Course title:
Fertilizer Markets, Products and Technologies

Abstract:
You will learn about the various types of fertilizers, the various fertilizer production technologies and fertilizer finishing technologies with its pros and cons, the role of fertilizers, the market trends and players in the fertilizer business and the hazards of the various fertilizers and fertilizer production technologies.

Course outline:

Module 1: Fertilizer Market (duration 2hrs)
1. What is Fertilizer
2. The role of Fertilizers worldwide
3. The role of each nutrient
4. What are the market drivers
5. The role of Nitrogen
6. The environmental consequences
7. Agriculture and Green House Gas emissions
8. Ammonia as Fuel
9. Fertilizer market situation per continent

Module 2: Fertilizer Products and Production Technologies (duration 1.5hrs)
1. Overview of the various fertilizers
2. Nitrogen (N)
3. Phosphates (P2O5)
4. Potassium (K2O)
5. NPK
6. Sulphur (S)
7. Nitrogen & Sulphur
8. Micronutrients (B, Fe, Ca, etc), organic / recycle materials
9. Enhanced Efficiency Fertilizers
Module 3: Fertilizer Finishing Technologies (duration 2hrs)

1. Various solid fertilizer products
2. Prilling tower
3. Oil prilling
4. Rotoformer
5. Fluid bed granulation
6. Drum granulation
7. Pugmill granulation
8. Pan granulation
9. Prill fattening
10. Compacting
11. Extrusion
12. Coating / Seedcore
13. Bulk blending

Module 4: Safety, Health & Environmental aspects (duration 1hr)

1. Compatibility of solid fertilizers
2. Nitrates (fire, detonation)
3. Anhydrous ammonia
4. Phosphates (HF, phosphogypsum)
5. Sulphur (fire, SO2, explosion)
6. Nutrient use efficiencies

Optionally we can add to above modules a Market Strategy Discussion for your products and services.

Learning Outcomes:

By the end of this course you will understand:

- Role of Fertilizers in our world
- The main trends and players in the Fertilizer industry
- The various types of Fertilizers
- The various technologies to produce Fertilizers with its pros and cons
- The various finishing technologies to produce solid Fertilizer products with its pros and cons
- The safety, health and environmental impact of Fertilizers and Fertilizer Technologies
Who will benefit:

Anyone who is involved in the marketing, sales, business development of fertilizers or fertilizer production technologies or fertilizer production equipment and design and operation of any kind of nitrogen fertilizer plant, including:

- Engineers and Managers
- Marketing and Business Development Managers
- Safety, Health and Environmental Managers
- Operations

Course materials:

- Hand Out Presentations in pdf format
- Technical Paper: The Future of Urea in pdf format

Price:

€ 950

Discounts:

- 2 places – 10% discount
- 3 places – 15% discount
- 4 or more places – 20% discount.

In-company training:

This course is also available as an in-company course (face-to-face or online) where content can be customised to meet your organisation’s specific needs and delivered on a date/location that suits your requirements.

Contact us for more information.

Training code: FERT01