Career Management Consultants & Training Est.
www.cmc-me.com
Tel No:+97126654546 | Fax No:+97126654182 | Email: aisha@cmc-me.com | www.cmc-me.com

AL102:
Fuel Treatment and Chemical Additives

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Determine the various gasoline & diesel fuel properties including volatility, octane & cetane numbers, density, API gravity, distillation profile and initial & final boiling point
- ✓ Learn diesel fuel specifications including their importance, features & functions
- ✓ Identify the test methods, equipment and ASTM standards applicable for gasoline & diesel fuels
- ✓ Learn the fuel types such as naphtha, kerosene, aviation turbine fuels, automotive diesel oil & fuel oil and emphasize their practical use & application
- ✓ Determine the various gasoline & diesel fuel additives and be able to explain their characteristics, features, functions, importance & role
- ✓ Perform gasoline & diesel fuel blending methods and become familiar with its components, blending calculations and blending indices
- ✓ Have a good background on batch & in-line blending including their set-up
- ✓ Understand chemical additives

Training Designed for:

This course is intended for personnel involved with the quality, supply, refining and concerned with the effective use of additives to maintain or improve quality, R&D, Laboratory Personnel and QA Personnel.

Training Program:

DAY ONE:

- ❖ PRE-TEST
- ❖ Introduction
- ❖ Fundamentals
- ❖ Fuel properties
- ❖ Basic fuel chemistry

DAY TWO:

- ❖ Fuel Properties
  - Basic fuel characteristics
  - Meeting octane and cetane requirements
  - Volatility and its influence on vehicle drive ability and emissions
  - Fuel composition and density
  - Fuel sulphur content
  - Hot and cold weather performance
  - Stability

DAY THREE:

- ❖ Testing and Analysis
  - Flash point
  - Density

- Color
- API
- Pour point and cloud point
- Ash content

DAY FOUR:

- ❖ Practical Session
- ❖ Chemical Additives
  - Antifoams
  - Anti-icing additives
  - Anti-knock additives (Antiknocks)
    - Oxygenates
    - Aromatic hydrocarbons (aromatics)
    - Aromatic amines
    - Organometallic compounds (carbonyls)

DAY FIVE:

- ❖ Chemical Additives
  - Antioxidants (inhibitors of fuel oxidation)
  - Antistatic additives
  - Anti-valve seat recession additives
  - Biocides
  - Cetane improvers
  - Combustion chamber deposit modifiers
  - Corrosion inhibitors
- ❖ Course Conclusion
- ❖ POST-TEST and EVALUATION

Training Requirements:

"**Hands-on practical sessions, equipment** and **software** will be applied during the course if required and as per the client's request."

Please note that the above topics can be amended as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

As per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:30	Recess (Prayer Break & Lunch)
13:30 - 15:00	Last Session

For training registrations or in-house enquiries, please contact:
Aisha Relativo: aisha@cmc-me.com
Tel.: +971 2 665 3945 or +971 2 643 6653 | Mob.: +971 52 2954615
Training & Career Development Department