

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