



## The Bloom Is Off the Google

I doubt there is any better demonstration of the rapid change of our society than the incorporation of the internet search engine Google into the consciousness of society. Granted the laser was held within the technical community for many years, so it took a while for the laser to take on other parts of speech. Now one speaks of laser-like precision and we say that a laser lased. The laser has lased. The laser will lase.

But to “google” took almost no time at all! Have you been “googled” yet? Or have you “googled” yourself? The process consists of getting on the Web, going to Google at [www.google.com](http://www.google.com), and entering your name. There you will find what others can find about you from looking on the Web. Some people even “google” a blind date before going out with them.

But beyond the curiosity factor, is Google useful? A year or so ago, I would have said “Yes,” but lately I am not so sure.

First, why has Google become so popular? To begin with, it had a different strategy for ranking the importance of results. The links were ranked based on the number of other sites that linked to it. Apparently, the reasoning was that rather than trying to arbitrarily assign some level of importance and usefulness, let the Web make the call.

Early on as I shifted from Yahoo to Alta Vista to Google for my search engine, I was guided by the ease with which I could find what I was looking for. Perhaps the most appealing feature of early Google was the unadorned look of the listing. In short order I had my information and was on my way.

Recently, as part of an optics lab I am teaching, I wanted to determine how difficult it would be to send my students out into cyberspace to find the atomic emission lines for some sources they were using. Certainly, the answers resided in the 1954–1955 edition of the *Handbook of Chemistry and Physics* in my office. But I wanted my students to use more up-to-date resources than a book whose covers are falling off.

I had done this exercise two years ago and my recollection was that it didn't take very long to find a listing. This time after several false starts with different search terms I managed to find the Atomic Spectra Database at NIST. But it was not as easy as earlier. Why? Part of it may be that the Web is just getting big and part, I fear, is that the algorithm may be breaking down.

My disappointment is not that it took so long to find this particular item, but rather that I grow more frustrated when I do my day-to-day searches. For a time it was possible to pick up information quickly and almost seamlessly. As I sat at my computer, I really thought that I might be able to dispense with much of the file cabinet and bookshelf behind me. But lately that unadorned look and on-target results have given way to discreet paid ads and chaff.

More and more sites depend upon Google listings and visibility. It would appear that Google has become a blend of commerce and knowledge that doesn't mix very well. As the Internet has turned from a source of individual sites intended to inform and entertain to a major engine of commerce, the ratio of marketing to information has grown to the point where the bloom is off the Google.

But I still harbor the hope that somehow we can retrieve some of the ease of the “Early Google.” It may be that professional societies in various fields can provide a service to their members and others in their profession. For example, in optics there are a few “compendium” web sites that specialize in optics, but the emphasis tends to be quantity rather than quality with Web page designs that border on the primitive.

With the establishment of digital libraries, current content is being served up in an easy-to-access manner. What is needed, however, is not an electronic journal—those are being established as the need and opportunity arises—but an electronic reference for our community.

Despite the assertion that “information should be free” by Internet evangelists, someone has to pay for the collation, verification, and distribution of reliable information. The same procedure by which this journal reaches you would be needed to support a reliable on-line technical reference library. Work is beginning on micropayment strategies that would permit inexpensive tolls to be charged in return for service and maintenance of technical content. Perhaps in the future, a more effective tool will capture the bloom that Google has lost.

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