TECHNOLOGICAL FORECASTING FOR SCIENCE & TECHNOLOGY INTELLIGENCE

April 23rd & 24TH, 2015 Table Mountain Inn Golden, Colorado U.S.A.

In this intensive 2 day workshop you will learn proven analytical techniques for:

- 1) Assessing the state of the art and predicting future directions and likely developments in technologies of interest to you, and
- 2) Combining quantitative and qualitative data for evaluating emerging technologies.



In association with



Course Overview

Articulating the present state of the art, evaluating emerging technologies, and forecasting the direction and rate of technological advance are critical elements of technology assessment, science & technology intelligence and strategic technology planning. In this workshop, you will learn proven techniques for evaluating the state of the art and predicting future directions and likely developments in technologies of interest to you. The emphasis is on data driven approaches rather than relying on anecdotal opinion that you can begin implementing when you return to the office. Of special interest will be the application of these methodologies to technology assessment and forecasting in the energy arena.

Who Will Benefit From Attending?

- ❖ Technical Professionals
- R&D Managers
- Managers of Technical Operations, including Manufacturing, Engineering, and Product Development
- Marketing Professionals in Technology Companies
- Strategic Technology Planners
- Competitive Intelligence Professionals

COURSE OUTLINE - DAY ONE

TECHNOLOGY FORECASTING IN STI - WHO? WHAT? WHY?

- Technology and competitive advantage
- Role of technology forecasting in STI and strategy formulation
- Taxonomy of technology forecasting methods
- Dynamics of technological advance and the technology S-curve
- ◆ Technology life cycle analysis

TECHNOLOGY SURVEILLANCE

- ♦ Scanning
- ♦ Monitoring
- ◆ Tracking

STI DATA COLLECTION

- ♦ Primary
- ♦ Secondary
- **♦** Electronic
- Ethics and legalities of data collection

TECHNOLOGY TREND ANALYSIS

- ♦ Types of trends
- What to forecast? Selecting forecasting measures
- Precursor trends/Forecasting by analogy
- ♦ Growth curves (Pearl, Gompertz)
- Trend extrapolation using simple spreadsheet techniques

Course Outline - Day Two

TECHNOLOGY SUBSTITUTION/DIFFUSION ANALYSIS

- ◆ Capital replacement
- ♦ Fisher-Pry substitution
- ◆ Rate of change models
- Attributes of innovations and their impact on innovation diffusion

LEARNING/EXPERIENCE CURVES

- ◆ Types of learning/experience curves
- ♦ Application of learning curves

EXPERT OPINION & JUDGMENTAL FORECASTING

- ♦ Structured interviews
- ♦ Nominal group technique
- ♦ Impact wheels/influence diagrams
- ♦ Delphi technique
- ♦ Morphological analysis
- ♦ Relevance trees
- ♦ Analytic hierarchy process

About TEMI and the course instructor

Technology/Engineering Management, Int'l, LLC is a consulting and contract research firm specializing in strategic technology planning, science & technology intelligence, technology forecasting and assessment, and other aspects of technology management including technology scouting, transfer and commercialization. We are also skilled in the application of operations research and analytical approaches to solving problems in these areas.

What past participants have said about the course:

"An excellent investment of my time and my company's money."

"Very impressive in experience, technological knowledge and ability to lead a class."

"[Dr. Mignogna] knows the material and can present it to all levels of learning and knowledge."

Course Instructor: Richard P. Mignogna, Ph.D., P.E.

Workshop instructor Richard Mignogna is principal consultant of Technology/ Engineering Management, Int'l, LLC (TEMI). Dr. Mignogna's career has spanned more than 30 years in industry, academia, and government service. An expert in science & technology intelligence (STI) and technology forecasting (TF), he has taught STI and TF workshops internally for Fortune 500 firms and in public courses in the U.S. and abroad. Dr. Mignogna has previously served as founding director of the Management of Technology graduate program at the University of Denver and as Senior Authority on Renewable Energy for the Colorado Public Utilities Commission. He presently lectures in the Global Energy Management Program at the University of Colorado Denver where he teaches a course in 21st Century Global Energy Issues & Realities.

Workshop Details

Workshop Fee: \$1695, includes all coursework materials, breakfast & lunches on both days, and coffee breaks. TEMI accepts checks payable to TEMI, or VISA, MC, or American Express. Early registration discount of \$1495 if paid by March 13. Special note: Pay the full price of the workshop by March 13, and TEMI will use the difference to fund a student's workshop attendance in your name!

Lodging is available at the beautiful Table Mountain Inn, a charming southwesternstyle hotel located in downtown Golden. The Table Mountain Inn is within walking distance of the Coors Brewing Company and the Colorado School of Mines. Be sure to ask for the Technology Forecasting workshop conference rate when booking your room. Free parking is available at the hotel.

TABLE MOUNTAIN INN Hotel & Restaurant & Catering

Phone: +1.303.277.9898
Toll Free: +1.800.762.9898
Fax: +1.303.277.0261

Email: hotel@TableMountainInn.com
Web: www.TableMountainInn.com



5 easy ways to REGISTER:



Register ONLINE at:

http://www.temi.us/registration-page.html.



EMAIL the registration information to workshop@temi.us.

Please be sure to include all the information below.



FAX this form to +1.720.441.0109.



CALL in your registration information to +1.303.800.5802.



Or MAIL this form to: TEMI, LLC

306 Berthoud Way

Golden, CO 80401

United States

To ensure your place at the workshop, please register early! Name: Title: Company: Address:	Workshop fee: \$1695 (Payable with registration, SAVE\$200! \$1495 if paid by March 13) Check (Please make checks payable to TEMI) VISA MasterCard American Express Card #: CVV:
City/State/ZIP:	Exp. Date:
Daytime phone:	Signature of cardholder: If cancellation is received before March 27, a full
Fax #:	refund will be made. After March 27, a fee of \$150
Email:	will be assessed to cover fixed costs. Cancellations after April 10 will incur the full cost of the workshop.
PLEASE PRINT CLEARLY!	Substitutions of participants can be made at any time.

