# About This Issue

Composer Horacio Vaggione has become one of the most highly regarded figures in computer music. In the interview in this issue of *Computer Music Journal*, Mr. Vaggione expounds upon a number of topics, including his use of multiple simultaneous time scales, his method of composing with networks of objects, his views on space as a musical parameter, and the relationships between his electroacoustic and his instrumental composing.

The next five articles in this issue present brief descriptions of music application programs that won awards in the Fourth International Music Software Competition, held in Bourges, France in 1999. A younger sibling of the prestigious competition for electroacoustic composers, the Bourges software competition brings recognition to noncommercial programming efforts.

The first of these articles describes the Director Musices software, which incorporates knowledge derived from years of research in the Speech, Music and Hearing department at the Royal Institute of Technology in Stockholm. The article summarizes a number of rules governing musical expression (a topic reminiscent of recent issues of *Computer Music Journal*). The Director Musices program attempts to model phrasing, articulation, and intonation to bestow a more lifelike demeanor upon an automatically performed score.

With one exception, the other four articles by Bourges prizewinners describe compositional environments that focus on manipulating note data, chiefly in the context of MIDI. The exception is Netochka Nezvanova's exuberantly nonlinear discussion about mining the World Wide Web for arbitrary data to render as sound.

This issue's final article, by Thierry Delatour, introduces another technique for converting extramusical data—in this case, molecular vibrations—into musical information. Molecules oscillate at rates far faster than acoustic vibrations, and each type of molecule has a characteristic spectrum. Mr. Delatour transposes static or time-varying molecular vibrational spectra down by about 35 octaves to make them audible. The spectra or their inverse Fourier transforms can similarly be mapped to various musical control parameters. This sonification technique can assist scientific researchers in identifying chemical substances, and might also provide composers with potential source material.

The reviews in this issue cover a music industry trade show, a scholarly conference, and a good many books and compact discs. The Products of Interest section announces recently issued music hardware and software.

*Front cover.* A screen image from the Director Musices program.
*Back cover.* The main window of the PRIE compositional environment, developed by Alfio Fazio.