played on the screen again. Then the user selects the Return option to return to the main Menu and then either exits Asystant GPIB or selects another option to continue working with Asystant.

Overall I have to say that it was a pleasure to work with such useful and easy to use software as Asystant GPIB. It helped a great deal with solving the problems and troubles I had with a project I was working on. I would recommend the use of Asystant GPIB to any user who wishes to collect, manipulate, analyze, and graphically display scientific and engineering data.

REFERENCES AND NOTES

(1) Asystant GPIB is available from Asyst Software Technologies, Inc., 100 Corporate Woods, Rochester, NY 14623 [(716) 272-0070 or (800) 348-0033]. The price is $695.00.

Lahey FORTRAN 77 Language System

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F77L is a FORTRAN language compiler that requires an MS-DOS or a PC-DOS operating system, version 2.00 or higher, and 256K of RAM memory and is able to make use of the INTEL family of numeric data coprocessors.

The F77L package includes a compiler for standard source files, a graphics development Toolkit binding, a P77L Profiler Demo, a NDP exception routines, and a conversion program from free to standard format and vice versa. It would have been nice if the developers had an editor included with the package.

The FORTRAN language, because of its logic and math orientation, is still very popular among engineers and scientists. Its popularity has not declined, as the experts predicted, as newer languages such as Pascal and C have been developed. As a result of FORTRAN's popularity, there are a number of FORTRAN compilers on the market.

The FORTRAN 77 language compiler from Lahey Computer Systems, Inc., is supported with very good documentation. The manual clearly shows every step of the installation of F77L, and further sections teach the user how to program in FORTRAN; there are many self-explanatory examples.

The F77L software has most of the same standard features that are available on mini and mainframe FORTRAN languages packages, but it also has some shortages like jumps in IF...THEN blocks. Personally, I also miss the DO...WHILE and DO-block loop, which are standard features on some other PC FORTRAN compilers but are missing in this compiler.

Among nice features are some nonstandard functions (like character handling routines, random number generators, and bit handling routines), DOS interface subroutines, interfaces to other languages (C, MS-FORTRAN), toolkits like IBM graphic library, and math chip exception subroutines for handling arithmetic errors. The F77L subprogram code is re-entrant so that subprograms can be invoked recursively, which is quite a rare option even in FORTRAN compilers on mainframe computers.

The F77L compiler has a lot of different options that are very useful for efficient error analyzing and further debugging with SOLD debugger. In addition, Lahey Computer System, Inc., also provides the PLINK86 Overlay Linker, which allows efficient library management.

Lahey Computer System, Inc., provides technical support at no cost to F77L users, but there is no toll-free number. Of course this support is limited to F77L problems and does not include tutoring in how to program in FORTRAN or how to use DOS.

After evaluating all the features the F77L compiler offers, from the considerable documentation, standard and nonstandard features, and technical support, I think that the F77L compiler is well worth the money.

REFERENCES AND NOTES

(1) The Lahey FORTRAN 77 Language System for personal computers, F77L, is available from Lahey Computer System, Inc., P.O. Box 6091, 917 Tahoe Blvd., Incline Village, NV 89450 [(702) 831-2500]. The price is $477.00.

TRC Databases for Chemistry and Engineering—Vapor Pressures

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The Thermodynamics Research center (TRC) at Texas A&M University has been in the data business for decades and has recently started to release some of its data in searchable form on disk for IBM PC compatible computers. This review is for the first of their products, a database of the vapor pressures for 5766 compounds.[1] Actually, it is not a database in the usual sense in that what the system contains are not actual data values, but rather the Antoine and extended Antoine coefficients and equations that allow one to calculate the vapor pressure at the given temperature and pressure