

Agenda for APTI Course No. 427 COMBUSTION EVALUATION

Sponsored by
SESARM
205 Corporate Center Dr., Ste. D
Stockbridge, GA 30281-7383

Location:
Alabama Dept. of Env. Mgmt.
1400 Coliseum Boulevard
Montgomery, Alabama
February 14-17, 2017

Course Moderator & Speaker
Taylor Beard, PhD, P.E.

Tuesday, February 14, 2017

Unit	Time	Subject	Manual Pages
	8:00-8:10	Registration and Introductory Comments	
	8:10-9:00	Pre-Test	
1.	9:10-10:00	Introduction to Combustion Source Evaluation	1-1 to 1-13
2.	10:10-11:00	Combustion I: Basic Concepts	4-1 to 4-15
3.	11:10-12:00	Fuels I: General Features	3-1 to 3-19
	12:00-1:00	Lunch	
4.	1:00-1:50	Combustion II: Excess Air	4-15 to 4-24
5.	2:00-2:50	Combustion III: Chemical Energy	4-24 to 4-39
6.	3:00-3:50	Fuels II: Fuel Properties	3-19 to 3-44
7.	4:00-5:00	Combustion Systems I: Conventional Systems	2-1 to 2-29

Homework: Read Chapters 1, 2, 3 & 4; Work Review Exercises Chapters 1, 3 & 4.

Wednesday, February 15, 2017

Unit	Time	Subject	Manual Pages
	8:00-8:50	Discuss Review Exercises	1-14, 3-45 & 4-40
8.	9:00-9:35	Combustion Systems II: Gas Incineration Systems	2-30 to 2-35
9.	9:40-10:10	Combustion Systems III: Boilers & Controls	2-36 to 2-47
10.	10:20-10:45	Combustion Systems IV: Municipal Waste Comb.	
11.	10:55-11:30	Air Pollution Formation I: Acid Gases	5-1 to 5-10
12.	11:30-12:00	Air Pollution Formation II: Particulates and Metals	5-10 to 5-20
	12:00-1:00	Lunch	
13.	1:00-2:00	Air Pollution Formation III: NO_x	5-20 to 5-33
14.	2:10-2:40	Air Pollution Formation IV: Organics	5-33 to 5-41
15.	2:50-3:50	Air Pollution Control I: Particulates	6-1 to 6-18
16.	4:00-4:30	Air Pollution Control II: Acid Gases	6-19 to 6-23
17.	4:30-5:00	Air Pollution Control III: Modification for NO_x	6-23 to 6-41

Homework: Read Chapters 5, 6 & 7; Work Review Exercises Chapters 2 & 5.

Thursday, February 16, 2017

Unit	Time	Subject	Manual Pages
	8:00-8:40	Discuss Review Exercises	2-48 & 5-42
18.	8:50-9:30	Air Pollution Control IV: NOx Flue Gas Cleaning	6-41 to 6-49
19.	9:50-10:20	Emissions I: Efficiency Applications	7-1 to 7-11
20.	10:40-11:10	Emissions II: Monitoring Systems	7-11 to 7-16
21.	11:10-12:00	Emissions III: Calculations	7-16 to 7-19
	12:00-1:00	Lunch	
22.	1:00-1:50	Emissions IV: Engines, Turbines	7-19-7-21
23.	2:00-2:30	Emissions V: Gas & Oil Boilers	7-21 to 7-24
24.	2:40-3:40	Emissions VI: Coal & Wood-Fired Boilers	7-24 to 7-28
25.	3:50-5:00	Emissions Workshop V	

Homework: Read Chapter 7; Work Review Exercises Chapter 6 & 7.

Friday, February 17, 2017

Unit	Time	Subject	Manual Pages
	8:00-9:00	Discuss Review Exercises	6-50 & 7-29
	9:00-10:00	Emissions Workshop V	
	10:00-12:00	Post-Test	
	12:00	Course Closing	