



Milwaukee Section Lecture Series - Keynote

Discovery World Digital Theater, Milwaukee

Event: 4:30pm January 24, 2007

Lecture Series Update

chairman: Joe Sagat (j.g.sagat@na.modine.com)

“Well-to-Wheel Emissions from Motor Vehicles: A Discussion of the Performance of Alternative Propulsion Systems”

Christopher Damm –Ph.D.

Assistant Professor, Milwaukee School of Engineering



Dr. Damm draws on his research and ongoing projects in energy conversion and pollutants to provide a “Well-to-Wheel” perspective on alternative technologies including gasoline-electric hybrids, fuel cell vehicles, electric vehicles, plug-in hybrids, and diesel vehicles.

Dr. Damm has been on the Mechanical Engineering faculty of the Milwaukee School of Engineering since the fall of 2004. He is also on the graduate faculty of the Atmospheric Sciences program at the University of Nevada, Reno. Dr. Damm received a B.S. and M.S. in Mechanical Engineering from the University of Minnesota. He graduated with a M.S. in Physics from Brown University and a Ph.D. in Mechanical Engineering from the University of California, Berkeley. He teaches courses in thermodynamics, heat transfer, fluid mechanics, energy systems, engineering instrumentation and engineering mechanics.

Dr. Damm’s research and consulting focus on energy conversion and pollutants associated with energy conversion. Current research topics of interest are solar photovoltaics, use of biofuels for power generation, combined heat and power systems for advanced commercial buildings, emission factors from on-road motor vehicles, the development of laser diagnostic techniques for characterizing reacting flows, and the design and implementation of advanced energy technologies. On-going projects include measurement of particulate matter emission factors for on-road motor vehicles (with the Desert Research Institute), the detection of toxic substances in soils (with Lawrence Berkeley National Laboratory), the design of integrated distributed energy supply systems for buildings (with Carnegie Mellon University), biodiesel-fueled engine generators for distributed power generation (with Carnegie Mellon University) and solar photovoltaic performance optimization (funded by We Energies).



“Commercializing an Emerging Technology -- The Rotating Liner Engine Example”

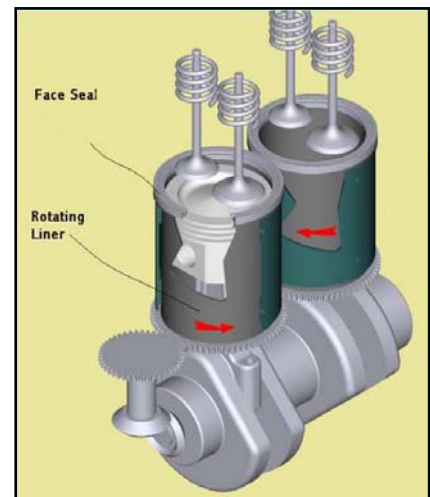
Damon Bresenham – M.S./MBA

President, Rotating Sleeve Engine Technologies, Inc. (RSET)

Damon Bresenham is an advocate of small business based technology startup firms. Damon has experience in stationary power generation, fuel cells, diesel engines, catalytic technologies, wind power project development, and fuel injection markets. Damon will share his experiences guiding the University of Texas spawned startup, RSET, over the last year.

The Rotating Liner Engine

- **Essential components to an early stage firm**
 - *What investors require*
- **The standard business pitch**
 - *What does it look like?*
- **The Rotating Liner Engine**
 - *Progress to date.*



Bresenham earned a BS in Chemical Engineering at the University of Tennessee, MS in Mechanical Engineering at University of Wisconsin–Milwaukee, and MBA at University of Wisconsin–Milwaukee. Prior to his interest in early stage energy firms, Bresenham was employed at Generac Power Systems in Waukesha where he assessed the late-90's potential fuel cell threat and managed the engine emissions certification program.

Bresenham is a Texas native, and resides in Middleton. He is a motorcycle enthusiast. This presentation will be available to attendees at Discovery World only.

Discovery World Digital Theater, Milwaukee

Event: 4:30pm January 24, 2007

Discovery World is located off of Lincoln Memorial Drive on Milwaukee's Lakefront between the Milwaukee Art Museum and Summerfest Grounds. Parking is available for \$7 in the structure. Please ask for a voucher at the presentation. Street parking is available on Harbor St. adjacent to Discovery World. The street address is:

500 North Harbor Drive, Milwaukee, WI 53202

Road Construction Updates

Change your route -- not your destination! Please note there is significant road construction on the Marquette Interchange (where I-94 and I-43 intersect). For up-to-date travel information visit www.mchange.org or call (888) 468-0037. Or, map your trip in advance with the Map-It Tool, choose Discovery World at Pier Wisconsin as your destination. The ramps from northbound and southbound I-43 to eastbound I-794 are closed, not to reopen again until late 2008. Traffic from the west is not affected and can continue to use I-794 eastbound. Here are alternate routes:

From the airport or South (Racine, Kenosha or Chicago)

Take I-94/43, exit I-43 at the Kilbourn Tunnel, turn right onto N. 6th St., turning left on E. Michigan St., proceed east past Lincoln Memorial Dr. to the parking structure at the end of the block.

From I-43 South (Beloit or Rockford)

Take I-43 north to I-894. Follow I-894 to I-94/43 north into downtown Milwaukee. Exit I-43 at the Kilbourn Tunnel, turn right onto N. 6th St., turning left on E. Michigan St., proceed east past Lincoln Memorial Dr. to the parking structure at the end of the block.

From the North (Green Bay)

Take I-43 south, exit I-43 at W. North Ave and take N. 6th St. turning left on E. Michigan St., proceed east past Lincoln Memorial Dr. to the parking structure at the end of the block.

From the West (Madison)

Take I-94 east to I-794. Follow I-794 to the Lakefront exit (the end of the freeway). Turn left at the lights and an immediate right at the first light – Harbor Drive. Proceed to the parking structure at the end of the block.

Webcast Details:

So you can't make it to Milwaukee on January 24th?

This will be the first Milwaukee Section event to be webcast. The details are being worked out and should be published mid-January, before this event. The latest information will be published at www.saemilwaukee.org and at www.sae.org section events.



This capability is being graciously hosted by Discovery World & the SAE Milwaukee Section.

- - - Discovery World, EVENT #1, AGENDA - - -

Registration/Social:	4:30 pm	Complimentary Beverages and Appetizers
Presentations:	5:00 - 6:15 pm	
Questions/Discussion	6:15 - 6:30 pm	

“Managing Duct Born Noise: Measurement, Analysis and Control”

Mr. Michael Zuroski, MSEE

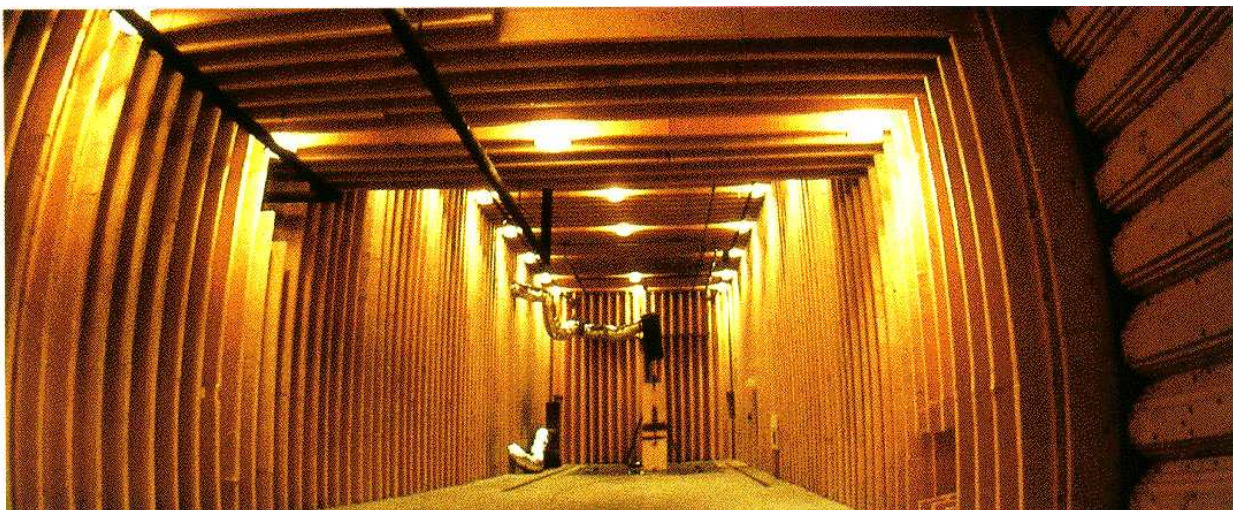
Research Director - Cummins Filtration, Stoughton, WI



Mr. Zuroski and Cummins staff will provide a brief tour of the development and analysis capabilities of the Cummins Filtration facilities. His presentation will include:

- Active and passive noise control engineering
- Development of sensors for sound pressure measurement
- Best practices for the interpretation of acoustic data.

Mr. Zuroski has been awarded 4 patents, and Design for Six Sigma Master Black Belt. He earned his degree at the University of Minnesota, specializing in Acoustics. He enjoys billiards, biking and golf.



Cummins Large Anechoic Room



Filtration



Muffler Cut-Away Example

- - - Zuroski/Cummins Event #2 AGENDA - - -

Registration/Tour:	4:30 pm	Complimentary Beverages and Appetizers
Presentation:	5:00 - 6:00 pm	
Questions/Discussion	6:00 - 6:30 pm	

Directions: Cummins Filtration 1801 Us Highway 51 And 138, Stoughton, WI

From Madison: Take US-14 E. 8.6 miles, Turn LEFT onto WI-138. 6.0 miles, Turn RIGHT onto US-51 S / WI-138 S. 0.3 miles

From Chicago: I-90 W / I-94 W / KENNEDY EXPY W. 7.5 miles, take I-90 W via EXIT 43B toward O'HARE / ROCKFORD (Portions toll) (Crossing into WISCONSIN) Merge onto US-51 N via EXIT 156 toward STOUGHTON. 8.4 miles, End at 1801 Us Highway 51 And 138

From Milwaukee: I-94 W toward MADISON. 70.3 miles, Take the WI-30 W exit- EXIT 240- on the LEFT toward MADISON, Merge onto I-39 S / I-90 E via EXIT 4A on the LEFT toward JANESVILLE. 3.7 miles, Merge onto US-12 W / US-18 W / W BELTLINE HWY via EXIT 142A toward MADISON. 1.4 miles, Take the US-51 S exit- EXIT 266- toward MC FARLAND. 0.2 miles, Turn LEFT onto US-51 S / STOUGHTON RD. Continue to follow US-51 S. 10.7 miles

From Oshkosh: US-151 S toward WAUPUN / MADISON. 51.0 miles, Merge onto I-39 S / I-90 E via EXIT 97A toward CHICAGO/ MILWAUKEE. 6.3 miles, Merge onto US-12 W / US-18 W / W BELTLINE HWY via EXIT 142A toward MADISON. 1.4 miles, Take the US-51 S exit- EXIT 266- toward MC FARLAND. 0.2 miles, Turn LEFT onto US-51 S / STOUGHTON RD. Continue to follow US-51 S. 10.7 miles

Registration:

Attendance will be limited to registered participants. Web registration is required for this event.

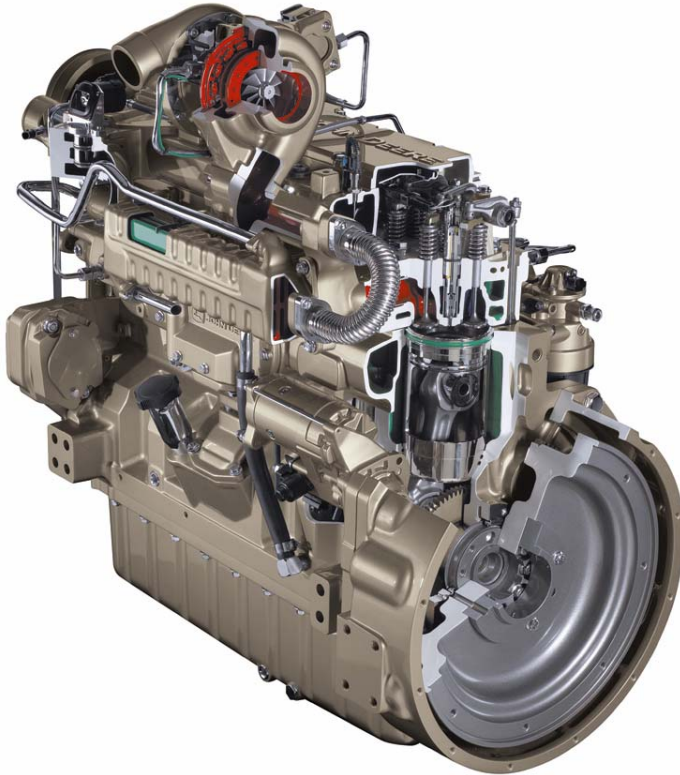
Please use Visit the website at, <http://milwaukee.sae.org>. Retirees without internet access may call the SAE Milwaukee registration line at (414-687-3032). Email registration has been discontinued.

Registration deadline: 6:00pm – Wednesday January 31

“EGR Cooling for Diesel Engines: Meeting U.S. 2007 Diesel Engine Emission Regulations”

Lawrence Gabbey, P.E., BSME, MBA

Manager – New Product Development, Modine Manufacturing



Mr. Gabbey will present an overview of the 2007 diesel engine emission regulations and EGR cooling technology solutions:

- Exhaust Gas Recirculation cooling Technology
- Applications of EGR coolers in diesel engines
- Current designs of EGR cooling heat exchangers.

Mr. Gabbey has been granted 6 U.S. patents. He has over 20 years experience in research and product development of vehicular heat exchangers. He earned his BSME at University of Wisconsin – Platteville and his MBA at the University of Wisconsin – Parkside.

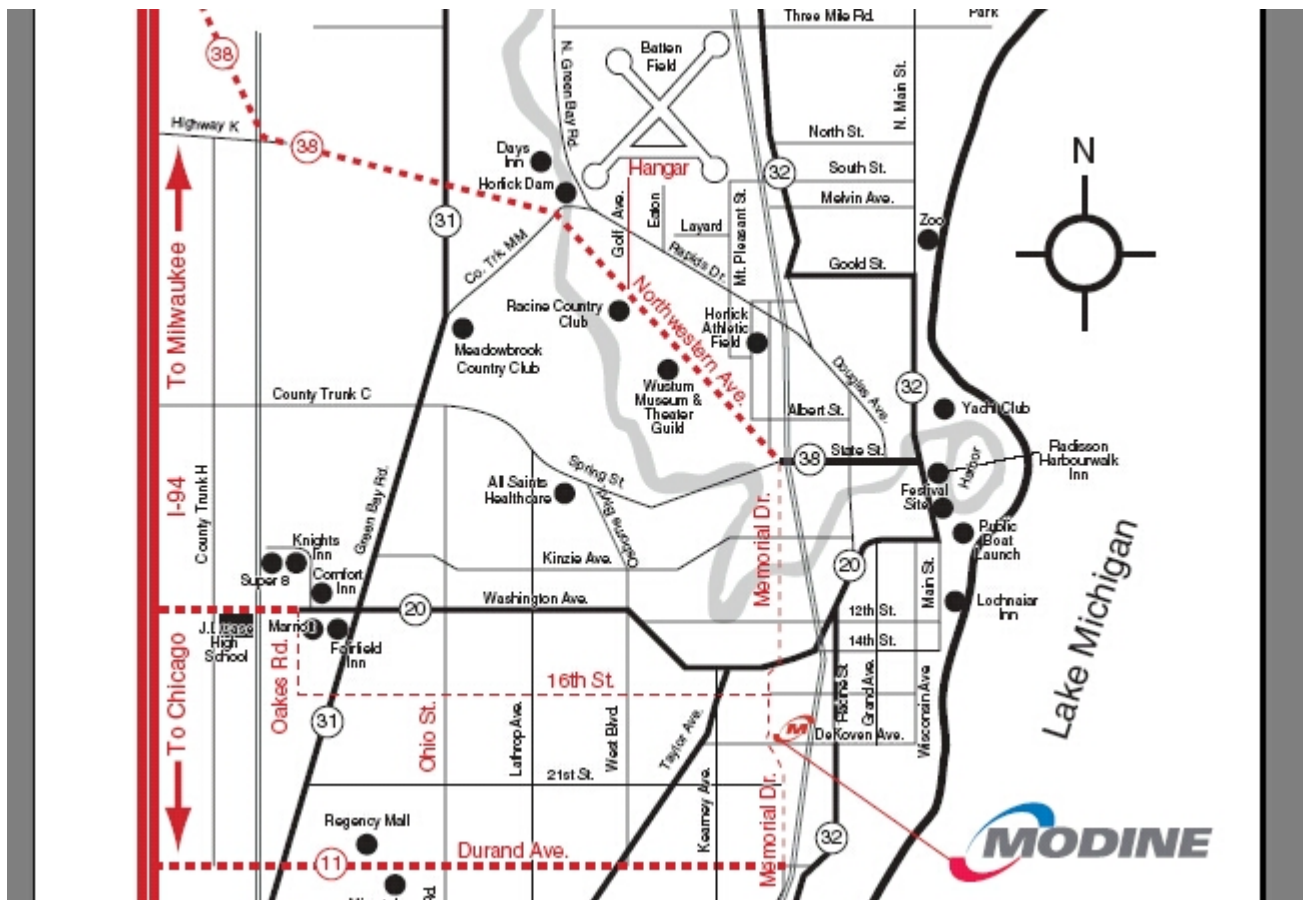


- - - **Modine – EGR Cooling Technology EVENT #3 AGENDA** - - -

Registration/Social:	4:30 pm	Complimentary Beverages and Appetizers
Presentation:	5:00 - 6:00 pm	
Questions/Discussion	6:00 - 6:15 pm	

This is a free event for SAE members.

Directions to Modine: Modine Manufacturing Co, 1500 DeKoven Avenue, Racine WI 53403.



Registration:

Attendance will be limited to registered participants. Web registration is required for this event.

Please use Visit the website at, <http://milwaukee.sae.org>. Retirees without internet access may call the SAE Milwaukee registration line at (414-687-3032). Email registration has been discontinued.

Registration deadline: 6:00pm – Wednesday, February 7th

Lecture Series Sponsorship

We wish to thank the following organizations for their support:



Filtration



Those who attend all three sessions of the SAE Milwaukee Section Lecture Series or the webcast events will be given a certificate of participation.
