

Acoustics Archive reviewed

by Geoff Leventhall

Geoff Leventhall, formerly reader in acoustics at the University of London, and a past president of the UK's Institute of Acoustics, is currently an independent noise consultant, frequently called on by the UK's Government and other public bodies.

This CD resource disk contains the past eight years of archival information from its parent hard-copy journal "Acoustic Abstracts". Published by Multi-Science, Acoustics Abstracts is now in its 36th year of publication and recognised as a major storehouse of information in all areas of noise and vibration. A wide variety of Journals and Proceedings are abstracted, including some to which many acousticians do not normally have access.

The CD Archive generally follows the pattern of Acoustics Abstracts, but contains the full information from 96 issues. The content exceeds 30,000 references from over 400 sources over the eight-year period covered by the CD.

In assessing a CD product, criteria include:

Installation
Facilities available
Convenience
Completeness

Installation on a 500MHz machine took a few minutes from inserting the CD to looking up the first abstracts. Once installed, it is only seconds from clicking the icon to being ready to start.

The START screen offers two modes of operation: TREE or SEARCH.

In the TREE mode, the screen gives the main divisions of the indexing, which follow those in the print version, as below.

- Acoustic diagnostic techniques
- Acoustic measurements

- Architectural acoustics
- Audio frequencies
- Fundamental acoustics
- Gaseous state acoustics
- Liquid state acoustics
- Noise
- Physiological, psychological and bioacoustics
- Review and miscellaneous
- Signal processing
- Ultrasonic applications
- Underwater acoustics
- Vibration and shock

Although specialists may disdain areas outside their narrow interests, it is mind broadening to see what others do, and every now and then something relevant pops up.

Each of the main areas open up to subdivisions. For example, "Noise" includes:

- Effects of noise
- Measurements and standards
- Noise reduction
- Noise sources

The SEARCH mode gives access to main headings and sub-headings from the TREE together with up to three independent search words or phrases, author's name, year and abstract number, if already known. Only the main heading is required for the coarsest search. For example NOISE gives 1488 abstracts to select from. Adding the sub- heading of NOISE REDUCTION reduces the number by more than half, but further narrowing is required by all but the most persistent of human browsers; those who have spare time to fill! Narrowing the search is obtained by adding search

words. For example “resonant” as a search word gave six papers related to noise reduction by resonant absorbers. The abstracts may be added to a Portfolio as the search progresses and printed at any stage.

The name of the first or second author can also be included in the search. A general search for SMITH came up with 82 publications over the five-year period. But combining the name with the search words focuses the result. SMITH and VIBRATION gave two hits.

Word searching is through the titles of the papers. Part words give the longer words from which they derive. For example, “pro” results in papers containing program, propagation, profan etc. If the title does not contain the correct word to describe the area of work, then the paper may be

missed, so that more than one approach is advised.

It is a remarkable advantage to have over 30,000 references, literally at your fingertips, many from non-standard sources, rolling off with ease after the first 10 minutes familiarisation.

Not cheap, but the content is enormous.

Minimum system requirements:

- Pentium 75 or higher
- 16MB RAM (32 MB preferred)
- Windows 95 or higher
- CD ROM drive (quad speed or higher)
- Hard disk space 10 MB

For product ordering information:
www.multi-science.co.uk

noise notes

Great apes doomed

Less than ten per cent of the remaining habitat of the great apes of Africa will be left relatively undisturbed by 2030 if road building, mining camps, and other infrastructure developments continue at current levels, a new report from the Great Apes Survival Project (GRASP) suggests. The future is even more bleak for the orangutans of Southeast Asia. The report indicates that within 30 years there will be almost no habitat left that can be considered “relatively undisturbed.” The study looked in detail at each of the four great ape species – chimpanzee, bonobo, gorilla, and orangutan – to assess the current, remaining, habitat deemed relatively undisturbed and thus able to support viable populations of apes. Experts then mapped the likely impact and area of healthy habitat left in 2030 at current levels of infrastructure growth. The findings are based on a new method of evaluating the wider impacts of infrastructure development on key species. While most studies focus on the actual area of land taken by a new road, mining camp, or infrastructure development, the GLOBIO method (Global Methodology for Mapping Human Impacts on the Biosphere) also factors in the wider impacts such as noise disturbance and habitat fragmentation. “This report suggests the possible fate of the great apes and their habitats,” said Klaus Toepfer, executive director of UNEP. “Roads are being built in the few remaining pristine forests of Africa and Southeast Asia to extract timber, minerals, and oil. Uncontrolled road construction in these areas is fragmenting and destroying the great apes’ last homes and making it easier for poachers to slaughter them for meat and their young more vulnerable to capture for the illegal pet trade.”