

sensor & calibration tips



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Greetings,

Welcome to Issue #54

Welcome to the February issue of our Dynamic Sensing and Calibration Newsletter. This month we lost one of our dearest team members and an industry stalwart, Mrs. Karin Schonthal. Karin, who was the widow of the late Ernst Schonthal, spent over 15 years at TMS and PCB, after an equally impressive three decades at Brüel & Kjaer.

Both Ernie and Karin were pillars of knowledge and stability in the metrology field for TMS, PCB and B&K. For those who had the pleasure to interact with Karin on calibration and services know she was a tenacious advocate of customer satisfaction and could always be counted on to "go the extra mile." As we attended the IMAC conference in Jacksonville earlier this month, we shared the news with industry friends of Karin's passing, and are thankful for the outpouring of sympathy and fond memories. We miss you Karin. If you would like to make a donation in Karin's honor, we have set up a [web page with links to her causes of choice](#).

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Tip of the Month

New "dual purpose" shakers have both mounting platforms and through-hole armatures. The platform allows for easy mounting and fixturing of a unit under test for vibe control / light duty vibration testing applications. They also facilitate modal or structural excitation with the through-hole armature which also allows for easy stinger installation securing to the chuck and collect arrangement.

Quick Links

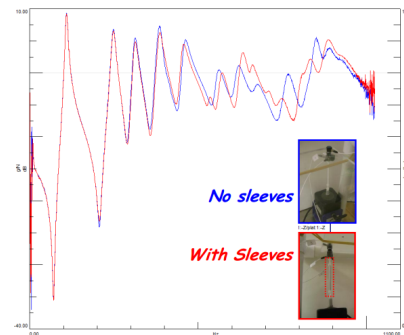
[NCSL](#)
[IMEKO](#)
[PTB](#)
[NIST](#)

Do's and Don'ts of Excitation Techniques

At the IMAC Conference this month, we spent time with our good friend, Professor Pete Avitabile. He has spent his career teaching and researching at the University of Massachusetts Lowell campus and is a pillar of the IMAC community.

In his signature style of application, data and explanation, Pete presented [Do's and Don'ts of Excitation Techniques](#),

illustrating practical knowledge on the excitation topics you need to know. While data acquisition and analysis always seem to get the front seat in training, Pete reminds us that it all starts with excitation and to avoid that testing cliché... "Garbage in - Garbage out."



[Click here to read more](#)

<http://www.modalshop.com/calibration.asp?ID=665>

Interview with Professor David Brown



Another favorite part about the International Modal Analysis Conference (IMAC), sponsored by SEM, is spending a little time with Professor David Brown.

Dr. Brown, who is now "retired" from University of Cincinnati, is active as

[ISO TC 108](#) - Mechanical vibration, shock and condition monitoring
[ISO TC 108/SC 3](#) - Use and calibration of vibration and shock measuring instruments

[SAVIAC](#)

[Vibration Institute](#)

[Equipment Reliability Institute \(ERI\)](#)

[TMS Video Vault](#)

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Previous Newsletters

[sensor & cal tips #53](#) -

What's Wrong with My Accelerometer; Industrial Vibration Accelerometer Performance

[sensor & cal tips #52](#) -

Nontraditional Uses of ICP 'Power' New Sensors; Low Frequency Calibration with Structural Gravimetric Technique

Select Newsletter Articles by Topic

[Function and Structure of Accelerometers](#)

[Similarities Between Charge and ICP Operation](#)

[Selecting Accelerometers for Mechanical Shock](#)

[Master List of Topics \(T.O.C.\)](#)

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ever in teaching, mentoring and innovating in the field of modal analysis and structural dynamics. Catching up, I asked Dave what his observations were on...

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<http://www.modalshop.com/calibration.asp?ID=666>

Blast from the Past - Long Stroke Excitation

For those who may be new to our newsletter, we wanted to highlight an article from a previous sensor & cal tips - "[A Game of Inches... or Centimeters](#)"...



The game of American football is sometimes called a "game of inches." Just as an inch of extra forward progress can determine the outcome of an individual play, an inch (or centimeter) can also determine the quality of your calibration at low frequency. As a rule of thumb, in the low frequency range there is no substitute for a longer stroke exciter...

[Click here to read more](#)

<http://www.modalshop.com/calibration.asp?ID=464>

Training Courses with Dr. Pat Walter

Dr. Pat Walter teaches (often sold out) courses in dynamic shock, vibration, pressure and force measurement theory and practice at PCB in Buffalo, NY. Click below for details on [upcoming courses in Buffalo](#) or here for [courses at TCU in Fort Worth, TX](#).

Thanks for spending time with us again this month. We appreciate your interest in the Sound and Vibe industry and invite you to step up to be an active member of the community in your favorite forum or technical social scene. Remember to visit our website as we've been busy adding to the [Mechanical Excitation Resource Center](#) and the [Video Vault](#). And please do consider following us on [Facebook](#) or [LinkedIn](#)... it's easy and just a click away.

Sincerely,

Michael J. Lally
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