# **Technical Seminar**



# **Offsite Management Systems LLC**

Houston, Texas, USA

Presents 3 Days' Comprehensive Technical Seminar For Refining Industry Professionals

# Strategic Fuels Blending Management and Technology November 8-10, 2017, Mumbai, India

(Early Bird / Group Discount Deadline - Sep 7, Payment Due by Oct 7)

To Register please go to: <a href="http://globaloms.com/OMS-02D/Register">http://globaloms.com/OMS-02D/Register</a>
To Email the link of this information: <a href="http://globaloms.com/OMS02D/Details">http://globaloms.com/OMS02D/Details</a>

Instructor - Dr. Suresh Agrawal, President

**Training Seminar** 

**Strategic Fuels Blending Management and Technology** 

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Mumbai, India November 8-10, 2017

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# Why Fuels Blending is Important?

It is becoming difficult for refining industry worldwide to cope with strict fuel quality and emission control requirements and regulations by local and foreign consumers and authorities. Unstable and high crude oil prices add further to their pain. Refiners are resorting to methods to conform to low Sulphur, low toxic content fuel specifications and finding that advanced control, and optimization system, in addition to process unit modification and additions, is a suitable, workable and economical solution.

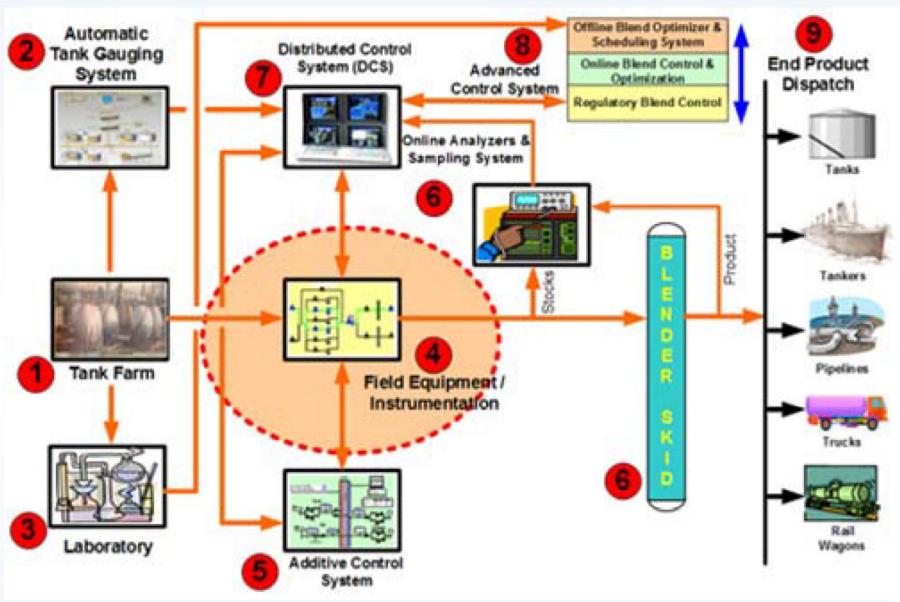
However, successful implementation of an advanced control and optimization system for gasoline, diesel and fuel oil products requires that both plant operators and engineers alike understand in details the technology and operations of such system available in the market place today. This workshop will cover in details each aspect of hardware, field equipment, software, interfaces and over-all integration of an advanced blend control system to leave the attendees with deep understanding and working knowledge of such a system.

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# **Fuels Blending Islands**



Mumbai, India November 8-10, 2017

#### **Training Seminar**

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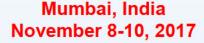
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### Instructor's Profile



Dr. Suresh S. Agrawal Webinar Presenter

- Founder and President of Offsite Management Systems LLC (OMS), Houston, Texas, USA since 1998.
- Has provided automation systems in countries like India, Mexico, Columbia, USA and Eastern and Western European countries.
- Holder of B.Tech. M.S. and Ph.D degrees in Chemical Engineering from I.I.T (Mumbai) and I.I.T. (Chicago)
- Has 30+ years of experience at senior technical / management positions with international companies and he has successfully managed many advanced refinery process control projects in numerous countries.
- Has published and presented 30+ papers in international publications and conferences in the areas of advanced process control of Refinery offsite operations.
- Co-editor and author of two chapters in the ASTM Manual MNL58-Petroleum Refining and Natural Gas Processing



**Training Seminar** 



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# **Recommended Attendees**

Mandatory – OM&S Manager, Blending Manager, Process Engineer, Blending Engineer, Control System Engineer, Analyzer Engineer, Offsite Operator, Blending Operator, Fuels Traders, Crude Traders

Recommended – Control System Manager, IT Manager, Refinery Planner, Refinery Scheduler, Blending scheduler

Optional – Refinery Manager, IT/Engineers/Analyst, Field Operator, Maintenance Engineer



# **Course Topics Details**

	Day-1 Overview of Blending operation	0	ay-2 Advanced Blend Control, Optimization and Planning		Day-3 Blending Project Justification and Implementation
	Session-1 Overview and fundamentals	Module-5	Session-1 Linear and non-linear Blend Models	Module-9	Session-1 Online Blend Control and Optimization
	Overview of Refining		Linear Blend Models		Advanced Online Blend Control & Optimization
	Refinery Offsite Operations		Non-linear Blend Models		Control and Optimization of run-down blending system
	Fuel Blending Operations in Refining		Methods to Handle Blend Non-linearity		Data Reconciliation and Feedback
	Blending Problems and Challenges		Control Matrix of Qualities		Technology Set of Hardware and software
	Roadmap to Efficient and Effective Refinery Offsite Operations		Gasoline, Diesel and Fuel Oils Specifications		System Architecture - Integration and Interfaces
	Session-2 Blending field equipment	Module-6	Session-2 Blend Optimization and Specifications	Module-10	Session-2 Blending Project Justification
	Blenders Configurations		Advanced Blend Control Strategy		Where and how to start
	Tank Farm and Automatic Tank Gauging System		Blend Optimization		Methodology to Assess the Current State of Blending
Module	Pumps, MOV's and Control Valves		How to estimate and update Blending values		Identifications of Automation Areas
	Additives Control and Monitoring		Spectrum based Blend Indexes		The Quality giveaway - Concept, Cost and reduction Benefits
	Blend Header Design Considerations		Biofuels - A perspective Part-I Gasohol		Data gathering and Analysis
			Biofuels - A perspective Part-II Biodiesel		
?	Session-3 Qualities Analysis and Measurements	Module-7	Session-3 Regulatory Blend Control	Module-11	Session-3 Blending Project Implementation
6	Quality Relationships and Measurements		Optimum Blend Control System Strategy		How to implement a oil movement and control project
	Lab Analysis of Stock and Product Qualities		Regulatory Blend Control Operations		How to implement a blending control and optimization project
Module	Online Analysis of Stock and Header Qualities		Blend Trim Control		How to realize and sustain benefits
2	Model Based Tank Qualities Measurement		Ethanol Blending		Required Enterprise Changes
	Session-4 All about octane and its measurements	Module-8	Session-4 Offline Blend Optimization and Planning	Module-12	Session-4 Collaboration and Reconciliation of Process and Da
	The Mysteries of Octane		Refinery-wide Planning & Scheduling		The Hydrocarbon Management (HM) in the Refining Industry
	The Journey of Octane thru Refinery Lanes		Offline Blend Planning and Optimization		Collaboration of Data and Process for Refinery Offsite Operations
	Octane Measurement by Knock Engine		Demonstration of An Offline Blend Optimizer System		A treatise of ASTM Standards
	Integrated Analyzers Technology and Applications		Lab Exercise to solve an LP problem of a small refinery		
	Octane Measurement by Spectrum based technology				
	Comparison of Knock engine versus Spectrum based methods				
	NIR and NMR versus CFR analyzers - Selection and Cost Effectiveness				

Notes: Each topic duration is 20-30 minutes, Total number of slides are 880+
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The course contents may be revised and/or enhanced as needed.

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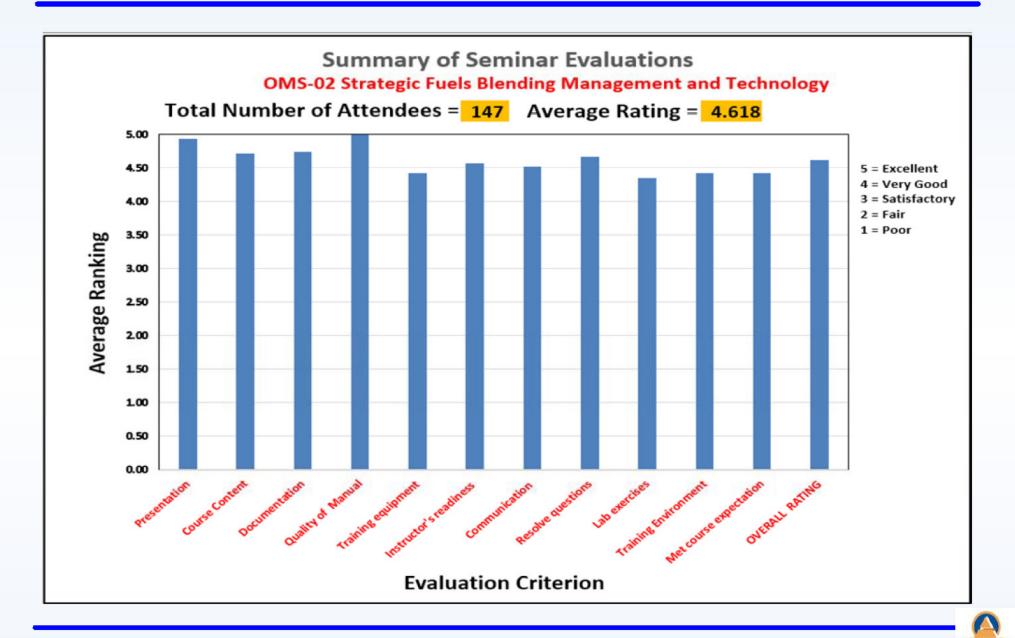
## **Strategic Fuels Blending Management and Technology**

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### **Past course Evaluation**



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#### Training Seminar

# **Strategic Fuels Blending Management and Technology**

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### **Testimonials**

I have not attended any training course before which is so methodical, exceptional, rich in topics and presented excellently. I learned a lot about fuels blending in this course, thanks to the instructor. — **Sergio Carvajal – IST corporation** 

The octane quiz was very interesting as it cleared many of my misconceptions about the octane. I would give 5 start to this course and the instructor, Dr. Agrawal — William Baustista, IST Corporation

The concept of Blender header design was very innovative as it was developed and taught by the instructor. It took the notion out that blend header is just a piece of pipe. It has many design considerations, important to success of blending system, thank to Dr. Agrawal. He deserved a standing ovation. —— Mike Redd, Silver Eagle Refining

The course was very interesting as I could relate the refining and auto industry problems and challenges in terms of fuel quality specifications and ways to meet them economically. — **Jay Cummings, GM** 

I wish you would offer this excellent course in India as we have 15 refineries and they all focus on onsite and ignore offsite operations which is you showed affect the refinery's bottom-line. – **Kothapalli Srinivas, Numaligarh Refinery, India** 

The instructor is extremely knowledgeable and very interactive with the class participants. — Alan Hugo, Valero

I liked that the course started with general concepts and continue to details giving space to change the amounts of details/time dedicated to topics relating to audience. The material of the course was excellent. This seminar provide the refiners an in-depth look at the blending and how to save company money. —Mohammad Al-Buftain, KPC

The discussion of case studies of refinery's progress to migrate from manual blending control to fully automate system was very interesting as it showed the problems, challenges and solutions at every step of upgrade. Excellent course material and the expertise of the instructor – **Singapore Refining Company** 

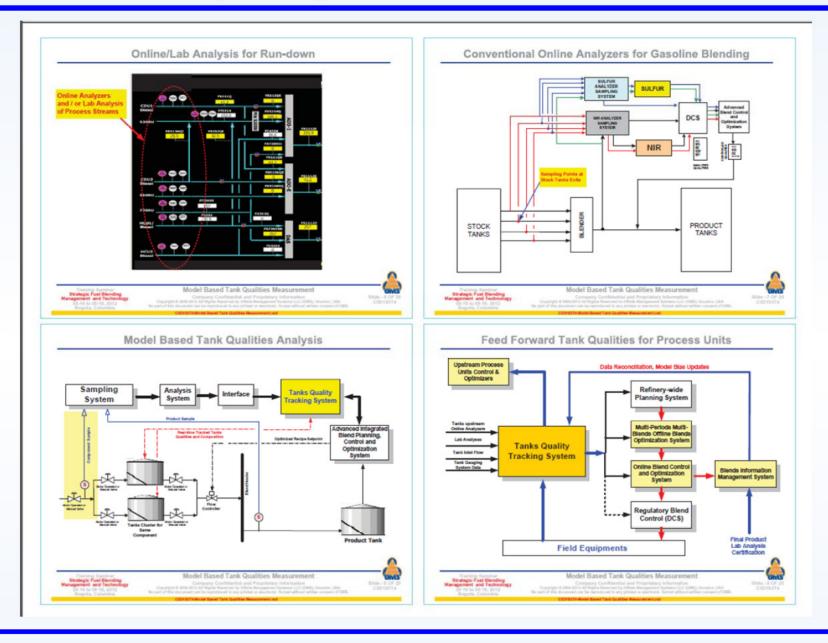
The discussion of our refinery fuels blending problem at the end was very helpful to us and gave us directions to move towards. Thank you very much, Dr. Agrawal – **BP Oil, India** 

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# Sample Page from Course Manual



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# What will the course consist of?

- 150+ pages Course Manual with 880+ course slides
- Free Excel based fully functional NLP Offline Blend Optimizer
- Free copy of 811 pages, Valued US\$260 book MNL58-Petroleum Refining and Natural Gas Processing, Published by ASTM International and Edited By Riazi M., Eser Semih, Agrawal Suresh, Peña Díez José, Published: 2013 (<a href="http://www.astm.org/DIGITAL\_LIBRARY/MNL/SOURCE\_PAGES/MNL58.htm">http://www.astm.org/DIGITAL\_LIBRARY/MNL/SOURCE\_PAGES/MNL58.htm</a>)
- Free consultation with the instructor for your refinery specific challenges on the last day of the course.
- Mid-morning / after-noon tea/snacks and lunch
- Complimentary dinner with the instructor on the second day of the course



# **Past Course Participants**







Singapore











USA













































Mexico















India, USA







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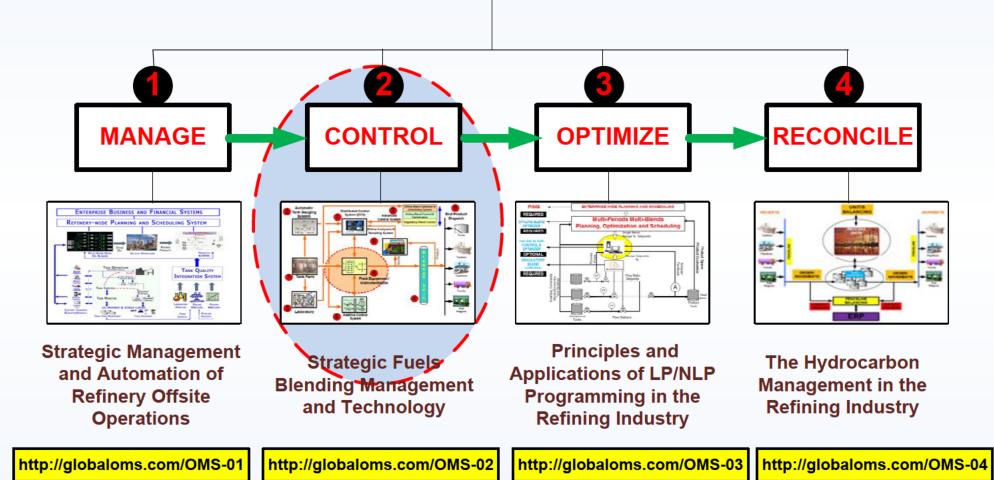
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# **Strategic Training Curiculum**

### STRATEGIC TRAINING CURRICULUM FOR THE STAFF OF REFINERY OFFSITE OPERATIONS



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# **Registration Details**

# OMS-02D-Strategic Fuels Blending Management and Technology

OMS02D-8-10 Nov, 2017-Mumbai, India Course ID: Course Dates: November 8, 2017 to November 10, 2017

Venue: Mumbai, India Course Timings: 9AM - 5PM Daily

Welcome: November 8, 2017 8AM - 9AM

Location: To be announced later

Fee: US \$1,495 / person

Early Bird Discount: US \$50 if registered 30 days before event date

Group discount: US \$50/person if 3 or more registered from the same

organization

Only limited seats available, so hurry to reserve your spot!

DEADLINE TO REGISTER is 30 Days before the event date. Registration and full payment must be completed before October 7, 2017.

To Register please go to: <a href="http://globaloms.com/OMS-02D/Register">http://globaloms.com/OMS-02D/Register</a> To Email the link of this information: http://globaloms.com/OMS02D/Details

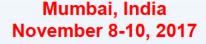


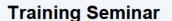
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Pay Now

Click Here to REGISTER

if you have already registered.







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# **Self Study Option Available**

# **Strategic Fuels Blending** Management & Technology

Self-Study **Training Seminar Manual** 

#### COURSE DIRECTOR

Dr. Suresh S. Agrawal President Offsite Management Systems LLC Houston, Texas, USA



3311 Stoney Mist Dr., Sugar Land, Texas, USA 77479 Tel: (281) 650-3707, Fax: (866) 450-4035 Email: info@globaloms.com, Web: www.globaloms.com

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The purchase and download of any of the OMS training (OMS-01 to OMS-03) manuals also includes the followings:

- 800+ pages PDF file of the training manual for PC screen viewing only and can not be printed
- Workbook to make notes while reviewing the manual on screen
- A copy of the 811 pages and \$260 value book MNL58 Petroleum Refining and Natural Gas Processing, Editors: Riazi M., Eser Semih, Agrawal Suresh, Peño Díez José, Published: 2013. The book will be mailed to you to the address indicated on the order within 10 business days.
- . 30 days free email/phone interaction with the instructor

Click on the image to go to order page on our site

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## **Contact Information**

# Dr. Suresh S. Agrawal

**Course Instructor** 

President
Offsite Management Systems LLC
Sugar Land, Texas, USA

www.globaloms.com

(T) 281-650-3707

(F) 866-450-4035

(E) s.agrawal@globaloms.com





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