

## Day One

### Introduction

1. Commercial Cokers – A virtual Tour
2. Safety – Incident Photographs, Statistics and Health Assessment Program.
3. Coking Process – Concept, History, Latest, Cycle Steps
4. Coker Feed – Sources, names, Qualities
5. Coker Products – Yields, Qualities, Processing Outlets
6. Chemistry of Coking – Molecules, Reactions, Fate of Elements in Feed,
7. Economics of Coking – Simple
8. Coking Drivers

### Coker Equipment

9. Furnace – Types, Operating Parameters, Fouling
10. Drums – Typical Accessories, level Detectors, Quench System, Acoustic system
11. Fractionator and Gas Plant – Short Review
12. Antifoam System
13. Blowdown System
14. Drum Decoking System
15. Coke Handling System
16. Other Equipment

## Day Two

### Coker Operation

17. **Drum Switching – Cycle steps, What to do and not to do, Issues**
  - a. Strip and Cool drum
  - b. Isolate and Decoke drum
  - c. Close and air free drum
  - d. Warm up drum and be ready
18. **Drum Decoking – Procedure, What to do and not to do, issues**
  - a. Drum diameter and water pressure
  - b. Coke Cutting Procedures
  - c. Coke Fine Removal Technologies
  - d. Coke Handling Technologies
19. **Furnace Decoking –**
  - a. Mechanical
  - b. Steam Air Decoking
  - c. On Line Spalling
  - d. Pigging

### Special Coker Topics

20. Antifoam – Chemistry and injection procedure
21. Foam Over – Symptoms and Causes
22. Coke Types and Outlets for coke
23. Sludge Processing
24. Interlocks – ‘No Person On Structure’ Program
25. Coker Health Assessment Program
26. Q&A - **General Coker Issues** – Hot Spots, Fouling in furnace and in Transfer lines