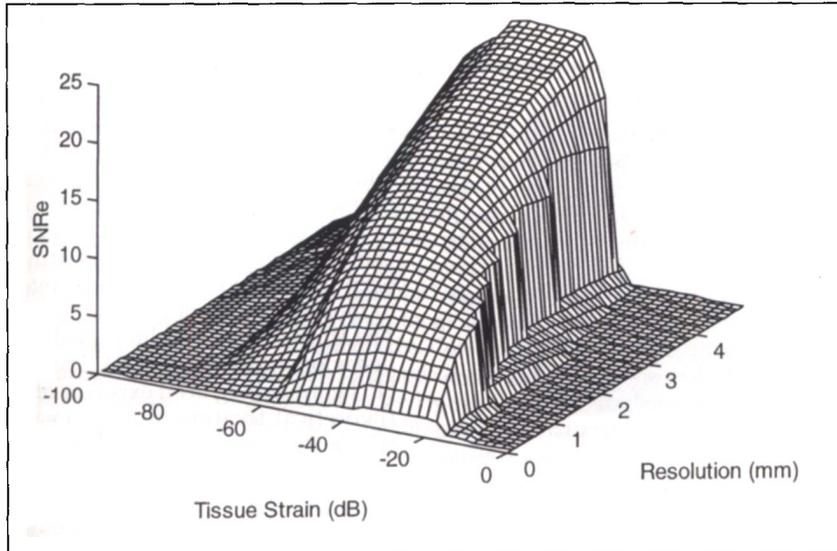


Figures appearing in *EDITOR'S CHOICE* are those arising from materials research which strike the editor's fancy as being aesthetically appealing and eye-catching. No further criteria are applied and none should be assumed. When taken out of context, such figures often evoke images beyond and unrelated to the original meaning. Submissions of candidate figures are welcome and should include a complete source citation, a photocopy of the report in which it appears (or will appear), and a reproduction-quality original drawing or photograph of the figure in question.



Remember the tail fins on autos of the 1950s? Had CAD/CAM been ubiquitous in Detroit at that time, one might see this month's *EDITOR'S CHOICE* as an artifact of that age. The aerodynamic design considerations are unmistakable. Or, if you watched television coverage of Nagano's Winter Olympics, you undoubtedly saw this graphic representation of the most challenging ski slope. Of course this Art Deco shape might merely be an abstract distortion of an elastic graph. If you look inside yourself, literally, you'll find the answer. That is, if you look inside using a diagnostic ultrasound technique. It turns out, as explained by T. Varghese, M. Bilgen, and J. Ophir (*IEEE Trans. Ultrason., Ferroelect., Freq. Contr.* **45** [January 1998] pp. 65-75), that the accuracy of elastographic imaging of our innards, by detecting and analyzing the reverberations of ultrasound, is bounded by a strain filter, which is the shape shown here. This is essentially a band-pass filter in the tissue strain domain. The clearest implication is that the poorer the resolution one is willing to accept (*y*-axis), the better the signal-to-noise ratio becomes (*z*-axis). A more subtle implication arises from the ski slope's lateral curvature. This tells us that the relatively noisiest signal results from attempts to achieve the best resolution at the highest decibels of strain. Under these conditions of tissue strain, who among us would not expect to hear more noise?

MRS MAILING LIST RENTAL

...reaching the broadest range of materials professionals directly!

89 Topical Categories to choose from!

NEW — Electronics: Microelectromechanical

UPDATED COUNTS NOW AVAILABLE!

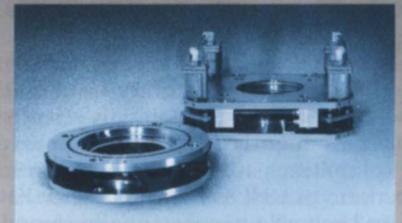
Contact Mary E. Kaufold at 724-779-8312 for a complete list of categories and counts.

Advertisers in This Issue

	Page No.
American Institute of Aeronautics and Astronautics (AIAA)	10
Australian Scientific Instruments Pty. Ltd.	9
Chemat Technology, Inc.	15
High Voltage Engineering	Inside front cover
Huntington Laboratories	Outside back cover
National Electrostatics Corp.	19
Omicron	13
Oxford Instruments	Inside back cover
Solartron	3
Virginia Semiconductor, Inc.	16
VLSI Standards, Inc.	36
Voltaix, Inc.	46

For free information about the products and services offered in this issue, fill out and mail the Reader Service Card, or FAX it to 312-922-3165.

Vacuum Pump Vibration Isolators



NEC Vibration Isolators effectively remove vibration from turbo and cryo pumps.

Model VI-1 is elastomer isolated; Model VI-2 is air-isolated. Both are UHV compatible, have short insertion lengths and high conductance with a wide variety of flanges available.

Contact NEC:

WEB SITE: <http://www.pelletron.com>

E-MAIL: nec@pelletron.com

NEC National
Electrostatics
Corp.

7540 Graber Road, P.O. Box 620310,
Middleton, WI 53562-0310 U.S.A.
Tel. 608/831-7600 • Fax: 256-4103

Circle No. 7 on Reader Service Card.