

May 2015 Calendar

Date: May 3, 2015

Technical Societies Council Officers

President: Art McKinnon (BEAM)
Vice President: Al Ker (ASME)
Treasurer: Frank Kizlik (AICHe)
Secretary: Jim Schraven (ASQ)

TSC website – www.eng.buffalo.edu/tsc/

Calendar of Upcoming TSC Activities:

- **Monday, May 11, 2015 at 6:00 PM:**
TSC Delegate's Meeting, UB @ Davis 208
- **Monday, September 14, 2015 at 6:00 PM:**
TSC Delegate's Meeting, UB @ Davis 208
- **Monday, November 9, 2015 at 6:00 PM:**
TSC Delegate's Meeting, UB @ Davis 208

TSC Members

ABCD	<i>Association for Bridge Construction and Design</i>
ACEC of WNY	<i>American Council of Engineering Companies</i>
AFE	<i>Association for Facilities Engineering</i>
AICHe	<i>American Institute of Chemical Engineers</i>
APICS	<i>Association for Operations Management</i>
APWA	<i>American Public Works Association</i>
ASCE	<i>American Society of Civil Engineers</i>
ASHRAE	<i>American Society of Heating, Refrigerating and Air Conditioning Engineers</i>
ASM	<i>The Materials Information Society</i>
ASME	<i>American Society of Mechanical Engineers</i>
ASQ	<i>American Society for Quality</i>
AWMA	<i>Air & Waste Management Association</i>
BAPG	<i>Buffalo Association of Professional Geologists</i>
BEAM	<i>Buffalo-Area Engineering Awareness for Minorities</i>
CHMM	<i>Certified Hazardous Material Managers</i>
CSI	<i>Construction Specifications Institute</i>
ESB	<i>The Engineering Society of Buffalo</i>
IEEE	<i>Institute of Electrical and Electronic Engineers</i>
IES-Buffalo	<i>Illuminating Engineering Society of Buffalo New York</i>
ISA	<i>International Society of Automation</i>
ITE	<i>Institute of Transportation Engineers</i>
NACE	<i>NACE International, the Corrosion Society</i>
NYSATE	<i>New York State Association of Transportation Engineers</i>
NYSSPE	<i>New York State Society of Professional Engineers</i>
SME	<i>Society of American Military Engineers</i>
SWE	<i>Society of Women Engineers</i>
UBEASAA	<i>UB Engineering & Applied Sciences Alumni Association</i>
VINF	<i>Vibration Institute, Niagara Frontier</i>

TSC - Technical Societies Council

Topic: *Invoice for Dues*

Duration: 2014 - 2015

Member Society Dues: \$50.00

Make checks payable to the TSC with a notation on the check that it is for TSC dues

Remit to: Frank J. Kizlik

TSC Treasurer

60 Jenell Drive

Grand Island, NY 14072

Questions: email fjkizlik@roadrunner.com or 773-1652

IEEE WNY Consultants Network Meeting

Topic: *Monthly Social for Networking ("Your net worth is your Network")*

Date: May 11th, 2015

Time: 6:30 PM

Location: Pairings Restaurant

5893 Main Street

Williamsville, NY 14221

Speaker Information: Amy Moore, Project Manager with a diverse group of industries including: Kean Wind Turbines, Inc., Northrop Grumman Corporation and the U.S. House of Representatives

Cost: None, wine and food available from the menu at attendees cost

Credits for Education: (if applicable) none

Contact for reservations:

<http://www.meetup.com/Consultants-Network-WNY-of-the-IEEE-for-Engineering-Jobs/events/221862108/>

VINF- Vibration Institute, Niagara Frontier

Topic: *Spring 2015 Seminar*

Location: Paddock Chevrolet Golf Dome
175 Brompton Road
Tonawanda, NY 14150

Date: May 14 - 15, 2015

(Thursday-Friday)

Time: 8:30 AM to 5:00 PM

(Thursday hours / Registration opens at 8:00 am)

Cost: \$ 400.00

Includes: Continental Breakfasts, Breaks, and Lunches

Instructor: Robert C. Eisenmann

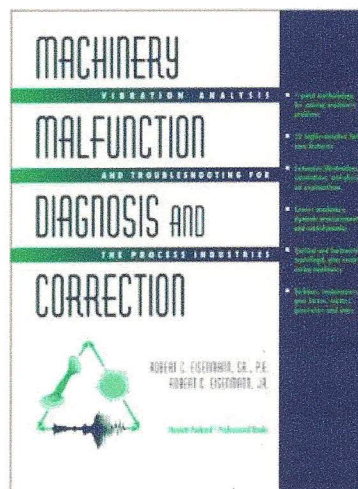
Instructor Acolates: We are truly excited to bring Robert Eisenmann to the Niagara Frontier Chapter to teach a vibration training seminar. We first learned about him through his 820-page book "Machinery Malfunction Diagnosis and Correction." (A popular website recently listed this impressive resource as one of the all-time top 10 vibration analysis books!)

Last summer, Eisenmann presented a one-day seminar at the Vibration Institute Annual Meeting. The quality and content of the session were excellent and it was abundantly clear that Bob both enjoys and is good at sharing his 50+ years of vibration analysis experience. We approached him to come share his knowledge with the Niagara Frontier Chapter and he agreed. ***We hope you can participate.***

Dynamic Signal Evaluation

- ✓ The significance of shaft orbits, and how changes in frequencies, amplitudes, and phase influence the orbit shape
- ✓ An explanation of how time domain signals are combined into shaft orbits
- ✓ The interrelationship between time domain and frequency domain characteristics

- ✓ Correlation between calculated and measured FFT components
- ✓ Identify forward and reverse precession on shaft orbits
- ✓ The influence of analog and digital filters upon vibration signals
- ✓ The three most common types of signal interaction: signal summation, amplitude modulation and frequency modulation.



Data Acquisition & Display

- ✓ Instrumentation systems required for field data acquisition
- ✓ Processing data into useful formats with samples
- ✓ Specialized data processing such as expanded transient capture, full spectrum analysis, and the use of polar plots for separation of rotor modes
- ✓ Functions and necessary compatibility issues between instruments and transducers
- ✓ Avoiding pitfalls on monitoring systems, and data integrity
- ✓ Evolution of data acquisition systems, and data processing/display systems
- ✓ Common data processing display techniques for steady state and variable speed (transient) data with multiple examples
- ✓ Necessity of including alignment data and thermal growth (offsets) into the machine database
- ✓ An overview of the MOST USEFUL machinery data presentation formats

Common Malfunctions

- ✓ Many common malfunctions experienced by process machines are reviewed
 - ✓ Diagnosis and correction of running speed vibration problems such as excessive clearance, unbalance, bent or bowed shaft, and eccentricity
 - ✓ Identification and correction of problems associated with shaft preloads
 - ✓ Modern hardware solutions to rotor stability problems
 - ✓ Identification and correction of resonant response problems, and various types of rotor instability issues
 - ✓ Identification & differentiation between mechanical looseness and rotor rubs
 - ✓ Learn about the identification and correction of foundation problems
- A series of descriptive field case histories are distributed throughout this section

Sign up before April 15. *There is a special commemorative gift for registrations received on or before April 15.*

Name: _____

Company: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____ Vib. Institute Member # _____

Method of payment: _____

Please circle your shirt size below IF you register on or before April 15, 2015

S M L XL XXL XXXL

Choose 1 of 3 options to register:

1. Fax the form to: 866-243-7918
2. Scan the form and email it to

joej@empireinst.com

3. Mail the form to:

Joe Jank
24 Plaza Drive
Williamsville, NY 14221

Paying by Check? Make the check payable to "Niagara Frontier Chapter of the Vibration Institute" and mail it.

Paying by Credit Card? Identify the card type, number, & expiration date on the form – or call Joe at 716-574-8864 to share the card info.

VINF- Vibration Institute, Niagara Frontier

Topic: *Evening Event with Bob Eisenmann*
Date: *Thursday May 14th*

Air & Waste Management Association, Niagara Frontier Section

Topic: *Tour of University at Buffalo's Center for Computational Research and Awards Dinner*

Date: *Thursday, May 21, 2015*

Time: 5:00 pm tour 6:15 Social Hour/Dinner

Location:

Tour – UB Center for Computational Research
- 701 Ellicott Street, Buffalo, NY 14203

Dinner - Jacobs Executive Development Center 672 Delaware Avenue. Buffalo, NY 14209

Cost:

\$25 Intl. Members and YP

\$30 Local Members

\$35 Non-Members

\$10 Students (w/ id)

Credits for Education: 1 PDH credit pending (\$10 extra)

Contact for Reservation:

www.awmanfs.wildapricot.org, Mark Hans
@ 716-860-0570 or

awmanfsreservations@gmail.com by
Wednesday May 13th.

VINF- Vibration Institute, Niagara Frontier

Course: *ME'scope VES Advanced Drawing Workshop Course Information:*

Location: The Conference Center, Niagara Falls, NY

Dates: June 16 – June 19, 2015 (Tuesday – Friday noon)

Instructor: Tony DeMatteo, 4x Diagnostics, LLC

Price: \$1450

Special Hotel Rate Available!

Course Description:

This 3.5 day course will improve students ability to draw advanced structures using ME'scope software. After completing the course you will be familiar with ME'scope structure drawing techniques, tips, tools and animation methods. Each student will be working with examples from several real job case histories from a variety of different industries.

- o Improve your ability to draw advanced structures in ME'scope software.
- o Emphasis on ME'scope structure drawing techniques tips and tools.
- o Working with examples from real job case histories from a variety of industries.

For a course flyer, registration form and additional information about Niagara Falls hotels and attractions visit

www.4xdiagnostics.com and click on the Training Tab or contact:

AJ

Technical Consulting Manager
585-820-8039

ajd@4xdiagnostics.com

Mary Ann

Director of Operations
Office: 585-293-3234

maryann@4xdiagnostics.com

Fax: 585-413-4370

Matt Rubin

Client Relations Manager

585-315-8785

matt@4xdiagnostics.com

VINF- Vibration Institute, Niagara Frontier

Course: *Practical Aspects of ODS & Modal Analysis Testing*

Location: The Conference Center, Niagara Falls, NY

Dates: Aug 31 – Sept 4, 2015

Instructor: Tony DeMatteo, 4x Diagnostics, LLC

Price: \$1700 Discount Hotel Rate

Special Hotel Rate Available!

Course Description:

This 4.5 day course teaches students how to do ODS and Modal Analysis testing using ME'scope software. After completing the course you will be familiar with the use of ME'scope software, the process involved in ODS and Modal testing and the types of data that must be collected. Each student will complete several ODS & Modal projects during the class.

Course Outline:

1. The decision making process – what goes into planning ODS and Modal testing.
2. Making ODS and Modal measurements (analyzer specific information may be available for your analyzer).
3. Using ME'scope software (drawing structures, numbering points, importing data, shape tables, animating the structure, curve fitting).
4. Interpreting ODS and Modal Analysis results.
5. Documenting test results.

Join us in Niagara Falls, NY for Operational Deflection