

## EDITORIAL

With respect to the subjects of the technical articles, this issue is dedicated to occupational noise. Published here are technical articles on the problems experienced by industrial workers with hearing loss, and on the measurement of worker noise exposure in industry.

Also presented here are further details of Acoustics Week in Canada 1993, to be held in Toronto in October. In particular, you will find the tentative symposium programme showing the technical sessions. With sessions on many diverse topics in acoustics and vibration, it looks like a great meeting.

Of great interest to me is the fact that two sessions will deal with physical and subjective aspects of industrial noise. With a purely physical/ engineering acoustics background, I have recently become more involved with subjective aspects of 'noise in the workplace'. I now see that people working on this subject fall very distinctly into either the physical or the subjective category. The two groups are dealing with the same problem from different points of view. But they often don't talk to (or even know) one another and they usually attend different conferences. In fact, they sometimes have considerable distain for one another. As someone who now works on both sides of the fence, this strikes me as sad and inefficient. Maybe the two associated sessions at this years symposium will help to bring the two sides together in Canada.

With this issue we welcome Chris Hugh, our new Associated Editor in charge of advertising. Thank you Chris, for volunteering to help to make *Canadian Acoustics* an ever-better journal.

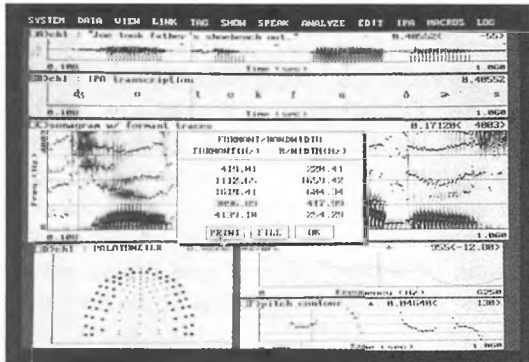
Les articles techniques de ce numéro sont consacrés au bruit industriel. Ces articles abordent les problèmes vécus par les travailleurs atteints de surdité professionnelle et la mesure de l'exposition au bruit industriel.

Des informations supplémentaires relatives à la Semaine Canadienne d'Acoustique 1993 qui se tiendra à Toronto en octobre sont aussi présentées. Vous trouverez principalement le programme préliminaire du congrès relatif aux sessions techniques. Sur la base des multiples thèmes du domaine de l'acoustique et des vibrations qui seront abordés, ce congrès sera sans doute très intéressant.

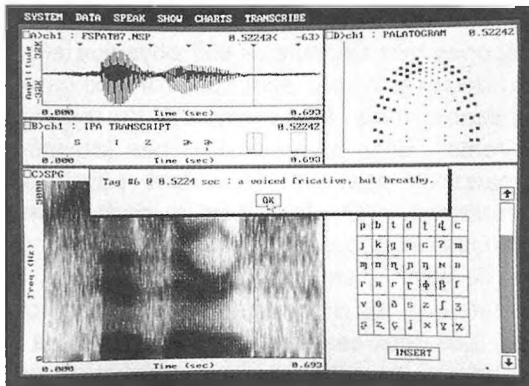
Les deux sessions portant sur les aspects physique et subjectif du bruit industriel présentent un grand intérêt pour moi. Avec une base purement physique acoustique, je me suis récemment impliqué au niveau des aspects subjectifs du bruit en milieu de travail. Je prends maintenant conscience que les gens qui s'intéressent à cette problématique forment deux catégories très distinctes - soit physique et subjective. Les deux groupes sont confrontés aux mêmes problèmes mais les analysent de points de vue différents. Elles ne se parlent pas (ou même ne se connaissent pas) et n'assistent pas aux mêmes conférences. En fait, il y a parfois de grandes distances qui séparent ces deux groupes. Comme je travaille maintenant des deux côtés de la clôture, je constate qu'il est dommage et peu efficace que ce soit ainsi. Les deux sessions associées prévues à l'horaire du congrès de cette année permettront peut-être de rapprocher ces deux groupes.

Nous profitons de la parution de ce numéro pour accueillir Chris Hugh, notre nouveau rédacteur associé, chargé de la publicité. Nous te remercions Chris d'avoir accepté de nous aider à rendre l'*Acoustique Canadienne* encore meilleure.

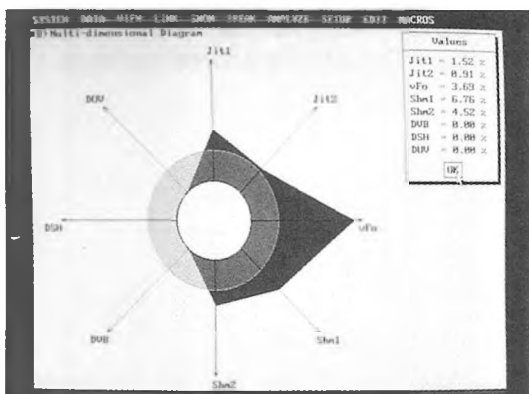
# CSL offers extensive analysis capabilities for speech research



Multiple windows of analysis including speech waveform, phonetic transcription (time-linked to waveform), spectrogram with formant trace, LPC slice, pitch contour and linguapalatal contact in lower left is linked to cursor in spectrogram. Numerical window shows formants' center frequencies and bandwidths.



The IPA Transcription Tutorial provides a multi-media format for learning and teaching IPA transcription. Students are guided through narrow transcription with "clues" which supplement careful listening, acoustic analysis and palatometric data.



The Multi-Dimensional Voice Program plots values inside the green circle indicating "within normal limits" while the red area(s) indicate values above the norms.

The Computerized Speech Lab (CSL™) is the most comprehensive PC-based system available for speech acquisition, analysis, editing and playback. Built on Kay's long experience in speech analysis, the CSL is designed to accommodate the wide variety of speech processing tasks required in teaching and research applications.

## Features

- Spectrographic, spectral, cepstrum, LTAS, waveform, LPC, pitch and energy analysis
- Extensive commands for editing, digital filtering, warping, splicing, appending, mixing, signal generation and other commands for exact manipulation of the signal for perceptual experiments
- On-screen IPA transcription with all 196 characters including diacritics, time-linked to the waveform and spectrogram
- Interface to Palatometer display to precisely relate linguapalatal contact patterns to speech acoustics
- DAT "pass-through" which allows direct input of digital data
- Dual channel acquisition and display (also option for four channel acquisition, analysis and display)
- Immediate access to CD quality playback of speech samples
- FREE 550-page book *Readings in Clinical Spectrography of Speech* with each CSL

## Programs for Speech Science & Teaching

- IPA Transcription Tutorial for teaching phonetic transcription
- Speech Synthesis for editing and synthesizing speech
- Palatometer Database of English phonemes showing IPA symbols, waveform, linguapalatal contact patterns and spectrogram
- Phonetic Database of over 1,800 speech samples from 25 languages on CD-ROM
- Multi-Dimensional Voice Program with 22 voice parameters both numerically and graphically represented

Contact Kay today at 1 (800) 289-5297 to receive your FREE "demonstration disk".

**KAY** Kay Elemetrics Corp.  
12 Maple Avenue, PO Box 2025  
Pine Brook, NJ 07058-2025 USA  
TEL: 1 (800) 289-5297 (In USA and Canada),  
(201) 227-2000 • FAX: (201) 227-7760

CSL™ is a trademark of Kay Elemetrics Corp.