

## 2023 End User Schedule of Seminar Dates IACET "CEU" ACCREDITATION

Dear TLV Associate,

TLV is pleased to announce the scheduled dates for TLV seminars in 2023.

The TLV Technical and TrapMan seminars begin with the basics of steam systems and general steam trap operation and conclude with application specific recommendations for better process performance and energy utilization. Based on global experience in steam, TLV's goal is to update attendees with current best practices to help improve the efficiency of their own steam system.

TLV's seminar program is fully accredited as an Authorized Provider of Continuing Education Units (CEU) by the International Association for Continuing Education & Training (IACET).

TLV will have IACET CEU credits available for interested participants in our Technical and TrapMan seminars in 2023. Receiving the IACET CEU requires some additional testing and instructor verification, therefore, it is an optional accreditation.

The attached schedules include the following seminars:

- **Technical** – Comprehensive technical training designed to help realize steam resource value opportunities.
  - 1.2 CEU/ 12 PDH – Requires complete attendance and passing an open-book exam.
- **TrapMan** – Develop methodologies and skills to effectively test and manage a steam trap population.
  - 1.3 CEU/ 13 PDH – Requires complete attendance and a trap testing capability demonstration.

Steam Lab demonstrations are an integral part of each seminar. The demonstrations that will be presented include: Glass display to visualize steam trap operation of various type traps, TrapMan testing display to show the accuracy

of the TM5N judgment with each type trap, functioning transparent PowerTrap display illustrating complete condensate drainage and condensate recovery, and DC3 & TATSU-2 separation demonstrations to show how these products provide high quality steam and air to processes. Additionally, attendees will be able to observe many other TLV products, that can be used to improve plant performance or lower steam cost, (COSPECT regulators, MC-COS control valves, Vortex Flowmeters, GP10L/GT10L and GT5C PowerTraps, compressed air traps, steam traps and air vents) operating in various applications throughout the Steam Lab.

In addition, after the TLV seminar activities conclude, there are many interesting activities to do while visiting the Charlotte area, and a list of possible things to do is provided for review.

Enrollment forms and agendas for each of these seminars are included in this mailing.

We look forward to welcoming our customers at our training center in Charlotte.

Sincerely,



TLV CORPORATION  
Andrew Mohr, BSME, CEM, PEM  
Manager, Consulting & Engineering Services

# Seminar Schedule 2023



## END USER 2023 FEE & SEMINAR SCHEDULE

Seminar <sup>1</sup>	Fee	IACET CEU Accreditation <sup>3</sup>
Technical (2-Day)	\$250	1.2 CEU
TrapMan (2-Day)	Consult TLV	1.3 CEU
Technical & TrapMan (4-Day)	Consult TLV	2.5 CEU
TrapMan Usage Fee for Seminar <sup>2</sup>	Consult TLV	-

Note: 1. A TLV Seminar Attendance Certificate is provided upon completion of all TLV Seminar programs.

2. If not bringing own TM5N, there is a usage fee to rent a TM5N for up to two people.

3. Requires full attendance to all sessions, as well as passing an open book examination.

Attendees	Seminar	Dates
TLV Reps & End Users	Technical TrapMan	February 14-15 February 16-17
TLV Reps & End Users	Technical	March 9-10
TLV Reps & End Users	Technical TrapMan	May 9-10 May 11-12
TLV Reps & End Users	Technical	August 10-11
TLV Reps & End Users	Technical TrapMan	September 12-13 September 14-15
TLV Reps & End Users	Technical	October 12-13
TLV Reps & End Users	Technical TrapMan	November 7-8 November 9-10

Note: Class limited to 20 attendees, with first priority given to existing TLV users.

**Advance notice will be given if seminar dates must be changed.**

# Seminar Schedule 2023



## ENROLLMENT GUIDELINES

### ENROLLMENT

1. Enrollment form must be completed, signed by the Attendee and the TLV Distributor, and submitted to TLV along with the appropriate fee prior to the seminar date.
2. The appropriate fee must accompany each enrollment form in order to reserve a seat. Seats are available on a first come, first serve basis.
3. Cancellation policy:
  - TrapMan Seminars
    - a) 3 weeks prior to seminar date – A credit memo will be issued for the returned fee.
    - b) 3 weeks or less – Cancellations after this will result in forfeited fee.
  - TrapMan Seat Voucher Redemption Users
    - a) 3 weeks prior to seminar date – Attendee may reschedule without penalty.
    - b) 3 weeks or less – Cancellations after this will result in forfeiture of the TrapMan Seminar seat voucher.

### TRANSPORTATION

1. Transportation To and From Charlotte is the responsibility of the Attendee. (Airport is Charlotte/Douglas International.)
2. TLV provides shuttle service to and from airport, hotel, scheduled restaurants, and TLV meeting location.
3. All other transportation charges are the sole responsibility of the Attendee.

### ACCOMMODATIONS

1. TLV pays hotel for night preceding the first day of class up to morning check out of last class date.
2. All incidental charges at the hotel (long distance phone charges, bar bills, movies, etc.) as well as extra night's stay are the responsibility of the Attendee and must be paid at checkout.
3. Meals (Daily):
  - a) BREAKFAST is provided at the hotel each morning.
  - b) LUNCH/SNACKS/DRINKS are provided at TLV throughout the seminar.
  - c) DINNER is provided each night by TLV at scheduled restaurant.

### TRAINING RECORDS

TLV Certificates stating CEU awarded and learning records can be requested for reissue, at any time in writing, by the attendee or an authorized person from the attendee's employer.

# Seminar Schedule 2023



## DIRECTIONS TO TLV CORPORATION

### TO TLV CORPORATION OFFICE:

13901 South Lakes Drive  
Charlotte, NC 28273  
Phone: 704-597-9070 / Fax: 704-583-1610

**Coming South:** I-77 South, crossing over the South Carolina Border. Take Exit 90 for Carowinds Blvd (US 21). Bear right onto Carowinds Blvd. Continue after the 3rd light (at Choate Circle), to the South Point Business Park entrance which is approximately 3/10 mile further down on the left (look for small lake with fountain). Turn left on South Point Blvd; take your next immediate left (between the median dividers) onto South Point Bridge (crosses over the two small lakes with fountains) to the main entrance to TLV.

**Coming North:** I-77 North to Carowinds Blvd/US 21 Exit 90. Turn left on Carowinds Blvd. Continue after the 4th light (at Choate Circle), to the South Point Business Park entrance which is approximately 3/10 mile further down on the left (look for small lake with fountain). Turn left on South Point Blvd; take your next immediate left (between the median dividers) onto South Point Bridge (crosses over the two small lakes with fountains) to the main entrance to TLV.

**From Airport:** Exit Airport, and stay on main road, going past the traffic light. Use right lane to bear southbound (signs will indicate that is the way to get to I-77), continue for about 3.5 miles. After passing the traffic light at S. Tryon Street, take entrance on right to I-77 South. Go south for about 7 miles, crossing the South Carolina Border. Take Exit 90 for Carowinds Blvd (US 21). Bear right onto Carowinds Blvd. Continue after the 3rd light (at Choate Circle), to the South Point Business Park which is approximately 3/10 mile on the left (look for small lake with fountain). Turn left on South Point Blvd; take your next immediate left (between the median dividers) onto South Point Bridge (crosses over the two small lakes with fountains) to the main entrance to TLV.

### TO HYATT HOUSE:

4920 S. Tryon St.  
Charlotte, NC 28217  
Phone: 704-525-2600 / Fax: 704-521-9932

**Coming South on I-85:** South on I-85 to I-77, take I-77 South to Billy Graham Parkway (South Tryon St.) Exit 6B. Immediately after ramp, bear right. Go through 1 light. Hotel is on the right, after La Quinta.

**Coming North on I-85:** North on I-85, take right at Billy Graham Parkway Exit, (heading south). Go about 7 miles, then take right on South Tryon St. Go through 1 light. Hotel is on right, after La Quinta.

**Coming South on I-77:** Take I-77 South to Billy Graham Parkway (South Tryon St.) Exit 6B. Immediately after ramp, bear right onto South Tryon St. Go through 1 light. Hotel is on the right, after La Quinta.

**Coming North on I-77:** Take I-77 North to Billy Graham Parkway Exit 6B. Immediately after ramp, change lanes to the far left and take left at light onto South Tryon St. Move over to the far right lane, and go through 1 light (Yorkmont Road). Hotel is on right, after the La Quinta.

**From Airport:** Exit Airport, and stay on main road (Josh Birmingham Parkway), going past the traffic light. Use right lane to bear right onto Billy Graham Parkway heading south, (signs will indicate that is the way to get to I-77). Go about 3.5 miles. At the traffic light at S. Tryon Street, turn right. Go through 1 light. Hotel is on the right, after La Quinta.

## CHARLOTTE AREA ATTRACTIONS

### SPORTS TEAMS

- Carolina Panthers (NFL)
- Charlotte Hornets (NBA)
- Charlotte Knights (Minor League Baseball)
- Charlotte Checkers (Minor League Hockey)
- UNCC 49ers (NCAA Football)

### SHOPPING

- South Park Mall (Largest mall in NC/SC with Tiffany's, Neiman Marcus, etc.)
- Carolina Place Mall
- Concord Mills (Concord, NC)
- Premium Outlets (Charlotte, NC)

### SPORTING ACTIVITIES

- US National Whitewater Center (Rafting, Kayaking, Hiking, Mountain Biking, Rock Climbing, Zip Lines, Canopy Tours)
- Lake Norman / Lake Wylie (Boating, Fishing, Water Skiing)
- Over 5 Local Golf Courses

### OTHER ACTIVITIES

- Carowinds Theme Park - 10 Minutes
- NASCAR Hall of Fame - 15 Minutes
- Blumenthal Theatre of Performing Arts - 15 Minutes
- Mint Museum of Craft and Design - 20 Minutes
- Charlotte Motor Speedway - 30 Minutes
- zMAX Dragstrip - 30 Minutes
- Daniel Stowe Botanical Gardens (Belmont, NC) - 35 Minutes
- NC Transportation Museum (Spencer, NC) - 1 Hour
- Riverbanks Zoo (Columbia, SC) - 1 Hour, 30 Minutes
- NC Zoo (Asheboro, NC) - 1 Hour, 40 Minutes
- Blowing Rock, NC (Art colony with shops, Tweetsie Railroad) - 1 Hour, 45 Minutes
- Biltmore Estate (Asheville, NC) - 2.5 Hours
- Grandfather Mountain (one of the highest peaks in the Blue Ridge Mountains at an elevation of 5,946 ft) - 2 Hours, 5 Minutes
- Blue Ridge Parkway (National Parkway running 470 miles along the Blue Ridge Mountains) - 2 Hours, 15 Minutes
- Linville Falls State Park (Beautiful waterfalls and hiking) - 2 Hours, 10 Minutes

# TLV® TECHNICAL SEMINAR

Time	Presentation
<b>DAY 1</b>	
<b>STEAM LAB START-UP</b>	
8:30 AM	Introductions
9:00 AM	Steam Basics
10:00 AM	<i>BREAK</i>
10:15 AM	Steam Distribution
10:45 AM	Steam Trap Operation
12:00 PM	<b>LUNCH / STEAM LAB DEMOS</b>
	Lab Tour & Glass Trap Display
1:00 PM	Steam Trap Operation (Continued)
2:00 PM	Steam Trap Specification, Selection, & Sizing
3:00 PM	<i>BREAK</i>
3:30 PM	CDL Faults & Failures
<b>DAY 2</b>	
<b>AIR LAB START-UP</b>	
8:30 AM	Steam System Economics
9:15 AM	Process Equipment Optimization
10:00 AM	<i>BREAK</i>
10:15 AM	Process Equipment optimization (Continued)
10:45 AM	Condensate & Flash Steam Recovery
12:00 PM	<b>LUNCH / STEAM LAB DEMOS</b>
	GP/GT10 PowerTrap operation
	DC3 Series Separator operation
	TATSU2 liquid drainer operation
12:00 PM	<i>LUNCH</i>
1:00 PM	Steam Quality & Pressure Regulation
2:30 PM	CES Capabilities
3:00 PM	Closing Remarks

# TLV TRAPMAN SEMINAR

Time	Presentation
<b>DAY 1</b>	
8:30 AM	Introductions
9:00 AM	Trap Survey Setup
9:30 AM	TrapManager software - Hardware/System Requirements
10:00 AM	<i>BREAK</i>
10:15 AM	TrapManager software - Setting Up a New Database
12:00 PM	<i>LUNCH</i>
1:00 PM	TrapManager software - Trap Log Editing
3:00 PM	<i>BREAK</i>
3:15 PM	TrapManager software - Creating and Modifying Routes
<b>DAY 2</b>	
<b>STEAM LAB START-UP</b>	
8:30 AM	TM5 diagnostic unit - Keypad Functions; Test Procedure
10:00 AM	<b><i>BREAK / STEAM LAB DEMO</i></b>
10:15 AM	<b>STEAM LAB: Trap Testing with TM5</b>
11:15 AM	TM5 Upload of Data and Review
12:00 AM	<i>LUNCH</i>
1:00 PM	TrapManager Reports and Analysis

## TLV Seminar Enrollment Form

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Title: \_\_\_\_\_ Fax: \_\_\_\_\_  
Company: \_\_\_\_\_ Email: \_\_\_\_\_  
Address: \_\_\_\_\_  
TLV Distributor: (if End User) \_\_\_\_\_

Attendee is:  End User  Design Engineer  Survey Contractor  Wholesaler  
 Installation Contractor  OEM  Student

Mark the Seminar(s) you are interested in attending.  
Please note optional IACET CEU/PDH Accreditation

- Technical Seminar (2-day)**
  - Option: 1.2 CEU/ 12 PDH
- TrapMan® Seminar (2-day)**
  - Option: 1.3 CEU/ 13 PDH
- Technical & TrapMan® (4-day)**
  - Option: 2.5 CEU/ 25 PDH

Seminar Date Requested (Month and Year):  
\_\_\_\_\_

As an IACET Authorized Provider,  
TLV offers CEUs for its programs that  
qualify under the ANSI/IACET Standard.



### TrapMan Attendees Only:

- I WILL NOT bring my **TM5N** unit and will pay the course fee<sup>1</sup> plus a TM5N usage fee (up to 2 people per **TM5N**)

Signature: \_\_\_\_\_

- I WILL bring my **TM5N** unit and will pay only the course fee (up to 2 people per **TM5N**)

Signature: \_\_\_\_\_

### Technical Seminar

Each participant will be able to:

- Properly identify necessary steam trapping locations
- Differentiate between steam trap types
- Select the best steam trap type for a given application
- Size & select steam traps based on process conditions
- Create a stall chart to identify process opportunity
- Size & select **PowerTrap** based on open or closed system
- Size a **COSPECT** Pressure Reducing Valve for single & two-stage pressure reduction

CEU/PDH accreditation (optional) requires full attendance to all sessions, as well as passing an open book examination.

### TrapMan Seminar

Each participant will be able to demonstrate proper use of TrapMan® condition monitoring system:

- Setup areas and Trap ID numbers
- Create a steam trap database with TrapManager® software
- Create a steam trap inspection route
- Transfer data between TrapManager & TM5N
- Create traps records with TM5N
- Inspect steam trap operational condition with TM5N
- Utilize analysis & reporting functions in TrapManager

CEU/PDH accreditation (optional) requires full attendance to all sessions, as well as demonstration of the above activities.

Attendee Signature: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

(Please complete this form and return to your local TLV Distributor)

Distributor Signature: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

(Distributor: For questions and/or additional information: **Email:** Rhodes@TLVengineering.com)

Send completed form to TLV CORPORATION by **Fax:** 704-583-4781 or **Email:** Rhodes@TLVengineering.com