

EDITORIAL

UN PERIODIQUE SCIENTIFIQUE OU UN BULLETIN DE LIAISON ?

L'Acoustique canadienne existe depuis une quinzaine d'années déjà. Une certaine tradition s'est donc implantée dans la communauté de l'acoustique au Canada.

Cette publication assume deux rôles, l'un d'information aux membres de l'Association, l'autre de moyen formel de communication scientifique. La vitalité et l'intérêt d'une telle publication dépend, pour une large part, de son contenu scientifique, en termes de données nouvelles ou de synthèses originales de connaissances. Dans un contexte multi-disciplinaire comme c'est le cas de l'acoustique, on doit aussi considérer la transmission de connaissances peu accessibles parce que publiées dans des périodiques disciplinaires hautement spécialisés. De plus, la communication scientifique entre chercheurs(euses) et professionnels(les) canadiens(nes) contribue à accroître les interactions dans un pays où les distances favorisent l'isolement. En somme, le caractère scientifique de notre périodique est essentiel. Pour l'alimenter, il a besoin d'un *support actif* des chercheurs(es) et professionnels(les) membres de notre Association.

A SCIENTIFIC JOURNAL OR A NEWSLETTER?

Canadian Acoustics has been published for fifteen years now. Thus, a tradition exists in the acoustic community of Canada. Such a publication fulfills two roles, one of providing information to the members of the Association, and another one of formal scientific communication. The vitality and the interest of such a publication relies, for a major part, on its scientific content in terms of new data or original reviews. In a multi-disciplinary context as is the case for Acoustics, one must also consider the transfer of knowledge that is less accessible because of being originally published in highly specialized disciplinary journals. Moreover, scientific communication between canadian researchers and professionals contributes to increase interactions in a country in which distances favor isolation. To sum up, the scientific character of our journal is essential. In order to feed it, there is a need for an *active support* from researchers and professionals who are member of our Association.

An innovative idea in speech analysis...



the workstation from Kay

The new Kay DSP Sona-Graph™ model 5500 is a speech workstation for speech acquisition, processing and display. It is designed for the speech scientist, speech-language pathologist, phonetician or other speech professional who needs a versatile and powerful tool to acoustically analyze speech in the most revealing method possible. It produces real time speech analysis on a high resolution color (and grey scale) display monitor. On-screen waveform editing and speech parameter extraction help analyze speech and select segments for further work.

The DSP Sona-Graph can filter and acquire signals in dual channel mode with sampling rates up to 80kHz. These stored signals can be analyzed in real time and then reanalyzed in a different format. Both narrow and wide-band spectrographic analysis can be performed in real time using the split screen display. These analyses can be edited, stored and printed.

The DSP Sona-Graph is also a data acquisition peripheral to computers. With Kay's special software the data can be acquired and DMA'd to an IBM® PC (for example) for further processing or storage. The DSP Sona-Graph is a complete system from one supplier. As a peripheral device or as a standalone unit it is the most powerful speech processing instrument available.

The system includes signal conditioning, A/D and an architecture design for fast

Specifications:

Input Filter: 120dB/Octave anti-aliasing filters.

Sampling: Up to 80kHz, dual channel, 12 bit (72dB).

Store: 2 Mbyte (50 seconds at 20kHz), up to 8 Mbyte can be added.

Analyze: Real time spectrographic analysis in wide and narrow band waveform, power spectrum, contour, FFTs, etc.

Display: Dual channel, high resolution, B/W color 640(h) x 480(v) x 256 levels (non-interlaced).

Digital Signal Processing: 10 MIPS including 10MHz multiply. Standard programs included LPC and formant extraction.

Edit: On screen cut, splice and paste.

Print: High resolution hard copy 2100(h) x 640(v) x 16 levels in 25 seconds.

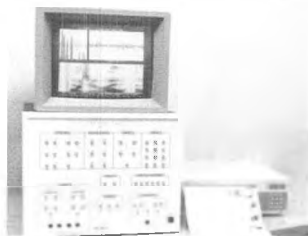
Communicate: High speed (20K bytes/sec) DMA to IBM PC and other computers.

digital signal processing. With its special parallel processing architecture, and 10 million instructions per second processing speed, the system can simultaneously acquire, store in memory, analyze and display speech signals in real time. It is, for example, about 200 times faster than an IBM® PC AT and about 15 times faster than a typical VAX™ system for most digital signal processing programs.

The very high resolution monitor is capable of displaying 640 x 480 graphics in black and white, 256 shades of grey and over 4000 colors simultaneously in a non-interlaced (flicker free) mode. Speech spectrograms and parameter tracings are vividly clear and revealing.

The system includes the system electronics with built in speech processing software in 1.5 Mbytes of PROM, high resolution video monitor and printer (it prints text, waveforms and grey scale sonagrams). No other system can compare in completeness, power, graphic resolution and speed. If your work involves speech analysis take a look at the DSP Sona-Graph workstation, a system designed from the ground up to provide all the capabilities you need.

For further information on the DSP Sona-Graph please call Robert McClurkin at (201) 227-2000 ex. 110 or write to the address listed below.



KAY

Tel: (201) 227-2000, TWX: 710-734-4347, FAX: (201) 227-7760
Kay Elemetrics Corp, 12 Maple Ave. Pine Brook, NJ 07058-9798 USA