By Popular Demand...Don’t Miss Out!
A 2½ / *3 Day Seminar
NOW COMING TO...HOUSTON, TEXAS, MARCH 2 - 4, 2020
ATTENDANCE IS LIMITED. REGISTER TODAY!

PRACTICAL DISTILLATION TECHNOLOGY
With Special Emphasis on Troubleshooting Techniques

taught by
HENRY Z. KISTER
Fluor
Lecturer and Author For This Same Seminar
As Taught Internationally For
Seminars & Conferences Group
For Over 20 Years

YOUR ANSWER TO —

\- INCREASING OPERATING EFFICIENCY
\- REDUCING COSTS
\- PROMOTING TROUBLE-FREE COLUMN OPERATIONS

*3 DAY SEMINAR INCLUDES OPTIONAL HALF DAY ON SPECIAL REFINERY CONSIDERATIONS

STRETCH YOUR TRAINING DOLLARS!
...Ask How We Can Also Come To Your Location & Save You Money - See Back Cover
At This Seminar You Will Learn How To...

- Troubleshoot a distillation column and determine what may cause poor performance
- Evaluate existing column performance and develop new designs
- Avoid common causes of capacity bottlenecks, tray damage, downcomer sealing problems, packed tower distributor malfunctions and many other operating difficulties
- De-bottleneck a column to improve capacity and/or separation
- Control and operate a distillation column
- Validate your tower simulation

Special Feature of This Program ...

In addition to the 800+ page color program manual, every attendee will receive a copy of the Distillation Operation and Distillation Troubleshooting textbooks. Each attendee will also receive a copy of Perry’s Section 14 Handbook.

This material will be an invaluable reference source.

AVOIDING FRACTIONATION PITFALLS


TROUBLESHOOTING DISTILLATION SIMULATIONS

Does your simulation reflect the real world? How poor simulation leads to incorrect problem diagnosis. What validation checks are needed? How far should we go? Sensitivity analysis and graphics for simulation troubleshooting: useful hints.

TRAY HYDRAULICS & LIMITS


TROUBLESHOOTING TRAY TOWERS

Gamma scans: application for diagnosing flood, missing and damaged trays, foaming, and downcomer flooding. How to combine gamma scans with process checks to get the most out of the scans: the four keys to success. Do gamma scans ever lie? Flooding and foaming symptoms: high dp’s, reduced bottoms, others. Which can be trusted? Liquid and vapor sensitivity field tests: identifying the correct flood mechanism. Downcomer unsealing and tray dryout: when would they affect your tower and how prevented.

TROUBLESHOOTING PACKED TOWERS


DEBOTTLENECKING

State-of-the-art trays & packings: strengths and weaknesses. Factors that favor trays and factors that favor packings. The pressure drop bonanza: why packings win in non-fouling vacuum services and in compressor suction. Pitfalls unique to structured packings: high pressure application, oxidation, shutdown fires. High-capacity trays (e.g. Superfrac, VG Plus, MD): principles, tricks, and traps. Do they really give 30% more capacity than conventional?
DISTILLATION CONTROL
Assembling control loops into an overall scheme: what works, which is better, what causes instability, and what impairs efficiency. The 3 most common causes of control assembly failure: no material balance control, fighting between temperature controllers, and level control on a small stream. Tips for avoiding problems. Can controls affect revamp success? Best temperature control location: is there a reliable method for finding? How can a temperature controller be fooled? Reboiler, condenser, and pressure controls: which loops work and which misbehave. How dead pockets in vapor overhead lines interfere with controls. Understanding hot vapor bypasses: why some work while others don’t. Control systems that did not work.

AVOIDING TOWER MALFUNCTIONS
The 20 most common causes of distillation malfunctions: what trouble should we look for and prevent. Points of transition (feeds, draws, tower base): why these are some of the worst tower bottlenecks: how diagnosed and remedied. High tower base levels: how they induce premature flood, even tray/packing damage, and how you can prevent. Instrument issues at the tower base: what to watch out for. Tray/packing damage: pressure surges due to water entering a tower full of hot oil or insoluble organics, other sources of tray damage and ways to avoid. Some commissioning and startup watchouts: pre-startup inspection, blinding and unblinding, reverse flow, steam-water operation, washing, rapid pressuring/depressuring, drawing vacuum, introducing liquid. Liquid outlets: choking in siddraw rundown lines and how it restricts tower capacity. Why must self-venting flow be assured in the presence of entrained vapor? Siphon formation.

Case Studies
These operating experiences will be scattered throughout to illustrate the key principles and to distinguish good from bad practices.

OPTIONAL HALF DAY SESSION
SPECIAL REFINERY CONSIDERATIONS
(Begins Immediately After Lunch On The Last Day)
Overlaps, gaps, cut points: how they reflect separation quality. Functions of various sections of refinery fractionators: fractionation, pumparound, wash, stripping. Which sections are prone to damage, coking, salting out and which are generally well-behaved. Why preflash drums are used and what are their issues. Pumparound (PA) duty: how does it affect the tower? Shifting duty between PA’s: can maximizing PA destabilize a tower?

Vacuum crude towers: how much wash keeps packing wet? True vs. measured overflow. Can tall or efficient wash beds impair capacity or lead to coking?


The Seminar Leader
HENRY Z. KISTER is a highly recognized specialist with over 25 years of vast expertise in all phases of distillation, including troubleshooting, operation, design, start-up, and control. As a director of fractionation technology at Fluor, he designs, revamps and advises on distillation processes, equipment, and controls for the chemical, petrochemical and oil industries. He is also extensively involved in field consulting, start-up and troubleshooting. He is Fluor’s representative on the Fractionation Research Inc. (FRI) Advisory Committee and serves on FRI’s Design Practices Committee.

Before joining Fluor in 1999, he was Brown & Root’s staff consultant on fractionation. He provided clients for over 17 years with designs, debottlenecks, troubleshooting expertise and field assistance on fractionation and absorption technology. Before that, he was with FRI, where he specialized in fractionator hydraulics. Prior to that, he was with ICI Australia Ltd., where his duties included start-up supervision, operation, debottlenecking, process and hydraulic design, troubleshooting, and commissioning of several distillation systems.

He is the author of over 100 technical articles on distillation, and two textbooks titled, Distillation Operation and Distillation Design both published by McGraw-Hill. He is also the author of the textbook, Distillation Troubleshooting, published by Wiley.

Henry Kister has conducted over 500 “Practical Distillation Technology” programs for major corporations in the U.S., Canada and overseas.
AN ADVANTAGEOUS MONEY-SAVING OFFER!

Have a group of three or more people from your company location attend the same session of this seminar and save $75 per person!

FOUR EASY WAYS TO REGISTER:

1. CALL Cathy Evans at 1(800) 832-4563 or (732) 617-8244
2. ONLINE: www.semconfs.com
3. EMAIL: cathye@semconfs.com
4. MAIL to her: Seminars & Conferences Group Int'l., L.L.C.
   400 Bridge Plaza Drive, Englishtown, NJ 07726-1735

REGISTRATION INFORMATION

PROGRAM: Hours are 8:00 a.m. to 5:00 p.m. each day. Should the program be cancelled for any reason we will make every effort to notify all attendees and our liability will be limited to the return of the registration fee.

If you desire more information about this session, please call Lorraine Castiglia, Director, Seminars & Conferences Group at (732) 617-8246 or Email: lorrainec@semconfs.com

FEES: Please check appropriate box below:

☐ $1,725  2½ Days  ☐ $1,875  3 Days

The fee payable in US dollars includes the color seminar manual, two textbooks, handbook, breakfast buffet, beverage breaks and luncheon buffet each day. These luncheons will be an additional opportunity to exchange ideas with other attendees and ask special questions of the seminar leader.

ACCOMMODATIONS: Program will be held at South Shore Harbour Resort & Conference Center, 281-344-1000 or 800-442-5005. The program and hotel information will be included with your confirmation letter.

REFUND POLICY: You will receive a full refund if your registration is cancelled ten business days prior to the program. Cancellations received after that date are subject to a service charge of $150.

In fairness to all attendees, confirmed registrants who do not attend or cancel seven business days prior to the program are liable for the entire fee. If you are unable to attend a program, call us to substitute another person in your place without penalty. Substitutions may be made at any time.

IN-PLANT TRAINING: Bringing this special program, (and others) to your site, can save your company money plus offer other significant benefits. For detailed information, please contact Lorraine Castiglia, Director, at 732-617-8246, e-mail: lorrainec@semconfs.com