

# Designing and Manufacturing Better Products Faster Using the Theory of Inventive Problem Solving

TRIZ Consulting, Inc. offers one of the most complete TRIZ Training including advanced TRIZ development.

## You will learn:

- How to analyze a product
- How to define problems that are worth solving
- How to solve conflicts without any trade-off
- How to develop breakthrough concepts
- How to systematize the process of idea generation
- How to develop the new generation of a product
- How to accelerate the evolution of your products
- How to increase effectiveness of your creative work and results dramatically
- How to apply TRIZ to real problems brought by the participants

**Dates: November 7-11, 2011**

**Time: 8 a.m.-5:00 p.m.**

**Location: Seattle, WA**

**Fee: \$3,995**

10% discount for three or more participants from the same organization.

Workshop materials and refreshments are included.

**Registration is limited. Advanced registration is required**

## Day One

### Introduction

- Why the Theory of Inventive Problem Solving?
- TRIZ vs. brainstorming

### Basic Concepts of TRIZ

- The evolution of systems
- Conflicts and contradictions
- Ideal system
- TRIZ methods

## **Analysis of a System**

- Analysis of the structure
- Functional analysis
- What is Substance-Field Analysis
- TOP function diagram of a system
- Problems that are worth solving
- Case studies

## **Ideal Ways (the best directions to design the ideal product)**

### **Inventive Principles**

### **Applying TRIZ to Problems Brought by the Participants**

## **Day Two**

### **Algorithm for Inventive Problem Solving**

- Analysis of a conflict
- Model of the problem
- Analysis of the available resources
- Physical contradictions
- Ideal final result
- Five techniques for physical contradiction -separation
- Case studies

### **TRIZ Standard Techniques**

- Sufficient substance-field models
- Development of the new generation of products and processes
- Case studies

### **Applying TRIZ to Problems Brought by the Participants**

## **Day Three**

### **TRIZ Standard Techniques**

- Six techniques for direct elimination of a harmful or unwanted action
- Seven techniques for indirect elimination of a harmful or unwanted action
- Three techniques for elimination of the consequences of a harmful action

- Techniques to turn a harmful action into a useful action
- Development of the new generation of products and processes
- Case studies

### **Algorithm for Inventive Problem Solving**

### **Applying TRIZ to Problems Brought by the Participants**

## **Day Four**

### **TRIZ Standard Techniques**

- Special techniques for development of measurement systems
- Development of the new generation of products and processes
- Case studies

### **TRIZ Standard Techniques**

- Techniques to reveal the cause of a failure using TRIZ
- Case studies

### **Algorithm for Inventive Problem Solving**

Case studies

### **Applying TRIZ to Problems Brought by the Participants**

## **Day Five**

### **Technological Forecast**

- Accelerated development of the new generation of products and processes
- Technological forecast using TRIZ
- Case studies

### **Concept Evaluation**

### **Combined application of TRIZ Methods**

### **Group Discussion**

### **Certification**