

In 1992, the responsibility for the Clearinghouse for Chemical Information Instructional Materials (CCIIM) was assumed by Gary D. Wiggins of the Indiana University Chemistry Library. Under Carol A. Carr's leadership since the inception of the project in 1985, the collection of the CCIIM has grown to nearly 200 items dealing with publications such as Beilstein and Chemical Abstracts, and topics such as physical properties, nomenclature, and online searching.

In 1993, the Education Committee, recognizing that chemistry departments were facing new challenges with increased reliance on electronic access to information, decided to update the 1984 survey on "Chemical Information Instruction in United States Colleges and Universities":

- to reflect the current status of information instruction
- to recognize trends
- to identify how the Committee could best assist

The questionnaire was sent to all 595 chemistry departments that granted chemistry degrees in May 1992. Report on the survey is expected to be presented at the ACS National Meeting in Chicago in August 1993.

## 6. Publications, 1975-1993

### *Chemical Information Bulletin*

Consistent with the change in the Division's name, the Divisional bulletin acquired a new name, *Chemical Information Bulletin*, with Issue No. 2 of Volume 27, published in Fall 1975.

Under the editorship of Gabrielle S. Revesz (till Spring 1977), Bonnie Lawlor (Fall 1977-1982), and Margaret A. Matthews (1983-1993), the Bulletin has continued to be the prime vehicle of communication among the Division members, especially between the Divisional Executive Committee and members at large. A relatively small fraction of members regularly attends the Divisional meetings which have been almost exclusively conducted at the ACS National Meetings. But all members need to be informed about the technical programs, educational activities, membership benefits, and news about the profession.

The Bulletin has continued to include the abstracts of papers to be presented at the Divisional symposia and sessions, and frequently of those presented at the cosponsored symposia as well. This has allowed all the members to be familiar with the technical content of papers often reporting the most recent advances in and application of new technologies.

Incidentally, because of misunderstanding rather than by design, the *Information Science Abstracts (ISA)* in its two issues (Volume 22, No. 1 and 2/3, of January and February/March 1987, respectively) published 414 abstracts based on abstracts published in the *Chemical Information Bulletin* in the period 1983-1987. While the Division might have been flattered by the coverage of the Bulletin in the ISA, it became immediately obvious that this was a mistake since the ISA had not normally covered abstracts of presentations such as those published in the Bulletin.

Till 1977, the Bulletin was published twice a year. Between 1978 and 1990, it appeared three times a year: in spring prior to the Spring ACS National Meeting, in summer prior to the Fall ACS National Meeting, and in fall/winter. The third issue, usually mailed in December, contained as a rule the Membership Directory. Often enough, the cover of that issue had a different color, blue, green, or peachy, to distinguish it from the other two regular issues.

In 1991, two issues were published, because the third projected issue was moved to the following year. Starting with 1992, the first issue became an "administrative" issue with information for the members published at the beginning of the calendar year rather than at the end. It contained:

- Chairman's Message
- 1992 Milestone Calendar
- Call for Nominations
- 1992 Publication Schedules
- 1992 CINF Symposia
- Constitution and Bylaws
- Membership Directory
- 1992 CINF Committees
- 1992 CINF Functionaries

Advertisements have continued to be a big factor in reducing publication expenses. Especially successful were two Bulletin's Business Managers, Ruthann Bates (1986-1987) and Ronald R. Dueltgen (1989-1991). Since 1987 the revenue for advertisements exceeded the expenses. The average number of full-page advertisements was 21 per issue and there were a number of half- and quarter-page advertisements as well.

The Division has been grateful for the support provided by the Institute for Scientific Information (ISI) which since 1973 absorbed the cost of typing, artwork, and foreign postage.

### *CINF News*

From time to time, the Executive Committee discussed the publication of an interim newsletter to inform the Division members of pertinent matters

between the two consecutive issues of the *Chemical Information Bulletin*. First such *Newsletter* was published by Ann P. Moffett in February 1986. It specifically focused on the events to take place at the forthcoming ACS National Meeting in New York in April 1986, providing details on the 3rd Tri-Society Symposium, the Herman Skolnik Award Symposium, and the Divisional luncheon and Business Meeting.

When the mission statement was adopted in 1987, one of the objectives supporting the mission has been "communicating with members through additional publications". In response to that, another issue of the *Newsletter* was published by Ann P. Moffett in March 1988, reporting on the 1987 planning sessions and on the events at the forthcoming meeting in Toronto in June 1988.

In November 1989, Bonnie Lawlor launched a new version of the newsletter, named *CINF News*. Its first issue contained highlights from the 198th ACS National Meeting in Miami Beach in September 1989, and information on future ACS meeting programs and on the 1990 2nd International Conference on Chemical Structures in The Netherlands.

Two issues of *CINF News* were published in 1990 and two in 1991. In the July 1991 issue, a new column "The Pen Writes On ..." by Betty L. Unruh was introduced to cover news and "hot" topics in the information industry, primarily outside the ACS.

A new format and a greatly enriched content were introduced in the Fall 1991 issue, which contained among others highlights from the August 1991 Executive Committee meeting, Councilors' report from the August 1991 ACS Council meeting, and a report on the ACS standards on evaluating and certifying undergraduate degrees with respect to libraries and chemical information retrieval skills.

Three issues were published in 1992 with additional features such as "Letter from Europe", "CINF Member Demographics", "A Brief History of the CINF", "Copyright News", and numerous other Committees' reports and announcements.

For 1989-1992, Richard A. Love (ACS Advanced Technology Group) was the *CINF News* Production Editor. For 1993, Richard A. Lowe (Institute for Scientific Information) took over that responsibility.

### **Books Containing Papers from Divisional and Division-Sponsored Meetings**

A number of problems became associated with the publication of papers presented at the Divisional

symposia at the ACS National Meetings and other Division-sponsored meetings. While many an author were most willing to participate in a given symposium to present a report on their activities, a state-of-the-art review, or a description of a specific application of software to a chemical information problem, a few authors only were willing to invest additional time in preparing a publication-quality manuscript and, often needed, a camera-ready copy.

Unlike other professional organizations or even other ACS Divisions which regularly publish preprints and request the speakers to submit a full manuscript or an extensive summary before the meeting, this Division has never had such requirements. Consequently, it often fell upon the symposium organizer to literally twist the arms of the participants to make them submit after the meeting, and without much delay, publication-quality manuscripts.

An additional problem has been created by a kind of tug of war between editors of journals such as the *Journal of Chemical Information and Computer Sciences* and book publishers such as the ACS Books Department which publishes the ACS Symposium Series. Both solicit symposia papers, but each has a different criteria for acceptance. The journal editor sends each paper for peer review and some papers are rejected because they do not fit the criteria of original, previously unpublished, research. The symposia often include historical or survey papers that have no new science to report. The book publisher, on the other hand, does not object to publishing a whole symposium including such introductory or review material, but is carefully looking at a potential market first.

Both ways of publishing the symposia have been advantageous to the Division. The Division has always been vitally interested in channeling papers to the *Journal of Chemical Information and Computer Sciences*, which has become internationally recognized as a forum for exchange of ideas and applications in chemical information science and which the Division still regards as its "unofficial organ". On the other hand, publishing a symposium as a proceedings has allowed the symposium organizer a greater control of the book's content, has directed the message to a more focused group, and has provided the Division with royalties as additional income.

As is seen from Table IX (page 58), seven symposia from the ACS National Meetings were published in the ACS Symposium Series, while symposia from the three international meetings, cosponsored by the Division, were published as proceedings by a commercial publisher.

**Table IX.**  
**Books Containing Papers from Divisional and Division-Sponsored Meetings, 1975-1993**

- "Computer-Assisted Structure Elucidation", Smith, D. E. (ed.), ACS Symposium Series, Vol. 54, American Chemical Society, Washington, DC, 1977, 151 pp.
- "Computer-Assisted Organic Synthesis", Wipke, W. T.; Howe, W. J. (eds.), ACS Symposium Series, Vol. 61, American Chemical Society, Washington, DC, 1977, 239 pp.
- "Retrieval of Medicinal Information", Howe, W. J.; Milne, M.; Pennell, A. F. (eds.), ACS Symposium Series, Vol. 84, American Chemical Society, Washington, DC, 1978, 231 pp.
- "TSCA's Impact on Society and Chemical Industry", Ingle, G. W. (ed.), ACS Symposium Series, Vol. 213, American Chemical Society, Washington, DC, 1983, 240 pp.
- "Graphics for Chemical Structures: Integration with Text and Data", Warr, W. A. (ed.), ACS Symposium Series, Vol. 341, American Chemical Society, Washington, DC, 1987, 160 pp.
- "Chemical Structures: The International Language of Chemistry", Proceedings of the Conference, Leeuwenhorst Congress Center, Noordwijkerhout, The Netherlands, May 31-June 4, 1987, Warr, W. A. (ed.), Springer-Verlag, Berlin, 1988, 472 pp.
- "Chemical Structure Information Systems: Interfaces, Communication, and Standards", Warr, W. A. (ed.), ACS Symposium Series, Vol. 400, American Chemical Society, Washington, DC, 1989, 132 pp.
- "Expert Systems for Environmental Applications", Hushon, J. M. (ed.), ACS Symposium Series, Vol. 431, American Chemical Society, Washington, DC, 1990, 232 pp.
- "The Terminology of Biotechnology: A Multidisciplinary Problem", Proceedings of 1989 International Chemical Congress of Pacific Basin Societies, PACIFICHEM '89, Loening, K. L. (ed.), Springer-Verlag, Berlin, 1990, 216 pp.
- "Chemical Structures 2: The International Language of Chemistry", Proceedings of The Second International Conference, Leeuwenhorst Congress Center, Noordwijkerhout, The Netherlands, 3rd June to 7th June 1990, Warr, W. A. (ed.), Springer-Verlag, Berlin, 1993, 496 pp.

### ***Journal of Chemical Information and Computer Sciences***

When the Division changed its name in 1975 from the Division of Chemical Literature to the Division of Chemical Information, the *Journal of Chemical Documentation* also changed its name to the *Journal of Chemical Information and Computer Sciences*, effective with Volume 15, Issue No. 1 (February 1975).

Not only this name change reflected the increasing involvement of the Division and of other ACS members in computerized operations such as data acquisition and analysis, data manipulation and display, pattern recognition, and automation, but it also identified a forum for publication of papers presented before a newly formed (1974) ACS Division of Computers in Chemistry. In fact, two of its founding members, Peter G. Lykos and W. Todd Wipke, were invited to join the Journal's Advisory Board.

Although the Journal has never been formally pronounced as the official organ of the Division and the Division has never attempted to influence the Editor's publication policies, very close ties have continued to exist between the Journal and the Division. Prominent

and active members of the Division have continued to serve on the Journal's Advisory Board. The Division directly has contributed by encouraging speakers at the Divisional symposia and sessions to submit their papers for publication in the Journal.

Examples of such published symposia are:

- User Reactions to CAS Data and Bibliographic Services (Vol. 15, No. 3, August 1975)
- Impact of Copyright Developments on Chemical Information Transmission and Use (Vol. 16, No. 2, May 1976)
- Information Handling and Processing by the Food and Drug Administration (Vol. 17, No. 2, May 1977)
- Retrieval of Polymer Information (Vol. 19, No. 2, May 1979)
- Techniques and Problems in Retrieval of Numerical Data (Vol. 20, No. 3, August 1980)
- Uses and Applications of the Wiswesser Line Notation Today (Vol. 22, No. 2, May 1982)

- Scientific Communication Pathways (Vol. 26, No. 2, May 1986)
- Searching for Markush Structures (Vol. 31, No. 1, February 1991)
- Computer Retrieval of Polymer Information (Vol. 31, No. 4, November 1991)
- Numeric/Factual Materials and Chemical Databases (Vol. 33, No. 1, January/February 1993)

While the symbiotic relationship with the Division has continued to exist, the Journal has increasingly attracted papers with no association with a previous scientific meeting, and papers from outside the U.S. Clearly, the Journal has gained an international status of a prime journal in chemical information science.

As an example, from a total of 62 papers published in 1979, 30 were from the area of chemical information and 32 from the computer science field. Out of a total of 62, 29 were presented before the Division and 29 were written for publication only and never presented anywhere. One-third of all the papers (21) came from outside the U.S.

In mid-1981, Herman Skolnik expressed his intention to relinquish the position of the Editor. He commented in his last editorial on "Changing of the Editor" on his experience as the Editor for 21.5 years and on the international importance of the Journal [Ref. 23].

Thomas L. Isenhour was named a new Editor, effective as of July 1, 1982. He noted in his first editorial in August 1982 the exponential development in computers and envisioned the opening of new areas of computerized chemical investigations for which he hoped the Journal would become a forum. Carlos M. Bowman was appointed an Associate Editor with special responsibility for the chemical information-related manuscripts. In 1982, Peter C. Jurs was appointed the Book Review Editor, and in 1984, Stephen R. Heller became the Software Review Editor.

To celebrate the 25th anniversary of the Journal, the Silver Anniversary Issue (Volume 25, No. 3, August 1985) with a glossy silvery cover was published. It was presented as a review of the past 25 years and a predictor of the future [Ref. 26]. W. Val Metanowski and Charles L. Wilkins acted as special Associate Editors who solicited papers from the best experts in the field. The issue contained 37 papers covering every conceivable topic of chemical information and computer sciences from publishing, storing, and retrieving primary and secondary information to storing, naming, searching,

and retrieving chemical structures to generating and organizing specialized databases to providing chemical information instruction to applying automation and robotics in the laboratory. Among them were contributions from Belgium, France, Germany, Japan, Poland, Rumania, Switzerland, and the United Kingdom. It is worth noting that six of the authors (Charles L. Bernier, Eugene Garfield, Joseph H. Kuney, Noel Lozac'h, Herman Skolnik, and Robert E. Stobaugh) 25 years earlier contributed papers to the very first issue of the Journal in 1961.

In mid-1988, Thomas L. Isenhour tendered his resignation. George W. A. (Bill) Milne was named a new Editor as of July 1, 1989. Shortly thereafter, three Associate Editors, Pierre Buffet from France, Reiner Luckenbach from Germany, and Wendy A. Warr from the United Kingdom were appointed to reflect the international nature of the Journal. Gary D. Wiggins became the new Book Review Editor and Stephen R. Heller has continued as the Software Review Editor.

The November 1990 issue (Volume 30, No. 4) was dedicated to the memory of George Vladutz, the 1989 Patterson-Crane Award winner, who passed away on September 3, 1990.

The May 1991 issue (Volume 31, No. 2) was dedicated to Michael F. Lynch, the 1989 Herman Skolnik Award winner, on the occasion of his 25th anniversary of joining the Faculty at the University of Sheffield, England, from where a steady stream of significant research papers has been reaching the Journal, from him, his colleagues, and his students.

Interesting statistics showing for the period 1982-1991 the upward slope in the percentage of papers from outside the U.S. published in the Journal were presented by the Editor in the November 1991 issue of *CHEMTECH* [Ref. 38]. The average for the last three years (1989-1991) was 55%.

Since the Journal in the past few years enjoyed a steady growth, the frequency of publication was increased in 1992 from four to six issues per year.

Starting with the March/April 1993 issue (Volume 33, No. 2), the Journal's papers have been divided into three sections, "Chemical Information", "Chemical Computation", and "Molecular Modeling". This merely formalized what the Journal had been publishing already. A subtitle, "Includes Chemical Computation and Molecular Modeling", has also been added. Anton J. Hopfinger and Kenny Lipkowitz were named as additional Associate Editors to deal with papers on chemical computation and molecular modeling.

## Information Science Abstracts

As one of the founders of this abstracting journal, the Division has continued to participate actively on its governing body, Documentation Abstracts, Inc., through the following representatives on the Board of Directors:

1976-1977	Peter F. Sorter, President Frederic R. Benson
1978-1982	Peter F. Sorter, President Ralph E. O'Dette
1983	John T. Dickman Ralph E. O'Dette
1984-1987	Murray D. Rosenberg, President (1986-1987) John T. Dickman
1988-1993	Paul E. Swartzentruber, Secretary (since 1990)

When in 1988 the Divisional representation was reduced to one member on the Board, the Division has started appointing an alternate representative whose role was to act for the representative whenever the latter could not attend the Board's meeting:

1988-1991	David F. Zaye
1992-1993	Judith E. Watson

The number of sponsoring organizations grew from the original three to eight:

- ACS Division of Chemical Information (ACS/DCI)
- American Society for Information Science (ASIS)
- Special Libraries Association (SLA)
- American Society of Indexers (ASI) (since 1978)
- American Library Association (ALA) (since 1985)
- Association of Information and Dissemination Centers (ASIDIC) (since 1985)
- Association of Library and Information Science Education (ALISE) (since 1985)
- Medical Library Association (MLA) (since 1985)

Accordingly, the Board of Directors was enlarged from the original six members to 18 in 1986, but it was trimmed down to eight when the new Bylaws went into effect in 1988. Currently, there are ten members, including two representatives from the Plenum Publishing Corporation.

In an effort to improve the currency and the efficiency of publication, the Board awarded a contract in 1981 to Plenum Publishing Corporation which continues to publish *Information Science Abstracts* to date.

When this change occurred, Frank Columbus of Plenum took over the editorship for four years (1981-1984). In 1985, Harry M. Allcock from Plenum became the Editor, the post he held till 1992. In 1993, Anne Meagher became the Managing Editor. Harry M. Allcock, as Technical Advisor, continues to serve on the Board of Directors.

In the years 1976 through 1980, the journal published on the average 4,500 abstracts per year. In the years 1981, 1982, and 1983, it published 5,892, 5,995, and 7,202 abstracts, respectively. When in 1984 the frequency of publication was increased from six issues to 12 issues per year, 12,000 abstracts were published. In later years (1987-1989), the number dropped to 8,400, then increased to 9,200 (1990-1991), and dropped again to 8,800 in 1992.

At the 191st ACS National Meeting in New York in April 1986, Dorothy Thomas presented an informative paper on "Information Science Abstracts: An Overview of History, Purpose, and Goals" [Ref. 30].

The journal observed its 25th anniversary in 1990 with a glossy ivory and silver cover [Ref. 36]. A special historical editorial, provided for the occasion by Ben-Ami Lipetz, former Editor (1966-1980), was published in the March 1990 issue (Volume 25, No. 3).

Since September 1983, the journal can be accessed online as the DIALOG File 202, and since September 1992 is available on a single CD-ROM. The latter is enhanced with information science records from the ERIC database.

## CHEMTECH

In January 1971, a new ACS monthly magazine, *CHEMTECH*, made its debut under the editorship of Benjamin J. Luberoff. Subtitled "The Innovator's Magazine", it was intended to cover interdisciplinary areas of chemistry and chemical engineering. From the very beginning, its Advisory Panel has consisted of official representatives of selected ACS Divisions. Among the 11 Divisions on the first such panel, the Division of Chemical Literature, as it was known then, was not included.

In 1977, the Divisional Long Range Planning Committee recommended that the Division should seek representation on the *CHEMTECH* Advisory Panel. The Division's application was unanimously accepted

by the Panel and Cynthia H. O'Donohue was appointed a Divisional representative for 1978.

Since then the Division has had a continuous representation on the Panel, renamed Advisory Board in 1985, as follows:

- 1978-1982 Cynthia H. O'Donohue (chairman, 1981)
- 1983-1984 Gabrielle S. Revesz
- 1985-1987 Stuart M. Kaback
- 1988-1993 Lucille M. Wert (chairman, 1992)

Their active participation was beneficial to both the magazine and to the Division, since they directly or indirectly contributed to the articles addressing chemical information issues such as:

- Rowlett, R. J., Jr. "Gleaning Patents with CHEMICAL ABSTRACTS" (Vol. 9, No. 6, June 1979)
- Kaback, S. M. "Patents: Keys to Knowledge" (Vol. 10, No. 3, March 1980)
- Revesz, G. S.; Cassidy, P. A. "Modern Literature Searching: The Case of C<sub>4</sub>" (Vol. 14, No. 1, January 1984)
- Kaback, S. M. "Access All the Information in Patents" (Vol. 15, No. 3, March 1985)
- Rickter, D. "Wandering through Darkest Abstracts" (Vol. 15, No. 8, August 1985)
- Nelson, G. L. "Whither Chemical Information" (Vol. 15, No. 12, December 1985)

At the 202nd ACS National Meeting in New York in August 1991, *CHEMTECH* celebrated its 20th anniversary.

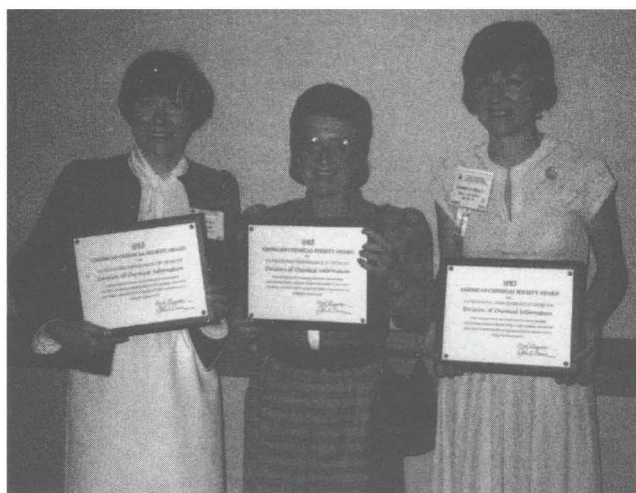
In the end of 1991, Benjamin J. Luberoff, the founding Editor, retired having served for 21 years (1971-1991). He spoke twice before the Division as a luncheon guest speaker on August 19, 1972, in New York and on August 25, 1992, in Washington, DC, almost to the day 20 years apart!

A new Editor, Abraham P. Geilbein took over the reins in January 1992. A new format for *CHEMTECH* was introduced in January 1993.

## 7. Awards and Recognitions, 1975-1993

### American Chemical Society (ACS) Outstanding Division Award

For its performance in 1982, the Division received the ACS Outstanding Intermediate Division Award, established by the ACS Committee on Divisional Activities. The Division was cited for excellence of administration, dissemination of information to members, sponsorship of journals, production of an educational videotape, and outstanding programming at the ACS National Meetings. Specifically identified for 1982 were the Tri-Society Symposium (with the American Society for Information Science and the Special Libraries Association) and the international character of the Herman Skolnik Award, given in 1982 to Robert Fugmann of West Germany. On hand to receive the Award plaques at the 187th ACS National Meeting in St. Louis in April 1984 were the 1982 Divisional Officers (Jean G. Marcali, chairman; Barbara G. Prewitt, chairman-elect; and Ann P. Moffett, treasurer).



Divisional Officers, Ann P. Moffett (treasurer), Jean G. Marcali (chairman), and Barbara G. Prewitt (Wood) (chairman-elect) receive the 1982 ACS Outstanding Intermediate Division Award at the 187th ACS National Meeting in St. Louis, MO, in April 1984.

At the semiannual Divisional Officers Group (DOG) dinner at the 196th ACS National Meeting in Los Angeles on September 24, 1988, the Division received, for the second time, the ACS Outstanding Intermediate Division Award for its 1987 performance. The Division was cited for carrying out its mission to provide a forum for the exchange of information, for cosponsoring and participating in the First International Conference on Chemical Information in The Netherlands, for

programming and demonstrations at the two ACS National Meetings, for providing assistance to four ACS Regional Meetings, and for encouraging a direct interaction between the bench chemists and information resources through programs, publications, awards, and member-assistance. The 1987 Divisional Officers (W. Val Metanowski, chairman; Arleen N. Somerville, chairman-elect; Bonnie Lawlor, secretary; and M. Karen Landsberg, assistant secretary) were on hand to receive the Award plaques.

The five factors that contributed most to both Awards were:

- long-range planning
- continuity of management
- monitoring of technological advances
- response to changing needs of members
- quality and comprehensiveness of annual reports

In response to a request by Karl S. Vorres, Chairman of the Divisional Officers Caucus, W. Val Metanowski made a brief presentation on "ACS Division of Chemical Information - An Award-Winning Division" at the Caucus meeting in Miami Beach on September 9, 1989, highlighting those very factors which contributed most to the 1987 Award.

### Herman Skolnik Award

In 1976, in honor of the first recipient, the Division established the Herman Skolnik Award to recognize outstanding contributions to and achievements in the theory and practice of chemical information science. It was not a coincidence that the first Award was given at the ACS Centennial Meeting in New York. It was fitting at the time of celebrating the 100th anniversary of founding the ACS to recognize chemical information as one of the integral functions of the whole Society.

Bruno M. Vasta, the 1976 Divisional Chairman is to be credited with initiating and implementing the Award. A year earlier, at the 169th ACS National Meeting in Philadelphia in April 1975, he had suggested the Division establishes an award to be granted for an outstanding paper, research endeavor, or other significant contribution in the field of chemical information. He further proposed the award to be named the Herman Skolnik Award in honor of the first Editor of the *Journal of Chemical Information and Computer Sciences*.

Upon the receipt of the Award, Herman Skolnik described the Award in an editorial [Ref. 19] as a proof that

"chemical information science has achieved the final mark of maturity: a continuing tradition of responsible authorities. When we honor a member of our discipline, we honor the discipline."



**Herman Skolnik receives the first Divisional Award from Bruno M. Vasta (chairman) at the 171st ACS National Meeting in New York on April 6, 1976.**

The original Award consisted of a \$350 honorarium and a walnut plaque. In recent years, the honorarium has been increased in 1989 to \$500, in 1991 to \$1,000, and in 1993 to \$2,000.

The "Call for Nominations" announcement and brochure refer to the Award as recognizing the continuing advancement of chemical information in areas such as:

- design of new and unique computerized information systems
- preparation and dissemination of chemical information
- editorial innovations
- design of new indexing, classification, and notation systems
- chemical nomenclature
- structure-activity correlations
- numerical data correlation and evaluation

Each Award winner gives an address at the time of the presentation of the Award at the ACS National Meeting. In 1976, and regularly since 1982, an Award Symposium has been organized by the recipient on the topic close to that of the address.

The Herman Skolnik Award Winners are listed in Table X (page 63). There were no Awards in 1979 and 1985. Two Awards were given in 1989. Detailed citations are given below.

**Table X.**  
**Herman Skolnik Award Winners**

1976	Herman Skolnik
1977	Eugene Garfield
1978	Fred A. Tate
1980	William J. Wiswesser
1981	Ben H. Weil
1982	Robert Fugmann
1983	Russell J. Rowlett, Jr.
1984	Montagu Hyams
1986	Dale B. Baker
1987	William Theilheimer
1988	David R. Lide, Jr.
1989	Michael F. Lynch Stuart A. Marson
1990	Ernst Meyer
1991	W. Todd Wipke
1992	Jacques-Emile Dubois
1993	Peter Willett

**1976 - Herman Skolnik** - for outstanding and sustained service in the field, as one of the founders of the Division, founder of the ACS Delaware Valley Chemical Literature Group, science historian, founder and Editor of the *Journal of Chemical Documentation* (*Journal of Chemical Information and Computer Sciences* since 1975), inventor of a notation system, innovator in indexing, and organizer of symposia and panel discussions at the ACS local, regional, and national level.

**1977 - Eugene Garfield** - for contributions to information science that have had considerable impact on both the academic world and the information industry, especially the successful application of scholarly work to the business of information, such as founding of the Institute for Scientific Information (ISI), publication of innovative secondary journals and indexes (*Current Contents*, *Index Chemicus*, and *Science Citation Index*), and enjoying acceptance of his innovations through effective educational marketing programs.

**1978 - Fred A. Tate** - for conceiving, developing, and implementing computer-based information-handling systems and procedures across the full-range of Chemical Abstracts Service's (CAS) operations, which had provided prototypes for other secondary services, for his leadership in the development of the CAS Chemical Registry System, and for close international cooperation between the United Kingdom, West German, French, Japanese, and United States groups in the development and use of chemical information systems and services.

**1980 - William J. Wiswesser** - for pioneering mathematical, physical, and chemical methods of punched-card and computer-stored representation of molecular structures, leading to the creation of the Wiswesser Line Notation (WLN) for concise storage and retrieval of chemical structures, which was adopted by the largest chemical and pharmaceutical companies worldwide to manage their respective chemical structure files, and by a number of secondary indexes, atlases of data, and catalogs of chemical compounds.

**1981 - Ben H. Weil** - for distinguished and dedicated services to the chemical profession, particularly in definition and documentation of chemical literature, pioneering and continuing work in chemical information systems and copyright, including one of the first punched card indexing systems placed in actual use, founding and editing of the Divisional bulletin, *Chemical Literature*, standardiza-

tion of abstracts, and contribution to the creation of the Copyright Clearance Center, Inc. (CCC).

**1982 - Robert Fugmann** - for development of the GREMAS system (Genealogical REtrieval of MAGnetic tape Storage), the first truly sophisticated computerized retrieval system, based on a faceted hierarchical fragment code for each part of a chemical molecule, and for development of the TOSAR system (TOPOlogical representation of SYnthetic and ANALYTICAL system Relations) for the retrieval of reactions and other concepts, including establishment of indexing concepts for nonstructural information and creation of theoretical basis of information systems.

**1983 - Russell J. Rowlett, Jr.** - for guiding *Chemical Abstracts*' transition from a manually produced abstracting and indexing publication to a computer-generated family of products, and for his leadership in the improvement of patent coverage, the CAS Registry System, timeliness of CA Volume and Collective Indexes, and quality control through a shift from volunteer abstractors to full-time professional document analysts and through the unified document analysis utilizing to the fullest extent man-machine interactions.

**1984 - Montagu Hyams** - for contribution to handling of patents by founding in 1951 a one-man business from his house, Derwent, which through his vision, leadership, and business acumen has become, as Derwent Publications Limited, the world leader in patent-based information services producing a diversified range of patent- and journal-based information services available both in printed form and as online computer-searchable databases.

**1986 - Dale B. Baker** - for leadership of Chemical Abstracts Service (CAS) in its move from the conventional abstracting and indexing service of the 1950's to the world's premier automated information storage and retrieval system through courageous embarkation on new paths and approaches including promotion of international sharing of scientific and technical information, which provided direction for the entire information industry.

**1987 - William Theilheimer** - for pioneering a chemical reaction documentation system, embodied in 40 yearbooks of "Theilheimer's Synthetic Methods of Organic Chemistry" and paving the way to modern chemical reaction databases through codification of chemical reactions and categorization of reactions in terms of reaction type and

essential bond breaking and formation.

**1988 - David R. Lide, Jr.** - for the creation of the National Standard Reference Database Series of computer-searchable numeric databases, administration of the Standard Reference Data Program of the National Bureau of Standards, founding and editing the *Journal of Physical and Chemical Reference Data*, and participation in national and international data activities of the International Union of Pure and Applied Chemistry (IUPAC) and the Committee on Data for Science and Technology (CODATA).

**1989 - Michael F. Lynch** - for pioneering research of more than two decades on the development of methods for the storage, manipulation, and retrieval of chemical structures and reactions as well as related bibliographic information, including generic structure storage and retrieval, automatic subject indexing, articulated subject index production, document retrieval system, and database management.

- **Stuart A. Marson** - for development of innovative, user friendly software which has allowed the bench chemist to more productively utilize chemical information as daily resource such as the first complete commercial system for graphic input, storage, searching, and retrieval of chemical structures (MACCS) and the chemical reaction information system (REACCS).

**1990 - Ernst Meyer** - for playing a major role in revolutionizing chemical information technology through the use of computer methodology since the late 1950's for input and searching techniques for topological and fragment representation of chemical substances, including generic or Markush structures and considering structure-activity correlations.

**1991 - W. Todd Wipke** - for pioneering work in the development of methods for representing and manipulating chemical information such as computer-assisted design of organic syntheses, simple interfaces and smart systems, methods for molecular modeling and conformational analysis, and editorial innovations in starting an electronic journal *Tetrahedron Computer Methodology*.

**1992 - Jacques-Emile Dubois** - for the development of the DARC Topological System which led to various applications in search and retrieval of chemical substructures and structures and in artificial intelligence such as in applying sequences of substructure, structure, and