PD506
Effective Management of Research & Development Teams and Organizations

Day 1

- R&D Management: A Historical Perspective
- Introduction to organization and R&D funding in US and the world
- R&D organizations and research classification
  - What is Research and Development?
  - Basic or applied research
  - Unique issues in R&D management
- Organizational structure and R&D
  - Organizational variables
  - Types of organization structures (advantages and disadvantages)
  - Examples of different organization charts
  - Technology, R&D, and organization chart
  - Organization structure for innovation
- Components required for an R&D organizations
  - Staff, ideas, communication, funds, culture
  - Match of a person and the job

Day 2

- Creating an effective and productive R&D organizations
  - Organization effectiveness
  - Specific characters of inventors/innovators
  - Management, researcher, and peer relationships
  - Group/team formation
  - Ethos of a scientific community
- Motivation in R&D environment
  - A human behavior model
  - Reward system and its change to sustain and support scientific/technical careers
  - Organizational structure for optimum communication
- Leadership and issues in R&D organizations
Leadership styles
Leadership in R&D organizations: Mutual influence process
A leadership style case study

Day 3

Technology transfer issues
- What is Technology?
- Technology Transfer stages
- Innovation
- Role of people and market
- Organizational issues in tech transfer
- Strategies
- A case study

Strategic planning for R&D organizations
- Strategy in the context of a corporation
- Technology strategy
- Strategic planning
- Strategic thinking and management
- An example of a strategic plan

New product development process

Processes associated with effective R&D Teams
- Leadership
- Team work
- Simultaneity

Strategic selection of R&D projects

Case study and discussion

Summary and conclusions

Note: There are many case studies throughout the seminar