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MOA
General

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*The chemical industry has
served the Nation
throughout its 200 years.
Its Association has
served for more
than half that time.*

MANUFACTURING CHEMISTS ASSOCIATION

BOR 008167

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¹Deceased

²Honorary Director

Letter to Member Companies

The year covered in this Annual Report probably will be remembered as the year of toxic substances. Indeed, much of the Association's work was concentrated on the campaign to persuade Congress to pass a reasonable toxic substances control bill.

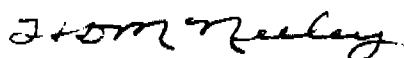
Because toxic substances legislation will impact heavily on the industry, the campaign for a reasonable bill was of overriding importance. As this is written, a compromise seems possible, and if a reasonable bill results it will be a credit to the effective work of the Association.

Important as this is, however, other interest areas of the Association are equally important, and they must not be overshadowed or dismissed. For example, one must not ignore some of the environmental issues now before Congress—revisions in the Clean Air Act, the goals of the Water Pollution Control Act, the thrust of the Solid Waste Utilization Act. The testing provisions of the toxic substances bills, for instance, must not overshadow the special research projects which the Association has been administering for years.

The Association's work to develop an energy policy appropriate to the needs of the industry continues to be important, even though the government still has not developed a policy for the country as a whole. Our contribution to the building of the industry's fine safety record and the contributions CHEMTREC has made to public safety should be recognized.

During the past year, MCA outlined its position on legislation as varied as that of tax reform and railroad revitalization. It presented influential speakers to influential audiences, published *ChemEcology*, showed exhibits and distributed materials. Descriptions of these activities and many more are to be found in the report which follows. They show that, through its committees, the Association has set many goals essential to the industry and has developed programs to reach those goals.

It is appropriate to recognize again this year the major assistance provided the MCA staff by many executives from member companies. We are grateful for your support and we are counting on its continuance during the coming year.



H. D. McNeeley
Chairman of the Board



William J. Driver
President

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Major Legislative Concerns

In 1975-76 most of the Association's work involved legislation, toxic substances control proposals being of paramount interest. In other cases, MCA testified on amendments to acts already passed; in some instances, it testified on proposals that became law. In still others, MCA presented views on legislation which may be changed radically before becoming law, or which may never become law at all. In each case, MCA attempted to act responsibly, not only in the interest of the chemical industry, but in the public interest as well.

MCA's efforts are not restricted to developing and giving testimony. Committees and staff monitor legislation and advise the Association on positions to take. Discussions are held with legislators and their staffs.

Any legislative year must be busy for an industry that intersects with the lives of all Americans in so many ways.

To put the issues of this year in perspective, there follows a list of those which were of major interest to MCA.

- Clean Air Act Amendments
- Railroad Revitalization and Regulatory Reform Act
- Solid Waste Utilization Act
- Trade Act of 1974
- Water Pollution Control Act
- Export Reorganization (Nuclear)
- Patent Reform
- Tax Revision
- Toxic Substances Control

MCA also testified or commented on specific administrative developments. Even more varied, these Association efforts covered matters as diverse as chemical transportation and electrical equipment.

Toxic Substances Control Legislation

As the year ended, efforts to secure a reasonable toxic substances control bill which MCA could support were satisfied by a measure introduced by Representatives Bob Eckhardt and James T. Broyhill with the support of John Y. McCollister and John M. Murphy. The bill was a substitute for an earlier version of the legislation proposed by Rep. Eckhardt. In all, more than 30 modifications in the original bill were developed. They covered testing,

premarket screening, regulation as to limiting or banning manufacture, imminent hazards, reporting, citizen petitions, federal preemption, mixtures and confidentiality.

The Association had supported in principle legislation introduced by Rep. McCollister and later an Administration modification of it. When it became clear



Dr. C. Boyd Shaffer (left), American Cyanamid Company, testified for MCA at House hearings on toxic substances control bill, as did George S. Dominguez (center), CIBA-GEIGY. Dr. Joseph Nemec Jr. represented Foster D. Snell, Inc., which prepared economic impact study for MCA.

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that these bills were not viable, a compromise was sought. The resulting bill appears to be much more realistic and enforceable, and it appears to focus appropriately the resources of industry and government on the most pressing problems.

But while the Association agreed that the bill is workable, it stressed that the manner in which such regulatory legislation is administered, in this case by the Environmental Protection Agency (EPA), ultimately will determine whether its impact will be favorable or unfavorable.

The history of toxic substances control legislation goes back to 1971, when the first bills were introduced in Congress. Neither the 92nd nor 93rd Congresses succeeded in enacting a law, however.

With the beginning of the 94th Congress in 1975, public opinion for toxic substances control mounted.

Regarding the Senate bill passed in March 1976, MCA declared that it was too sweeping and poorly focused. Also, its lack of selectivity and its over-regulation would, in fact, have the effect of slowing down efforts on the part of industry and the government to identify and properly control toxic substances. An economic impact study

underwritten by MCA underscored the financial burden such legislation would impose.

An MCA Special Committee on Toxic Substances Legislation provided leadership for the Association in its drive to obtain responsible legislation. Through its efforts a new level of activity was encouraged from member companies, especially from ranking executives. The program included direct contact with legislators—including visits with congressional delegations from such major chemical-producing states as New Jersey, Ohio, New York, California, Pennsylvania, Michigan and Texas, technical and legal support, media programs, liaison with related organizations and industries and a strong grassroots effort.

A special issue of MCA News and a six-page flier explained the Association's position. More than 48,000 fliers and almost 40,000 copies of the special issue were distributed. Six programs were made for the radio show "Good Living," which is distributed to more than 400 stations having an audience of around seven million. Requests for information and interviews came from such sources as Barron's, National Enquirer, National Observer, Jack Anderson, the national news services, radio and television.

Environmental Management

MCA's fourth survey on environmental management was published in the fall of 1975. Its title, "Environmental Commitment—1975," indicates the attitude of the chemical industry toward its responsibilities to the ecosystem. The figures brought out by the survey show the depth of that commitment:

The 130 responding U.S. companies had invested \$2.2 billion for air and water pollution control and solid wastes treatment and disposal through 1974. This compares with \$1.1 billion invested through 1971 and a projected total through 1977 of \$4.6 billion.

On a percentage basis, the firms spent 6.2 percent of their total chemical capital investment on environmental management through 1974. This compares with 4.4 percent through 1971 and a projected expenditure of 8.1 percent through 1977.

Water pollution control costs, both actual and projected, continue to demand the greatest number of dollars. At the end of 1974, \$1.2 billion had been invested. This is expected to rise by \$1.5 billion by 1977.

Air pollution control investment was \$825 million, with a projected increase of \$749 million by 1977.

Present investment for solid wastes control was \$120 million, with another estimated \$172 million by 1977.

Annual operation and maintenance costs of environmental management facilities jumped from \$235 million to \$502 million or three percent of total chemical operating and maintenance costs.

The amount of energy needed for pollution control was surveyed for the first time. It came to 7.3 percent of total demand.

Reports by seven Canadian member companies and Canadian facilities of seven U.S. member firms showed that capital investment in environmental facilities at the close of 1974 came to \$70.7 million or 3.5 percent of total chemical capital investment. This is expected to rise to \$166.5 million through 1977, or 4.9 percent of the total.

By categories, investments were: water pollution control—\$40.2 million in 1974 and rising to \$87.1 million through 1977; air pollution control—\$26.3 million and growing to \$67.8 million; solid wastes—\$4.2 million and rising to \$11.6 million.

Air Quality

Two subjects concerning air quality predominated during the year, a growing national concern about photochemical oxidants and proposed amendments that would make major changes in the Clean Air Act.

At present, the secondary ambient air quality standard for photochemical oxidants in terms of ozone is 0.08 parts per million, which reportedly is being exceeded throughout most of the nation. If the standards were applied literally, industries would not be allowed to continue to discharge hydrocarbons or other ozone precursors at present levels.

The chemical industry is acquiring data on ambient air conditions in order to understand how the regulation of ozone can be dealt with on a more realistic basis. MCA is preparing to define the economic impacts of the present limits. Because ozone formation is linked by EPA to hydrocarbon releases and because low mass release rates are under discussion by EPA, the control costs could be hundreds of millions of dollars.

Modifications to the Clean Air Act are under consideration by the House and Senate. In the fall of 1975, MCA made several recommendations to Congress, including a redefinition of ambient air quality standards to delete the phrases "threshold of response" and "an adequate margin of safety."

On nondeterioration of air quality, MCA held that the maintenance of secondary and primary ambient air quality standards will, of and by itself, prevent significant deterioration of air quality. MCA challenged the necessity for added federal authority to protect presently clean air areas, and said that any attempt at such legislation will result in substantive and procedural bars to industrial and economic growth.

Industry views have not been reflected in the bills written by congressional committees, but efforts to amend the language of the "nondeterioration" sections in both the House and Senate continue.



Mid-course corrections are needed in requirements of Water Pollution Control Act Amendments, F. Perry Wilson (center), board chairman of Union Carbide Corporation, told National Commission on Water Quality. Charles L. Sercu (left), Dow Chemical U.S.A., and George J. Hanks Jr., Union Carbide, accompanied Mr. Wilson.

Water Resources

The National Commission on Water Quality (NCWQ) released its report early in 1976, and F. Perry Wilson, chairman of the board of Union Carbide Corporation, presented Association comments on it to the commission.

Mr. Wilson said MCA concurred with the commission's central findings that adjustments in the government's water resources program are necessary because implementing the 1977 requirements will produce better water quality than was anticipated at the time of enactment, and because incremental improvements from implementing 1983 requirements would be small and would not justify the substantial additional cost.

MCA made the following recommendations:

- Implement the 1977 requirements of the Water Pollution Control Act for all sectors as rapidly as the country's resources permit.
- Amend the act to make the "interim" goals the national goals, thus striking the 1983 target year; withdraw the mandatory requirements for application of Best Available Technology by industry and Best Practicable Waste Treatment Technology by public sectors.
- Establish a process to evaluate the actual effects of implementing the 1977 requirements and identify those areas where the goal has or has not been met.
- Provide only that control necessary to maintain goal quality levels where the goal has been achieved.
- Identify the additional technology needed where goal quality has not been met.
- Establish a permanent, independent body to conduct a continuing assessment of the state of the nation's water resources.

The NCWQ forwarded its report to Congress in March. MCA concurred in the key recommendations of the commissioners. These recommendations were:

- Extensions of time be allowed on a discretionary case-by-case basis to meet 1977 requirements where progress toward compliance is being made.
- Requirements for 1977 be waived, deterred or modified on a case-by-case basis where costs are disproportionate to benefits or where adverse environmental effects will be minimal or undetectable.
- Congress defer 1983 requirements for five to 10 years.
- Toxic pollutants in toxic concentrations be controlled as soon as possible but before Oct. 1, 1980.

- Congress stress conservation and reuse of resources and redefine the goal of "elimination of discharges" where it concerns "the chemical, physical and biological integrity of the nation's waters."

- A new commission, similar to the NCWQ, should report by 1985 on progress then achieved and directions to be taken.

For two years EPA has been developing regulations concerning spills of hazardous materials, as called for in section 311 of P.L. 92-500. In February, MCA supported the proposed regulations dealing with penalties for hazardous spills. The Association hoped that acceptable corrective language dealing with negligence would be included in amendments to the Water Pollution Control Act proposed in the House. In mid-April, however, last minute changes made the proposed penalty provisions unacceptable.

Comments also were prepared on separate storm sewer regulations, on control of pits, ponds and lagoons as they may affect drinking water, and on injection wells for waste disposal. A technical manual covering suggested practices and procedures for using injection wells as a waste disposal method was published.

Solid Wastes Management

The Solid Waste Utilization Act of 1975 is the major piece of legislation in this field before the Congress this year. MCA took the position that it would only produce chaos to allow states to design environmental programs that can control what products may be manufactured. The Association also stated that the definition of hazardous waste should put less emphasis on the form of the waste and more emphasis on its effect on the environment, especially when organisms beneficial and indigenous to the site are involved.

MCA also recommended that the Department of Transportation (DOT) continue its authority over the handling, containerizing and transporting of hazardous waste.

The complex interaction of several factors makes any predetermination of disposal techniques for hazardous waste impractical and unreasonable. MCA feels Predetermination, in fact, could be counterproductive if it restricted development of technology and eliminated alternatives appropriate to geographic areas or available equipment. MCA also feels that physical possession of the waste determines responsibility for it.

Accepting Lammot du Pont Safety Award in the larger company category was John C. Morley (left), president of Exxon Chemical Company U.S.A., while Harry W. Buchanan (right), president and chairman of the board of Virginia Chemicals Inc., accepted the award in the smaller company category. Harry D. McNeeley, chairman of MCA's Board and executive vice president of Eastman Kodak Company, presented the honors at the 1976 Annual Meeting.



Health and Safety

During the past year, increasing attention was directed toward a sensitive and expanding environmental problem area—the workplace. More and more chemicals are being added to the list of suspect carcinogens, and federal and state regulatory agencies have stepped up research and enforcement activities concerning occupational health hazards.

Evidence of the public's concern is the fact that George Washington University's medical school is preparing a television documentary on cancer in the workplace for the Occupational Safety and Health Administration (OSHA) and the National Cancer Institute. MCA has cooperated with the university during research and filming. The 30-minute documentary will be shown later this year in prime time on commercial stations in the nation's 10 largest cities. The university is filming how three MCA member companies control employee exposure to occupational carcinogens and how they educate employees about hazards.

As part of a program to speed up regulatory actions in this area, OSHA and the National Institute for Occupational Safety and Health are cooperating on a Standards Completion Project that would issue complete individual standards on about 400 chemicals for which threshold limit values have been published. These standards would include medical surveillance, record retention and personal protection, among others. Based on Occupational Health Committee recommendations,

MCA has suggested the alternative approach of an industrial hygiene survey which would identify hazards in each workplace. Emphasis could then be placed on activities which predictably offer the greatest improvement of workplace conditions, thus giving superior protection to worker health. MCA also questioned the need for a uniform "action level" of 50 percent of the permissible exposure limit, since the limit already has built-in safety factors. MCA also voiced the following objections:

- A uniform hierarchy of compliance, especially with "feasible engineering controls" left undefined, introduces major new uncertainties into the decision-making process. It will impede new investment and innovation and lead to further concentration of manufacture as suppliers drop out or decline to enter a market.
- The format of the appendices is an unwarranted intrusion into the rights of employers and the process of collective bargaining.
- The project, taken as a whole, is bound to dilute the industrial hygiene and medical resources available to industry to the point that some of the more serious hazards will be neglected, and non-compliance with many aspects of the standards will become widespread.

A new standard for the labeling of hazardous industrial chemicals was adopted by the American National Standards Institute (ANSI). The standard, numbered Z129.1, was prepared by MCA's Labels and Precautionary Information Committee.



James J. Walker of Union Carbide Corporation, chairman of Safety and Fire Protection Committee, addressed nearly 200 participants at MCA Workshop on Safety and Health in the Chemical Industry.

ANSI has long recognized the acute need for such a standard, not only because of so many new applications of chemical products, but also because it can serve as the widely recognized position for the United States in international negotiations on labeling. Further, the standard is a significant contribution to continuing improvement in the safe handling of hazardous industrial chemicals for those who transport, use or store hazardous industrial chemicals.

ChemEcology, the Association's monthly environmental newsletter, continues to monitor such current concerns as the fluorocarbon/ozone controversy and potential hazards from low levels of pollutants. Emphasis, however, is on the strides the industry is making in controlling pollution. Recent innovations include landfarming and reuse of certain types of solid wastes and ocean incineration of hazardous liquid residues. Its pages have provided a forum for industry spokesmen on timely subjects such as changing the direction of air and water pollution control, the management of hazardous materials and the relationship of chemicals and cancer.



"Chemical pollutants are a problem, and it's your job to cope with the threats they pose," Rep. George E. Brown Jr. (D-Calif.) told Public Relations Committee and Contacts at January dinner.



Dr. Samuel Tuthill, director of the Office of Energy Programs in the Department of Commerce, told Public Relations Committee that chemical industry has responsibility to explain economics of energy to public.

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Special Research

It should not be forgotten in the intense interest generated by toxic substances control legislation that MCA for about four or five years has already been engaged in special research projects on the toxicity or environmental effects of certain chemicals.

These projects are funded by subscription of companies having a direct interest in the substance involved, and they may be supported by non-member as well as member companies. At the same time, they are a credit to the industry broadly as evidence of a commitment to safety, health and a sound environment.

Currently, MCA's Technical Department administers 11 subscribed projects.

Acrylonitrile

A three-year program of ingestion and inhalation studies was implemented during the year. It covers carcinogenicity, teratology and metabolism.

Allyl Chloride/Epichlorohydrin

Proposed research involves a chronic inhalation study as well as studies of teratology and mutagenicity.

Chlorobenzenes

A worldwide literature search on monochlorobenzene, ortho dichlorobenzene and paradichlorobenzene covers studies on toxicity, inhalation, ingestion, mutagenicity, teratology and others.

A special summary which points up gaps in the literature is an important part of the overall report evolving from this study.

Ethylene Dichloride

A joint study with interested European companies has been initiated on the effects of long-term inhalation. Metabolic and other investigations also are planned.

Fluorocarbons

MCA administration of research concerning chlorofluorocarbons, commonly known as fluorocarbons, in the atmosphere began in 1972. Twenty companies manufacturing more than 99 percent of the free world's production of fluorocarbons now support the program, which is coordinated with the research program of the federal government.

In the three years ending Dec. 31, 1977, it is anticipated that the fluorocarbon industry will have funded more than

\$5 million worth of research in the following areas: chemistry and kinetics, analytical methods and equipment development, atmospheric measurement and modeling.

Phosgene

This research has been concerned with basic mechanisms involved in phosgene-damaged lungs and with diagnostic procedures and therapeutic countermeasures for lungs exposed to phosgene.

Phthalate Esters

Thirteen companies have renewed arrangements to keep track of the reports of the effects of phthalate esters on man, animals and the environment. A study also is under way on the effects of phthalate esters on the food chain in fresh water.

Styrene

A three-year research program in progress will extend the data base for this monomer by determining the effects of chronic exposures by inhalation and ingestion, including teratology and metabolism.

Trichloroethylene

This is an investigation of any toxic effects of inhaling trichloroethylene over a long period.

Vinyl Chloride

Research on the carcinogenicity, epidemiology, metabolism and teratology of vinyl chloride has been completed or is nearing completion, although additional studies in some areas are under consideration. Government agencies and others are giving increasing attention to non-worker populations that may be exposed to vinyl chloride.

Vinylidene Chloride

Investigations of metabolism and fetal development, as well as toxic effects of exposure, are in progress. Further research is under consideration.

* * *

MCA also took friendly interest in the establishment of the Chemical Industry Institute of Toxicology, which, while not directly connected to the Association, was founded and is being supported by chemical manufacturing companies.

Technical Concerns

In 1975, MCA member companies had their safest year since 1968. Four years of gradual increases in the disabling injury frequency rate came to an end with a rate of 3.36 per million manhours worked. This was 13 percent better than the 3.88 rate of 1974. The injury severity rate, however, increased. This rate, which reflects days lost or charged because of industrial injuries, increased from 334 per million manhours in 1974 to 433 for 1975.

The companies have been using the ANSI method in reporting industrial injuries to MCA. OSHA has made its reporting requirements mandatory, however, and on the recommendation of the Safety and Fire Protection Committee, MCA is converting to the OSHA system.

The Lammot du Pont Safety Awards, first sponsored more than 25 years ago by Lammot du Pont and subsequently by E. I. du Pont de Nemours & Company, are based on improvement in the prevention of injuries as shown by the average injury rate for the combined years 1974-75 as compared with the previous three years. The awards are granted to companies in two categories: more than two million manhours worked per year and less than two million manhours worked per year.

The 1976 winner in the larger category was Exxon Chemical Company, which showed a 61 percent reduction. The runner-up was American Cyanamid Company, with a 48 percent reduction.

In the smaller category, the winner was Virginia Chemicals Inc., with a 61 percent reduction. Runner-up was SunOlin Chemical Company, which had a 59 percent reduction.

Each year Certificates of Achievement are awarded to member companies whose plants have worked at least 20,000 employee hours without a lost-time industrial injury. In 1975, 52 companies were awarded 729 certificates.

A Safety and Health Workshop, attended by more than 200 safety, medical and industrial hygiene personnel, was arranged jointly by the Safety and Fire Protection Committee and the Occupational Health Committee. The Safety and Fire Protection Committee also arranged a seminar on safety in the phenolformaldehyde resin industry. It stressed procedures and facilities involved in proper resin-kettle operation and was attended by more than 100.

The Safety and Fire Protection Committee surveyed member companies on their safety programs and is using the results to reshape its overall safety program.

CHEMTREC, MCA's Chemical Transportation Emergency Center, will complete its fifth year of service to the carriers and emergency services of the nation in 1976.

Since its inception, CHEMTREC has assisted in some 6,600 problem situations.

Congress enacted during the year the Railroad Revitalization and Regulatory Reform Act of 1976, the principal section of which establishes the Consolidated Railroad Corporation (ConRail). During legislative hearings preceding passage of the law, MCA opposed provisions for suspension of freight rates, supported loan guarantees to ConRail, supported an independent budget for the Interstate Commerce Commission (ICC) and supported provisions promoting competition in transportation. The Association also urged that periodic determination of compensation be paid to the owners of all freight cars, and not just to the railroads.

The Association submitted views that the ICC should have an active role in determining which transportation mode dominates a market.

During ICC consideration of problems caused by railroads going bankrupt, MCA urged a rail system in the Northeast composed of existing carriers rather than alternative carrier systems. MCA noted a growing public concern over abandonment of little-used lines, but favored federal subsidies for only a limited period.

MCA and several chemical companies won concurrence from the ICC that the railroads should adjust compensation paid to owners of tank cars to reflect increased costs. The commission recommended a 25 percent increase in compensation pending study of the issues. The parties involved, however, proposed an agreement, accepted by the ICC and ordered effective by May 3, 1976, that increases tank car compensation by 22.5 percent, with further increases to follow after car hire rates have been adjusted.

MCA also petitioned the ICC to reconsider a decision on the allocation of costs for cleaning bulk transportation equipment, asking for the development of a realistic and equitable chart of cleaning accounts.

In an action stemming from the bankruptcy of the Rock Island Railroad, MCA told the ICC it opposed both a federal subsidy and a "ConRail" solution. Instead, MCA urged that essential rail service be maintained under a service arrangement.

MCA recommended that the Department of Transportation adopt a transportation hazard information system whose core is a three-digit information number identifying the primary, secondary and tertiary hazards of a material. The number would appear on transportation labels and placards and also would be shown in shipping papers as part of the description for each shipment.

The Chemical Packaging, Transportation Equipment and Transportation and Distribution Committees jointly



Crowded ballroom of Philadelphia-Sheraton Hotel testified to high interest in MCA-sponsored seminars on hazardous materials transportation regulations. Seminars were held in Philadelphia, Houston, San Francisco and Chicago.

sponsored a Symposium on Transportation of Hazardous Materials. The program was presented in Philadelphia in January, Houston in February, San Francisco in March and Chicago in April. More than 1,100 heard the speakers, all representatives of MCA member companies, discuss the responsibilities of the shipper under the hazardous materials regulations and how to comply with these requirements.

The Transportation Equipment Committee prepared recommendations to DOT for amending the Hazardous Materials Regulations. One recommendation would make it necessary always to vent the intermediate chamber in a combination safety relief device on certain tank car tanks. Another clarifies provisions for periodic inspection and test intervals, and another eliminates the requirement that certain tank car tanks have to be painted white even if they are not used to transport flammable compressed gases.

The Nuclear Committee prepared MCA views on a Senate bill to limit the proliferation of nuclear weapons. MCA agrees with the intent of the bill, but felt it would have a limited impact on the spread of nuclear weapons worldwide. The Association also believes that overly burdensome and time-consuming export licensing procedures of the bill would severely restrict U.S. nuclear industry trade, and it recommended that exports be controlled through the International Atomic Energy Agency or through firm international agreements. The

committee also is investigating a system that would prevent widespread panic if there were an accident involving nuclear materials in transit.

The Engineering Advisory Committee prepared MCA's recommendations for revision of the 1975 National Electrical Code and is writing proposals for a new OSHA electrical inspection code that is being developed by the National Fire Protection Association. MCA also sought revocation of OSHA's regulation governing mandatory use of ground fault circuit interrupters in low-voltage service.

The committee has suggested changes to the National Board Inspection Code of the National Board of Boiler and Pressure Vessel Inspectors and has established contact with metric coordinators in member companies for the purpose of minimizing disruptions during the conversion period to the metric system.

The Food, Drug, and Cosmetic Chemicals Committee prepared MCA's comments on several proposed regulations of the Food and Drug Administration and recommended that descriptions of manufacturing processes be incorporated in final product specifications only in exceptional cases. MCA also opposed waiving the right to assert a prior sanction, upheld the right of member companies of an association to dissociate themselves from an association position and proposed adequate

MCA award for outstanding teacher in the western region went to Dr. Richard J. Merrill (right). His daughter Vicky looked on as William J. Driver, president of MCA, made the presentation at Northern California Chemical Industry Council's Progress Week Luncheon.



safeguards on information submitted by manufacturers.

The committee follows closely the testing done by the National Cancer Institute on food chemicals, and it is preparing guidelines on good manufacturing practice for these chemicals.

A program to computerize information on fire, explosion and other drastic losses is close to completion. Funded by eight companies and guided by the Insurance Committee, the special project should develop techniques for compiling data and reporting results that will help prevent such disasters.

In keeping with a continuing program of stewardship, MCA is funding jointly with The Society of the Plastics Industry a research program being conducted by the University of Michigan on the analysis and toxicity of combustion products of natural and synthetic materials. The study will analyze the products of the combustion of plastics materials and will measure the toxicity of these products by evaluating laboratory animal performance tests.

Additional studies related to major public issues of concern to the plastics industry—worker health and safety, environmental impact, combustibility and flammability—are under review.

The special program is funded by the 58 member

companies which comprise the Plastics Group and is guided by the Plastics Committee.

In preparation for the Tokyo Round of multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT), the Trade Policy Staff Committee held hearings at which Dr. David H. Dawson testified as the Chemical Industry Trade Advisor on behalf of MCA, the Dry Color Manufacturers Association, The Fertilizer Institute, The Society of the Plastics Industry and the Synthetic Organic Chemical Manufacturers Association. Devoting most of his attention to the Generalized System of Preferences, Dr. Dawson recommended selectivity of products and beneficiary countries and specific exclusion for a number of sensitive chemical products. He expressed concern about the impact of the system on the U.S. competitive position, since reciprocity is implicit in the European Economic Community's web of preferential agreements. He noted the capacity of the OPEC countries to manufacture petrochemicals, and recommended quota limits on annual import growth.

Dr. Dawson also appeared before the Senate Finance Committee during oversight hearings on implementation of the Trade Act of 1974. He said the effectiveness of the Industry Sector Advisory Committees has been mixed, and he urged revision of GATT to deal with such problems as value-added taxes and compensation for other countries' tariff actions.

Energy Conservation

Recognizing the importance of energy conservation in the national interest, the Board of Directors established an Energy Conservation Committee as a standing committee of the Association. The committee held its first meeting on March 18, succeeding the *ad hoc* committee which had been functioning since the fall of 1974.

As part of its voluntary energy conservation program, MCA reports every six months to the Department of Commerce and to the Federal Energy Administration the results achieved in energy conservation by a majority of its member companies. The Association first devised the accurate energy conservation reporting system and now collects reports from participating companies, aggregates them and submits the consolidated figures to the government agencies

MCA has submitted two comprehensive energy conservation reports so far. The first, in which 100 companies participated, was submitted in August 1975. It used 1972 as a base and showed that from July 1, 1974, to June 30, 1975, the companies had reduced their energy consumption per unit of output by 5.0 percent, or by 5.7 percent, if the energy costs of environmental and OSHA regulations not in effect in 1972 are added. The second report, for calendar year 1975, included 107 companies. Corresponding reductions were 4.0 percent and 4.9 percent, reflecting the fact that the industry operated at only 74.2 percent of capacity in 1975, with a consequent sacrifice in energy efficiency.

High school students picked up material at seminar on careers in chemistry sponsored by Chemical Council of Greater St. Louis as part of its Chemical Progress Week.



Government Relations

In addition to monitoring legislative developments and directing the Association's communications programs with Congress, the Government Relations Department also provides staff management for a number of MCA committees

The Economic Policy Review Committee regularly reviewed developments in areas related to energy and to the national economy, calling our energy prospects increasingly gloomy, but finding the economy generally improving.

A major undertaking sponsored by the committee was a study by Professor Steven Lustgarten of Baruch College, City University of New York, entitled "An Analysis of the Chemical Industry in View of the Proposals for Deconcentration." This study documents the competitive character of the industry and is available to fortify the industry's position in case new efforts to decentralize are launched in Congress.

Task forces of the committee are analyzing current proposals for economic planning and studying the problem of capital formation.

Tax reduction and tax reform were high on Congress' priority list throughout the year. The chemical industry particularly was concerned with numerous tax proposals which would, if enacted, place U.S. manufacturers at a competitive disadvantage with foreign businessmen.

The Tax Policy and Economic Policy Review Committees developed data to indicate that increased corporate taxes would lead to a loss of U.S. jobs in the chemicals and allied products industries. This study has been used effectively to demonstrate the impact on employment of pending tax proposals.

In July 1975, the chairman of the Tax Policy Committee, Matthew P. Landers, testified on behalf of the Association at the House Ways and Means Committee's tax reform hearings. This testimony was directed principally at tax changes affecting capital formation and foreign source income.

During the fall of 1975, when the House Ways and Means Committee was marking up a tax reform bill, representatives of member companies were active in opposing tax proposals which would have ended the Domestic International Sales Corporation, required current taxation of the earnings and profits of foreign subsidiaries of U.S. corporations and repealed or limited the foreign tax credit. Largely as the result of a coordinated effort on the part of U.S. business, including the chemical industry, the bill finally approved by the House contained few provisions which would have had a significant adverse impact on exports and foreign operations of the chemical industry.

In March of this year, F. Perry Wilson, chairman of the board of Union Carbide Corporation, testified on behalf of MCA at the Senate Finance Committee hearings on tax revision and tax reduction. Mr. Wilson emphasized the importance of adopting tax provisions which would assist in capital formation and the need to retain present provisions which make it possible for U.S. industry to compete with their foreign counterparts in world markets. The Association is continuing to pursue these objectives as the pending legislation is debated in Congress.

During the past year increasing concern has developed about the role of the multinational corporation. This concern has been highlighted in a number of international forums, particularly the Organization for Economic

Chemical industry leaders met with Administration leaders in October for a briefing on taxes, toxic substances and safety and health in industry. L. William Seidman, at right end of table, assistant to the President for economic affairs, spoke to the group on corporate taxes.





MCA's view that capital formation is essential to provide machinery and equipment needed for economic growth was given House Ways and Means Committee by Matthew P. Landers, treasurer of Pfizer Inc. and chairman of Tax Policy Committee.

Cooperation and Development, where there have been efforts to draft a code of conduct for multinational corporations. The code would consider such topics as foreign investment practices, commission payments, transfer of technology and social responsibility. The international debate also has brought to the fore the differences between the practices and objectives of the western economies and those of the developing nations.

MCA's Task Force on Multinational Corporations has analyzed the significance of principal issues and kept the membership informed. In particular, the task force is urging member companies to prepare and publish case studies of successful and constructive performance in host countries, particularly developing ones.

A major patent law revision bill, under consideration for several years, passed the Senate in February 1976. MCA's Patent and Trademark Committee has actively followed the course of this legislation and a number of Association recommendations were adopted. The bill approved by the Senate, however, embodies provisions which would be burdensome, expensive and time-consuming for both corporations and individual inventors. The Patent and Trademark Committee will continue to seek improvements in the legislation if and when it is considered by a House judiciary subcommittee in the latter part of 1976.

An important function of the Industrial Relations Advisory Committee is to facilitate the exchange of information among MCA member companies on such matters as college recruitment, equal employment opportunity trends and the impact of federal legislation and regulations. The committee supervises a personnel information exchange service and sponsors a Chemical Industrial Relations Conference every other year.

At the urging of the Technical Information Retrieval Committee, vendors of technical information services have adopted a number of innovations which are of value to the chemical industry. The principal service providing information on foreign patents recently put its data base from 12 countries on line. A major supplier of U.S. patent information now offers a limited on-line computer search.



Those attending Chemical Forum Luncheon in October heard Sen. William V. Roth Jr. (R-Del.) outline a proposal for business to share additional tax incentives with labor through creation of employee stock plans or trust funds to increase job security.



Chemical Forum Luncheons give chemical industry representatives, the press and others a chance to hear Washington views—official, congressional and otherwise—at first hand. Morton Corn (left), assistant secretary of labor and head of the Occupational Safety and Health Administration, spoke at the March Forum, while Arizona's Republican Senator Paul Fannin (center) addressed the Forum in November. Sen. Herman E. Talmadge (D-Ga.) concluded the series in May.

service. The U.S. Patent Office, responding to the committee's suggestions, has improved the integrity of the patent search files and the timing on publication of patents and abstracts and has established an experimental search program for polymer patents.

In April 1976 the committee compiled and published a directory of on-line computer retrieval services and conducted a two-day seminar for MCA members on the subject of on-line services. A seminar for advanced users is scheduled to be held in September.

The committee also is studying the problem posed by the present widely fragmented system of patent information and is developing the criteria needed for a uniform system.

MCA's monthly Federal Legislative Bulletin aims to inform member company recipients about the status, background and prospects for action of legislation that is of direct and indirect interest to the chemical and allied industries. It is devoted to such issues as environment, taxation, trade, consumer affairs and labor developments.

Chemical Forum

Three influential United States senators and a key Administration policymaker were guests of honor and featured speakers at MCA's Chemical Forums during the past year. The popular luncheon series, held in Washington, D.C., regularly attracts many chemical industry executives, business leaders, elected officials and spokesmen for government agencies. The purpose is to build better understanding between the government and the private sector through frank discussion of

important issues. The press, both trade and national, finds the Forums ready sources of timely information and fresh material.

The October speaker was Senator William V. Roth Jr., a Delaware Republican with a keen interest in streamlining the organization and effectiveness of the federal government. He called for "a new Hoover Commission" to prune unnecessary programs and cut wasteful spending, thereby restoring public confidence in government.

Senator Paul Fannin told his November audience that businessmen must "invest more time in becoming students of politics" and must demonstrate effectively that the operation of a free marketplace is essential to the public good. The Arizona Republican is ranking minority member of the Committee on Interior and Insular Affairs.

In March, the newly appointed assistant secretary of labor for occupational safety and health spoke at the Chemical Forum. Dr. Morton Corn revealed a new level of federal emphasis on the identification and prevention of health hazards in the workplace. While not sacrificing attention to plant safety, Dr. Corn said that the higher priority on health-related matters would involve stepping up the completion of OSHA standards and increasing chemical industry contact with agency inspectors.

The final Forum of the 1975-76 series took place in early May and featured an address on prospects for tax legislation by the Democratic Senator from Georgia, Herman E. Talmadge. Ranking majority member of the Senate Finance Committee and chairman of the Committee on Agriculture and Forestry, Senator Talmadge called for drastic simplification of the tax codes and warned against extreme tax reform amendments which would cripple industry and thereby severely weaken the U.S. economy.

Public Relations and Educational Activities

Cooperation between the Public Relations and Education Activities Committees is now an established fact, with the two groups occasionally scheduling meeting dates that overlap and thus enable the members to discuss mutual problems and policies.

The 1976 teacher awards were given to one Canadian and 17 Americans from 12 states

National Award Winners:

College:

Gilbert P. Haight Jr., University of Illinois
George B. Kauffman, California State University-Fresno
Robert R. Rothfus, Carnegie-Mellon University
Raymond B. Seymour, University of Houston

Two-Year College:

Ernest S. Kuljian, Los Angeles Pierce College

High School:

George W. Stapleton, Arcadia High School, Arcadia, Calif

Regional Award Winners:

Two-Year College:

James A. Campbell, El Camino College
Wilma K. Meckstroth, Ohio State University-Newark
Paul J. Santiago, Harford Community College
Bobby R. Walters, Paris Junior College

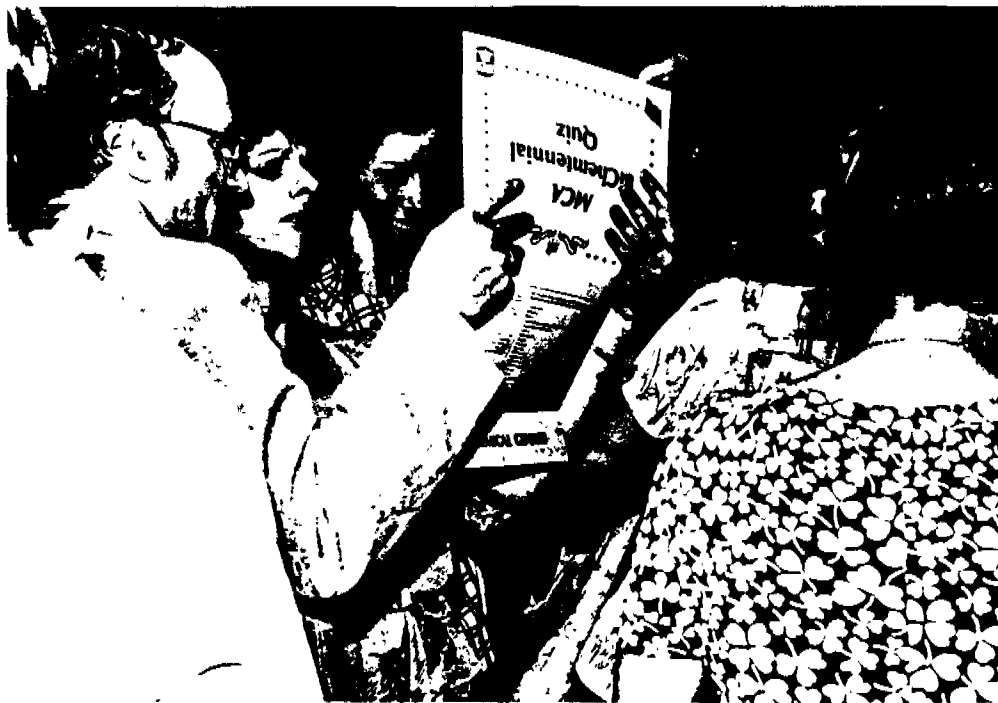
High School:

Margret B. Andersen, Westfield High School
Edwin L. Fankhauser, Columbia High School
Richard J. Merrill, Mt. Diablo Unified School District
Dale C. Reynard, Brandywine High School
Crosby U. Rogers, Joel Barlow High School
Satya P. Sethi, Kingsville District High School
Edith M. Stillwaggon, Division Avenue High School
Marcella C. Wain, George Washington High School

MCA publications prepared by the Education Activities Committee included a completely new edition of "Your Tomorrow—A Guide to Careers in the Chemical Industry," 15,000 copies of which were distributed to teachers during the first four months after publication

An education exhibit was shown at regional meetings of the National Science Teachers Association in Oklahoma City, Indianapolis and Atlanta and at the national meeting in Philadelphia. The exhibit also was shown at the summer conference of the New England Association of Chemistry Teachers and jointly with the Consumer Information Section at the annual meeting of the American Vocational Association in Anaheim. It went on display for the first time at the annual meeting of the National School Boards Association in San Francisco. In all, more than 5,000 administrators, school board members and science teachers visited the exhibit during the past year

Visitors to MCA's crowded suite at the annual meeting of the American Women in Radio and Television found the only available space to discuss the BiChemtennial Quiz with Alan Poland of ICI United States was up in the air.



Exhibits also are a major Consumer Information activity. At some meetings and conventions, only a table-top exhibit from which materials can be picked up is displayed, as was the case at the All-Eastern Consumer Education Conference at Cherry Hill, N.J., in February and the American Council on Consumer Interests in Atlanta in April.

A much larger exhibit is used at other meetings. Staffed by MCA personnel and member company volunteers from the Consumer Information Subcommittee, the exhibit draws crowds because of its attractiveness, the prizes offered and the chemical quiz. This last is an amusing and instructive short test designed to show how important the industry is to the American lifestyle. Quiz-takers are eligible for prizes donated by member companies. The newly designed exhibit went on display at the American Home Economics Association in June in San Antonio and at the National Association of Extension Home Economists in October in Knoxville and in cooperation with the Educational Activities Section at the American Vocational Association in Anaheim in December. For the second year, MCA had a place on the program of the Auxiliary of the National Rural Letter Carriers' Association and, with member company participation, emphasized safety in the home.

MCA again had the most popular suite at the annual meeting of the American Women in Radio and Television (AWRT), held in Philadelphia May 5-8. At times, four rooms were in use simultaneously for tapings, as 14 member company representatives gave 51 video and 49 radio interviews to 33 women broadcasters. Many other television broadcasters could not be accommodated because they had not requested a time slot in advance.

MCA participation in the AWRT meeting was arranged by the Consumer Information Subcommittee, and the suite was staffed by 15 members of the subcommittee and the Public Relations Committee. MCA's vice president for public relations also taped a dozen interviews to be mailed to AWRT members who couldn't attend. 1,000 of the tapes will be sent to almost 100 extension home economists around the country.

More than 400 of the convention's 650 registrants signed MCA's guest book, took a BiChemtennial Quiz and spun the wheel of fortune for a red, white or blue grab bag filled with MCA materials and gifts donated by 47 member companies. They also registered for daily door prizes.

Also in Philadelphia in May, the Consumer Information Section arranged for member company participation at the annual conference of the National Home Fashions



Will chemical wonders never cease is a question both the sophisticated teacher and the learning student ask. At left, Dr. Robert E. Varrerin, MCA manager for education, showed off chemical light to science teachers at



their convention in Oklahoma City. At right, Northern Petrochemical's extruder exhibit drew keen attention from students at career seminar sponsored by the Chemical Industries Council-Midwest.

Dr. L. David Moore, corporate vice president, chemicals group, Chemetron Corporation, answered questions put to him by Lee Cannon of Alabama Educational Television. This was one of 112 radio and television interviews that MCA company representatives gave to broadcasters at annual meeting of American Women in Radio and Television



League. Company representatives brought an update on new fibers and chemicals being used in the home furnishings industry to more than 250 women executives.

Consumer Information's publication of last year, "How to (Chemically) Become an Instant Expert," became this year's best-seller, with requests from the media, including the worldwide network of Armed Forces Radio and Television, to use material in the book. Also, *Chemicals and You*, the chatty newsletter designed to reach extension home economists, women in radio and television, consumer organizations and consumer-oriented publications, became successful enough to go to a publishing schedule of three times a year.

In addition to preparing *ChemEcology* for publication, the Environmental Quality Information Section of the staff also works with the Environmental Study Conference, an influential organization on Capitol Hill. Created by ecology-conscious congressmen, the conference seeks to keep legislators and their staffs aware of issues bearing on environmental bills. Information packets of industry materials have been provided for circulation in Congress by the study conference, and industry spokesmen attended conference briefings on toxic substances and cancer and the environment.



More than 2,000 persons attended activities of Chemical Progress Week sponsored by the Chemical Council of Greater St. Louis, among them three exhibits placed at the McDonnell Planetarium.



Obviously trying to get it right, Kay Currie of WITN-TV, Washington, N.C., pressed Bill Price, director, business promotion, Phillips Chemical Company, for details about "The Magic House of Chemicals."

While it handled as a matter of course many queries on toxic substances control, the Press Relations staff also answered requests for information on specific chemicals, from benzidine to isopropyl alcohol to trichloroethylene.

Fluorocarbon research results also were a matter of continuing interest to the media. Associated Press and CBS Television, as well as the trade press, were among those calling for information on this subject.

An "Information Officers of Member Companies" directory was published again to aid news media representatives seeking information about the Association or any of its companies.

The Press Relations staff continued to meet monthly

with the Publicity Subcommittee to keep abreast of happenings throughout industry. Speakers, mostly from the press, were featured at the meetings. Among those who addressed the group were representatives of Chemical & Engineering News, Washington Post, Business Week, Inside R&D, Chemical Marketing Reporter and Chemical Week.

MCA news releases the past year have covered toxic substances control legislation, MCA publications, MCA research administration, new MCA members and staff, education and safety awards, meetings, energy conservation, the industry's economy and MCA testimony and statements.

In addition to the special issue of MCA News and the flier devoted to toxic substances control and the pamphlet containing the results of the survey on environmental management, the Public Relations staff also wrote MCA News, the monthly newsletter devoted to news of the Association and the industry. It also gathered up a selection of "Themes-of-the-Month" that had appeared in MCA News and reprinted them in a booklet entitled "Lifestyle, Chemicalstyle."

Careers in chemistry interested students in Chicago, who crowded around counselors' tables at seminar held by the Chemical Industries Council-Midwest.



MCA Teacher Award Winners



Raymond B. Seymour
University of Houston



George B. Kauffman
California State University-Fresno



Robert R. Rothfus
Carnegie-Mellon University



Ernest S. Kuljian
Los Angeles Pierce College



Gilbert P. Haight Jr.
University of Illinois



George W. Stapleton
Arcadia High School

Legal Counsel

A memorandum prepared by outside counsel and approved by the Executive Committee concluded that there are no policy or legal barriers to MCA pursuing a more active program of advocacy in relation to governmental bodies. Such a program would range "from presenting general positions to Congress, the regulatory agencies, and the executive departments on broad issues of public and regulatory policy, to making specific recommendations on the details of a particular bill or regulation." The memorandum also set forth general principles and guidelines to be followed in the conduct of such a program on the federal, state and local levels. It

thus constitutes a benchmark for the guidance of the Legal Advisory Committee, MCA staff and outside counsel.

Outside counsel in conjunction with the Legal Advisory Committee revised MCA's Antitrust Guide for Committee Members. The guide will be incorporated in the MCA Directory.

Members of the Legal Advisory Committee have been designated to be responsive to legal needs of the various technical committees, including assistance in developing statements and testimony on proposed legislation.

Business Conditions

The U.S. chemical industry's performance was mixed in 1975. Value of shipments was up and physical output down. Net income fell, but not as far as early predictions had indicated. Capital investment was seven percent of total shipments, the same relationship as in 1974. Total inventories were steady throughout the year and the chemical price index showed little change after a rise during the first quarter. Exports were at the 1974 level and a sizable drop in imports resulted in a new high in the positive trade balance.

A Commerce Department survey in late January and February indicated an expected chemical sales increase of 16.4 percent in 1976. An MCA economic sample survey in late 1975 showed expectations of a 17 percent sales increase, with an increase of 20 percent in net income after taxes.

The value of shipments of chemicals and allied products reached a new high in 1975. Inventories held steady at about \$10.9 billion, up slightly over December 1974. The year-end inventory to shipment ratio was 1.35, the lowest ratio since September 1974. Shipments in the first quarter of 1976 exceeded those of last year by 19 percent. The value of all manufacturing shipments rose one percent in 1975.

Chemical production dropped for the first time since 1970. Chemical output in the first quarter of 1976 was up 17 percent from last year's comparable period. Total industrial production fell 8.8 percent last year but was eight percent higher for the 1976 first quarter.

Officers of MCA met the press before the 1975 Annual Meeting at a conference that is one of the highlights of the yearly trip to The Greenbrier.

Net sales for the first three quarters of 1975 were up about two percent over the same period in 1974, and net income after taxes was down 13 percent. Fourth quarter sales were four percent higher and net income nine percent higher than in 1974.

The Department of Commerce survey forecast capital expenditures of \$6.67 billion this year, a 6.7 percent increase. All manufacturers' capital expenditures were up 4.2 percent last year; an 8.1 percent increase is expected this year.

The Commerce Department reported chemical manufacturing capacity utilization rates of 72, 72, 75 and 78 percent for March, June, September and December of 1975. The rates for the comparable 1974 periods were 85, 86, 86 and 81 percent. According to past surveys, the preferred chemical utilization rate is 92 percent.

The industry's wholesale price index increased 5.4 percent during 1975. During the first quarter of 1976 the index increased 1.2 percent. The price index for all industrial commodities increased 6.0 percent during 1975 and 1.7 percent in this year's first quarter.

Employment of chemical production workers averaged 570,000 in 1975, 6.8 percent lower than in 1974. Employment of all manufacturing production workers dropped 10.5 percent. Total chemical employment in April 1976 was up 2.8 percent over a year ago.

Total chemical trade was down in 1975. Exports



INDICES OF CHEMICALS AND ALLIED PRODUCTS INDUSTRY **1965-1975**

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1975 over 1974, %	Growth Rate per year* 1965-1975, %
1 Total Shipments (billion \$)	37.5	40.8	42.1	45.6	48.3	49.4	51.9	57.4	67.0	81.4	86.0	5.7	8.6
2 Production Index (1967=100)	82.2	92.8	100.0	109.9	120.4	120.2	126.4	139.6	150.2	154.3	143.2	(7.2)	5.7
3 Corporation Sales (billion \$)	40.1	44.5	47.5	52.0	55.5	58.1	62.1	70.4	83.6	*84.9	86.9	2.4	(See Notes)
4 Net Income (after taxes) (billion \$)	3.2	3.5	3.3	3.5	3.6	3.4	3.8	4.5	5.7	*7.2	6.6	(8.3)	(See Notes)
5 Net Income to Sales (%)	7.9	7.8	6.9	6.8	6.5	5.9	6.1	6.4	6.8	*8.4	7.6	—	—
6 Assets (average) (billion \$)	33.8	38.2	41.6	44.8	48.0	52.1	55.7	59.7	68.0	*67.8	76.9	13.4	(See Notes)
7 Net Income to Assets (%)	9.5	9.2	7.9	7.8	7.5	6.5	6.8	7.5	8.3	*10.6	8.5	—	—
8 Capital Expenditures, New Plant & Equipment (billion \$)	2.73	3.26	3.06	2.83	3.10	3.44	3.44	3.45	4.46	5.69	6.25	9.8	8.6
9 Wholesale Price Index (1967=100)	99.0	99.4	100.0	99.8	99.9	102.2	104.2	104.2	110.0	146.8	181.3	23.5	6.2
10 Total Employment (thousands)	908	961	1001	1030	1060	1049	1010	1006	1033	1057	1013	(4.2)	1.1
11 Average Weekly Wage, Production Workers (\$)	121	126	129	136	145	154	164	176	188	202	220	8.9	6.2
12 Funds for Research and Development (billion \$)	1.17	1.22	1.30	1.39	1.47	1.59	1.64	1.71	1.88	2.15#	2.30#	7.0#	7.0

Sources: 1 U.S. Department of Commerce, Bureau of the Census
2 Federal Reserve Board
3,4,5,6,7 Federal Trade Commission
8 U.S. Department of Commerce, Bureau of Economic Analysis
9,10,11 U.S. Department of Labor, Bureau of Labor Statistics
12 National Science Foundation (industry-generated funds only—excludes government-sponsored R&D)

Notes: *New basis beginning in 1974. Not comparable for previous years.
#Compounded annually
#Estimated

decreased one percent and imports eight percent. The trade balance topped that of 1974 by \$200 million, reaching \$5 billion. Chemical exports in the first quarter of 1976 were up 0.5 percent over the first quarter of 1975 and imports were down 1.4 percent, resulting in a first quarter trade surplus of \$1.26 billion. All U.S. exports in 1975 increased 9.5 percent, imports were down 4.1 percent

and the trade balance was a positive \$11 billion. All U.S. trade showed a minus \$0.87 billion balance in 1976's first quarter.

Continuing the practice of former years, the 10-year Indices of Chemicals and Allied Products Industry are included in this section. The table is compiled by MCA's Staff Services.

The Administrative Year

Membership

The Association welcomed the following firms as members during its 104th year as the oldest chemical trade association in the Western Hemisphere:

Alberta Gas Chemicals Ltd
Burris Chemical, Inc.
CPS Chemical Company
JOC Oil Aromatics, Inc
Linden Chlorine Products, Inc
McGean Chemical Company, Inc
Polysar Limited
Rhodia Inc
Soltex Polymer Corporation

There were three resignations (Girdler Chemical, Inc., Rilsan Corporation and Story Chemical Corporation) and two consolidations (separate memberships of Commercial Solvents Corporation and Sobin Chemicals, Inc., merged to a single membership in the name of IMC Chemical Group, Inc.; Productol Chemical Company merged into Ferro Corporation), and the Association closed the year with 197 members, 11 of which are headquartered in Canada.

Personnel

MCA staff members administer all technical and functional programs, provide the secretariat for each MCA committee, handle inquiries and correspondence and maintain contacts with governmental agencies and private organizations whose activities are important to the chemical industry. At the end of the fiscal year the Association staff had 30 in professional or supervisory positions and a full complement of 78, distributed as follows:

Management 12
Technical-General 23

Technical-CHEMTREC..... 7
Public Relations
(including Education) 12
Government Relations 10
Staff Services 14

New members of the staff are Thomas J. Gilroy, press relations specialist (June 2, 1975); John C. Van Horn, Carl A. Gosline and Dewey A. Kunze, assistant technical directors (July 7 and December 1, 1975 and May 17, 1976); Samuel M. Williams, legislative representative (June 24, 1975), and Jane H. Rasmussen, librarian (April 5, 1976).

Edward J. Klecka became manager of staff services on November 1, 1975.

Marjorie V. Campbell, director of information service, retired on November 1, 1975, after 25 years of service. Marion Woodruff, administrative assistant, retired on November 1, 1975, after 31 years, and D. Miller Simpson, librarian, on May 31, 1976, after 22 years.

Budget and Financing

The budget accepted by the membership at the 103rd Annual Meeting on June 12, 1975, as amended during the year, was distributed as follows:

	Operations	Projects	Total
Management	\$ 597,500		\$ 597,500
Technical-General	667,250	\$188,225	855,475
Technical-CHEMTREC	220,150		220,150
Public Relations (including Education)	376,950	171,100	548,050
Government Relations	306,300		306,300
Information Service	94,100		94,100
Office Administration	193,550		193,550
	<u>\$2,455,800</u>	<u>\$359,325</u>	<u>\$2,815,125</u>

The amendments added \$21,400 to the additional cost of liability insurance for CHEMTREC under operations, and \$2,525 to supplement technical projects.



Benton W. Harries of Standard & Poor's (left), Moderator William S. Sneath of Union Carbide, G. James Williams of Dow and Charles Moeller Jr. of Metropolitan Life listened as Robert H. B. Baldwin of Morgan Stanley & Co., Inc., discussed capital formation at the morning session of the Semiannual Meeting.



William S. Sneath (left), Union Carbide, and Harvey J. Taufen (right), Hercules, discussed Gabriel Hauge's remarks on the economy at the Semiannual Meeting. In photo below, Robert B. Stobaugh of Harvard Business School (top), Anny Reichl of BASF, Edward Donley of Air Products and Chemicals, Robert J. Patrick Jr. of the Treasury Department and Dr. David H. Dawson, chemical industry trade advisor, participated in the afternoon panel on foreign trade at the Semiannual Meeting.

An additional \$60,000 was subscribed by 58 member plastics materials producers for research on synthetic resins. Other funds apart from the regular Association budget were received and used in connection with meetings, workshops and symposia. Some \$3 million in voluntary contributions from interested companies was received for scientific studies administered by the Association that concerned directly only certain segments of the industry.

The budget was financed primarily from membership fees based on "chemical sales" dollar volume in the preceding calendar year as provided for in the Bylaws. This revenue was augmented by income from general meetings, interest on investments, sales of publications and reimbursement of direct expenses and overhead from the scientific projects carried on with subscribed funds.

Income exceeded outgo by \$532,000, thus restoring reserves to 52 percent of the 1976-77 fiscal year budget—reaching the six-month expense level which the Board of Directors desires to maintain as a matter of policy.

The financial report for the fiscal year ending May 31, 1976, was presented to the membership at the 104th Annual Meeting and, together with a summary of the independent audit, incorporated in the official proceedings.

Meetings

The 103rd Annual Meeting of the Association was held at The Greenbrier, White Sulphur Springs, W. Va., June 12-14, 1975. There were 1,042 registrants from 178 member firms. The program consisted of the annual

business session, banquet, conferences and tournament events. Speakers were Hermann J. Abs, chairman of the supervisory board of the Deutsche Bank, and William J. Driver, president of MCA. Proceedings of the meeting were sent to members in July.

The 25th Semiannual Meeting was held at The New York Hilton, New York City, Nov. 25, 1975, with 1,026 persons attending. Themes of the morning and afternoon sessions were "Capital Formation" and "World Trade and Investment." The luncheon speaker was Gabriel Hauge, chairman of the boards of Manufacturers Hanover Corporation and Manufacturers Hanover Trust Company.

As in the past, the Board met monthly except for July, August and December. One meeting was held in New York, one in San Francisco and Pebble Beach, Calif., one in White Sulphur Springs, W. Va., and the rest in Washington, D.C.



MCA Staff



Peggy Walton
Public Relations



Thomas J. Gilroy
Public Relations



Robert E. Vamerni
Education



Morgan M. Hoover
Technical



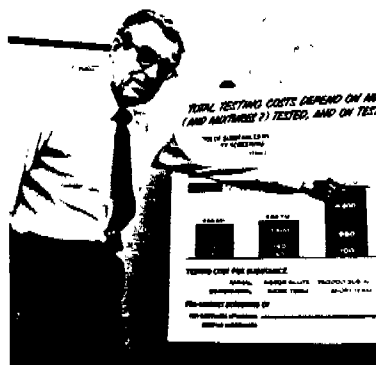
James L. Clark
Mail Room



John C. Van Horn
Technical



Kenneth D. Johnson
Technical



George W. Ingle
Technical



Dewey A. Kunze
Technical



Jane H. Rasmussen
Librarian

D. Miller Simpson
Librarian



Marjorie V. Campbell
Director of Information Service



Samuel L. Watts
Technical



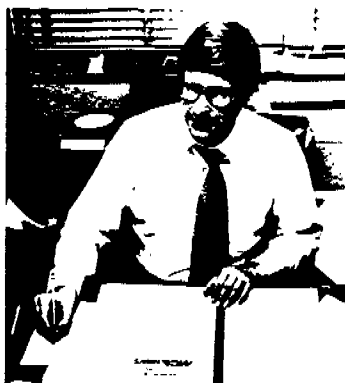
Anne Waggoner
Government Relations



John C. Zercher
CHEMTREC



John G. Tritsch
Technical



John E. Slavick
Public Relations



Samuel M. Williams
Government Relations



James P. Turner
Public Relations



Edward J. Klecka
Manager of Staff Services



Joseph T. Seawell
Technical



Bruce M. Barackman
Staff Counsel



William H. Butterbaugh
Technical



Milton Freifeld
Technical



David C. Williams
Government Relations



Edith V. Tabor
Assistant to the Treasurer



Carl A. Gosline
Technical

Hugh M. Robinson
Government Relations

Publications and Materials

(Published June 1, 1975-May 31, 1976)

Antitrust Guide for MCA Committee Members

Education

1976 MCA Catalyst Awards

Experiments in the Chemistry of Foods (reprint)

Chemistry Projects and Science Fairs (reprint)

Your Tomorrow—A Guide to Careers in the Chemical Industry

Public Relations

How to (Chemically) Become an "Instant Expert" (reprint)

Information Officers of Member Companies

Lifestyle, Chemicalstyle

Water Pollution: Causes & Cures (reprint)

What's Your Sign? (reprint)

ChemEcology (monthly)

Chemicals and You (triannually)

MCA News (monthly)

Technical

WR-1 A Guide for Subsurface Injection of Waste Fluids from Chemical Manufacturing Plants

Environmental Commitment—1975 (A Survey of the Members of the Manufacturing Chemists Association on Environmental Management in Chemical Manufacturing)

Chemical Safety Data Sheets

SD-16 Phosphorus, Elemental (revised)

SD-101 Sulfur Trioxide

Committees and Their Chairmen

AIR QUALITY COMMITTEE	W. BAILEY BARTON, Borden, Inc.
CHEMICAL PACKAGING COMMITTEE	STEPHEN KUZMA, Allied Chemical Corporation
ECONOMIC POLICY REVIEW COMMITTEE	FLETCHER L. BYROM, Koppers Company, Inc.
EDUCATION ACTIVITIES COMMITTEE	ROBERT C. BUSCH, Diamond Shamrock Corporation
ENERGY CONSERVATION COMMITTEE	RONALD S. WISHART JR., Union Carbide Corporation
ENGINEERING ADVISORY COMMITTEE	C. S. HINES, Union Carbide Corporation
FOOD, DRUG, AND COSMETIC CHEMICALS COMMITTEE	G. A. SUNSHINE, ICI United States Inc.
GOVERNMENT RELATIONS COMMITTEE	ROBERT L. SHAFER, Pfizer Inc.
INDUSTRIAL RELATIONS COMMITTEE	JOHN J. RADIGAN, Merck & Co., Inc.
INSURANCE COMMITTEE	ROBERT B. CHAPMAN, Monsanto Company
INTERNATIONAL TRADE COMMITTEE	RICHARD M. BRENNAN, Union Carbide Corporation
LABELS AND PRECAUTIONARY INFORMATION COMMITTEE	CHARLES J. O'CONNOR, Stauffer Chemical Company
LEGAL ADVISORY COMMITTEE	BRIAN D. FORROW, Allied Chemical Corporation
NUCLEAR COMMITTEE	LAMAR P. BUPP, Exxon Nuclear Company, Inc.
OCCUPATIONAL HEALTH COMMITTEE	E. E. CHRISTOFANO, Hercules Incorporated
PATENT AND TRADEMARK COMMITTEE	JOHN B. CLARK, Monsanto Company
PLASTICS COMMITTEE	HENRY AVERY, USS Chemicals Division
PUBLIC RELATIONS COMMITTEE	JAMES E. MCKEE JR., Monsanto Company
SAFETY AND FIRE PROTECTION COMMITTEE	J. J. WALKER, Union Carbide Corporation
SOLID WASTES MANAGEMENT COMMITTEE	DENNIS P. BRIDGE, The Standard Oil Company (Indiana)
TAX POLICY COMMITTEE	MATTHEW P. LANDERS, Pfizer Inc.
TECHNICAL INFORMATION RETRIEVAL COMMITTEE	WENDELL P. METZNER, Monsanto Company
TRANSPORTATION AND DISTRIBUTION COMMITTEE	G. A. COFFENBERG, Stauffer Chemical Company
TRANSPORTATION EQUIPMENT COMMITTEE	R. E. PHILLIPS, Ethyl Corporation
WATER RESOURCES COMMITTEE	G. J. HANKS JR., Union Carbide Corporation