

**April 2015 Calendar**

Date: April 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/](http://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**

<b>ABCD</b>	<i>Association for Bridge Construction and Design</i>
<b>ACEC of WNY</b>	<i>American Council of Engineering Companies</i>
<b>AFE</b>	<i>Association for Facilities Engineering</i>
<b>AIChE</b>	<i>American Institute of Chemical Engineers</i>
<b>APICS</b>	<i>Association for Operations Management</i>
<b>APWA</b>	<i>American Public Works Association</i>
<b>ASCE</b>	<i>American Society of Civil Engineers</i>
<b>ASHRAE</b>	<i>American Society of Heating, Refrigerating and Air Conditioning Engineers</i>
<b>ASM</b>	<i>The Materials Information Society</i>
<b>ASME</b>	<i>American Society of Mechanical Engineers</i>
<b>ASQ</b>	<i>American Society for Quality</i>
<b>AWMA</b>	<i>Air &amp; Waste Management Association</i>
<b>BAPG</b>	<i>Buffalo Association of Professional Geologists</i>
<b>BEAM</b>	<i>Buffalo-Area Engineering Awareness for Minorities</i>
<b>CHMM</b>	<i>Certified Hazardous Material Managers</i>
<b>CSI</b>	<i>Construction Specifications Institute</i>
<b>ESB</b>	<i>The Engineering Society of Buffalo</i>
<b>IEEE</b>	<i>Institute of Electrical and Electronic Engineers</i>
<b>IES-Buffalo</b>	<i>Illuminating Engineering Society of Buffalo New York</i>
<b>ISA</b>	<i>International Society of Automation</i>
<b>ITE</b>	<i>Institute of Transportation Engineers</i>
<b>NACE</b>	<i>NACE International, the Corrosion Society</i>
<b>NYSATE</b>	<i>New York State Association of Transportation Engineers</i>
<b>NYSSPE</b>	<i>New York State Society of Professional Engineers</i>
<b>SME</b>	<i>Society of American Military Engineers</i>
<b>SWE</b>	<i>Society of Women Engineers</i>
<b>UBEASAA</b>	<i>UB Engineering &amp; Applied Sciences Alumni Association</i>
<b>VINF</b>	<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](mailto:fjkizlik@roadrunner.com) or 773-1652

**IEEE - Institute of Electrical and Electronic Engineers WNY**

**Topic: Consultants Network Meeting**

**Date: April 13th 2015**

**Time: 6:30 PM**

**Location: Pairings Restaurant**

5893 Main Street

Williamsville, NY 14221.

**Speaker Information:**

The guest speaker will be Jack McGowan, Project Manager with Insyte Consulting. Jack works with manufacturers on business and strategic planning, Innovation Engineering, lean manufacturing, finance and ISO quality management systems. He also helps technology start-ups prepare for equity and grant funding. Jack is director of the Western New York Venture Association/Buffalo Angels. Cost: None, wine and food available from the menu at attendees cost

**Credits for Education: none**

**Contact for reservations:**

[http://www.meetup.com/Consultants-Network-WNY-of-the-IEEE-for-Engineering-Jobs/events/221056220/?a=ea2\\_grp&rv=ea2&af=221056220&af=event](http://www.meetup.com/Consultants-Network-WNY-of-the-IEEE-for-Engineering-Jobs/events/221056220/?a=ea2_grp&rv=ea2&af=221056220&af=event)

## ASME Buffalo

**Tour:** *MOOG Plant Tour*

**Date:** Tuesday April 21, 2015

**Time:** 5:00 pm Tour, 7:00 pm dinner

**Location:**

Plant 20-Space and Defense Grp Building  
500 Jamison Road  
Elma, NY 14052

**Directions** -<https://goo.gl/maps/wvoqv>

**Tour Includes:** Moog Capabilities Overview, Engineering, Computed Tomography System, Additive Manufacturing, Cellular Manufacturing, Control Electronics, Actuation Development & Production Electronics, Citric acid passivation line, Electronics Manufacturing, Machine Shop, Materials & Process Engineering, Clean rooms

**Host Biography:** Jim van Oss; Engineer currently managing the Product Lifecycle Management implementation at Moog. Jim has 30 years' experience at Moog in a number of functions including engineering design, information technology management and engineering management.

**Security:** US citizens can register up until Friday April 17, 2015. Non U.S. citizens must pre-register by April 13. Failure to pre-register in time for the tour could result in denial of access to the tour.

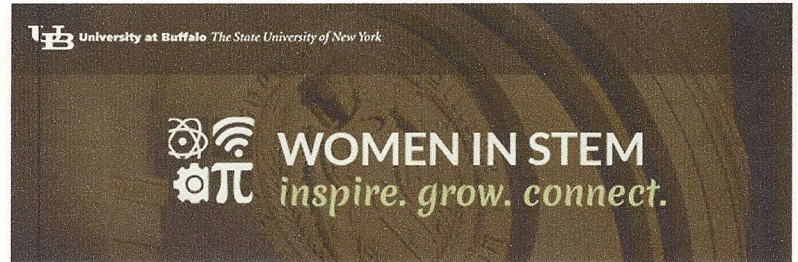
**Cost:** \$25 members, \$30 non-members/guests, \$10 for students.

**Menu:**

Dinner at the Roycroft will be choice of:  
Tenderloin of Pork; Seared Chicken; or  
Atlantic Salmon

**Reservations and further details:**

[www.sections.asme.org/buffalo](http://www.sections.asme.org/buffalo)



The University at Buffalo is excited to host:

## Women in STEM Summit

**Date:** Thursday, April 23, 2015

**Time:** 8:30 a.m. to 12 noon.

**Location:** UB's Student Union

**Summit Agenda:**

- **Keynote Speaker:** Rachel Haot, Chief Digital Officer and Deputy Secretary for Technology of New York State
- Panel discussions
- Networking
- Career development

The program features a keynote address and informative panel discussions with local thought leaders representing various STEM disciplines on negotiating power and building your professional network.

Plan to join us for a morning of unforgettable inspiration, invaluable career development and unbeatable networking. Don't miss this opportunity to inspire, grow and connect with us!

[Visit our website](#) for more information and program details.

[Follow us on Twitter](#) and join the conversation. Admission is free and open to the public. Register today to reserve your seat.

This event is a collaboration between the School of Engineering and Applied Sciences, the College of Arts and Sciences, the Undergraduate Academies, UB STEM Academic Affairs, Interdisciplinary Science and Engineering Partnership, Institute for Research and Education on Women and Gender, Intercultural and Diversity Center, Office of Student Engagement,

Computing and Information Technology, and the Professional Staff Senate.

Contact: Kathleen Murphy at [kbrown@buffalo.edu](mailto:kbrown@buffalo.edu)  
or at 716-645-6700

## VINF- Vibration Institute, Niagara Frontier

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

Location: The Conference Center, Niagara Falls, NY

Dates: **April 27 - May 1, 2015** (Mon. – Fri. noon)  
**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

## Air & Waste Management Association, Niagara Frontier Section

Topic: *Tour of Solar Strand at UB North Campus*

Date: **Tuesday, April 28, 2015**

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

Location: tour - UB North Campus by Center for Tomorrow

Dinner - Ramada Hotel and Conference Center  
2402 North Forest Road  
Amherst, NY

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](http://www.awmanfs.wildapricot.org), Mark Hans  
@ 716-860-0570 or  
awmanfsreservations@gmail.com

## Vibration institute, Niagara Frontier

Topic: *2015 Regional Vibration Institute Training Conference*

Date: **April 30 (Thurs) & May 01 (Friday)**

Location: Peek'n Peak Resort Hotel  
1405 Olde Road  
Clymer, NY 14724  
(716) 355-4141

Location Description: Peek'n Peak is an all-seasons resort located approximately 30 miles from Erie PA International Airport (ERI). Visit [www.pknpk.com](http://www.pknpk.com) for more information about facilities & amenities of Peek'n Peak.

#### DAY #1

**8:00 - 8:30 am** Welcoming Address

David A. Corelli, President, The Vibration Institute

**8:30 - 10:00 am** Vibration Analysis of Induction, Synchronous & DC Electric Motors

Nelson Baxter, PE (ABM Technical Services)

**April 2015 Calendar**

Date: April 3, 2015

**10:30 - Noon High Frequency Data Acquisition & Analysis**

David A. Corelli (PCB Piezotronics, Inc)  
Noon - 1:00 pm Lunch (provided)

**1:00 - 2:15pm Stories about Working with Art Crawford**

Robert J. Sayer, PE (Applied Structural Dynamics)  
"The Art of Troubleshooting" Video containing interviews with and captions of lectures & presentations by Art Crawford

**2:45pm - 5:00pm Case Study Presentations**  
Field Balancing of Bowed Steam Turbine Rotor  
Stanley Bognatz, PE (M&B Engineered Solutions)  
Vibration Analysis of Multiple Pump Problems  
Bob Morgenstern & Jay Marchi (ProPump Services)

**DAY #2**

**8:00 - 10:00 am** The Practical Application of Signal Processing  
Nelson Baxter, PE (ABM Technical Services)

**10:30 - Noon** Vibration of Induction Motors Operating with VFD Drives  
Mikhail Tsyarkin (Vibration Specialty Corporation)

**Noon - 1:00 pm** Lunch (provided)

**1:00 - 3:00pm** Case Study Presentations  
Integrating ODS Models, Vibration Analysis & Lubrication Parameters to Improve Rolling Mill Reliability  
Bill Stan (Stan Engineering & Analysis)  
Using Principals of Time Waveform, Frequency Spectra & ODS Analysis to Solve a Fan Vibration Problem  
Robert J. Sayer, PE (Applied Structural Dynamics)

**3:30pm - 5:00pm** Vibration Analysis of Centrifugal Fans  
Robert J. Sayer, PE (Applied Structural Dynamics)  
Attendees are responsible for making their own room arrangements. A Special Room Rate of \$99 is available for this training conference. Call Peek'n Peak Reservations (716) 355-4141 and mention the Vibration Institute when making your room reservation.

**CERTIFICATE OF ATTENDANCE:**

A certificate for 16 PDH will be provided upon completion of the training conference.

**REGISTRATION:** Register on-line @

<http://bit.ly/1BgoNRK>

or at Upcoming Events on the VI website

[www.vi-institute.org](http://www.vi-institute.org)

or Send registration form & payment to:  
The Vibration Institute  
2625 Butterfield Road, Suite 128N  
Oak Brook, IL 60523

**COST**

Vibration Institute Members \$295  
Case History Authors \$150  
Non-Vibration Institute Members \$350  
Faculty & Students \$100

**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

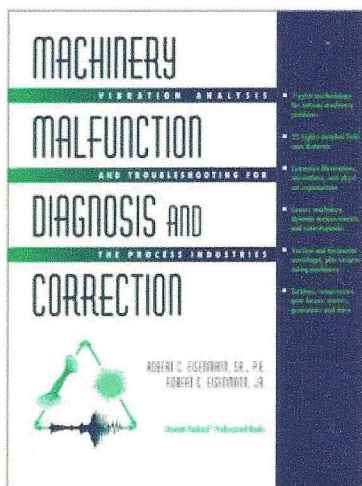
**Instructor:** Robert C. Eisenmann

**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](mailto: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**

**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.

○ Improve your ability to draw advanced structures in ME'scope software.

○ Emphasis on ME'scope structure drawing techniques tips and tools.

○ 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](http://www.4xdiagnostics.com) and click on the Training Tab or contact:

AJ

Technical Consulting Manager  
585-820-8039

[ajd@4xdiagnostics.com](mailto:ajd@4xdiagnostics.com)

Mary Ann

Director of Operations

Office: 585-293-3234

[maryann@4xdiagnostics.com](mailto:maryann@4xdiagnostics.com)

Fax: 585-413-4370

Matt Rubin  
Client Relations Manager  
585-315-8785  
[matt@4xdiagnostics.com](mailto:matt@4xdiagnostics.com)

**Community Event**  
(Submitted by Organization Listed)

**IEEE - Institute of Electrical and  
Electronic Engineers WNY**

**Topic:** Tonawanda's Sportsman's Club  
Spring Gun Raffle

**Date:** April 19th, 2015

First Annual TSC Meat Raffle will be held on Sunday April 19<sup>th</sup>, 2015 from 1 PM to 4 PM. Admission is \$5.00 per person. The club is open to the public. Includes a Roast Beef Sandwich, Chips, Popcorn, Beer and Pop. Ok to bring your own snacks.

Drawing and Grand Prize tickets \$10.00 each which includes a Weber Stainless Gas Grill, Chest Freezer, Meat Smoker, and more. Spin starts at 2:00 PM. Bring your dollar bills for the Meat Raffle. Meat Selections include: Steaks, Lobster, Pork Chops, Hot Dogs, and Hamburgers.

The Tonawanda Sportsmen's Club was founded in the fall of 1946 and by 1948 the membership grew to 125 sportsmen. At that time, the 130 original acres was acquired to erect a clubhouse to be one of the finest in the area. As of today we have 300 acres of land with almost 500 members and we are the premier club in the Western New York region dedicated to the conservation and replenishment of our natural wild life resources.

Club facilities include: Trap, skeet, sporting clays, indoor and outdoor pistol ranges, outdoor pistol range, archery range, hunting and fishing. A fully stocked bar, open to the public, as well a short order and full menu dinners are available. The club is open every day except Monday. Check the club web site for times and more details at <http://www.tonsportsclub.com/>

A fully integrated pheasant release program for our members manifest an accomplishment which is a benefit to the community and state as a whole, as well as to the sportsmen themselves.

For more information on the Tonawanda's Sportsman's Club Spring Gun Raffle contact:

[jimcagney11@roadrunner.com](mailto:jimcagney11@roadrunner.com) or

**James Cagney**  
5657 Killian Rd.  
Pendleton, NY 14127  
716-481-6615