical structure of the international oil and gas industry. Examples of strategic planning by key international companies including Petrobras, Mobil Oil and others.

Essential Negotiation Skills: A Process for Positive Results

The essentials of positive negotiation: the process of positive negotiation developed at the Harvard Negotiation Workshop applied to a petroleum case study. The key steps you will take to successful negotiations are: identify interests, invent options, use standards, manage people problems, develop alternatives, BATNA and reach closure. Team participation in an oil and gas case study.

DEVELOPING NICOIL'S STRATEGIC PLAN: NICOLA

During Unit Four of this program, teams have been retained to work with a small U.S. company of exploration specialists, Nicoil. They have made a major oil and gas discovery on a shallow offshore block licensed by the Republic of Nicola, an island republic off the West Coast of Africa. Reports state that two major discoveries were made: an oil reservoir containing an estimated 50 million barrels in-place and a deeper gas discovery containing an estimated 5 TCF in-place. The team assignment is to develop a strategic plan.

A consultant has provided the company with a menu of options that it could pursue to maximize the value of its discoveries. It will be up to teams to decide on Nicoil's business strategy and then prepare and implement a plan to achieve strategic and business goals.



WORKSHOP SESSIONS INCLUDE:

- Identify Nicoil's strategic plan, vision and mission
- Prepare a big picture view of Nicoil's needs and opportunities
- Convert strategic plan to Balance Scorecard
- Adopt Balance Scorecard to implementation plan

UNIT THREE DATES:

September 28 – October 2, 2009

September 27 – October 1, 2010

UNIT FOUR DATES:

October 5 - 9, 2009

October 4 – 8, 2010

Petroleum Business Workshops

OVERVIEW

IHRDC has developed thirteen practical workshops on energy business management that are taught on a private in-house or regional multi-company basis. Designed around IHRDC's comprehensive Management Programs, these workshops are ideal for teaching international energy business essentials.

Each program combines lectures by experienced energy business specialists with a classic IHRDC "business game" where participants work in teams to develop and manage an energy business over a simulated 20-year period. Computers are used to record each team's decisions and measure overall team performance. This form of learning has proven to be ideal for experienced managers, because they challenge team members to reach decisions through debate and discussion. In essence, they learn from each other in the context of a realistic case study.

Our Energy Business Workshops consistently receive very high praise. They are offered on an in-house basis to many international companies who schedule them annually to develop the important business knowledge and skills of their asset managers. Ideally these workshops are organized on a residential basis for maximum effectiveness.

INTERNATIONAL GAS BUSINESS WORKSHOP (5 DAYS)

This intensive one-week business workshop introduces participants to all aspects of the integrated natural gas value chain. Through formal lectures and a challenging, team-based business game, participants learn the commercial, technical, financial, and economic aspects of the business – from upstream gas supply to midstream transportation and processing and downstream markets. Special emphasis is placed on LNG, gas-fired power plants and GTL opportunities. IHRDC has developed two business game settings that will be offered according to regional relevancy:

Singnam

This business game focuses on the challenge of commercializing and managing a sizeable gas prospect in Asia over a 20-year period. The setting is an undeveloped but highly populated hypothetical country on the South China Sea called "Singnam."

Expetra

The setting of the alternative business game is the Atlantic Basin, where teams choose to explore several offshore exploration blocks in the "Republic of Expetra," an unexplored island in the Caribbean just north of a major gas discovery in Trinidad.

INTERNATIONAL POWER BUSINESS WORKSHOP (4 DAYS)

This workshop provides international oil, gas and power professionals with an overview of the international power business, with special emphasis on the commercialization of combined-cycle, gas-fired power plants. The instructional format includes formal lectures and a challenging, team-oriented business game. This popular program has been taught in many international locations and, for many years, was a core program for a major petroleum company.

LNG BUSINESS WORKSHOP (2 DAYS)

In this two-day workshop, participants learn the technical, commercial, legal and business essentials of LNG projects at each step along the LNG value chain. Through a combination of lectures and a challenging LNG business game, the session progresses from the host country agreement and gas production to liquefaction, shipping, receiving terminals and gas marketing. The LNG business game takes place in either "the Republic of Pacifica," an island republic off the coast of Peru or "the Republic of Sogal, an island republic off the West coast of Africa. Participants, working in teams, are asked to develop a significant gas resource by deciding which LNG technology and train size to implement, what size ships to charter, what receiving terminal options to accept and where to sell the LNG – North and South America, Europe and Asia. The financial performance of these decisions are then reviewed after 20 years of simulated performance.

GAS CONTRACTS WORKSHOP – NEW! (3 DAYS)

This practical workshop is intended for those who wish to learn the legal and commercial aspects of Gas Sales Agreements. It is achieved through a combination of introductory lectures, class discussion and team participation in a challenging business game in which the teams negotiate term sheets for three sets of agreements: an initial one between a West African gas producer and a local power plant, a second one between the producer and an LNG developer and the third between the LNG developer and ultimate purchasers in three developed countries that have different gas market pricing structures. Each team presents the 20-year commercial results that rely on its negotiated agreements. During the program the participants also review jointly the terms of the Association of International Petroleum Negotiators ("AIPN") Model Form Gas Sales Agreement, a Standard NAESB Contract for sale of gas in the USA and, at the end, obtain approval of all agreements from the Host Country.

Please note: The LNG Business Workshop and Gas Contracts Workshop may be combined into a 5 Day program.

INTERNATIONAL PETROLEUM BUSINESS WORKSHOP (5 DAYS)

This workshop uses lectures and a business game to provide a thorough grounding in the petroleum (oil and gas) value chain, including exploration agreements, exploration methods, drilling, field development, production, reservoir engineering and enhanced recovery, pipeline transmission, refinery and petrochemical operations, and marketing of crude oil and products.

During the business game, participants work in teams to find and develop oil and gas reserves in the West Africa Republic of Sandland and then decide on the optimal way to develop and market the production. In each session, the teams are given background information on the technical and economic aspects of the decision to be made during that session. Then they pursue the development and marketing of the discovered oil and gas from the upstream to the midstream and downstream 'markets' over a 20-year horizon.

As participants apply classroom knowledge to practical job-related problems, they also develop the key financial skills used to measure project and corporate performance, including project investment analysis and financial statements.

OVERVIEW OF THE INTERNATIONAL PETROLEUM BUSINESS (3.5 DAYS)

This workshop is an abbreviated version of our popular International Petroleum Business Workshop. It is ideal for individuals from many different backgrounds (lawyers, accountants, HR, IT specialists, etc.) who seek a broad introduction to the international petroleum industry. It introduces participants to the integrated oil and gas value chains through a combination of "overview lectures" and team participation in a challenging business game set in West Africa.

Sessions begin with an Overview of the Industry and then progress to the *Upstream Sector* (Host Country Agreements, Exploration, Drilling, Reserves Estimation, Field Development, Crude Marketing), *Midstream Oil Sector* (Crude Transportation and Refining), *Midstream Gas* (Transportation, Processing), *Downstream Oil* (Products Distribution and Sales), and *Downstream Gas* (Distribution, Power Generation, and Petrochemicals).

During the business game, teams of participants explore for and discover oil resources and then decide on how the upstream and midstream oil and gas sectors will be developed in order to sell hydrocarbons into the downstream markets that they have elected to develop. Their decisions are then implemented over a 20-year production period and the financial results are reported for each team at the end of the program. The team with the best performance is awarded the Workshop Prize! IHRDC has received rave reviews from participants who have attended this program because ... "it is a very effective and fun way of learning!"



International Gas Business Workshop, Venezuela



Winning Team

Petroleum Business Workshops

UPSTREAM PETROLEUM AGREEMENTS: INTEGRATION OF LEGAL AND COMMERCIAL ISSUES (5 DAYS)

This program provides an overview of the legal and commercial aspects of upstream petroleum agreements – including host country oil and gas exploration agreements, joint venture arrangements and operating agreements, service agreements and product sales agreements.

The focus of the program is the application of E&P business fundamentals to the negotiation and implementation of the agreements found along the upstream petroleum value chain. The learning format is a balance of formal lectures and team participation in a unique petroleum business game in the Republic of Nicola. The format has been highly rated by past participants as a challenging and effective way to learn the legal aspects and financial impact of host country agreements.

NEGOTIATING SUCCESSFUL UPSTREAM PETROLEUM AGREEMENTS – NEW! (5 DAYS)

This workshop is an ideal program for those who wish to learn both the financial and legal aspects of Upstream Petroleum Agreements and negotiating skills necessary to achieve win-win outcomes. Participants initially learn the essential terms of host government agreements from both the contractor and government points of view. Then, using a specially designed financial model, participants analyze the economic returns of a realistic exploration and development program in the fictitious island “Republic of Atlantica” off the coast of West Africa under a typical Production Sharing Contract.

After completing their analysis, the participants, working in teams, engage in active negotiations by playing the role of either the government or the contractor. In the process, they use the “Getting to Yes” method of negotiation to achieve win-win outcomes.

This challenging learning process allows participants to effectively internalize the essential aspects of Upstream Petroleum Agreements. Two experienced instructors/mentors make it all very challenging and enjoyable!

DEEPWATER E&P PROJECT DEVELOPMENT WORKSHOP (5 DAYS)

This challenging digital workshop allows participants to learn the commercial, technical, economic, and project management processes (ie. the Industry’s stage-gate process) required to explore for and develop a modern, deepwater offshore field. It covers all aspects of a classical upstream project management process, including seismic program design and analysis, exploration and appraisal drilling decisions, field development planning including resources estimation, well and reservoir performance predictions, uncertainty management, and project economics.

Except for a few modest lectures, all workshop communications and analysis tools (including well logs, reservoir simulation, risk analysis and financial models, and decision analysis) are made available to the learner in a digital framework. This unique instructional format includes engaging mentors who guide teams of participants step-by-step through the exploration and development of a deepwater offshore prospect in West Africa. Teams are asked to make sequential decisions to move an attractive exploration opportunity along a simulated stage-gate timeline, from the execution of the exploration agreement to the field development decision. Each team’s development decisions are captured, and the financial outcome of those decisions are presented over a 20-year production period.

Note: IHRDC recommends that those attending this program have some background in upstream petroleum technology.

PETROCHEMICALS, REFINING AND GAS PROCESSING WORKSHOP (5 DAYS)

This program provides a comprehensive overview of today’s international petrochemical business with emphasis on how it can be integrated with the refining and gas processing sectors to improve operating margins. The program examines the many petrochemical product options with emphasis on the technical, economic, commercial, and market factors that shape these important downstream sectors of the industry. Special attention is given to their integration and the ways in which profit margins can be improved. In order to enhance the learning process, teams of participants compete for the “team prize” in a challenging petrochemical business game.

PETROLEUM PROJECT ECONOMICS AND RISK ANALYSIS (5 DAYS)

This program teaches participants how to analyze, in a practical and realistic manner, the financial performance of oil and gas investments from both project and corporate perspectives. Attendees are asked to build financial models for typical oil and gas projects, calculate the standard measures of project performance (PV, IRR), and incorporate all project risks into the analysis using such processes as tornado diagrams, decision trees, scenario analysis, portfolio analysis, and Monte Carlo simulation. A major part of the learning is achieved through team participation in a challenging business game, in the Republic of Oceana, where each team analyzes a major upstream project and presents their pre-development recommendations and post-development results to the Board.

EFFECTIVE NEGOTIATING SKILLS WORKSHOP (2 DAYS)

This highly acclaimed two-day program provides participants with a practical understanding of the highly regarded negotiation process developed at Harvard University that is outlined in the book *Getting to Yes*. Participants will leave this program with a full understanding of the “best practices” of negotiating, whether they are used to negotiate a major business agreement or to settle a misunderstanding with a colleague. In the workshop setting, teams of participants are asked to negotiate positions in a realistic oil and gas case study to demonstrate and internalize the process.

SENIOR MANAGEMENT LEADERSHIP WORKSHOP – NEW!

This Workshop consists of a training/consultation engagement for your senior management team that will enhance their leadership skills, cause them to successfully surmount their immediate challenges and strengthen their capacity to lead their organizations far into the future.

The four specific activities are:

Preliminary Communications to identify the scope of the team’s activities, key organizational measures, logistical planning, and distribution of 3600 assessments; **Individual Interviews** with team members prior to the group meetings to gain background on strategic objectives and corporate culture (1-3 days); **Leadership Sessions** in which team members meet with Robert Ryan as a group to reach consensus and alignment on an Action Plan that will stimulate leadership and promote enhanced performance (2 days); and **Monitoring Sessions** which take place 1, 3 and 6 months afterwards on-site or through teleconferences to monitor progress and recommend strategies to achieve enhanced performance and fulfillment of the Action Plan.



International Gas Business Workshop, Peru



Human Resources Development Workshop, Turkey

2009 Instructor Biographies

DR. DAVID A. T. DONOHUE PROGRAM DIRECTOR



Dr. David A. T. Donohue is the Founder and President of both IHRDC and Arlington Storage Corporation.

Dr. Donohue is a technical specialist, businessman, attorney and lecturer who is highly regarded for the teaching of management programs devoted to the business of oil and gas. He has successfully designed and taught these "business game" programs to more than 10,000 members of the international oil and gas industry on both in-house and public bases. He was the developer of an innovative video-based learning system for the upstream petroleum industry, which has now been converted to IPIMS, a widely licensed e-Learning system. Dr. Donohue is also the developer and owner of independent underground gas storage facilities in New York State. In his early career he held various positions in engineering and research for Exxon and, for four years, served on the faculty of Pennsylvania State University. Dr. Donohue holds the Ph.D. in Petroleum & Natural Gas Engineering from Pennsylvania State University and a J.D. degree from Boston College Law School. He is active in public affairs in his hometown, a Distinguished Member of the SPE and Alumni Fellow of Pennsylvania State University.

"Articulate and informative lecturer. I was inspired by his sessions."

—2008 Participant

OWEN ANDERSON



Owen L. Anderson is the Eugene Kuntz Chair in Law in Oil, Gas & Natural Resources and Director of Legal Research, Analysis, & Writing at The University of Oklahoma College of Law. He is also a Principal Research Fellow and Distinguished Lecturer at the University of Dundee and a Senior Fellow at the University of Melbourne. His energy law experience includes an extensive and diverse background as a general counsel, in-house lawyer, faculty member and legal dispute resolution and policy consultant. He has authored, co-authored and co-edited a broad range of articles, textbooks and casebooks on oil and gas law, and is a frequent lecturer on oil and gas law and policy.

MEG ANNESLEY



Meg Annesley, former President of Tricentrol Oil Trading in London and Houston, has more recently acted as an independent trading advisor and consultant, concentrating on the international oil trading markets for crude oil and petroleum products, hedging and risk management strategies and trading in domestic markets. Her extensive oil industry experience includes eight years with BP, in international supply and trading. Ms. Annesley is a Fellow of the Institute of Petroleum, former Director of the International Petroleum Exchange of London and until recently, Secretary of the Association of U.K. Oil Independents and an initiating member of the UK Government Minister's Downstream Oil Forum.

BENTLEY (BEN) BEAVER



Bentley Beaver is the Vice President of Business Operations at IHRDC. His early career was with a management consulting firm where he worked with a diverse group of businesses to improve operational performance and profitability. He later accepted an offer from one of his client companies to head up its financial and administration functions. For the past thirty years Mr. Beaver has been directly involved in human resources as a retained executive search consultant. Most recently, he and a partner were Managing Directors of a retained executive search firm that provided human resource consulting and recruitment of senior executives for both private and publicly traded companies. He has had responsibility for operational issues in service company environments as well as exposure to a broad range of companies in diverse industry segments. After receiving his undergraduate degree from Colby College, Mr. Beaver served four years as an officer in the U.S. Navy, after which he received an MBA from Harvard Business School.

DR. HELEN CURRIE



Dr. Helen Currie is a Director in the Chief Economist's Office of ConocoPhillips Inc., where her duties include developing long-term energy price forecasts, market analysis and valuing strategic options for management. Her earlier roles at ConocoPhillips involved leadership on a global risk management system project and Director of Risk Control for North America Gas and Power Marketing. Prior to joining Conoco, Dr. Currie held university faculty positions in the field of finance and served as a staff economist for the state of Washington's

Department of Ecology, as well as various consulting roles. Dr. Currie holds a Ph.D. in Finance from Mississippi State University, a MA in Economics from University of Washington and a B.A. in Economics from Millsaps College.

DR. Y. SERDAR DOGULU



Dr. Y. Serdar Dogulu is a Senior Technical Specialist who joined IHRDC in 1999. He is currently involved in the content development of interactive learning and training products, especially the IPIMS e-Learning system. Dr. Dogulu has been very active in the building of company-specific competency models for IHRDC clients and is the principal developer and instructor for IHRDC's highly regarded new E&P Project Development Workshop. For the Arlington Group, an IHRDC affiliate, he is also actively involved in technical and financial modeling studies of underground gas storage projects. After earning his Ph.D. degree in Petroleum and Natural Gas Engineering from Pennsylvania State University, Dr. Dogulu held a post-doctoral researcher position with the Energy and Geo-Environmental Engineering Department at Penn State. His areas of interest include numerical simulation and reservoir characterization. During his graduate studies Dr. Dogulu spent a summer as a Research Technologist at the Chevron Petroleum Technology Company developing reservoir simulation and management tools, including stream-tube techniques for modeling large oil reservoirs.

BRADFORD R. DONOHUE, CFA



Bradford R. Donohue is Director of Corporate Development for IHRDC and manages IHRDC's finance group, which includes managing financial performance, capital structure, shareholder relationships and the budgeting process. He is also in charge of quality assurance, marketing and project management for IHRDC's Operations and Maintenance (O&M) training services group. Mr. Donohue has a broad management, business and technical background in both the private and public sectors. During 2002, he worked for Merrill Lynch in Strategy and Product Development, and from 1997 to 2000, he was a Program Manager and Mechanisms Engineer at the U.S. Naval Research Laboratory's Naval Center for Space Technology in Washington D.C. Mr. Donohue has an MBA degree and a B.S. degree in Mechanical Engineering, both from the University of Virginia, and has earned the Chartered Financial Analyst (CFA) certification.

TIMOTHY D. A. DONOHUE



Timothy D. A. Donohue, Director of Media Production, joined IHRDC in 1995. He has been responsible for all of the significant advances IHRDC has made in both the system and content of its knowledge and learning systems, from the first publication of IPIMS in CD-ROM format to the delivery today of IPIMS.ep over the Internet/Intranet. Mr. Donohue is also responsible for IT systems and functions for all IHRDC offices. He has a B.S. degree in Geology from Colorado College and an M.S. degree in Geological Sciences from Pennsylvania State University. Prior to joining IHRDC he worked as an Environmental Specialist with Camp, Dresser & McKee in Boston specializing in hydrogeology.

2009 Instructor Biographies

continued

MARSHALL E. FRANK



Marshall E. Frank retired in September 2000 from Chem Systems, where he was President and Managing Director, responsible for international consulting activities in North and South America and Asia Pacific. During his more than thirty years with the company, he had technical and administrative responsibility for a large number of multidisciplinary projects, both single-client and multi-client sponsored. Mr. Frank's areas of expertise include natural gas utilization and conversion, the petrochemical industry, the refining/petrochemical interface and alternative fuels. He also directed Chem Systems' Financial Practice, which provided assistance to lenders in assessing the various risks associated with the financing of major international energy, petrochemical and polymer projects. Prior to joining Chem Systems, Mr. Frank was involved in process evaluation, process engineering and startup of many of Halcon/SD's proprietary processes at Scientific Design Company. Mr. Frank received a B.S. degree in Chemical Engineering from Cornell University.

MAHER HABBAL



Maher Habbal is Manager, Business Simulators Development/Applications for IHRDC. He is responsible for developing and implementing the business simulation models used in IHRDC management programs and workshops. To date he has built five such simulators: one for the oil industry, two for gas, and two for power. His other responsibilities include internal financial reporting, analysis and forecasting. Before joining IHRDC, Mr. Habbal worked

three years with Arthur D. Little, Inc. as a Senior Financial Analyst in financial reporting and modeling. Also, as a member of the teaching staff at the Arthur D. Little School of Management Master of Science in Management Program, he taught Finance, Economics and Accounting. Mr. Habbal holds a M.S. degree in Management from Arthur D. Little School of Management and a B.S. in Business Economics from the Lebanese American University.

SAMY H. IBRAHIM



Samy H. Ibrahim is an energy and utility operating executive with extensive experience in operations, management and energy delivery services. He is the Vice President of Business Development with Hess LNG and currently manager of the development of LNG import facilities in Shannon, Ireland. Previously he served as the Vice President of Operations of NSTAR Gas, a gas distribution company serving 265,000 residential, commercial and industrial customers in Massachusetts. Mr. Ibrahim has over 30 years of experience in the gas utility, consulting, engineering and manufacturing fields. He completed the Graduate Program of Special Studies in Administration and Management at Harvard University and holds B.S. and M.S. degrees in Mechanical Engineering from Ain Shams University, Cairo, and Northeastern University, respectively.

JOHN B. (JACK) KING



John B. (Jack) King, is an expert in the developing and marketing of natural gas, both in pipeline natural gas and LNG, with over 26 years experience in Mobil and ExxonMobil Corporations. Jack began his career as a production engineer in the Gulf of Mexico. He then progressed through a number of senior executive natural gas marketing positions for both Mobil and ExxonMobil affiliates in the United States, Indonesia, Qatar, Peru, Venezuela, Japan and Russia. From Indonesia, he participated in successful long-term LNG sales contract negotiations with gas consumers in Japan, South Korea and Taiwan. In Qatar, he was instrumental in leading the successful LNG sales negotiations to kick-off the RasGas LNG project with Korea Gas Corporation, as well as the lead negotiator in Mobil's contract negotiations with Japanese buyers in the QatarGas project. He was instrumental in initiating LNG sales contract negotiations with LNG consumers in Thailand, Turkey, Taiwan, India and Italy. He led both Mobil Corporation's efforts in the Camisea gas project in Peru and ExxonMobil's participation in the Venezuela LNG project. As Project Executive for the Sakhalin-1 project, he concluded a successful feasibility study to bring pipeline natural gas from ExxonMobil's Sakhalin-1 project, in Russia, to Japanese utilities and concluded a successful long-term agreement to bring pipeline natural gas to China from the Sakhalin-1 project. Jack received a B.S. in General Engineering and Military Art from the United States Military Academy at West Point, New York, and earned an MBA degree from Tulane University.

DR. MICHAEL KRATEN



Dr. Michael Kraten, is an Assistant Professor of Accounting at Suffolk University in Boston, Massachusetts. He is also the President and co-founder of Enterprise Management Corporation, a strategic management consulting firm in Milford, Connecticut. Dr. Kraten is a management accounting educator and researcher who specializes in behavioral factors impacting issues of negotiation, entrepreneurship and social policy. Dr. Kraten has authored articles in both the academic and practitioner literature, including such publications as the *Journal of Digital Business*, the *Journal of Theoretical Accounting Research*, the *CPA Journal*, *Family Foundation Advisor*, and *Pension Governance.com*. Dr. Kraten has earned a Ph.D. in behavioral accounting from the University of Connecticut. He has also earned an M.P.P.M. in management from Yale University and a B.B.A. in public accounting from Baruch College of the City University of New York.

DR. SHASHI KUMAR



Dr. Shashi Kumar is the Academic Dean at the U.S. Merchant Marine Academy, Kings Point, New York, and has participated in IHRDC instructional programs since 1994. Prior to joining USMMA, Dr. Kumar was the Founding Dean and Professor at the Loeb-Sullivan School of International Business and Logistics at Maine Maritime Academy. His areas of teaching have included International Business, International Logistics, International Transportation, Managerial Economics and Transportation Economics and Policies. Dr. Kumar is a licensed Master Mariner (UK), and has an M.S. degree in Maritime (Business) Management from Maine Maritime Academy and a Ph.D. in Maritime Economics from the University of Wales, United Kingdom.

MICHAEL LYNCH

Michael Lynch is President of Strategic Energy and Economic Research and a research affiliate at the Massachusetts Institute of Technology's Center for International Studies. Mr. Lynch has combined S.B.-S.M. degrees in Political Science from M.I.T., and has performed a variety of studies related to international energy matters, including forecasting of the world oil market, energy and security and corporate strategy in the energy industries, as well as analysis of oil and gas supply. He is currently working on a book, *The Fog of Commerce: Oil Crises and Economic Security*, expected to be published within the next year. He is a former Chief Energy Economist at DRI-WEFA, Inc., a leading economic consulting firm, and a past-President of the United States Association for Energy Economics, and was the Program Chairman of the 1996 North American Conference, as well as being an appointed council member of the International Association for Energy Economics. His publications have appeared in Spanish, Arabic, Italian, Russian and Japanese, as well as English, and he serves on the editorial board of the journals *Energy Policy* and *Geopolitics of Energy*.

ELIZABETH MACDONALD



Elizabeth Macdonald has 15 years of experience in teaching and developing international business communication programs. She is currently Director of Business Communication at Thunderbird School of Global Management, and also provides business communication coaching to executive clients from companies like Walt Disney, Chevron, and Wal-Mart. Prior to coming to Thunderbird, Prof. Macdonald was the Director of ESL at the Monterey Institute of International Studies and at Thomas

Moore College. For ten years she worked on a variety of projects for the US government, including conducting needs assessments and program evaluations, developing monitoring/assessment instruments, setting goals and objectives and training staff. Professor Macdonald has a B.A. in French and Sociology from Bryn Mawr College, and an M.A. in TESOL from the Monterey Institute of International Studies.

RICHARD A. NORMAN



Richard A. Norman is Founder and Partner of Essex Hydro Associates, a developer and operator of nine small-scale hydroelectric projects regulated by the U.S. Federal Energy Regulatory Commission. He also serves as Vice President and Treasurer of Honeoye Storage Corporation where he actively directs the construction, financing, and operations of this underground gas storage company in New York State. Mr. Norman has held energy project management positions at the Cabot Corporation, J. Makowski Associates, Inc., and Oxford Energy, Inc. He has served as Special Assistant to the United States Assistant Secretary of Commerce for Maritime Affairs, advising on a program to construct LNG tankers, and has been active in the development of gas-fired cogeneration projects, LNG facilities, and underground gas storage projects. Mr. Norman graduated from the U.S. Naval Academy, after which he served as an officer in the nuclear submarine fleet for seven years. He then received an MBA degree from Harvard Business School.

"This is the single most valuable class I have ever taken in my professional career."

—2008 participant

2009 Instructor Biographies continued

KENNETH C. OGLE



Kenneth C. Ogle is a Petroleum Engineer and Senior Technical Editor at IHRDC. He has over 27 years of industry and academic experience, including 17 years as an E&P learning specialist, writer, technical editor and instructor, and 10 years as a petroleum engineer in drilling, production and field operations. He is currently in charge of content development, curriculum design and student mentoring for IHRDC's computer-based knowledge and learning systems. Before joining IHRDC in 1991, he worked for Chevron USA as a drilling representative, production engineer and production foreman, and for Bechtel Petroleum Operations as a reservoir engineer and production engineer. Mr. Ogle holds B.S. (magna cum laude) and M.S. degrees in Petroleum Engineering from the University of Southern California, and a Master of Technical and Professional Writing degree from Northeastern University. A member of the Society of Petroleum Engineers since 1976, he is a licensed Professional Engineer in California.

KEVIN ROHAN



Kevin Rohan, founder of Rohan LLP, has more than 20 years of Fortune 500-level experience. He worked as a Senior Manager with Accenture and as a senior member of the Human Performance Consulting Practice, where he helped develop their course on e-Process and served as a guest faculty member for management development courses. Mr. Rohan has worked with such industry-leading clients as Chevron, DuPont Chemicals, Caterpillar, Georgia Pacific and Nokia to implement successful large-scale organizational change on a global scale. Before joining Accenture, Kevin headed an Operations Systems Development group

for CKE Restaurants. Kevin holds a B.S. in Business Administration and received an M.B.A. from the University of Phoenix. He has served on the Project Management Committee at the University of California at Irvine and is a member of the Project Management Institute.

ROBERT F. RYAN



Robert F. Ryan, the former Chief Executive Officer of McBer and Company in Boston, is a management consultant who works with corporations, public sector, and non-profit organizations to increase individual and group effectiveness and performance. He works with individuals, teams and organizations in the areas of leadership development, team building, organizational improvement and strategy implementation. Mr. Ryan's clients have included Mobil Oil Corporation, General Electric, Global PLC, ICL, State of Florida, Rohm and Haas and Texas Instruments, both domestically and internationally. He received both his B.S. and M.S. degrees from Boston College.

JOSEPH SCHECHTMAN

Joseph Schechtman is a national consultant, trainer and coach, working with public school districts, non-profit organizations, businesses and the federal government. He is a professor at Cambridge College, teaching in the graduate Special Education department. He specializes in improving leadership skills for senior management, developing high-performance teams and creating safe learning and working environments. Mr. Schechtman developed a very successful program in working with "at risk" students and challenging employees. He has been using the Benziger Thinking Styles Assessment with adults and youth to help them be successful and utilize their true gifts for over 15 years.

DR. CAROL ANN SHARICZ



Dr. Carol Ann Sharicz is Associate Professor of Adult and Organizational Learning at Suffolk University in Boston, Massachusetts. She is the recipient of several "Outstanding Faculty" Awards at Suffolk and is a recipient of "Women Leaders at Suffolk" award. Dr. Sharicz also has her own consulting practice, specializing in leadership, team development, coaching, and systems thinking. Her clients span high tech, federal and state governments, health care, education, consumer products and financial organizations. Prior work experience includes serving as a senior training instructor for Motorola, Inc. Dr. Sharicz received her EdD in Systems Thinking from Boston University. Dr. Sharicz has many publications to her credit, including her book by Linkage, Inc., *The Big Picture: A Systems Thinking Story for Managers*, and is a frequent presenter at regional, national, and international conferences. Her international experience includes assignments in Europe, Russia, the Former Soviet Union, Australia and Japan.

RICK SQUIRES



Rick Squires, an IHRDC Senior Lecturer, is the founder of PiEnergy, which provides consulting and executive search services to the energy industry. He is also a Non-Executive Chairman of a U.K.-based offshore hybrid gas and wind power company. For four years, from 1998 to 2002, Mr. Squires was Senior Vice President, Planning, Strategy and Investor Relations for InterGen, an international power company with plants in ten countries. Prior to joining InterGen, he headed the Power Business within Shell Gas and Power, London. Mr. Squires' career at Shell spanned over 25 years and also included senior management positions in International Oil Trading and Coal Business Development and Marketing in London, South Africa and Japan. Mr. Squires holds an B.S. (Honours)

degree in Electrical Engineering from Lanchester University and a Master's Degree in Business Studies from Durham University, U.K.; he is a member of the Institute of Electrical Engineers, the Institute of Directors and the Energy Institute.

MARTIN R. TALLETT



Martin Tallett is President of EnSys Energy & Systems, Inc., an international consultancy specializing in refining and oil markets. He is a senior advisor to industry and government, focusing quantitatively on the fundamentals that drive the industry, its activities and economics. Much of his work centers on EnSys' WORLD system for analyzing the global downstream petroleum industry and oil markets, which has been used by oil companies, the US government, OPEC and other industry organizations since 1988. Mr. Tallett also heads EnSys' development and support of the Bloomberg refining networks, and has undertaken significant expert witness work for ExxonMobil and the State of New York on refining economics issues. He holds a B.Sc. in Chemical Engineering from the University of Nottingham in England.

ROBERT W. TAYLOR



Robert W. Taylor is Vice President of International Business Development for IHRDC and an instructor in its Energy Management Programs. Since joining IHRDC in 1999, he has coordinated worldwide sales and business opportunities in Asia Pacific and West Africa, provided learning and competency development advice and ensured quality products and services for all IHRDC clients. From 1977 to 1999, Mr. Taylor held positions of increasing responsibility for Otis Engineering and Halliburton Energy Services. In 1995, he became the Halliburton

Scandinavian Business Development Manager, responsible for all of the service offerings of Halliburton and for proposing commercial opportunities involving integrated services and products. Mr. Taylor holds a Master's Degree in Adult and Organizational Learning from Suffolk University, and a B.S. degree in Mechanical Engineering from the University of Kentucky. He is a long-time member of the Society of Petroleum Engineers, and an author of numerous technical and professional papers. He is also a qualified wireline and coiled tubing operator, gravel pack specialist, well completion and drilling specialist, and multilateral drilling/completion advisor.

DR. IR. J. P. VISSER



Dr. Ir. J.P. Visser formerly served as the Manager of Health, Safety and the Environment for Shell International E&P in The Hague, and Chairman of the Shell Group HSE Committee. Currently Dr. Visser is consulting on HSE management. He was with Shell for 27 years, where he played a major role in the development of Health, Safety and Environment (HSE) Management Systems. Dr. Vissers' involvement with the Society of Petroleum Engineers (SPE) includes chairing program committees of several conferences on HSE. Currently he is a member of the Dutch Safety Board, which investigates all serious accidents in The Netherlands. Dr. Visser also advises companies and governments on HSE and sustainable development is involved in a number of academic programs. He received a Master of Engineering degree from Technical University Delft, and a Ph.D. degree in Chemistry from the University of Pittsburgh.

DR. KERMITT WALROND



Dr. Kermit Walrond is an IHRDC Associate who has served as Deputy Chairman of the Board of Directors of Neal & Massy Energy Company in Trinidad & Tobago, as Chairman of the Board of Directors of NM Wood Group Ltd., and as Special Advisor to the Board of Governors of the Trinidad & Tobago Institute of Technology. He is a member of the Advisory Council of the Energy Centre of the University of Trinidad and Tobago. Until his early retirement in 2000 Kermit spent 33 years in progressively more senior positions with British Petroleum, Shell, Amoco and then BP. His early experience was in engineering and operations with British Petroleum (Trinidad) Ltd. He served five years with Shell in their Houston Research Laboratory before joining Amoco, where he was Regional Production Manager, Houston; Production Manager, Norway; Manager of Engineering, Worldwide; and Vice President, Production & Transportation, for BP's Caspian operations in Azerbaijan and Georgia. He has three degrees in Petroleum Engineering – a B.Sc. (Honors) from the University of Birmingham, and the MS and PhD from Pennsylvania State University. Dr. Walrond was a Distinguished Lecturer for the SPE in 1988-89 and was elected a Distinguished Member in 1991. The Pennsylvania State University has honored him as a Centennial Fellow, College of Earth & Mineral Sciences (1996) and as an Alumni Fellow (1997).

2009 Instructional Programs Enrollment Form

Enroll for 2009 programs online at www.ihrdc.com.
 For 2009 programs, fax this completed page to 1.617.536.4396 or 1.617.247.6669. By mail, send to: IHRDC Management Programs, 535 Boylston Street, Boston, MA 02116 U.S.A.
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PLEASE ENROLL ME IN THE FOLLOWING 2009 PROGRAM(S):

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- Full Program
- Unit One: Upstream Sectors, Project Economics & Petroleum Accounting, May 4 – 8
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- | | |
|---|---|
| <u>MAY OFFERING</u> | <u>OCTOBER OFFERING</u> |
| <input type="checkbox"/> Full Program | <input type="checkbox"/> Full Program |
| <input type="checkbox"/> Unit One: Upstream Gas Business, May 11 – 15 | <input type="checkbox"/> Unit One: Upstream Gas Business, October 5 – 9 |
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HR PROCESSES AND CHANGE MANAGEMENT

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- Unit One: HR Management for Oil & Gas Managers & Supervisors, June 1 – 5
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E&P PROJECT DEVELOPMENT WORKSHOP June 8 – 12

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- Full Program
- Unit One: Leadership Skills & Essential Negotiation, June 15 – 19
- Unit Two: Effective Business Communication & Strategic Planning, June 22 – 26

UNCONVENTIONAL RESOURCES AND RENEWABLE ENERGY ALTERNATIVES

- Full Program
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- Unit Two: Renewable Energy Alternatives, June 22 – 26

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- Unit One: Financial Modeling for the Oil & Gas Industry, September 14 – 18
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- Unit One: Upstream Sectors, Project Economics, & Petroleum Accounting, September 14 – 18
- Unit Two: Downstream Sectors & Petroleum Economics, September 21 – 25
- Unit Three: Petroleum Project Development, September 28 – October 2
- Unit Four: Key Skills for the Petroleum Manager, October 5 – 9

CONTACT INFORMATION (Please type or print clearly.)

Name _____

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2009 Boston Oil and Gas Management Program Fees* (U.S. \$)

ONE UNIT: \$4,250	THREE UNITS: \$11,500
TWO UNITS: \$7,950	FOUR UNITS: \$14,750

*The above fees for Boston-based Oil and Gas Management Programs include instruction, instructional materials, receptions, continental breakfast and lunch during the session days, weekend bus trips, and miscellaneous conference expenses. Fees do not include travel, hotel expenses, or evening meals; these are the responsibility of the enrollee. Payment should be made by wire transfer, credit card, or check in U.S. funds drawn on a U.S. bank. Fees must be paid in full prior to the first day of the program.

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Who attends IHRDC programs?

- Over 2,500 have attended Boston Programs in the past 18 years
- They have come from 35 countries
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Enrollment Information

Registration in any IHRDC program may be made by mail, telephone, fax, e-mail, or online at www.ihrdc.com. Class size is limited, so we encourage early enrollment. IHRDC will confirm all accepted registrations by courier, fax, or e-mail. The confirmation will include complete details regarding course location, a visa invitation letter, hotel request form, Boston welcome information, and an invoice.

FEES

All fees are listed in U.S. dollars. Payment should be made by wire transfer, credit card, or check in U.S. funds drawn on a U.S. bank. Fees must be paid in full prior to the first day of the program.

Fees include instruction, instructional materials, receptions, continental breakfast and lunch during the session days, weekend bus trips and miscellaneous conference expenses. Fees for Boston programs do not include travel, hotel expenses, or evening meals; these are the responsibility of the enrollee.

PAYMENT/SUBSTITUTIONS/ CANCELLATIONS

The fee is due and payable to IHRDC before the first day of the program. If an enrollee is unable to attend the course, the enrollee or the company may appoint a substitute at any time without penalty. One half of the registration fee must be paid by those registrants who commit to attend the program and then cancel less than 30 days before the first session. A paid enrollment may be transferred to a future course if the request is received before the first day of the program.

IHRDC reserves the right to cancel any course due to insufficient enrollments to ensure effective sessions. The Registrar will make this determination on or about the course closing date. If IHRDC cancels the course, the Registrar will refund all course fees in full.

HOTEL RESERVATIONS

For your convenience, IHRDC has reserved guest rooms for program attendees at several area hotels. Enrollees needing assistance with accommodations should contact IHRDC for bookings. Rooms are limited – early reservations are encouraged. Detailed hotel information is provided with your enrollment confirmation. Please be advised that Boston is a very busy city and hotels will fill to capacity. We encourage you to return the hotel request form in as soon as you can.

SCHEDULE

Unless otherwise specified, programs run from 8:30 am to 5:30 pm with an hour for lunch. Some workshop sessions and lectures may extend into the evening hours. IHRDC provides refreshment breaks each morning and each afternoon. When making your flight arrangements, please take into account that the Friday afternoon sessions end around 2:00 pm. Additionally, airports require at least a two-hour advance check-in.



Instructional Programs Client List

This is a sampling of our full client roster, which includes over 450 companies that have sent employees to our Instructional Programs.

Addax Petroleum Development Ltd.
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Elf Petroleum Nigeria Ltd.
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Energy and Mineral Resources Division/Bangladesh
Energy and Water Utilities Regulatory Authority/Tanzania
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ENPPI
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GDD-CPDD/Nigeria
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Liberia Petroleum Refining Co.
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Malaysia-Thailand Joint Authority
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Ministry of Energy – Trinidad & Tobago
Ministry of Mines & Energy – Ethiopia
Ministry of Oil & Mineral Resources – Yemen
Ministry of Oil – Iraq
Ministry of Petroleum – Angola
Ministry of Petroleum and Natural Resources/Pakistan
Ministry of Petroleum Resources – Nigeria
Mitsubishi Development Company
MND Exploration & Production Ltd.
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MOL Hungarian Oil & Gas Co.
Mongolian Petroleum Company
National Oil Corporation Kenya
National Oilwell Varco – MD/TOTCO
National Planning Commission/Nigeria
New Zealand Refining Co.
Niger Delta Exploration & Production PLC

Nigerian Agip Oil Company Ltd.
Nigeria LNG Ltd.
Nigeria/Sao Tome & Principe JDA
Nigerian Gas Company Ltd.
Nigerian National Petroleum Corporation/NAPIMS
NIS Rafinerija Nafta
Norsk Hydro A/S
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