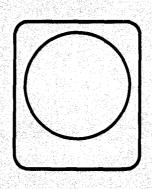
# ANNUAL REPORT 1979



### REPORT OF THE PRESIDENT

In its 109th year, AIME has continued its tradition of growth, achievement and service to its members and to the nation.

On January 1, 1979, AIME membership totalled 68,670; on January 1, 1980, total membership was 73,001, an increase of 4,331 members, or 6.3 percent. Only ten years ago, when the decade of the '70's began, AIME membership stood at 48,000.

Financially, AIME did very well in 1979 in a time of sharply increasing costs and budgetary restraints. Balance sheet assets increased by 15.3 percent to \$13,281,295. Overall the Institute enjoyed a healthy



William H. Wise President, 1979

surplus, in spite of modest deficits experienced by two Constituent Societies. One of the primary functions of a professional society is to provide a forum for the dissemination of new knowledge. In 1979 AIME units conducted some 23 technical meetings and conferences and participated in 15 additional conferences with other organizations. The Fall Meetings of the Constituent Societies reached new attendance records; the 108th Annual Meeting in New Orleans was equally successful. The Offshore Technology Conference, managed by the Society of Petroleum Engineers of AIME, continues as the largest technical conference in the world.

Thirty-four new book titles were issued in 1979, adding to AIME's valuable contribution to the world's technical literature. In addition, a wide range of high-quality member service programs were conducted in the areas of public affairs, technical information exchange and continuing education.

During the year, 52 Honors and Awards were presented throughout the Institute in recognition of distinguished achievement in our profession.

The year 1979 also saw the establishment of a new unity organization for the engineering profession, the American Association of Engineering Societies. AIME, along with its four fellow engineering Founder Societies ASCE (civil), ASME (mechanical), IEEE (electrical and electronics) and AIChE (chemical), spearheaded this three-year effort toward combining presently existing engineering federations into one effective organization to handle professionwide issues. AAES was officially established on December 13, 1979, and launched at a formal inaugural ceremony in Washington, D.C., on January 3, 1980.

It was my special privilege as President of AIME in 1979 to participate in the dedications of our two new Society headquarters buildings. The ISS/TMS building in Warrendale, Pennsylvania, was dedicated on June 13; the dedication ceremony for the new SME building in Littleton, Colorado, took place on November 7. These buildings, while providing excellent facilities for our Society staffs, have added considerably to the overall assets of the Institute. SPE continues to occupy newly-expanded rental facilities in Dallas. AIME Headquarters remains in the United Engineering Center in New York because of contractual arrangements with the other Founder Societies with whom AIME shares ownership of the building. The Institute now employs over 100 full time staff members, only eight of whom still work in New York.

During my term as President of AIME, I have learned a great deal about the Institute's unique structure and its inner workings, and I have come to appreciate just how very well it does work. AIME is a diverse and complex organization encompassing some 35 fields of engineering and technology. Its Constituent Society structure is based on this diversity and designed to provide service to members who share a particular interest; the Institute Headquarters promotes and provides support for the similarities and mutual interests shared by all AIME members, regardless of their Society affiliation.

Over the years, AIME's ability to adapt to changing circumstances has made it a strong, viable organization for the advancement of knowledge and the efficient extraction and production of the world's minerals, materials and fuels. The Institute must maintain its strength and dedication to meet the unknown challenges of the future.

William H. Wise

### **AIME Highlights**

### 108th AIME Annual Meeting

The 108th AIME Annual Meeting was held in New Orleans, February 18-22, 1979. Over 4,800 registrants and 750 WAAIME attendees made it one of the most successful Annual Meetings in AIME history. More than 900 papers were presented in 195 sessions by the Society of Mining Engineers of AIME, The Metallurgical Society of AIME, the Iron and Steel Society of AIME, the All-Institute Program Committee, and the Council of Economics. A special Laterite Symposium highlighted the SME-AIME program. The Annual Meeting is tentatively scheduled to return to New Orleans in 1986.

### **AIME Council of Economics**

The activities of the AIME Council of Economics are directed toward the more than 2,500 AIME members in all four Constituent Societies who have indicated a primary interest in the economics of the minerals and energy industries. The Council presented six special sessions at the New Orleans Annual Meeting, covering such subjects as state government policymaking and industry response, and new techniques of mineral economics analysis. The Council also programmed three halfday sessions jointly with the American Economic Association at its Annual Meeting in Atlanta in December, and the Economics Subsection of the Washington, D.C. Section held its Annual Mineral Economics Symposium on the "Future of U.S. Mining" in November. Two issues of the Council of Economics NEWSLETTER were produced in 1979, in March and October. Proceedings of the Council of Economics, 1979 AIME Annual Meeting, as well as proceedings from prior years and from the recent 1980 Annual Meeting in I Vegas, are available through AIM

Headquarters, New York. The Council is also preparing a fourth edition of *Economics of the Mineral Industries*, scheduled for publication in late 1982.

### **AIME GEM Committee**

The success of the Technical Information Committee (TIC) of the Society of Petroleum Engineers of AIME led to the establishment in 1975 of the AIME Governmental, Energy and Mineral Affairs (GEM) Committee as a means of expanding the scope of AIME operations to include meaningful public exchange with government, the media and the public at large, specifically in technical matters within AIME's areas of interest and expertise. Since that time SME, TMS and ISS have also established GEM Committees at both Society and Section levels, each designed to meet the particular requirements of its own constituency. In order to establish and maintain channels of communication and to encourage the flow of ideas and information between these groups, the Institute GEM Committee was restructured in 1979 to include the current and past Chairmen of each Society GEM/TIC Committee. In addition to this valuable information exchange, the committee also put together an excellent session for the 1980 Annual Meeting on federal land use, and published a six-page folder highlighting GEM activities at all Institute levels.

### American Association of Engineering Societies Formed in 1979

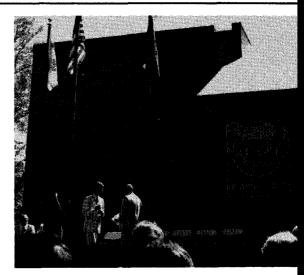
The year 1979 brought the culmination of many years of effort toward a unity organization for the engineering profession with the ablishment of the American sociation of Engineering Societies.

This development was extensively reported in the AIME NEWS in the April 1980 issues of the four AIME journals.

The new AAES combines three previously existing engineering organizations into one body. Its goals are to provide closer cooperation between engineering societies and to provide a greater input of engineering into the affairs of our nation. It will operate through four functional Councils: Educational Affairs, Engineering Affairs, Public Affairs and International Affairs.

AIME leaders have been active in the movement since the beginning. H. Arthur Nedom, 1977 AIME President, served as Permanent Chairman of the Organizing Committee for AAES for two years. Mr. Nedom also serves as Vice Chairman of the AAES Board of Governors in 1980, and AIME President M. Scott Kraemer and Executive Director Ioe B. Alford also are on the Board of Governors. Other AIME members active in the AAES Councils are: Julius J. Harwood, Member, Executive Committee, Engineering Affairs; John C. Calhoun, Jr., Member, Executive Committee, International Affairs; Douglas Von Gonten, Delegate, and William H. Dresher, Alternate Delegate, Educational Affairs; Robert D. Pehlke, Delegate, Engineering Affairs; Donald A. Dahlstrom, Delegate, and Granville Dutton, Alternate Delegate, Public Affairs: Michael Tenenbaum, Delegate, and Leonard O. Franklin, Alternate Delegate, International Affairs. Additional members will be appointed to Commissions and Panels of the Councils as they are organized.

The new AAES holds great promise for the future of the engineering profession. It deserves the effort of the Institute in its activities and also the support of individual AIME members throughout the nation.





Dedication of the new headquarters building for The Metallurgical and Iron and Steel Societies took place in Warrendale, PA, on June 13, 1979. Participating in the ceremony are Alexander R. Scott, TMS-AIME Executive Director, and Lawrence G. Kuhn, ISS-AIME Executive Director.

The new headquarters building of the Society of Mining Engineers of AIME was dedicated on November 7, 1979 at the Ken-Caryl Ranch, Littleton, CO. Left to right: Robert H. Merrill, 1981 AIME President, Joe B. Alford, AIME Executive Director, Alfred Weiss, 1981 SME-AIME President, and Claude L. Crowley, SME-AIME Executive Director.



### Society of Mining Engineers of AIME

The new headquarters building was completed under budget and occupied almost on schedule. A Building Fund Drive has thus far eliminated the need for a commercial loan, and contributions continue to be received.

Increased meeting attendance, plus a \$98,582 distribution from OTC, contributed to the Society's record \$239,760 surplus. With the Building Fund Drive proceeds, the Society's net worth now exceeds \$1 million.

The Fall Meeting in Tucson saw 3,597 registrants, with 112 companies occupying 157 booths at the Technological Information Exchange Exhibit. SME attendance at the AIME Annual Meeting in New Orleans was exceptionally good for a nonwestern site. The fourth RETC, in Atlanta, drew 787 registrants, and 38 companies reserved 52 booths at the accompanying exhibit.

At year-end, corporate membership stood at 21,858, up 5.76%. Student membership decreased by 593 (12.9%); however, total membership is now 25,877, its highest ever. Membership development continues on a strong basis: the President's Letter generated over 250 new members; the Annual Membership Contest was won by Joy J. Merz of Manila, Philippines (50 members); Divisional Membership Contest honors went to the Coal Division; the Local Section Membership Contest was claimed by the Upper Mississippi Valley Section; and participation has increased 18% in the Continuing Incentive Membership Contest.

Special issues of MINING ENGINEERING included Annual Review, Small-Scale Mining, Health and Safety, and Far East Mining. Display advertising pages were up almost 7%, with total ad sales of \$547,510. The Technical Papers section was published in 10 issues of the magazine and additional papers are being included in the 1979 Transactions Volume. Book publishing activities grew with the issuance of nine new titles and

the reprinting of six existing volumes.

The new Southeast Missouri and Northeastern Nevada Sections brought the total of SME-AIME sections to 66, three of which are overseas. A new student chapter was established jointly at Wabash Valley College and John Logan College in Southeastern Illinois. Discontinuance of the Dartmouth College Chapter kept the total of SME-administered chapters at 58. Eighteen Divisional scholarships were awarded, and 22 local sections reported scholarship programs, with available funds exceeding \$70,000.

GEM activities ranged from communication workshops to publications and peer reviews of governmental regulatory documents. Many local sections now have ac-

tive GEM programs.

One hundred fifty registered for SME's seven continuing education courses, and over 12,000 career pamphlets were distributed to students and local school districts. The first national professional engineering examination, developed by SME and the NCEE, was administered in April; 72 persons from 23 states participated.



### The Metallurgical Society of AIME

The new TMS-AIME headquarters building in Warrendale, PA, was dedicated on June 13, 1979. Special appreciation was accorded to Relocation and Building Committee members Harold W. Paxton, Robert E. Lund, Robert I. Jaffee, William R. Opie, William

Polifroni and B.J. Kelly.

Despite rising income from JOURNAL OF METALS advertising, book sales and meetings, the Society ended the year with a \$28,950 deficit, due largely to the effect of inflation. However, increased dues revenues and the continuing upward trend in meetings attendance and advertising sales promise a balanced TMS budget for 1980. The Society has also launched a special campaign, entitled "Foundations for the Future," with the goal of raising \$250,000 to be used as seed money for future projects. The campaign is under the guidance of a blueribbon committee chaired by Robert E. Lund. David L. Swan, President of the Society in 1972, has been named Industry Campaign Chairman; a separate membership fundraising drive is planned for the spring of 1980.

Over 2,000 TMS participants attended the Annual Meeting in New Orleans, which saw a record 114 half-day sessions programmed by the Society. A total of 811 technical papers were presented. The Fall Meeting in Milwaukee broke the 1,000 attendance mark for the first time. Some 542 papers were presented during 76

half-day sessions.

The Society published 13 conference proceedings during 1979, a new record. Efforts to publish needed new textbooks economically began with "Handbook of Metallurgical Energy and Material Balances," due off the press in early 1980. Paper selection publication grew to a total of 131 titles, of which 5,500 copies were sold. The JOURNAL OF METALS had an especially successful year: total advertising revenue grew to \$98,717, with display advertising registering a 92% gain over 1978. Subscription sales hit a new record at \$69,942. An important step for the JOURNAL was its application and approval for the ABC circulation audit. Editorial coverage was improved by the addition of several new departments, all initiated in response to member requests. METALLURGICAL TRANSACTIONS A (4,400 subscribers) and B (2,100) showed an increase in the number of papers published, which totaled 2,642 pages.

Membership remained stable at slightly over 8,000, including 2,326 students. Membership development will

receive increased emphasis during 1980.

TMS co-hosted a one-month visit by a delegation from the Chinese Society of Metals (CSM). The successful exchange program was climaxed by the signing of an Agreement of continuous liaison between TMS and CSM. The Society's expanding international role is signalled by a joint IMM/SME/TMS-AIME Conference on National and International Management of Mineral Resources in London in May 1980 and the Joint AIME/MMIJ Meeting in Tokyo in November 1980.



### Iron and Steel Society of AIME

On December 15, 1979, ISS-AIME completed its first full year of operation at the new Headquarters building in Warrendale, Pa. Our attractive and functional building has helped the staff make giant strides toward more efficient operation of the Society. Frederick C. Motts joined the staff in April, assuming the position of General Manager. Fred's duties will include general administration of the Society and its services to members.

In 1979 the Society continued its level of excellence in conferences. ISS programmed 14 half-day sessions at the AIME Annual Meeting in New Orleans, scheduling 88 technical papers. The 62nd NOH-BOSC was held concurrently with the 38th Ironmaking Conference in Detroit. Together, these highly successful meetings drew nearly 1,700 attendees. The 21st Mechanical Working and Steel Processing Conference took place in Cleveland; almost 300 participants attended. The 37th Electric Furnace Conference, also held in Detroit, saw an attendance of 1,399, a 15% increase over the previous year. Both the NOH-BOSC/IC and the EFC were accompanied by Technical Information Exchanges, each of which had 31 exhibitors.

The Society's consolidated income for fiscal 1979 totaled \$663,039. With an operating expense of \$668,342, the deficit for the year was \$5,303, primarily the result of writing off over \$8,000 in book inventory. Society assets by year-end stood at \$723,328, an increase of almost 250% since the founding of ISS five years ago.

Membership continued a dramatic rise as well: the addition of 955 new members during 1979 brought total Society membership to 5,192 surpassing the five-year goal set by the Board of Directors in 1974. It is the consensus of the Board and the Membership Committee that ISS maintain a minimum 10% growth rate through the next five years, to reach approximately 8,000 members by 1984.

The IRON & STEELMAKER continues to do well as the primary monthly publication of the Society. The staff was saddened by the death of our United Kingdom correspondent, W. Eyton (Bill) Jones, who contributed the important and informative "British Scene" column for over four years. We were quite fortunate to have John Craig fill the vacancy left by Bill's death. The I&SM staff was also significantly strengthened when Dr. Bernard Queneau agreed to serve as Editorial Consultant for the magazine. ISS publications activities were further expanded when, late in 1979, the Society undertook full partnership with The Metals Society in London in the publication of IRONMAKING AND STEEL-MAKING JOURNAL, an international journal issued six times a year. The publication will give members a much broader view of the iron and steel industry, and will serve to promote the Society's recognition, orldwide, as the source of iron and steelmaking chnology in North America.



### Society of Petroleum Engineers of AIME

1979 witnessed the implementation of several precedent-setting activities for the Society of Petroleum Engineers of AIME. These activities were couched in both the framework of the Society's Long-Range Plan and in SPE's ability to react to the changing scenarios of the industry served by Society members.

A voluntary standard for Reserve Recognition Accounting (RRA) was developed to satisfy the Securities and Exchange Commission's new reserves accounting regulations. The standard has international implications in its potential to unify the definition of a proved reserve. The Society also reached agreement with the U.S. Department of Energy to co-sponsor two worldwide symposia on oil and gas recovery methods, the first major cooperative effort between DOE and SPE.

The Society's meetings program experienced exceptional growth in 1979, and further reflected the international growth of SPE through such meetings as the Middle East Oil Technical Conference and Exhibition held in Bahrain. Additionally, SPE launched a new program format entitled Forum Series, which addresses specific topics in limited attendance, discussion and participation sessions. The Society's Annual Technical Conference and Exhibition continued the forward pace with increases in registration, number of technical papers presented, and number of exhibiting companies.

The Society's membership increased to 33,871 in 1979, reflecting both successes in expanded member service programs and acceptance of SPE as a technical/professional home for some 3,000 new members. Two new local sections were created in 1979: Balikpapan, Kalimantan, Indonesia, and Salt Lake City, Utah,

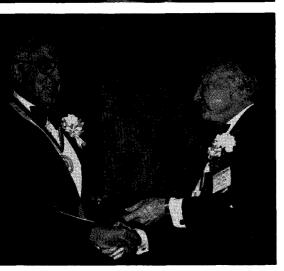
brought the SPE section total to 74.

Publications programs expanded in 1979 with a record number of manuscripts considered for publication in JOURNAL OF PETROLEUM TECHNOLOGY and THE SOCIETY OF PETROLEUM ENGINEERS JOURNAL. The SPE Monograph Acidizing Fundamentals was also published, and work continued on several other monograph projects. Production began for the Spanish translation of the Monograph The Reservoir Engineering Aspects of Waterflooding, and the textbook committee approved typesetting for Drilling, the first in a projected series of Society texts.

Three new standing short courses, Drilling Fundamentals, Natural Gas Engineering, and Review for the Principles and Practices Examination, were added to the Society's continuing education program. A pilot program to intensify the use of live short course presentations was undertaken under the auspices of the Continuing

Education Committee.

The Society's public outreach program expanded with the implementation of the Technical Information Service initiated in December. The TIS was created to provide accurate and objective information on exploration, drilling and production of energy related resources.





1978 AIME President Wayne L. Dowdey presents William Lawrence Saunders Gold Medal to Henry T. Mudd at 1979 Annual Banquet.

Michael Tenenbaum receives AIME Honorary Membership certificate and medallion from 1979 AIME President William H. Wise.

1979 Hoover Medal is presented to Charles M. Brinckerhoff by Nathan Cohn, Chairman, Hoover Medal Board of Award.

### **Professional Recognition**

In recognition of meritorious service and distinguished contributions to the fields of engineering and science it encompasses, AIME conferred the following prestigious HONORS AND AWARDS in 1979: HONORARY MEMBERSHIP Dr. Charles S. Barrett Mr. Wayne E. Glenn Mr. James D. Reilly

Mr. James D. Reilly Dr. Michael Tenenbaum JAMES DOUGLAS GOLD MEDAL Dr. Albert W. Schlechten

WILLIAM LAWRENCE SAUNDERS GOLD MEDAL

Mr. Henry T. Mudd CHARLES F. RAND MEMORIAL GOLD MEDAL

Sir Ian M. McLennan ANTHONY F. LUCAS GOLD MEDAL

Dr. Donald L. Katz ERSKINE RAMSAY MEDAL

Mr. Edwin R. Phelps
ROBERT H. RICHARDS AWARD

Dr. Strathmore R.B. Cooke BENJAMIN F. FAIRLESS AWARD

Mr. C. William Verity, Jr. HAL WILLIAMS HARDINGE AWARD

Dr. Walter D. Keller ROBERT EARLL McCONNELL AWARD

Dr. Jim Douglas, Jr.

Dr. Donald W. Peaceman, and

Dr. Henry H. Rachford, Jr.

ENVIRONMENTAL CONSERVA-TION DISTINGUISHED SERVICE AWARD

Dr. Beatrice E. Willard

ROSSITER W. RAYMOND AWARD

Dr. Harold R. Warner, Jr. MINERAL INDUSTRY

EDUCATION AWARD Dr. Ben H. Caudle

MINERAL ECONOMICS AWARD

Dr. M.A. Adelman

ROCK MECHANICS AWARD

Dr. Donald F. Coates

Outstanding contributions in its fields were also recognized by each of the Constituent Societies of AIME. In 1979 nine outstanding honor and/or achievement awards were conferred by the Society of Mining Engineers of AIME, eight by The Metallurgical Society of AIME, thirteen by the Iron and Steel Society of AIME, and seven by the Society of Petroleum Engineers of AIME. In

addition, SME-AIME, TMS-AIME, and ISS-AIME each honored select members by inducting them Fellows or Distinguished Members of the Society.

Scholarships Approximately 304 young people preparing for careers in the minerals, materials and energy fields have benefited from the five scholarship programs directed by AIME and the Consti-

tuent Societies.

Engineering Societies Joint Awards With its sister Founder Societies and other professional organizations, AIME sits on the Boards of Award of the John Fritz Medal, Hoover Medal, Alfred Noble Prize and the Washington Award. In 1979, an AIME member, Charles M. Brinckerhoff, was the recipient of the coveted Hoover Medal.

25 Year/Legion of Honor 50 Year Members In appreciation of their professional responsibility evidenced by their long-time loyalty to the Institute, AIME issued Twenty-five Year Certificates to 940 members. Inducted into the Legion of Honor in 1979: 55 Fifty-Year Members each received a certificate and a gold

lapel pin.

The Women's Auxiliary to AIME WAAIME was saddened by the death in March 1979 of Mary Laverty, Office Administrator, who had been affiliated with AIME and WAAIME for 20 years. A new Administrator, Mrs. Doreen Sylvester, was appointed in July.

The 1979 Bylaws were approved at the Annual Meeting in February.

The Scholarship Loan Fund, which has aided 1,021 students since its inception in 1920, had a total of 104 recipients in undergraduate and graduate schools. Forty-one new scholarships were awarded in 1979, and 44 were repaid in full.

The Engineers for Tomorrow program expanded considerably, adding Petroleum to its Minerals and Metals Kits. EFT is exploring a Canadian Curriculum Project on WORK in mineral resources. The Chest Assistance for Students program aided 3 students.

Twelve Sections have active and varied Library programs; the WAAIME Newsletter is now edited and printed in Kellogg, Idaho.

Membership in 1979: 2,620.

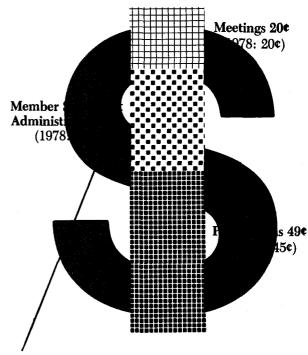
### 1979 AIME Financial Summary

During 1979 AIME total operating expenses were \$6,878,398. This was approximately \$90 per member, considerably above individual member dues. The charts illustrate where revenue came from and functions for which it was spent.

### **AIME Revenue Dollar**

# Funds & Misc. 9¢ (1978: 8¢) Meeth (1978 (1978) Mage than 1978 And 1978 Meeth (1978) Mage than 1978 Mage

### AIME Expense Dollar



Society Business Services & Operations 19¢ (1978: 24¢) Membership Development & Section Rebates 5¢ (1978: 4¢) AIME Institute-Wide & Engineering Federations 7¢ (1978: 7¢)

			NCE SHEET		9, 71, 12
		Novembe (dollars in	er 30, 1979 thousands)		
Assets	1979	1978	Liabilities and Fund Balances	1979	1978
Cash Temporary cash investments	\$ 1,478	\$ 1,423	Accounts payable	\$ 467	\$ 866
Receivables	696	534	Dues received in advance	554	663
Inventories of Publications	1,106	791	Other advance revenues	291	176
Investments (Market \$7,739)	7,640	7,582	Annual Meeting surplus fund	55	50
Plant and Equipment, net of depreciation	1,972	845	Endowment and custodian funds	6,514	5,694
Advances to United Engineering Trustees, Inc.	265	265	Property fund	265	265
Other assets	124	77	Operating surplus	5,135	3,833
	\$13,281	\$11,517		\$13,281	\$11,517







### 1979 Officers and Directors

### AIME BOARD OF DIRECTORS

PRESIDENT

William H. Wise, Chromasco, Ltd., Toronto, Ontario

PRESIDENT-ELECT

M. Scott Kraemer, Amoco Production Company, Denver, CO

PAST PRESIDENT

Wayne L. Dowdey, Envirotech Corporation, Salt Lake City, UT

VICE-PRESIDENT-FINANCE

John K. Hammes, Citibank, N.A., New York, NY

VICE PRESIDENTS

Hugh B. Barton, Exxon Company, U.S.A., Houston, TX Robert I. Jaffee, Electric Power Research Institute, Palo Alto, CA Arthur Marcantonio, Republic Steel Corporation, Cleveland, OH Burt C. Mariacher, Colorado School of Mines Research Institute, Golden, CO Robert S. Shoemaker, Bechtel Corporation, San Francisco, CA Arlie M. Skov, Sohio Petroleum Company, San Francisco, CA

**DIRECTORS** 

Charles L. Bare, Conoco, Inc., Houston, TX
Robert S. Cooke, Union Oil Company of California, Midland, TX
G. Robert Couch, AMAX Specialty Metals Corporation, Parsippany, NJ
Theodore M. Geffen, Amoco Production Company, Tulsa, OK
Marvin L. Katz, ARCO Oil and Gas Company, Dallas, TX
Bruce A. Kennedy, Golder Associates, Inc., Golden, CO
Francis D. Nelson, Inland Steel Company, East Chicago, IN
Nelson Severinghaus, Jr., Franklin Limestone Company, Nashville, TN
William M. Shepard, AMAX Exploration, Inc., Denver, CO
Robert Stefanko, Pennsylvania State University, University Park, PA
Dale F. Stein, Michigan Technological University, Houghton, MI
Edmond J. Whittenberger, U.S.S. Engineers & Consultants, Inc., Pittsburgh, PA
EXECUTIVE DIRECTOR

Joe B. Alford, AIME, New York, NY

### SOCIETY OF MINING ENGINEERS OF AIME

PRESIDENT, Robert Stefanko, University Park, PA PRESIDENT-ELECT, Nelson Severinghaus, Jr., Nashville, TN PAST PRESIDENT, Robert S. Shoemaker, San Francisco, CA TREASURER, Alfred Weiss, Stamford, CT EXECUTIVE DIRECTOR, Claude L. Crowley, Denver, CO

### THE METALLURGICAL SOCIETY OF AIME

PRESIDENT, G. Robert Couch, Parsippany, NJ
PRESIDENT-ELECT, Dale F. Stein, Houghton, MI
PAST PRESIDENT, Robert I. Jaffee, Palo Alto, CA
TREASURER, George S. Ansell, Troy, NY
EXECUTIVE DIRECTOR, Alexander R. Scott, Warrendale, PA

### IRON AND STEEL SOCIETY OF AIME

PRESIDENT, Edmond J. Whittenberger, Pittsburgh, PA PRESIDENT-ELECT, Francis D. Nelson, East Chicago, IN PAST PRESIDENT, Arthur Marcantonio, Cleveland, OH TREASURER, George W. Knepshield, Pittsburgh, PA EXECUTIVE DIRECTOR, Lawrence G. Kuhn, Warrendale, PA

### SOCIETY OF PETROLEUM ENGINEERS OF AIME

PRESIDENT, Charles L. Bare, Houston, TX
PRESIDENT-ELECT, Marvin L. Katz, Dallas, TX
PAST PRESIDENT, Hugh B. Barton, Houston, TX
TREASURER, T. Don Stacy, Tulsa, OK
EXECUTIVE DIRECTOR, Dan K. Adamson, Dallas, TX

- 1980 SME-AIME President Nelson Severinghaus, Jr., cuts symbolic ribbon held by 1978 President Robert S. Shoemaker and 1981 President Alfred Weiss at SME building dedication.
- 1979 TMS President G. Robert Couch (right) presents \$15,000 AMAX contribution to David Swan (center), Industry Campaign Chairman for TMS "Foundations for the Future" funding drive; 1980 TMS President, Dale F. Stein (left) looks on.
- 1979 ISS President Edmond J. Whittenberger addresses Electric Furnace Conference. Attendance exceeded 1,300.
- 1980 SPE-AIME President Marvin L. Katz receives gavel from 1979 President Charles L. Bare during SPE Annual Meeting in Las Vegas, September 24, 1979.

# Official Alme Almual Review/1979



# American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.

## AIME OFFICIAL ANNUAL REVIEW

### 1979

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### AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC.

REPORT OF THE EXECUTIVE DIRECTOR, AIME FOR 1979

The year 1979 was a significant year for AIME and its four constituent societies. This annual review is a record of the Institute's operations for the year, the highlights of which are as follows:

- 1. Overall AIME membership increased by 6.3 per cent for a total of 73,001 at year end. The net increase in the number of members was 4,331.
- 2. The balance sheet assets increased by 15.3 per cent from \$12,393,623 at the end of 1978 to \$14,288,296 at the end of 1979. Overall, the Institute had a surplus in its financial operations for 1979, with two of the Societies experiencing modest deficits.
- 3. Completion and occupation of two new headquarters buildings for the Constituent Societies were real highlights for the year. The building in Warrendale, Pennsylvania for the Iron and Steel Society and The Metallurgical Society of AIME was dedicated on June 13,1979. The building for the Society of Mining Engineers of AIME in Littleton, Colorado was dedicated on November 7,1979. Both are excellent buildings, well-suited to the needs of the Societies.
- 4. During the year, 23 technical meetings and conferences were conducted by the Institute and the Constituent Societies.
  Also, AIME units participated in some 15 additional conferences with other organizations.
- 5. A wide range of high-quality member service programs were conducted in the areas of public affairs, technical information exchange, the conduct of 22 continuing education courses, the issuance of 34 new book titles and the reprinting of several others and the presentation of 52 different honors and awards throughout the Institute.

Extensive data on all these operations are contained in the reports of the Executive Directors of AIME and the Constituent Societies in this Annual Review. The 108th year of the Institute's history was another outstanding year in its record of service.

All members of the Institute are indebted to President Wise for his contribution during the year, and to the Institute Board of Directors, the Constituent Society Officers and Directors and several thousand members of the Institute who provided their services in the work of committees, the conduct of meetings, the presentation of papers, and the general operation of the Institute. The future of the Institute will remain bright with the continuing contributions of so many dedicated people.

Respectfully submitted,

oe B. Alford Executive Director

## American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.

### RECORD OF HONORS AND AWARDS PRESENTED BY AIME IN 1979

The following Honors and Awards were presented by AIME in 1979, in addition to those presented by our Constituent Societies and described elsewhere in this Annual Review:

### HONORARY MEMBERSHIP was conferred upon

Jesse F. Core, "For his dedication and concern for the safety of all people engaged in mining, and his ability to motivate and develop leaders in the mining industry."

Edwin H. Crabtree, Jr., "For significant contributions to the technology of minerals processing and extractive metallurgy derived from positions of production supervisor and research administrator, and for his many services to professional organizations, government activities, and educational institutions."

Melvin E. Nickel, "In recognition of his contributions to the initial development of operating practices in basic oxygen steel-making and his forty-two years of devoted and outstanding service to the steel industry, the Iron and Steel Society and AIME."

Eugene P. Pfleider, "In recognition of his extraordinary dedication to the minerals industry education of young engineers, his pioneering developments in laterite nickel operations, and as a tribute to his dedicated service to the Institute."

The JAMES DOUGLAS GOLD MEDAL to Albert W. Schlechten, "In recognition of his distinguished service as a research scientist, educator, and engineer, and for his valuable innovative contributions to extractive metallurgy technology and practice."

The BENJAMIN F. FAIRLESS AWARD to C. William Verity, Jr., "For his recognition of the importance of technology in the steel industry as exemplified by his strong support of research and development and innovations at Armco Steel Corporation."

The HAL WILLIAMS HARDINGE AWARD to Walter D. Keller, "An outstanding member of the mineral industry whose more than one hundred and fifty publications in geology and geochemical journals have provided invaluable aid to the clay industry."

The ANTHONY F. LUCAS GOLD MEDAL AWARD to Donald L. Katz, "In recognition of his distinguished contributions to hydrocarbon phase behavior and petroleum reservoir performance; and for his outstanding leadership as an engineering educator."

The ROBERT EARLL McCONNELL AWARD to Jim Douglas, Jr., Donald W. Peaceman, Henry H. Rachford, Jr., "For their contribution in the field of simulation methods for the study of petroleum reservoirs, which has broadened the application of computational mathematics to engineering problems and thereby extended recovery of a valuable natural resource."

The ERSKINE RAMSAY MEDAL to Edwin R. Phelps, "Long aware of coming energy and environmental needs, he pioneered in promoting passage of workable surface mining legislation and innovative development of western coal reserves."

The CHARLES F. RAND MEMORIAL GOLD MEDAL to Sir Ian M. McLennan, "For dynamic management of Broken Hill Proprietary leading to outstanding growth and diversification of its Australian interests and inspiring statesman-like leadership in the mining industry."

The ROBERT H. RICHARDS AWARD to Strathmore R. B. Cooke, "In recognition of dedicated teaching, of pathfinding contributions leading to commercial flotation of potash, non-metallic, and iron ores, and of elucidating mechanisms of heat hardening in iron ore pellets."

The WILLIAM LAWRENCE SAUNDERS GOLD MEDAL to Henry T. Mudd, "For successfully applying his engineering and leadership talents in developing a significant mining company, creating an outstanding engineering college, and enriching his community's cultural life."

The ENVIRONMENTAL CONSERVATION DISTINGUISHED SERVICE AWARD to Beatrice E. Willard, "For her untiring efforts in bringing the interests of the government, mining industry and environmental community together in solving critical and important environmental problems, and for her clear and forth-right presentation of ecological principles to the American public."

The MINERAL INDUSTRY EDUCATION AWARD to Ben H. Caudle, "In recognition of his practical and creative teaching of laboratory procedures, his classroom proficiency, his outstanding contributions to continuing education, and his sincere interest in students and colleagues."

The MINERAL ECONOMICS AWARD to M. A. Adelman, "To recognize his valuable insights into oil industry economics; his distinguished teaching career; his insistence that mineral policy be based on rigorous economic analysis."

The ROSSITER W. RAYMOND AWARD to Harold R. Warner, Jr., for his paper, "An Evaluation of Miscible CO2, Flooding in Waterflooded Sandstone Reservoirs."

LEGION OF HONOR FIFTY-YEAR MEMBER INSIGNIA were conferred upon the following fifty-five members: Paul Audibert, Thomas C. Barger, James P. Bradley, Charles M. Brinckerhoff, A. T. Cape, Benjamin B. Cox, Harry B. Croft, Elis M. Dahlstrom, Edmund L. Dana, G. L. De Huff, Jr., E. J. Delay, Edwin L. Derby, Jr., S. J. Dickinson, Arthur H. Dierker, Alphonse O. Dufresne, John Edward Eckel, Gerald Edmunds, William C. Ellis, Arthur H. Fischer, Edward F. Fitzhugh, Jr., Ira N. Goff, Peter P. Gregory, Michel T. Halbouty, Herbert W. Hard, David G. Hawthorn, F. W. Hertel, H. G. Iverson, A. C. Jephson, Jerome J. Kanter, John B. Knaebel, Roland P. Koehring, Robert Lenon, E. M. Lindenau, Robert W. Loofbourow, F. Luchsinger, Arthur Maddox, William J. McKenna, J. Lawrence Muir, Ellwood B. Nelson, Don O. Noel, Frank G. Norris, Ernest K. Parks, Harry I. Phemister, Lawrence T. Postel, A. C. Richardson, Richard H. C. Leb Ross, M. Clifford Smith, Jr., Jasper L. Stuckey, James A. Studstrup, Leonard Teifer, E. D. C. Van Dissel, Herman H. Vogel, John L. G. Weysser, Ralph L. Wilcox, Lawrence B. Wright.

### COOPERS & LYBRAND

CERTIFIED PUBLIC ACCOUNTANTS

A MEMBER FIRM OF
COOPERS & LYBRAND (INTERNATIONAL)

Board of Directors,

American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.:

We have examined the balance sheets of AMERICAN INSTITUTE of MINING, METALLURGICAL, and PETROLEUM ENGINEERS, INC. as of November 30, 1979 and 1978, and the related statements of revenue and expenses (including the individual statements of revenue and expenses of the Institute's Headquarters and the four constituent societies for 1979) and surplus, and changes in endowment and quasiendowment and custodian funds for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. at November 30, 1979 and 1978, and the results of its operations and the changes in its endowment and quasi-endowment and custodian funds for the years then ended, and the individual revenue and expenses of the Institute's Headquarters and the four constituent societies for the year ended November 30, 1979, all in conformity with generally accepted accounting principles applied on a consistent basis.

Coopers & Lybrand

New York, New York January 14, 1980.

AMERICAN INSTITUTE of MINING, METALLURGICAL, and PETROLEUM ENGINEERS, INC. BALANCE SHEETS, November 30, 1979 and 1978

ASSETS:	1979	1978	LIABILITIES and FUND BALANCES:	1979	1978
Operating fund: Cash and temporary cash investments	\$ 1,295,661	\$ 1,178,458	Operating fund: Accounts payable and accrued liabilities	\$ 466,929	\$ 866,026
Accounts receivable (Note 1c) Inventories of publications (Note 1b)	695,967	624,153 647,237	Membership dues received in advance	553,928	633,249
<pre>Investments, at cost plus accrued interest (at market quotations plus accrued interest, approximately \$2,687,910 in 1979 and \$2,453,000 in 1978) (Notes 1d and 3)</pre>	2,585,268	2,396,734	Other deferred credits, principally publications and meetings	291,558	175,736
uildings and equipment (Notes 1c and 2):		137,016	Mortgage loan payable (Note 2)	202,420	
Buildings, less accumulated depreciation of \$20,013  Equipment, furniture and fixtures, less accumulated depreciation of \$214,900 in 1979 and \$147,200 in 1978	1,292,256	339,106	Loans payable to endowment fund plus accrued interest (Note 2)	768,615	299,340
Construction in progress	1,971,618	557,394 1,033,516	Advance from endowment fund for SME land and building investment (Note 2)	100,000	100,000
Prepaid expenses, deferred charges and other assets	124,155	77,413	Annual meeting surplus fund	54,836	49,809
Endowment, quasi-endowment and custodian funds: Investments, at cost plus accrued interest (at market quotations plus accrued interest, approximately \$4,182,612 in 1979 and \$4,448,000 in 1978)			Surplus - unrestricted (per statement annexed)	5,135,121	3,833,351
nd 3)	4,186,369	4,484,111			
Inventories of books (Note 1b) Cash and temporary cash investments	205,426	143,658	Endowment, quasi-endowment and custodian funds: Fund balances (per statement annexed): Endowment and quasi-endowment funds (Note 1a)	5,033,516	947,476
Loan receivable from operating fund plus accrued interest (Note 2)	768,615	299,340	funds (unrestricted)	409,373	346,636
Advance to operating fund for SME land and building investment (Note 2)	100,	100,		5,442,889	5,294,112
Founder Society advances to United Engineering Trustees, Inc. (Note 4)	5,442,889	5,294,112	Property fund (no change during 1979 and 1978) (Note 4)	265,000	265,000
	\$13,281,296	\$11,516,623		\$13,281,296	\$11,516,623

The accompanying notes are an integral part of the financial statements.

for the years ended November 30, 1979 and 1978 STATEMENTS of REVENUE and EXPENSES and SURPLUS

	Headquarters	Society of Mining	The Metallurgical	Iron & Steel	Society of Petroleum			
	and All-Institute	engineers of AIME	Society of AIME	of AIME	of AIME	Eliminations	Total 1979	
Revenue: Members' dues and entrance fees	\$254,833	\$ 598,333	\$184,957	\$135,307	\$ 568,846	(\$254,833)(1)	\$1,487,443	
Advertising and publication sales		1,021,242	321,068	248,797	1,427,184		3,018,291	
	182,300						182,300	
Offshore Technology Conference: Attendance and membership distribution	76,261	98,583	31,937	16,270	928,042		1,151,093	
Management fees					223,600		223,600	
Exhibit space commission					49,333		49,333	
Meetings, interest and miscellaneous	5,666	481,691	220,931	262,666	888,955	(5,000)(2)	1,854,909	
	519,060	2,199,849	758,893	663,040	4,085,960	(259,833)	7,966,969	
Expenses:								
Publications		1,270,715	358,026	325,146	1,494,909		3,448,796	
Society direct expenses		600,861	405,708	322,489	1,633,437		2,962,495	
AIME headquarters	472,107	88,513	25,194	20,707	120,419	(259,833)	467,107	
	472,107	1,960,089	788,928	668,342	3,248,765	(259,833)	6,878,398	
	46,953	239,760	(30,035)	(5,302)	837,195	1	1,088,571	
Contributions for SME building construction, net of fund raising expenses of \$21,258 in 1979, and \$10,324 in 1978 (Note 1c)		213,199					213,199	
Excess (deficiency) of revenue over expenses	\$ 46,953	\$ 452,959	(\$ 30,035)	(\$ 5,302)	\$ 837,195	1	1,301,770	

Surplus (unrestricted): Balance, beginning of year

Balance, end of year

dues allocated to headquarters from societies. Elimination of (1)

3,268,590

3,833,351

\$3,833,351

\$5,135,121

appropriation from AIME headquarters to Society of Mining Engineers. Elimination of (3)

The accompanying notes are an integral part of the financial statements.

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# STATEMENTS of CHANGES in ENDOWMENT and QUASI-ENDOWMENT and CUSTODIAN FUNDS for the years ended November 30, 1979 and 1978

1an id nts 1cted Total	\$4,977,797	32,384	(116)	24,110	17,079	1,260		000	617 683,442	5,661,239	6,743	31,918		40,286		10,341	636 \$5,294,112
1978 1- Custodian t Fund Accounts Unrestricted	\$349,966					<b>L</b>	90		25 75,617				60				\$346,636
Endowment and Quasi- Endowment Fund Accounts	\$4,627,831	37,713	117,190	301,510	120,061		27,860	3,491	607,825		89,220	32,314	10,909	16,654		700,100	\$4,947,476
Total	\$5,294,112								634,678	5,928,790					L O	402,301	\$5,442,889
1979 Custodian Fund Accounts Unrestricted	\$346,636	44,367	(1,870)	37,832	15,845	102,333		1,056	199,563		11,101	30,148		95,577	700 701	130,020	\$409,373
Endowment and Quasi- Endowment Fund Accounts	\$4,947,476	9,722	(39,271)	345,305	91,883		27,255	221	435,115		97,976	29,067	5,185	34,547	182,300	349,075	\$5,033,516
	Balance of fund accounts, beginning of year	Revenue: Contributions	Net gain (loss) on sale of investments	Interest and dividends	Sales of books, volumes, etc.	Revenue from conferences and committee meetings, net	Royalties from publishers and oil deeds	Other			Expenses and appropriations: Publication expenses	Awards	Lecture series and student travel	Sundry expenses	Appropriations to operating fund		Balance of fund accounts, end of year

The accompanying notes are an integral part of the financial statements.

### 1. Summary of Significant Accounting Policies

### a. General

The financial statements include the accounts of Headquarters and All-Institute (AIME Headquarters), the Society of Mining Engineers (SME), the Society of Petroleum Engineers (SPE), The Metallurgical Society (TMS), and the Iron & Steel Society (ISS); the four societies being referred to as the constituent societies.

Custodian funds are either set aside for or generated by the conduct of specific activities within AIME and its constituent societies. While the Institute retains ownership and AIME directors remain responsible for proper use, the operating control has generally been delegated to the AIME body that manages the related activity.

Quasi-endowment funds of \$3,858,179 and \$3,749,291 at November 30, 1979 and 1978, respectively, represented amounts which have been restricted by the Institute's Board of Directors. The Board of Directors has also determined that such funds be retained and invested.

The financial statements do not include assets, liabilities, revenues or expenses of Local Sections, Divisions or Special Committees except for the Institute's share of the net income of the Offshore Technology Conference (OTC). Advances to the OTC, which approximate the Institute's equity in the net assets of the OTC (at November 30, 1979 and 1978, the OTC's net assets were comprised principally of cash and temporary cash investments) are included in endowment and custodian fund cash and temporary cash investments on the balance sheet.

The Institute's Board of Directors periodically makes appropriations from interest and dividend income of endowment funds to AIME Headquarters and the individual constituent societies based on their respective operating requirements.

### b. Inventories

Salable publications and books are carried at the lower of cost (first-in, first-out) or net realizable value.

### c. Property, Buildings and Equipment (See Note 2)

Land and buildings comprise the headquarters for SME in Denver, Colorado and TMS and ISS in Warrendale, Pennsylvania, both of which were completed during fiscal 1979. The land and buildings are recorded at cost and the buildings are depreciated on the straight-

Continued

line method over their estimated useful lives. Depreciation expense of \$20,013 for 1979 was charged to Society direct expenses.

In connection with the construction of the SME head-quarters, SME recorded contributions in 1978 and 1979, net of fund raising expenses, for the restrictive prupose of defraying the cost of the head-quarters. Contributions that were not expended for the headquarters may be used to repay the \$467,000 floating interest loan from the endowment funds (see Note 2) or for future building improvements. In connection with the aformentioned contributions, pledges of \$102,254 and \$90,601 have been included in accounts receivable at November 30, 1979 and 1978, respectively.

Equipment, furniture and fixtures are recorded at cost and are depreciated on the straight-line method over their estimated useful lives. Depreciation expenses for 1979 and 1978 were as follows:

	<u>1979</u> <u>1978</u>
Charged to publications Charged to Society direct	\$ 17,700 \$ 9,200
expenses Charged to AIME Headquarters	82,200 75,200 3,500 3,100
	<u>\$103,400</u> <u>\$87,500</u>

### d. Investments

Investments are carried at cost with regard to those purchased or at market value on date of gift with regard to those received as contributions, plus accrued interest where applicable. Purchases and sales of securities are reflected on a trade-date basis. An allowance for decrease in market value of investments is provided whenever market value is significantly below the aforementioned carrying value.

### e. Gains or Losses on Sale of Investments

Gains or losses on sale of investments are determined on the basis of average cost. Such gains or losses relating to investments which are part of the endowment and custodian commingled pool of investments are allocated to the individual funds based on their relative book values at the end of each quarter.

Continued

f. Interest and Dividend Income

Interest from investments is recorded on the accrual basis. Dividends are recorded on the cash basis; however, such basis of accounting does not differ significantly from the generally accepted method of accruing dividends on the record date.

g. Membership Dues

Membership dues are recorded as income in the accounting period to which they relate.

h. Pensions

The Institute has a contributory pension plan covering substantially all full-time employees. Actuarially computed pension costs, including amortization of prior service costs over a fifteen-year period, are funded and charged to expense each year. Pension expense amounted to \$78,100 and \$68,300 in fiscal 1979 and 1978, respectively.

### 2. Financing of TMS/ISS and SME Headquarters Facilities

TMS/ISS Headquarters

During fiscal 1978, the operating fund obtained a \$300,055 loan from the endowment funds, payable over twenty years at a floating interest rate based on the endowment fund's net earnings after management fees. At November 30, 1979 and 1978, the balance of the loan plus accrued interest at 7.5% and 5.5% per annum was \$292,761 and \$299,340, respectively.

On December 8, 1978, the Institute obtained a mortgage loan of \$206,400 from the Pennsylvania Industrial Development Authority to finance the remaining portion of the construction costs. The loan, collateralized by a mortgage on the building, bears interest at the rate of 4% per annum and is payable in 240 equal monthly instalments which began May 1, 1979. At November 30, 1979, the balance of the loan plus accrued interest was \$202,420.

SME Headquarters

During fiscal 1978 and 1979, SME received contributions, net of fund raising expenses, of \$168,812 and \$213,199, respectively, for the restrictive purpose of defraying the cost of the facility (see Note 1c).

On February 28, 1978, the Institute's Board of Directors approved an investment of \$100,000 from the endowment fund (Rocky Mountain Fund) for the facility and stipulated that the Fund shall hold a proportional share of the facility and receive a proportional share of any proceeds from its sale or disposition.

During fiscal 1979, the operating fund obtained a \$467,000 loan from the endowment funds, payable over twenty years at a floating interest rate based on the endowment fund's net earnings after management fees. At November 30, 1979, the balance of the loan plus accrued interest at 7.5% was \$475,854.

### 3. Changes in Investments

changes in investments		
	1979	<u>1978</u>
Operating Fund: Investments at cost, plus accrued		
interest, beginning of year Purchases of securities	\$2,396,734 867,076	\$1,966,866 546,039
	3,263,810	
Transfer of savings certificate to cash and temporary cash investments Sales of securities	(52,145) (626,397)	(116 <b>,</b> 171)
Investments at cost, plus accrued interest, end of year	\$2,585,268	\$2,396,734
Endowment and Quasi-Endowment and Custodian Funds: Investments at cost, plus accrued interest, beginning of year Purchases of securities	\$4,484,111 2,405,984	\$4,547,870 2,952,642
	6,890,095	7,500,512
Sales of securities	(2,662,585) 4,227,510	(3,133,475) 4,367,037
Net gain (loss) on sales of securities*	(41,141)	117,074
Investments at cost, plus accrued interest, end of year	<u>\$4,186,369</u>	<u>\$4,484,111</u>

<sup>\*</sup>Amounts shown represent realized gains and losses based on the original cost of the investments sold.

### 4. Advances to United Engineering Trustees, Inc.

In accordance with an agreement between the Institute and the United Engineering Trustees, Inc. (UET), the Institute has agreed to maintain permanently its principal offices in the United Engineering Center Building and to pay a pro rata

Continued

portion of the operating costs of the building. The Institute's share of these costs during 1979 and 1978 was \$41,000 and \$70,000, respectively. The advance to UET, made in connection with the erection of the United Engineering Center Building, is repayable only out of available reserve funds on dissolution of UET and carries interest at an annual rate of 4%.

### 5. Commitments

Rental commitments under leases for office space and computer equipment approximate \$89,500 in 1980, 1981, and 1982 and \$72,300 in 1983. Rental expense was approximately \$115,000 and \$135,000 during 1979 and 1978, respectively.

See Note 4 with respect to the Institute's commitment related to the United Engineering Center.

### 6. Reclassification

Certain items in the 1978 financial statements have been reclassified to conform with the 1979 presentation.

### 5

# TOTAL FINANCIAL RESOURCES OF AIME

# AS AT NOVEMBER 30, 1979

OPERATING SURPLUS FUNDS	AIME Corporate Headquarters Operating Reserve All-Institute Deficit from Prior Years Net Headquarters Reserve \$155,941 \$115,941	SME-AIME TMS-AIME ISS-AIME SPE-AIME TOTAL OPERATING SURPLUS FUNDS	Approximate value based on 1978 Section  Treasurers' Reports	\$ 5,033,957 464,209 464,209 5,135,121 10,633,287 265,000 ES 2,383,008* 13,281,295 1,007,000 S14,288,295	vestments as follows: \$768,615 100,000 1 \$868,615
AIME ENDOWMENT FUNDS	Medal and Plaque Award Funds \$ 208,598 Scholarship Funds 191,816 Specific Use Funds 2,009,852 General Purpose Funds 2,623,249 TOTAL ENDOWMENT FUNDS \$5,033,515	FUNDS UNDER ASSIGNMENT TO CONSTITUENT UNITS  Custodian Funds:  AIME Corporate Headquarters \$ 92,194  SME-AIME  TMS-AIME  17,466  TSS-ATME	n Undistributed OTC us AL CUSTODIAN FUNDS\$ 4 ts surplus distributable t Constituent Societies	ENDOWMENT FUNDS	*Includes Endowment Fund Loans and Inv Loan for Society Buildings Investment in SME Building Total

## American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.

### MEMBERSHIP DATA

Year	Member Total								
1870	22	1880	832	1890	2,000	1900	2,450	1910	4,210
1871	157	1881	1,031	1891	2,134	1901	2,897	1911	4,169
1872	254	1882	1,213	1892	2,258	1902	3,262	1912	4,290
1873	273	1883	1,345	1893	2,392	1903	3,741	1913	4,284
1874	345	1884	1,467	1894	2,391	1904	3,530	1914	4,150
1875	554	1885	1,439	1895	2,437	1905	3,886	1915	4,650
1876	628	1886	1,504	1896	2,390	1906	4,048	1916	5,880
1877	732	1887	1,615	1897	2,455	1907	4, 191	1917	6,597
1878	734	1888	1,714	1898	2,562	1908	4,241	1918	7,856
1879	788	1889	1,857	1899	2,564	1909	4, 284	1919	8,426

Year	Corporate Members	Student Members	Grand Total	Year	Corporate Members	Student Members	Grand Total
1920	8,388	1,920	10,308	1940	10,828	4,171	14,999
1921	8,879	1,326	10, 205	1941	11, 334	4,179	15, 513
1922	8,805	1,328	9,413	1942	11,675	3,489	15, 164
1923	7,813	1,315	9,128	1943	12,081	2,707	14,788
1924	7,555	1,263	8,818	1944	12,334	1,497	13,831
1925	7,569	1,157	8,726	1945	12,910	1,088	13,998
1926	7,385	1,131	8,516	1946	14, 119	1,737	15,850
1927	7,434	1,004	8,438	1947	15,000	3,117	18, 117
1928	7,488	1,000	8,488	1948	15, 580	4,069	19,649
1929	7,823	1,033	8,856	1949	16,315	4,952	21, 26
1930	7,831	1,162	8,993	1950	17,082	4,534	21, 61
1931	7,843	1,131	8,974	1951	17,482	2,229	19,71
1932	7,685	975	8,660	1952	18,643	1,964	20,60
1933	7,155	672	7,827	1953	19,718	2,195	21,91
1934	6,887	628	7,515	1954	21,816	2,179	23, 99
1935	6,916	1,006	7,922	1955	23,723	2,825	26, 54
1936	7,326	1,620	8,946	1956	26, 298	3,415	29,71
1937	8,279	2,147	10,426	1957	28,823	3,974	32, 79
1938	9,005	2,898	11,903	1958	30, 553	3,757	34, 31
1939	9,614	3,760	13,374	1959	33,378	2,332	35, 71
	Corporate	Student	Grand		Corporate	Student	Grand
Year	Members	Members	Total	Year	Members	Members	Total
1960	34,852	1,893	36,745	1970	43,095	3,863	46,95
1961	<b>34, 36</b> 8	1,633	36,001	1971	44, 627	3,962	48,58
1962	34, 437	1,857	36, 294	1972	45,742	3,652	49,39
1963	<b>34,</b> 8 <b>3</b> 8	2, 289	37, 127	1973	45, 154	4,572	49,72
1964	35,740	2,370	38, 110	1974	46,702	4,988	51, 69
1965	36,878	2,561	39,439	1975	50,085	6,663	*56,15
1966	38,912	2,706	41,618	1976	52,642	7,131	59,77
1967	40,278	3,183	43, 461	1977	56,008	8,802	64,81
1968	42,015	3,437	<b>45, 4</b> 88	1978	59,385	9,285	68,67
1969	43,300	3,438	46,738	1979	63,712	9,289	73,00

<sup>\*</sup>Actual Grand Total; 596 TMS-AIME/ISS-AIME Joint Corporate Members included once in 1975.

# AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC. MEMBERSHIP STATISTICS January 1, 1980

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# AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC. MEMBERSHIP STATISTICS January 1, 1980

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# American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.

### CLASSIFICATION OF AIME MEMBERS

### THREE-YEAR TALLY - 1977-1978-1979

	1077				1979 BREA	KDOWN	
	<u>1977</u>	<u>1978</u>	<u>1979</u>	SME	TMS	<u>ISS</u>	SPE
HONORARY MEMBERS MEMBERS ASSOCIATE MEMBERS JUNIORS ASSOCIATE JUNIORS	41 34,944 10,199 10,509 315	42 36,120 10,565 12,049 609	46 37,865 11,282 13,602 917	16 12,797 3,766 5,059 220	6 3,919 1,077 632 101	6 3,634 1,173 337	18 17,515 5,266 7,574 596
TOTAL	56,008	59,385	63,712	21,858	5,735	5,150	30,969
STUDENTS	8,802	9,285	9,289	4,019	2,326	42	2,902
GRAND TOTAL	64,810	68,670	73,001	25,877	8,061	5,192	33,871

### 1979 NET MEMBERSHIP GAINS (LOSSES)

SME-AIME	597
TMS-AIME	(38)
ISS-AIME	697
SPE-AIME	3,075
AIME	4,331

### APPROXIMATE MEMBERSHIP RATIO BY SOCIETY FOR LAST 19 YEARS

DECEMBER	SME-AIME	TMS-AIME	ISS-AIME	SPE-AIME
1961	35.3%	25.4%		39.3%
1962	34.5	26.7		38.8
1963	33.6	28.0		38.4
1964	33.0	29.1		37.9
1965	32.2	29.5		38.3
1966	32.9	29.6		37.5
1967	33.7	29.2		37.1
1968	33.7	29.1		37.2
1969	33.7	29.1		37.2
1970	34.0	29.0		37.0
1971	35.4	26.9		37.7
1972	36.7	25.6		37.7
1973	36.9	22.3		40.8
1974	36.8	20.5		42.7
1975	36.9	14.2	6.4%	42.5
1976	37.6	13.1	6.5	42.8
1977	37.4	12.4	6.6	43.6
1978	36.8	12.0	6.5	44.7
1979	35.5	11.0	7.1	46.4

### AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC.

### REPORT ON THE

### 108th AIME ANNUAL MEETING

The 108th AIME Annual Meeting was held in New Orleans, Louisiana, February 18-22, 1979. The Society of Mining Engineers of AIME was headquartered at the New Orleans Hilton, The Metallurgical Society of AIME at the New Orleans Marriott, and the Woman's Auxiliary of AIME (WAAIME) at the International Hotel. The Delta Section hosted the meeting under General Chairman Joe Wirsching.

REGISTRAT	ION DATA	
	ESTIMATED	ACTUAL
AIME Members	2,700	3,006
-Non-Members	700	794
Non-Member Authors	300	406
SEG, CIM, AIMMG, Founder Societies		147′
Student Members	200	360
Student Non-Members	50	87
WAAIME	500	747
TOTAL REGISTRATION	4,450	5,547
PERCENTAGE OF ME	MBER ATTENDANCE	
Society of Mining Engineers of AIME The Metallurgical Society of AIME		3%
REGISTRATION REVE	NUE AND EXPENSE	
	BUDGETED	ACTUAL

REVENUE OVER EXPENSE	\$ 12,000	\$125,990.07
Registration Revenue	219,750	145,619.93
Registration Revenue Total Expenses Charged to	\$231,750	\$271,610.00
	BUDGETED	<u>ACTUAL</u>

### DISTRIBUTION OF REVENUE SURPLUS

Society of Mining Engineers of AIME	57,519.84 53,373.07 3,658.07 3,543.55 7,895.54
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\$125,990.07

REPORT

of the

### Executive Director

1979

1979 was another good year. The Headquarters Building was completed under budget and was occupied almost on schedule. The Building Fund Drive provided sufficient money to eliminate the need for commercial borrowing and was continuing to grow at year-end. Operating Surplus exceeded \$200,000 for the first time and when added to the Building Fund Drive results brought the net worth (Surplus Fund) of the Society to more than \$1,000,000. The Fall Meeting set a record for attendance and exhibit sales and contributed largely to the record surplus. Corporate Membership increased by 1,190 to 21,858, a favorable growth rate of 5.76%; however, Student Membership decreased by 593 to 4,019. Local Sections increased by two to 66 and Student Chapters remained at 58. Publications continued to be a major-used service and performed well in spite of a printing services inflation rate greater than the national average rate of inflation.

The SME-AIME Headquarters Building Project was completed at a cost of \$818,419 which was \$1.00 less than the approved Project Budget. Landscaping was completed at a cost of \$53,187 which was \$4.00 less than the approved Landscaping Budget. The total cost of \$871,606 was paid:

\$467,000	Loan from AIME Endowment Funds
100,000	Investment from Rocky Mountain Club Fund
279,857	Fund Drive Receipts (net of drive expense)
24,749	SME General Funds
\$871,606	TOTAL

The \$24,749 from General Funds will be repaid as additional Fund Drive donations and payments on the unpaid pledges (\$102,254 at year-end) are received. The Building Fund will continue to be accounted for separately within the Society Surplus Fund to facilitate future Board decisions on disposition of that amount received over the minimum required (\$279,857 + \$24,749 = \$304,606).

The Fall Meeting in Tucson, Arizona had 3,597 registrants and 112 companies buying 157 booths at the Technological Information Exchange Exhibit. SME attendance at the Annual Meeting in New Orleans was exceptionally good for a non-western location. The 1979 RETC was held immediately following a meeting of the International Tunnelling Association and created extra work and complexity which resulted in a greater than usual cost recovery from that activity. These factors, coupled with a record \$98,582 surplus distribution from the OTC enabled the Meetings Department to contribute 73% (\$176,204) of the \$239,760 surplus.

Corporate Membership growth increased to 5.76% from a rate of 4.47% in 1978. Student Membership, which had increased by 4.18% in 1978, decreased by 593 (12.9%). Some of this decrease is attributed to a leveling of enrollments and some to finally dropping from membership a number of student members that had been carried forward in an effort to reestablish communications. The Student Member growth rate in 1977 was 22.7. This decreased to 4.18% in 1978 due at least in part to a doubling of dues. With the decrease for 1979,

the student member population is now 4,019. Student activities for 1980 will be carefully watched to see if this downward trend indicates a problem or not.

Staff experienced a turnover rate of 31.25% with the loss of ten personnel. Four individuals left to accept better positions; two moved out of the Denver area; one returned to school as a full-time student; and three were terminated for unsatisfactory performance. Two major promotions were made during the year with John D. Wiebmer being promoted from Associate Editor to Technical Editor of MINING ENGINEERING and Linda M. Kingsley being promoted from Meetings Secretary to Assistant Meetings Manager.

Publications continued as the largest area of activity providing more than 46% of the direct Revenue and 64% of Expenses. The increased cost of publishing (15%+ annually for the past few years) has restricted the number of pages which can be published in MINING ENGINEERING and promises greater problems in the future. Book Publishing continues to grow and challenges staff capacity—continued expansion will require additional personnel. One of the most unexpected results of 1979 was a surplus in the Preprint Program—\$3,805 on Revenues of \$39,578 and Expenses of \$35,773 compared to a loss of \$9,537 in 1978 on Revenues of \$19,415 and Expenses of \$28,952.

### FINANCES

The Society experienced its largest Operating Surplus, \$239,760, exceeding \$200,000 for the first time. The following shows the Operating Surplus (Deficit) for the Society since it was started in 1957 (000's omitted):

1957	1958	1959	1960	1961	1962	1963
\$11.4	<b>\$.</b> 7	\$(.8)	\$4.5	\$1.0	\$(1.7)	\$(14.8)
1964	<u>1965</u>	1966	1967	1968	1969	<u>1970</u>
\$20.1	\$1.2	\$52.6	\$30.1	-0-	\$(10.5)	\$(17.6)
<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	1977
\$(58.9)	\$(32.5)	\$10.7	\$16.6	\$120.4	\$137.9	\$119.7
1978	1979					
\$(19.4)*	\$239.8					

<sup>\*</sup>Resulting from one time relocation related expenses of \$184,191.

The following shows the status of the Society Surplus Fund since it was started in 1957 (000's omitted):

1957	<u>1958</u>	<u>1959</u>	1960	1961	1962	1963
\$100.9	\$101.6	\$100.8	\$105.3	\$106.3	\$104.6	\$89.8
1964	1965	1966	1967	1968	1969	1970
\$109.9	\$111.1	\$163.7	\$193.8	\$193.8	\$183.3	\$165.7
<u>1971</u>	1972	1973	1974	<u>1975</u>	1976	1977
\$106.8	\$74.3	\$85.0	\$101.6	\$222.0	\$359.9	\$479.6
<u>1978</u>	<u>1979</u>					
\$629.0*	\$1,082**					

<sup>\* \$168.8</sup> from Building Fund Drive

<sup>\*\* \$382.0</sup> total from Building Fund Drive (\$168.8 in 1978 and \$213.2 in 1979)

### PUBLICATIONS DEPARTMENT

Three words best characterize significant activities and problems in the publications area: books, travel, and inflation. Several major publications, undertakings of several years duration, were completed: "Coal Preparation," 4th edition; "Computer Methods for the 80's," and "Open Pit Mine Planning and Design."

Significant travel by the editor of MINING ENGINEERING, Ta Li, included leading a US Department of Commerce trade mission to the Philippines, Thailand, and Indonesia in April and at year-end a month-long trip to the People's Republic of China, the latter at the invitation of the Ministry of Coal Industry and China National Mining Committee.

Inflation, a chronic problem in recent years, particularly as it affects printing costs, continues to cause concern. The cost of paper in about two years has risen over 60% and further price increases in early 1980 are forecast. Supply of paper is also a problem, becoming more critical at year-end. In conjunction with the magazine printer, staff is prebuying paper whenever possible, to ensure supply and to try and hold price. In the area of book publishing, the printers are competitively shopping for paper well in advance of printing, again to have a supply and hold price. In the latter area, book binding cloth has been hard to acquire and increasingly expensive. Because of declining efficiency of the postal service and because of the expense of replacing orders lost in the mail, the Society has increasingly turned to alternate means of delivery.

### MINING ENGINEERING

The second Annual Review, compiled by the Contributing Editors (Ed Winegartner, Coal; Alan Burton and Bill Shepard, M&E; Stan Lefond, IndMD; Burt Mariacher and Ed Martinez, MPD) and staff was published in May. Discussion continues by the SME-AIME MINING ENGINEERING Committee and various divisional groups on ways to improve input of information for the Review. For the 1978 Review published this year, there was heavy reliance on meeting and other papers for information on technological advances.

Other previously announced special issues published during the year were the Directory in July, the Fall Meeting Preshow report in September, and a Health and Safety issue in November. In recent years staff has been limiting the number of previously announced specials in order to have maximum flexibility to focus on stories developing after editorial planning has been done. This year, as a result of an international conference on small-scale mining, the February issue was devoted to the subject. A report on Far East mining, covering the Philippines, Thailand, and Indonesia, resulting from the editor's trip in April, was published in August. An early spring issue, 1980, will be devoted to a survey of Chinese mining operations and the status of the industry in that country.

Of benefit to the magazine has been the stability of personnel since mid-summer 1978 when the Society moved to Denver. Continued stability results in increased technical and professional awareness by staff, resulting in greater competency in input to the magazine.

There was an increase in advertising pages, both in the display category and in classified and professional services. Advertising rates were increased on July 1, 1979, by 9.6%, both to cope with inflation and escalating costs and to remain competitive in the marketplace. Comparative advertising statistics are:

F	7 1	.9	7	8	

### FY 1979

	Pages	\$ Income	Pages	<pre>\$ Income</pre>
Display	333 10/12	409,282.60	356 10/12	467,674.93
Classified	42 11/12	52,127.25	43 8/12	61,373.96
Professional Services	63 10/12	12,951.00	70	18,461.35
Totals	439 7/12	474,360.85	470 6/12	547.510.24

In FY 1979, 630 6/12 editorial pages of all types (feature articles, regular columns, Society news, GEM Facts, etc.) were published. In addition, 46 pages of material for other aspects of the Society's operations were published: advance publicity for the Fall Meeting, AIME Newsletters and Annual Report, an annual report for the Society in April, membership contest material, and a special insert and contributors' list to commemorate the building dedication in November. A list of new contributors to the building fund was included in all issues except November, and in all issues there was a special insert for "Build for the Future," the fund drive.

There continues to be a blend in advertising promotion efforts between inhouse produced material and purchased services. Purchased services include the audited circulation statement produced twice a year; the annual media data booklet, a validated form required by many advertising agencies; a professional readership survey; and an advertising campaign in "Standard Rate and Data Service." In-house material has included a series of ads in the magazine that were overprinted and mailed to the promotion list which consists of current and prospective advertisers. A new cover was designed for the media kit which is used by the advertising salesmen and mailed on request to prospective advertisers and agencies. A flyer was developed for promotion of the Professional Services section.

### TECHNICAL PAPERS

The Technical Papers section was published in 10 issues of MINING ENGINEERING (omitted in May and July, the Annual Review and Directory issues because of the size of those two issues) and a total of 256 pages was published. In addition, 116 additional pages were published in the 1978 Transactions Volume 264. At year-end there is a sizeable backlog of papers accepted for both the Technical Papers section and the annual volume. In an effort to eliminate part of that backlog, a part-time typesetter has been working an evening shift three-four days a week and concentration is on publishing papers accepted for the annual Transactions volume. At the October meeting, the Technical Papers Subcommittee discussed the backlog situation and decided to impose a limit on the number of printed pages per paper, since the length of some papers published in the last few years has limited the total number of papers that could be published. Authors will be asked to consider condensing papers prior to review.

### PREPRINTS

In FY 1979, a total of 48,680 copies of preprints were produced: 3,040, 1978 Fall Meeting; 30,185, 1979 Annual Meeting; 9,855, 1979 Fall Meeting; and 5,600 1980 Annual Meeting. Production cost of preprints in 1979 was \$35,772.74 and the cost per preprint in FY 1979 was \$0.735. Preprint income was \$39,578.37.

For the Annual Meeting, eight "Mini Symposia" were printed and two more for the Fall Meeting. These "Mini Symposia" are booklets containing all the papers for a session, usually a theme session. Because of the difficulty in collecting all the papers on a session in time to produce the booklets, no "Mini Symposia" are planned for the 1980 Annual Meeting.

For 1980 preprint prices will remain \$1 for AIME Members and \$2.50 for nonmembers. In the past year there has been an increase in the number of complete sets of preprints sold and an increase in the number of bulk orders (50 or more copies) for individual preprints.

### BOOK PUBLISHING

The book publishing activities of the Society continue to grow. In calendar year 1979, nine new titles were issued and six existing ones reprinted, for a total of fifteen. New titles are:

"South Texas Uranium Seminar," 129 pp.

"International Laterite Symposium," D.J.I. Evans, R.S. Shoemaker, H. Veltman, eds., 688 pp., index.

"Open Pit Mine Planning and Design," J.T. Crawford, III, W.A. Hustrulid, eds., 367 pp., index.

"16th Application of Computers and Operations Research in the Mineral Industry," T.J. O'Neil, ed., 653 pp., index.

"Computer Methods for the 80's," A. Weiss, ed., 975 pp., index.

"Coal Preparation," 4th ed., J.W. Leonard, ed., 1204 pp., index.

"In Situ Uranium Leaching and Ground Water Restoration," W.J. Schlitt, D.A. Shock, eds., 137 pp., soft-cover, index.

"1979 RETC Proceedings," A.C. Maevis, W.A. Hustrulid, eds., 2 vols., 1819 pp. (December Publication).

"Beneficiation of Mineral Fines," P. Somasundaran, ed., 406 pp., soft cover (December Publication).

Since compilation of the index for the 1979 RETC Proceedings was delaying publication, the decision was made to print the proceedings without the index, include a pocket for it in the back of volume two, and distribute the index to registrants as a separate pamphlet.

Reprinted in FY 1979 were "Economics of the Mineral Industries," 3rd ed., 3066 copies (for the Mudd Fund); "Quest for Ore" by Russell H. Bennett, 2000 copies (for the AIME Richards Award Fund); "Surface Mining," 4950 copies (for the Mudd Fund); "Elements of Practical Coal Mining," 3010 copies; "SME Mining Engineering Handbook," 7000 copies; and "Flotation," 1620 copies.

To be published in early 1980 are "Casper, WY, Uranium Seminar," J. Russell, ed.; and "Computer-Assisted Mineral Appraisal and Feasibility" by M.P. Barnes.

To be published for the Annual Meeting in February 1980, or shortly thereafter, are: "International Symposium on Fine Particles Processing," P. Somasundaran, ed.; "Hydrometallurgical Recovery of Metals from Ores, Concentrates, and Secondary Sources," M.C. Kuhn, ed.; and "Leaching and Recovering Copper from As-Mined Materials," W.J. Schlitt, ed.

Other works in progress are "Asbestos," P.H. Riordon, ed.; "Underground Mining Methods Handbook," W.A. Hustrulid, ed.; "Geostatistical Ore Reserves" by Y.C. Kim and H.P. Knudsen; Proceedings, 2nd International Mine Ventilation Congress; "Mine Investment Analysis" by T.J. O'Neil and D.W. Gentry; Proceedings of the 1980 Uranium Mine Waste Disposal Conference, C.O. Brawner, ed.; "Mine Ventilation" by C.J. Hall; and 1980 South Texas Uranium Seminar. Now that most material has been received for the "Mineral Processing Handbook," production work is proceeding, although authors and section editors have been and will continue to be given the opportunity to update material prepared a number of years ago.

Two existing titles are being revised, with new editions to be published: "Mineral Processing Plant Design," A.L. Mular and R.B. Bhappu, eds.; and "Elements of Practical Coal Mining," D.F. Crickmer and D.A. Zegeer, eds.

The one staff change in the Publications Department this year took place in the book area. Carmen Nietes moved to Chicago and Judy MacDonald, an Australian with library science background, was hired as a replacement. Staff continues to investigate alternative ways to handle book projects when the number exceeds in-house capability. Three alternatives are: use of a service bureau, use of professional freelance personnel, and part-time personnel. Pauline Kaempfer, who has had an art background with commercial art training, has been hired part-time, primarily to work on putting together camera-ready books. Several freelance persons in the area are being used for other projects.

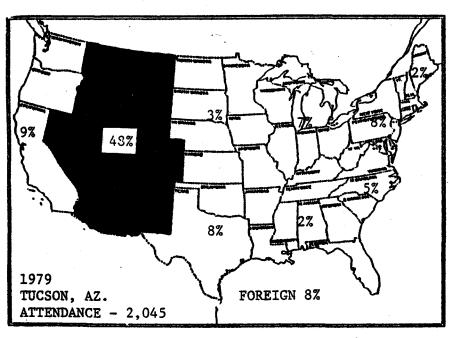
Book sales of all types grossed \$266,764 in 1978; cost of sales was \$188,500 and 15,092 books were distributed.

### **MEETINGS**

The 1979 SME-AIME Fall Meeting and Technological Information Exchange Exhibit (TIE) and the 17th Application of Computers and Operations Research in the Mineral Industry (APCOM) were held October 17-19, 1979, at the Tucson Community Center, Tucson, Arizona. The meeting, which had 2,045 paid registrants, was successful in attendance as well as technically. Registration was up for this meeting with 3,597 registrants as follows:

Members	1,702
Nonmembers	343
Students	135
Ladies	452
Exhibitors	517
Exhibits Only	175
Guests of Exhibitors	273
TOTAL REGISTRATION	3,597

# 1979 SME TUCSON, ARIZONA Member and Nonmember Attendance by Region



The 1979 Exhibit was the largest ever:

SME-AIME Fall Meeting - Exhibiting Companies and Booths Sold

1979	112	157
1978	-0-	-0-
1977	96	144
1976	108	151
1975	97	125
1974	0-	-0-
1973	37	45
1972	37	52
1971	18	28
1970	26	92 .
1969	88	117
1968	34	47
1967	57	7.1
1966	79	102
Year	Companies	Booths

As reported in prior years, Fall Meetings have been purposefully moved around the United States to take the Society to the membership. It is thought that this practice would allow attendance at a national meeting by members who might not otherwise be able to. Analysis seems to indicate that this is so as held. Successful attendance, enough to pay the bills, seems to depend; (1) on the number of members attendance at Fall Meetings continues to be strongly oriented to the region in which the meeting is on the reverse side on member-nonmember attendance indicates the validity of these conclusions. in a region; and, (2) the propensity of the members in that region to support the meeting.

## SME-AIME FALL MEETING

# ATTENDANCE BY GEOGRAPHIC REGIONS

(Members & Nonmembers only)

REGION	1966 Tampa	1967 Las Vegas	1968 Mpls.	1969 Salt Lake	1970 St. Louis	1971 Seattle	1972 B'ham	1973 Pittsburgh	1974 Acapuíco	1975 Sait Lake	1976 Denver	1977 St. Louis	1978 Orlando	1979 Tucson
-	23	20	14	22	23	8	8	10	4	11	17	22	12	39
2	240	145	135	181	162	63	7.1	244	11	113	112	143	115	159
3	417	69	55	58	7.4	28	88	99	45	47	68	49	207	110
4	186	122	235	139	133	54	26	81	51	114	129	205	80	137
5	62	17	18	14	44	4	177	21	10	50	18	55	35	31
9	56	54	338	93	199	28	39	31	19	54	57	880	40	69
7	94	26	43	62	107	30	27	15	19	64	53	61	49	169
8	80	424	86	1,048	285	154	29	48	135	269	781	202	126	988
6	56	241	51	215	26	185	27	24	64	163	124	83	36	192
10	51	59	126	163	288	98	22	28	318	25	175	54	21	151
Total	1,265	1,248	1,113	2,012	1,412	664	585	568	642	1,340	1,534	1,094	721	2,045

## REGION LEGEND

- NEW ENGLAND: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.
- MIDDLE ATLANTIC: New York, New Jersey, Pennsylvania.
- SOUTH ATLANTIC: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida.
- 4. EAST NO. CENTRAL: Ohio, Indiana, Illinois, Michigan, Wisconsin.
- EAST SO. CENTRAL: Kentucky, Tennessee, Alabama, Mississippi.

- 6. WEST NO. CENTRAL: Minnesota, towa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.
- 7. WEST SO. CENTRAL: Arkansas, Louisiana, Oklahoma, Texas.
- MOUNTAIN: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada.
- 9. PACIFIC: Washington, Oregon, California.
- 10. CANADA

### FOREIGN

## UNCLASSIFIED

#### SME-AIME MEMBER ATTENDANCE - AIME ANNUAL MEETING

#### Attendance

Year	Location	Number	Percent	
1963	Dallas, Texas	1079	47.0%	
1964	New York, New York	1221	44.2%	
1965	Chicago, Illinois	1073	48.2%	47.8% Average
1966	New York, New York	1438	47.7%	1.100 11.01080
1967	Los Angeles, California	1421	48.5%	
1968	New York, New York	1632	51.1%	/ -Institute of Metals Div.
1969	Washington, D.C.	1478	63.1%	of TMS Stopped Programming
1970	Denver, Colorado	2399	69.4%	
1971	New York, New York	1460	62.0%	
1972	San Francisco, California	1581	72.8%	
1973	Chicago, Illinois	1145	62.9%	
1974	Dallas, Texas	1235	63.2%	63.9% Average
1975	New York, New York	1263	65.0%	
1976	Las Vegas, Nevada	1840	64.0%	Institute of Metals Div.
1977	Atlanta, Georgia	1381	55.0%	of TMS Resumed Programming
1978	Denver, Colorado	2076	66.0%	
1979	New Orleans, Louisiana	1777	59.1%	$I_{ m C}$ , the second constant $I_{ m C}$

#### SME-AIME FINANCIAL PERFORMANCE - OFFSHORE TECHNOLOGY CONFERENCE (OTC)

#### FY70 THROUGH FY79

Year	Surplus to SME-AIME
1970	\$ 12,198
1971	11,994
1972	19,731
1973	31,187
1974	40,824
1975	57,838
1976	75,497
1977	84,518
1978	70,005
1979	98,582
	\$502,374

The fourth RETC was held June 18-21, 1979, at the Atlanta Hilton Hotel, Atlanta, Georgia. The meeting, which had 787 paid registrants, was successful in attendance as well as technically. Each paid registrant received a copy of the two-volume Proceedings from that meeting. The 1979 RETC also held an exhibit with 52 booths and 38 companies exhibiting.

Plans for the fifth RETC on May 3-7, 1981, in San Francisco, California are well under way. The SME-AIME staff provides meeting services for this joint AIME-ASCE venture. The ASCE staff will provide staff support for the Exhibit in 1981.

The 1980 SME-AIME Fall Meeting and Exhibit will be held October 22-24, 1980, in Minneapolis, Minnesota. Plans for this meeting are also well under way.

The 1981 SME-AIME Fall Meeting and Exhibit will be held October 14-16, 1981, in Denver, Colorado.

#### GENERAL MEMBER SERVICES

Two new corporate sections were established in 1979 - Southeast Missouri in February and Northeastern Nevada in September. A name change was made within the Southern California Section due to the formation of a corresponding TMS-AIME section in the Los Angeles Basin. The SME-AIME administered section is now called the Southern California Mining Section. SME-AIME corporate sections totalled 66 at year's end, 63 of which are domestic. The active sections abroad include Lima (Peru), Mexico and the Philippines.

One new student chapter was established in 1979; Students of Coal for Power, located jointly at Wabash Valley College and John Logan College in Southern Illinois. One was discontinued at Dartmouth College. Discontinuance stemmed from a faculty recommendation that neither mining nor geological programs existed on campus and continued activity would be less than productive. Total student chapters administered by SME-AIME remained at 58.

Inquiries for the establishment of new student chapters were received from four universities and two technology colleges to which staff responded with procedures and informational correspondence.

#### MEMBERSHIP DEVELOPMENT

#### I. <u>Statistics</u>

Through 1979, membership in SME-AIME grew from 25,280 to 25,877.

#### Membership by Divisional Interest

AS OF	M & E	COAL	IndMD	MPD	EDUC	ECON	STUD	UNCLASS	TOTAL MEMBERS	CORPORATE MEMBERS
1/1/1968	7,074	1,377	766	2,284	83	273	773	1,849	14,489	13,716
1/1/1969	7,423	1,435	793	2,384	86	300	1,005	2,001	15,427	14,422
1/1/1970	7,782	1,436	795	2,416	90	301	995	2,360	16,175	15,180
1/1/1971	8,035	1,413	811	2,448	95	321	864	2,655	16,642	15,778
1/1/1972	8,288	1,501	838	2,538	99	348	1,170	3,059	17,841	16,671
1/1/1973	8,348	1,518	851	2,541	104	364	1,129	3,474	18,329	17,200
1/1/1974	8,151	1,517	834	2,517	106	349	1,442	3,413	18,329	16,887
1/1/1975	8,222	1,615	824	2,506	104	354	1,872	3,500	18,997	17,125
1/1/1976	8,517	1,860	864	2,638	115	388	2,726	3,835	20,943	18,217
1/1/1977	10,345	2,749	999	3,116	149	502	3,608	1,004	22,472	18,864
1/1/1978	10,812	3,098	1,085	3,267	146	527	4,427	849	24,211	19,784
1/1/1979	11,240	3,485	1,079	3,395	177	563	4,612	729	25,280	20,668
1/1/1980	11,856	3,818	1,108	3,566	186	585	4,019	739	25,877	21,858

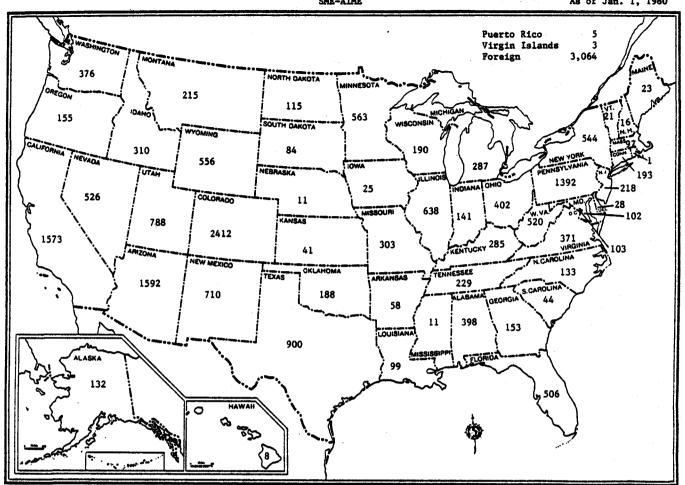
#### Membership by Grade

AS OF	TOTAL MEMBERS	CORPORATE MEMBERS	FULL MEMBERS	ASSOC. MEMBERS	JUNIOR MEMBERS	ASSOC. JUNIOR MEMBERS	STUDENT MEMBERS
1/1/1968	14,489	13,716	9,892	2,214	1,610	-0-	773
1/1/1969	15,427	14,422	10,763	2,449	1,786	-0-	1,372
1/1/1970	16,175	15,180	11,089	2,583	2,141	-0-	1,330
1/1/1971	16,642	15,778	11,503	2,753	2,305	-0-	1,653
1/1/1972	17,841	16,671	11,343	2,840	2,488	-0-	1,170
1/1/1973	18,329	17,200	11,410	3,054	2,736	-0-	1,129
1/1/1974	18,329	16,887	11,203	2,950	2,734	-0-	1,442
1/1/1975	18,997	17,125	11,096	3,036	2,992	-0-	1,872
1/1/1976	20,943	18,217	11,506	3,210	3,501	-0-	2,726
1/1/1977	22,472	18,864	11,867	3,411	3,506	80	3,608
1/1/1978	24,211	19,784	12,631	3,671	3,782	121	4,427
1/1/1979	25,280	20,668	12,476	3,597	4,426	169	4,612
1/1/1980	25,877	21,858	12,813	3,766	5,059	220	4,019

#### Membership by State

Total Membership SME-AIME

As of Jan. 1, 1980



#### Corporate Membership Changes 1975-1979

Losses	1975	1976	1977	1978	1979
Deaths	124	132	141	178	122
Resignations	188	276	241	385	367
Drops & Changes of Status	1,032	1,137	653	858	1,213
Unaccepted	44	23	11		16
TOTAL	1,388	1,568	1,046	1,421	1,718
Gains	1975	1976	1977	1978	1979
Total	2,480	2,215	1,966	2,305	2,892
Net	1,092	647	920	884	1,190
Corporate Members	18,217	18,864	19,784	20,668	21,858
Student Members	2,726	3,608	4,427	4,612	4,019
TOTAL	20,943	22,472	24,211	25,280	25,877

#### II. Membership Development Programs

In 1979, SME-AIME participated in a number of regional and national meetings with membership development material. Meetings included the Minnesota Section Annual Meeting, AIME Annual Meeting in New Orleans, the Offshore Technology Conference in Houston, the Uranium Seminar in Casper, Wyoming, and the SME-AIME Fall Meeting in Tucson, Arizona. The Society continues to maintain a permanent traveling exhibit as well as a portable exhibit.

The President's Letter, an annual event since 1959, generated over 250 new members by year's end.

#### III. Membership Development Contests

In 1979, the Society continued its internal membership development efforts with four contests:

- A. Annual Membership Contest. This contest was developed to recognize and reward the individual SME-AIME member recording the highest number of new membership credits within a year beginning October 1 and ending September 30. In 1979, this honor went to Joy J. Merz of Manila, Philippines, who was credited with 50 new members.
- B. <u>Divisional Membership Contest</u>. The Division recording the highest percentage growth in 1979 was the Coal Division with an increase from 3,485 to 3,818 or 10%.
- C. <u>Local Section Membership Contest</u>. The local SME-AIME section recording the highest percentage growth in 1979 was the Upper Mississippi Valley Section with an increase from 30 to 59 or 96%.
- D. <u>Continuing Incentive Membership Contest</u>. By year's end nearly 1400 eligible members had participated in this contest since its inception in 1974. Participation increased by 18% in 1979. Over 3,000 new members have been recruited in this program since 1974.

In 1979, the SME-AIME Membership Committee recommended and the SME-AIME Executive Committee approved a change in awards whereby an eligible member credited with one (1) new member shall receive a token of appreciation from the Society. Awards shall remain for the 5, 10, 25, 50 and 100 member categories. A recap of participants in the 5 to 100 new member categories is as follows:

1976	<u>1977</u>	1978	<u>1979</u>	Total Prizes
25	30	30	25	127
6	16	6	12	44
. 1	1	2	5	10
_	_		1	2
-	1	<del>-</del> . :	-	1
	25	25 30	25 30 30 6 16 6 1 1 2	25 30 30 25 6 16 6 12 1 1 2 5 1

#### IV. SME-AIME Local Section Activities

#### A. Eastern Region

In 1979, the region was composed of ll sections. The oldest is New York, and the most recent, Georgia. All sections reflected a balanced budget at year's end. The average growth per section in total administrative responsibility was slightly over seven members per section. Local and regional meetings were diverse in 1979 and included New York's Gold and Silver as well as Non-Ferrous Metals Reviews, the Carolinas Fall Meeting, the Central Appalachian Fall Meeting and the Annual Mineral Economics Symposium sponsored by the Mineral Economics Subsection of the Washington, D.C. Section. All 11 sections reported regular monthly or bi-monthly meetings.

#### B. <u>Central Region</u>

The region was expanded to 17 sections in 1979 with the addition of the Southeast Missouri Section. The section, with over 160 members, is headquartered in the "bootheel" section of Missouri, between St. Louis and Memphis. Most sections met regularly and all reported balanced budgets. Section growth averaged 8 new members per section.

#### C. Western Region

This region of 35 sections grew by an average of 12 new members per section in 1979. Each section met at regular intervals and experienced a balanced budget. Local and regional activities were highlighted by the Annual Arizona Conference Meeting, Intermountain Minerals Conference, Mining and Petroleum Days, the Pacific Southwest Mineral Industry Conference and the Pacific Northwest Metals and Minerals Conference. The Tucson Section hosted the 1979 SME-AIME Fall Meeting in Tucson.

#### V. SME-AIME Student Activities

The Society experienced a busy year in the student affairs area. One new chapter was established jointly at Wabash Valley and John Logan Colleges in Southern Illinois while one was discontinued at Dartmouth College in New Hampshire. The decision to discontinue this chapter came only after a strong recommendation to do so by the faculty, due to the fact that neither mining nor geological programs exist on campus. This action was part of the Society's year long program to identify troubled chapters and to institute a rebuilding program where possible. Organizational problems have been identified at nine chapters (out of 58 total chapters). Rebuilding programs have begun at eight with discontinuance at Dartmouth.

The competition with the Student Awards Program was keen in 1979. The recipients were:

- 1979 Best Student Chapter University of Alabama
- 1979 Honorable Mention to Virginia Polytechnic Institute and State University University of Arizona
  University of Nevada-Reno
- 1979 Best Undergraduate Student Paper Mark Strever, Colorado School of Mines
- 1979 Best Graduate Paper Miguel A. Ibarra, University of Arizona

#### VI. Scholarships

At the divisional level, the Coal, Industrial Minerals and Mineral Processing Divisions all continued within the following schools:

#### Coal Division Scholarship

Richard L. Mullen University of Alabama Richard C. Pate University of Alabama John F. Perry University of Alabama Charles E. Allen University of Kentucky Bradley W. Settles University of Kentucky University of Kentucky James R. Wade University of Missouri-Rolla Everett E. Bleakney, III \* John J. Ronan, Jr. University of Missouri-Rolla Daniel L. Vaughn University of Missouri-Rolla Jimmy L. Wilson University of Missouri-Rolla Mark E. Kendrick Pennsylvania State University Thomas J. Kuchera Pennsylvania State University Donald A. Vissat Pennsylvania State University David L. Conley Virginia Polytechnic Institute and State Univ. Virginia Polytechnic Institute and State Univ. Richard P. Harris David F. Wagner Virginia Polytechnic Institute and State Univ.

#### Industrial Minerals Division Scholarship

Gerald Edwards

University of Texas-El Paso

#### Mineral Processing Division Scholarship

Linda Kaase

University of Utah

At the Local Section level, 22 sections reported scholarship programs with available funds exceeding \$70,000.

#### VII. Henry Krumb Lecture Series

Well into its second decade, the Henry Krumb Lecture Series continues to serve the public with a variety of mining and mineral related topics by three distinguished persons within the profession. Lecturers for 1979 included Dr. Milton E. Wadsworth, Associate Dean of the College of Mines at the University of Utah; Mr. John F. Havard, Senior Consultant to Kaiser Engineers in Oakland, California; and Dr. John K. Hammes, Vice President of Citibank in New York. Topics included:

The lecturers made 23 appearances to SME-AIME and TMS-AIME Sections throughout the country.

<sup>&</sup>quot;Recent Developments in Solution Mining"

<sup>&</sup>quot;Metallurgical Engineering Developments in the People's Republic of China"

<sup>&</sup>quot;Mine Finance in a Changing World - A Lender's Perspective"

<sup>&</sup>quot;Conclusions and Recommendations of the U.N. Panel on International Mining Finance"

<sup>&</sup>quot;Stories of Lost Mines"

<sup>&</sup>quot;Satellite Images and Mining"

<sup>\*</sup> George C. Breidenbach Scholarship

#### VIII. GEM (Government, Energy and Minerals) Committee

In its fifth year, the 1979 GEM program at SME-AIME continued to serve the public well as a source of technical information as well as a forum of interchange with the general public. By year's end, nearly all of the 63 AIME domestic sections administered by SME-AIME reported some form of GEM programming. Projects and programs included:

COMMUNICATION WORKSHOPS. All-day sessions which bring SME members together with teachers, journalists, and other professionals are sponsored by a number of local GEM groups. The workshops foster mutual understanding and narrow the gap between the technological community and society at large.

SPEAKER BUREAUS. A number of local GEM committees coordinate speaking engagements for the benefit of schools and civic groups. SME members who live in the community and enjoy the role of public speaker are actively encouraged to stand up and explain the facets of mining.

MINE AND MILL VISITS. Many GEM committees arrange tours of nearby mine and mill operations. This program has proven extremely popular with students and teachers alike.

LIAISON AND PUBLICATIONS. Several sections maintain liaison with school and civic leaders to encourage open communication. This often affords SME members the opportunity to contribute in a timely fashion to published and broadcast reports on the mining industry.

TECHNICAL ASSISTANCE. Those members within a local AIME section who possess expertise in a particular mineral or related engineering field are encouraged to offer aid to decisionmakers. These individuals act not as lobbyists to sway opinion, but as true technical assistants to provide counsel on technical problems.

On the national scene, GEM continued to provide a variety of tools by which information may be converted from the technical to the understandable. In 1979, GEM programming at the national (Society) level included:

PEER REVIEW. SME-AIME now maintains a liaison program with the U.S. Environmental Protection Agency. EPA invites SME experts to examine and comment upon research undertaken at EPA's Industrial and Environmental Research Laboratory.

PUBLICATIONS. GEM information is regularly published in the "GEM Facts" column of MINING ENGINEERING and in the <u>GEM Newsletter</u>. As in all other GEM programs, the goal is to translate mining technology to the general public.

CONFERENCES. SME sponsors or participates in GEM-related conferences, often in conjunction with national and regional SME-AIME meetings. Topics have included: "The Adequacy of Mineral-Related R&D," "US Energy and Mineral Supplies: Meeting National Needs," and "Conflict and Consensus: The National Coal Policy Project."

#### IX. CONTINUING EDUCATION

Continuing education programs as a concept, aid the engineer by improving needed skills as well as enabling one, in many jurisdictions, to remain currently certified and licensed.

In 1979, the Society offered seven courses, more than double the number offered ten years before and enrolled more than 150 students.

#### Course offerings in 1979 included:

- Modelling and Simulation of Crushing and Grinding Circuits for Design, Control, and Optimization
- Solids Handling Centrifugal Pumps
- Storage and Flow of Solids
- Project Financing in the Development of Mineral Resources
- The Past, Present, and Future of Truck Haulage in the Mine
- Policy Formulation in Natural Resource Companies Part I
- Policy Formulation in Natural Resource Companies Part II

#### X. CAREER GUIDANCE

One of the many programs benefitting the public is the Society's role of identifying career opportunities for young persons as they reach the "working" stage of their lives as well as helping to guide them along a rewarding path.

For pre-college men and women interested in mining and mineral related work, this identification is accomplished through a variety of literature available at no cost upon request. The literature includes two career pamphlets, "Careers for Engineers in the Minerals Industry," and "Should You Be A Coal Mining Engineer?;" a listing of mining and mineral related universities with current addresses as well as one for mining technology schools; a comprehensive synopsis of the traditional as well as non-traditional careers a graduate may enter after college; a current film list reflecting entries from over 200 sources in industry, government and academia and a current review of what to expect in mining engineering viz supply, demand, needs and salaries. In 1979, the Society distributed over 12,000 career pamphlets to individuals, school districts and government agencies nationwide.

#### XI. PROFESSIONAL REGISTRATION ACTIVITIES

The first national professional engineering registration examination was developed by the Society in cooperation with the National Council of Engineering Examiners. The "Mining/Minerals Engineering" examination was administered in April 1979. An estimated 72 persons from 23 states answered problems from SME disciplines. To facilitate the administration of future examinations, the SME-AIME Board of Directors established the Professional Registration Committee in 1979, as a standing Committee of the Society.

#### HONORS AND AWARDS

The following honors and awards were selected in 1979 for presentation to SME-AIME members during 1979 and 1980:

AIME Honorary Member
James D. Reilly

SME Best Presentation Award
Anthony T. Stroebel
James A. Goodwin

James Douglas Gold Medal
Joe B. Rosenbaum

Environmental Conservation Distinguished Service Award
David R. Maneval

Antoine M. Gaudin Award
Nathaniel Arbiter

GEM Award
Utah Section
Alfred G. Hoyl

Daniel C. Jackling Award Herbert E. Hawkes

Robert Earll McConnell Award Vernon E. Scheid

Mineral Industry Education
Stefan H. Boshkov

<u>Percy Nicholls Award</u> William N. Poundstone

Robert Peele Award Edward R. Mueller

President's Citation
John F. Havard
Donald O. Rausch

Erskine Ramsay Medal Clayton G. Ball

Robert H. Richards Award
James E. Lawver

#### SME Distinguished Member Award

George E. Atwood

Roshan B. Bhappu

Samuel M. Cassidy

Douglas F. Crickmer

Edward S. Frohling

John W. Hager

Walter D. Keller

Truman H. Kuhn

Ian M. McLennan

Henry T. Mudd

Edwin R. Phelps

William N. Poundstone

#### William Lawrence Saunders Gold Medal

James S. Westwater

#### Young Engineer Award Philip L. Longenecker

1979

#### AIME Henry Krumb Lecturers

John K. Hammes

John F. Havard

Milton E. Wadsworth

#### AIME LEGION OF HONOR

(50 Years of Continuous Membership)

The following 37 SME-AIME Members will become members of the AIME Legion of Honor during 1980:

Ira S. Allison

William M. Barret

Fred A. Brinker

Hart Brown

John J. Brunner

Robert H. Carbonnier

Steven S. Dettman

Albert I. Edwards

Elmer J. Garbella

Angus E. Gilfillan

Helmer Hedstrom

Joseph D. Hitch

Charles B. Hoskins

Juel G. Huseby

Royal B. Jackman

Frederick G. Kuehl

Hugh K. Lancaster, Sr.

R. H. Lowe

Williams Swift Martin

Bliss Moore

P. E. Oscarson

Richard F. Payne

Louis C. Raymond

John Landon Rodda

Charles C. Russell

#### AIME LEGION OF HONOR (cont.)

David S. Sanders

J. H. Schindler, Jr.

Harold D. Strandberg

Oscar F. Tangel

Edward H. Thaete, Jr.

Harold W. Thoms

Carl Tolman

Gailen T. Vandel

Marvin S. Walker

Willis H. Wamsley

Forbes K. Wilson

Stephen R. Wilson

#### ADMINISTRATIVE SERVICES

As in 1978, the major challenge in the administrative services area in 1979, was to handle the Society's increased activities while relocating; this time to the new permanent headquarters on the Ken-Caryl Ranch. This move had an additional challenge due to the Society's change of role from a renter to a landlord; for both the Society and its tenant, the Association of Surgical Technologists.

The Society continued to take advantage of the computer service arrangement with Kennecott Copper Corporation. During April, the system of maintaining the membership records of the Society was converted from the former batch entry process to a direct access method. Four (4) CRT data access stations now provide the staff members with immediate access to any member's records and with the ability to update the records then, if necessary.

Local sections and student chapters are now provided with updated galleys of their membership records each month, and mailing labels for their members either monthly or on request, at no charge. At this date, 67 sections and chapters have requested that the labels be provided monthly or quarterly during 1980. Membership mailing labels are also provided at cost to qualified educational institutions who offer continuing education courses to our membership. The billings for the cost of such labels during 1979 amounted to \$8,637, over twice the amount for the previous year.

Programming to maintain records for meetings registration activities on the computers was also completed during the year.

The cash computer records and the lock box system inaugurated last year enabled the Society this year to maximize its temporary cash investments to take full advantage of the high interest rates in 1979. The average investment for the fiscal year ended November 30, 1979, of the Society and custodian funds in the amount of \$495,488 earned a total interest of \$53,078 at an average rate of 10.71%.

Respectfully submitted,

Claude L. Crowley
Executive Director

REPORT

of the

#### EXECUTIVE DIRECTOR OF THE METALLURGICAL SOCIETY OF AIME

for 1979

The year 1979 saw TMS-AIME operate for the first full year in its new headquarters building in Warrendale, Pennsylvania. The staff members who relocated from New York have all adjusted to their new homes and working environment. The new staff members have now had a year of experience and now know the cycle of meetings and publications with their numerous deadline dates. This is extremely important as most of the work is associated in one way or another with a meeting and its supportive subsequent publications.

The new headquarters building has proven to be not only a beautiful but functional office. The official dedication of the building was held on June 13, 1979, with some 100 guests in attendance. Local and state officials, the AIME Board of Directors, members, and staff all enjoyed a beautiful, warm, sunny day, the raising of the American and Society flags, unveiling of the AIME logo sign, and the reception which followed the dedication ceremonies. Commemorative engraved bricks, the same as used in the construction of the building, were given to Harold W. Paxton, Robert E. Lund, Robert I. Jaffee, William R. Opie, William Polifroni, John M. Cigan, and B. J. Kelly, members of the Relocation and Building Committees in appreciation of their service to the Society in this important project.

While income showed considerable gain in 1979, particularly from Journal of Metals advertising, book sales, and meetings, the Society ended the year with a \$28,950 deficit. This was largely due to continuing inflation which impacts on almost every service area to the members. A dues increase of \$5.00, which became effective in 1979, increased advertising in Journal of Metals, and anticipated larger attendance at meetings should improve the revenue for 1980 and bring the Society into a balanced budget for the year.

The Society launched a special fund-raising campaign in late 1979 entitled "Foundations for the Future" under the guidance of a blue-ribbon committee consisting of Chairman Robert E. Lund, Robert I. Jaffee, Harold W. Paxton, Dale F. Stein, and Gareth Thomas. The Committee named David L. Swan, President of the Society in 1972, as Industry Campaign Chairman and sent out approximately 1,000 letters to metals-related companies requesting a donation. The "Foundations for the Future" campaign will hopefully raise \$250,000 to be used by the Society as seed money for future projects. A campaign addressed to the membership is planned for the spring of 1980.

The Annual and Fall Meetings in 1979 both showed increases in attendance and programming over 1978. The Annual Meeting set a record for the number of technical sessions, with TMS-AIME programming 114 half-day sessions with 811 papers. Total attendance was 4,800, with 2,043 TMS-AIME participants. New Orleans proved a popular site, and the Institute plans to return in the future.

The Fall Meeting in Milwaukee for the first time drew an attendance of 1,011. Some 76 half-day technical sessions were presented including 542 papers. The Milwaukee Convention Center (MECCA) was an ideal facility for the meeting, with housing provided at the Marc Plaza and several other hotels.

Publications of the Society saw dramatic growth in 1979. A record number of 13 Conference Proceedings were published, and three were reprinted in response to efforts of the Society Board to expand revenue sources for the Society. The Book Publishing Committee was restructured, and the Technical Committees responded overwhelmingly to the invitation to publish their symposia as Conference Proceedings.

The first efforts were made to publish needed textbooks, with "Handbook of Metallurgical Energy and Material Balances" to come off the press in early 1980. Plans call to expand publication of textbooks based on need within the universities and the Society's ability to publish them economically.

The paper selection program had modest growth with 131 published. Book orders exceeded 3,100 volumes, and some 5,500 paper selections were sold for a total book and paper selection revenue of \$94,250.

Journal of Metals, the main communication vehicle to the membership, experienced dramatic growth in several areas. Advertising grew 70% over 1978 and set a record since the creation of Iron and Steelmaker. Total advertising revenue of \$98,717, made up of \$54,201 display and \$44,516 classified, demonstrated that the Journal of Metals can and does attract advertising. 1979 ended with a network of four ad salesmen set up to cover the entire United States. An important step was taken in 1979 when the Journal of Metals applied for and received ABC Audit approval. This gives the Journal credibility as to its readership in the advertising market. Subscription revenue set a record of \$69,942, with 2,900 subscribers, of which 850 were other AIME members.

Editorially the Journal saw several changes with new monthly departments added: Campus Newsletter to focus on university happenings; Industry and Business News; International Report; and Book Reviews. These were added in response to reader surveys which continue so the Journal will truly reflect the needs of the members. Feature Articles as well as Technical Articles became the regular technical presentation of the Journal. Contacts through the Technical Committees have increased submission of papers for publication in Journal of Metals.

Metallurgical Transactions continued in its role as the archival Journal of the Society. Met Trans A - Physical Metallurgy with 4,400 subscribers and Met Trans B - Process Metallurgy with 2,100 subscribers saw modest growth in the number of papers published, which totaled some 2,642 pages.

Membership for the year remained stable, with the total slightly over 8,000. Membership development will receive increased emphasis in 1980.

A special highlight of 1979 was the one-month visit to the United States of a delegation from the Peoples Republic of China. The delegation was under the sponsorship of the Chinese Society of Metals (CSM) and was hosted jointly by ASM and TMS-AIME. The Ad Hoc Organizing Committee raised \$14,000 to host the delegation travel while local industry and universities arranged their tours, lodging, and meals. The exchange was a great success, and TMS-AIME climaxed the visit with the signing of an Agreement to continue the liaison with CSM. The Society continues its expanding international role with international

conferences in 1980, including a Joint IMM/SME-AIME/TMS-AIME Conference on National and International Management of Mineral Resources in London in May 1980 and the Joint AIME/MMIJ Meeting in Tokyo in November 1980.

As we continue to respond to the many and varied needs of our members, TMS faces the prospect of growth and change during the decade of the 1980's proud of the Society's past and optimistic about its future.

#### TMS-AIME

#### STATEMENT OF INCOME AND EXPENSE

#### YEAR END, NOVEMBER 30, 1979

#### REVENUE

Member Dues and Fees	\$184,957
Publications: Books, Paper Selections and Proceedings	146,190
Publication Monthly Journal	180,303
Interest and Dividends	11,351
Meetings: AIME Annual Meeting	90,327
Offshore Technology Conference	31,937
Fall Meeting	48,365
Electronic Materials Conference	21,777
Short Course	9,350
Other	34,336
TOTAL REVENUE	\$758,893
	775,075
EXPENSE	
AIME Corporate Headquarters	\$ 25,194
Society Headquarters and Business Services	127,698
Publications: Books, Paper Selections and Proceedings	109,450
Publication Monthly Journal	248,575
Membership Development	82,991
Section and Student Chapter Rebates	12,229
Meetings: AIME Annual Meeting	73,107
Offshore Technology Conference	3,395
Fall Meeting	50,963
Electronic Materials Conference	22,101
Short Course	9,711
Awards: TMS-AIME	1,575
Other	20,854
TOTAL EXPENSE	\$787,843
Type-	
EXPENSE OVER REVENUE	(\$28,950)

#### MEETINGS DEPARTMENT

#### TECHNICAL CONFERENCES

The Metallurgical Society of AIME, sponsored or co-sponsored four technical conferences during 1979.

Conference	Attendance	Number of Technical Sessions	Number of Papers Schedul
108th AIME Annual Meeting; New Orleans Marriott Hotel; New Orleans, Louisiana February 18-22	4,800 2,043 TMS	114	811
11th Annual Offshore Technology Conference; Houston Astrodome; Houston, Texas; April 30-May 3	78,688 54 TMS		
21st Annual Electronic Materials Conference; University of Colorado; Boulder, Colorado June 27-29	496	12	129
1979 TMS-AIME Fall Meeting; MECCA and The Marc Plaza Hotel; Milwaukee, Wisconsin September 16-20	1,011	76	542

#### TMS Technical Program

The technical programs sponsored by TMS-AIME during 1979 showed an increase in the number of sessions and papers scheduled in previous years. This increase undoubtedly reflects the fine quality of programming and the excellent forum TMS provides the metallurgical profession.

At the 1979 AIME Annual Meeting in New Orleans 114 sessions, consisting of 811 papers, were programmed by TMS. In 1978 the figures were 106 sessions and 652 papers. The 1979 TMS Fall Meeting Program consisted of 76 sessions and 542 papers which compares to 73 sessions and 501 papers in 1978.

A further increase in the number of sessions and papers is projected for future TMS programs. This reaffirms that TMS has and continues to conduct outstanding opportunities for the advancement of research and technology in the metallurgical industry.

#### SCHEDULE OF TMS-AIME CONFERENCES FOR 1980 AND 1981

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February 24-28 109th AIME Annual Meeting; Las Vegas Convention Center; Las Vegas Hilton, MGM Grand, and Aladdin: Las Vegas, Nevada - featuring -The 1980 Lead, Zinc, Tin Symposium (sponsored by the TMS-AIME Lead, Zinc, Tin Committee) May 5-8 12th Annual Offshore Technology Conference; Houston Astrodome; Houston Texas May 19-22 4th International Conference on Titanium, Kyoto International Center; Kyoto, Japan May 27-30 Joint IMM/AIME Conference - National and International Management of Mineral Resources; London, England; Hilton Hotel June 24-27 22nd Annual Electronic Materials Conference; Cornell University; Ithaca, New York August 25-30 3rd International Conference on Composite Materials: Palais des Congres; Paris, France October 5-9 1980 TMS-AIME Fall Meeting; William Penn and Pittsburgh Hyatt House; Pittsburgh, Pennsylvania November 4-8 4th Joint Meeting MMIJ/AIME; Sasakawa Memorial Hall; Tokyo, Japan 1981 February 22-26 110th AIME Annual Meeting; Hyatt Regency Chicago,

Radisson Chicago, Chicago Marriott; Chicago, Illinois

May 4-7 13th Annual Offshore Technology Conference; Houston Astrodome; Houston, Texas

June 23rd Annual Electronic Materials Conference (dates and location to be announced)

October 11-15 1981 TMS-AIME Fall Meeting; The Galt House, Hyatt Regency Louisville, and Commonwealth Convention Center; Louisville, Kentucky

#### MEMBERSHIP DEPARTMENT

This department continued in 1979 with one full-time staff member and one part-time employee. Included in its activities are processing new member applications, change of address and status, and membership promotion. The new in-house Sperry Univac BC/7 computer has improved record keeping and reduced mistakes and problems.

Membership promotion campaigns through meetings, direct mail, and various follow-up work brought in 363 new members in 1979. The membership contest, initiated in 1975, had participation by more than 50 members.

TMS-AIME MEMBERSHIP BY GRADE	CLASSIFICATION
JANUARY 1, 1980	
Mank an	2 620
Member	3,628
Associate Member	1,077
Junior Member	733
Student Member	2,326
Honorary Member	7
Senior Member	286
Life Member	4
GRAND TOTAL	8.061
GRAND IOTAL	0,001

#### TMS-AIME MEMBERSHIP 1975 - 1979

	<u>1975</u>	<u>1976</u>	<u>1977</u>	1978	1979
E&PM	1,715	1,863	2,103	2,041	2,038
AM&MS	2,973	2,998	<b>3,090</b>	2,964	2,978
Education	25	39	44	53	55
Economics	51	52	53	47	48
Unclassified	1,124	892	780	704	616
Total Members	5,888	5,844	6,070	5,809	5,735
No. of Members Gained (Lost)	167	(44)	226	(261)	(74)
Percent Change	2.83	(.99)	3.84	(4.30)	(.99)
Student	2,183	1,974	1,997	2,290	2,326
GRAND TOTAL	<u>8,071</u>	7,815	<u>8,067</u>	8,099	<u>8,061</u>

#### TMS-AIME PUBLICATIONS DEPARTMENT

#### I. Journal of Metals

1979 was a very good year for <u>Journal of Metals</u> in all areas: advertising increased by 70%, several major new departments were added, the size increased by 17%, and new composition procedures were adopted.

For the fiscal year ending November 30, 1979, <u>Journal of Metals</u> published 872 pages, broken down as follows:

Technical and feature articles		293.33 pages
Departments		202.08
Society news		39.75
Display advertising		56.50
Classified advertising		37.17
Directory		72.00
TMS and AIME Meetings Abstracts		94.00
House Advertisements		6.00
Miscellaneous editorial matter		11.50
Reader service cards		24.00
Miscellaneous		35.67
	Total	872.00 pages

#### A. Advertising

Total advertising revenue for 1979 was \$98,717 compared to \$57,565 in 1978. Classified advertising in 1979 ran 37.17 pages, very close to the 35.83 pages in 1978, but display advertising increased by 92%, from 29.5 pages in 1978 to 56.50 pages in 1979. Four new display advertising salesmen were added in 1979 in order to continue the push for increased advertising sales in 1980; one unproductive salesman was terminated. Several promotional pieces were prepared and distributed.

#### B. Editorial Content

Several new departments were added to the Journal in 1979:

Industry and Business News International Report Business Briefs Book Reviews Campus Newsletter

A monthly questionnaire to 300 randomly selected TMS members was started to pinpoint likes and dislikes of our member readers. The response to this questionnaire has been high.

Starting with the 1979 Fall Meeting, the full abstracts for papers in TMS technical sessions have been printed camera-ready in the Journal issue two months prior to the meeting. This has been a very popular move.

#### C. Journal Production Matters

Beginning with the March 1979 issue, <u>Journal of Metals</u> composition has been done by Horizon Press in Pittsburgh. This move cut costs slightly, but most importantly cut production time sharply, improved production control and quality, and improved communication in handling production matters. Printing and distribution continue to be handled by Lew A. Cummings, Inc. of Manchester, N.H.

#### D. 1980 Journal of Metals Editorial Emphasis Topics

Issue	Editorial Emphasis Topic
January	Effluent Control - Air and Water
February	Light Metals - Aluminum, Titanium, Magnesium
March	Alloy Development Review
April	Extractive Metallurgy Annual Review
May	Microscopy - Electron, Optical, Transmission,
-	Scanning, Microprobe
June	Membership Directory Issue
July	Mechanical Testing
August	1980 Fall Meeting Program
September	Casting Technology Review
October	High-Temperature and Corrosion-Resistant Materials
November	Refractories
December	1981 AIME Annual Meeting Program

#### II. Book Publication

The number of books published by TMS-AIME has increased sharply--from 4 in 1978 to 13 in 1979. We expect to publish 15-20 in 1980. A total of 3,100 books were sold in 1979, up from 2,800 in 1978.

#### A. Conference Proceedings published by TMS-AIME in 1979:

Light Metals 1979, edited by Warren S. Peterson, from the 1979 AIME Annual Meeting in New Orleans. Two volumes, paperback, total of 946 pages.

Thermomechanical Processing of Aluminum Alloys, edited by James G. Morris, from a symposium held at the 1978 TMS-AIME Fall Meeting in St. Louis. Hardback, 228 pages.

Failure Modes in Composites IV, edited by J. A. Cornie and F. W. Crossman, from a symposium held at the 1977 TMS-AIME Fall Meeting in Chicago. Paperback, 465 pages.

The Metal Science of Stainless Steels, edited by E. W. Collings and H. W. King, from a symposium held at the 107th AIME Annual Meeting in Denver. Hardback, 206 pages.

New Developments and Applications in Composites, edited by Doris Kuhlmann-Wilsdorf and William C. Harrigan, Jr., from a symposium held at the 1978 TMS-AIME Fall Meeting in St. Louis. Hardback, 371 pages.

Calculation of Phase Diagrams and Thermochemistry of Alloy Phases, edited by Y. A. Chang and J. F. Smith, from a symposium held at the 1979 TMS-AIME Fall Meeting in Milwaukee. Hardback, 286 pages.

Precipitation Processes in Solids, edited by K. C. Russell and H. I. Aaronson, from a symposium held at the 1976 TMS-AIME Fall Meeting in Niagara Falls. Hardback, 318 pages

Environment-Sensitive Fracture of Engineering Materials, edited by Z. A. Foroulis, from a symposium held at the 1977 TMS-AIME Fall Meeting in Chicago. Hardback, 662 pages.

Formable HSLA and Dual-Phase Steels, edited by A. T. Davenport, from a symposium held at the 1977 TMS-AIME Fall Meeting in Chicago. Hardback, 244 pages.

Copper and Nickel Converters, edited by Robert E. Johnson, from a symposium held at the 108th AIME Annual Meeting in New Orleans. Hardback, 395 pages.

Toughness Characterization and Specifications for HSLA and Structural Steels, edited by P. L. Mangonon, Jr., from a symposium held at the 106th AIME Annual Meeting in Atlanta. Hardback, 384 pages.

Lead-Zinc-Tin '80, edited by John M. Cigan, Thomas S. Mackey, and Thomas J. O'Keefe, from a symposium to be held at the 109th AIME Annual Meeting in Las Vegas. Hardback, 1,030 pages.

Structures and Properties of Dual-Phase Steels, edited by R. A. Kot and J. W. Morris, Jr., from a symposium held at the 108th AIME Annual Meeting in New Orleans. Hardback, 362 pages.

#### B. Books Reprinted by TMS-AIME in 1979

Light Metals 1979, edited by Warren S. Peterson

Lectures on the Theory of Phase Transformations, edited by H. I. Aaronson

Computer Control in Process Metallurgy, notes from a short course organized by G. R. Marchant.

#### C. Paper Selections

A total of 132 Paper Selection titles were published in 1979, 58 of which were from <u>Light Metals 1979</u>, 114 from the 108th Annual Meeting, and 18 from the Fall Meeting. Sales of these papers totaled 5,500 for revenue of \$14,729.

#### D. Miscellaneous Publications

Short Course notes: "Selection of Equipment and Materials: A Special

Workshop on Hydrometallurgical Plant Design," short course at the 108th AIME Annual Meeting.

Abstract Bulletins: 108th AIME Annual Meeting--TMS-AIME Abstracts

TMS-AIME Fall Meeting

Electronic Materials Conference

TMS-AIME INVENTORY AND BOOK STATUS YEAR END, NOVEMBER 30, 1979

Title	Number Printed	Cost Per Copy	Inve 11- Quantity	Inventory 11-30-79 ity Value	1979 Income	Overall Income	Expenses	Income over (Expense)
Failure Modes II ('74)	550	\$ 4.33	250	\$ 1,082.50	\$ 412.00	\$ 4,107.25	\$ 1,480.11	\$ 2,627.14
Failure Modes IV ('79)	552		512	3,118.08	215.00	215.00	• [	• •
Light Metals 1978	066	90.6	215	1,952,20	3,939,40	515.	•1	.344.
	1.042	2.33	163	379.79	784.00	12,032,10	103.	7,928.50
fons	491	3.40	46	156.40	990	7,755	2,265.	489
Extractive Met. of Copper ('76	2,	5.65	619	3,497.35	136	53,903.00	ડો	390.
Phase Trans. (7	9	1.39	72		1,581,50	9,158.40	1,651.97	7,506.43
	Vol	-	15	157.35				ı
oceedings I (176)	800 Set		18	377.82	1,734.50	17,740.00	,770.	•1
ICCMProceedings II ('78)			240	5,762.40	7,632.50	13,080.50	•	427
· 0	ے	8.89	73	648.97	2,233.60	18,093.00	,327.	- 1
Hot Deformation ('77)	550	9.03	42	379.26	1,972.00	10,085.60	3,962.02	6,123.58
Work Hardening ('77)	490	3.87	61	236.07	1,155,70	4,834,40	897.	.937.
Electro & Thermo Trans. ('77)	525	2.20	245	539.00	388,10	2,435,10	-	278.
Mat. Sel. for Minerals Ind. (78	ا	2.30	88	202	1,167,50	3,545.80	1,116.07	J
eder Reactor (178)		11.85	324	3,839.40	2,689.00	9,300.00	480	819.
Hardenability Concepts ('78)	1,257	5.48	848	4,647.04	7,409.90	8,411.40	7,075.47	,335.
Computer Control ('76)	475	3.58	223	798,34	591,00	7,875.00	820.	.054.
	1,022	5.17	784	4,053.28	2,688.80	2,688,80	5,279,16	590.
Environment Sensitive Frac. (79	7	9.03	986	8,903.58	890	2,068,00	9,773,94	(7, 705, 94)
Copper & Nickel Conv. ('79)	783	76.7	390	1,926.60	6,526.60	6,526.60	3,867.32	52%
icati					00 0	00 077		17 103 3/1
In Composites ('79)	260	6.90	531	3,663.90	440.00	440.00	3,803.34	127
Metal Sci. of Stnls Steel ('79)		5.21	477	2,485.17	1,238.00	1,238.00	2,/03.24	. 1
Toughness Character. ('79)	766	7.14	442	3,1/7.30	1,111.00	T, 111.00	3,737.02	(7,024,2)
HSIA &		0	127		000	00 660	2 1 2 7 1 3	(9 215 13)
Steels (		3.91	/2/	7,881.0/	927.50		70/01	19
Precip. Process. in Solids('79		4.97	97/	3,618.10	^	•	0,190.43	7
Sel. of Matl. & Equip. ('79)	200	14.33	99	1,418.67	1,708,10	1,708,10	7,865.61	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
179)	496	5.56	390	2,168.40	1,272.80	•	2,750.20	
Thermomechanical Process. ('79)		6.53	484	3,160.52	313.00	313.00	3,324.94	(3,011.93)
				\$65,331.70	\$60,371.10	\$230,511.15	\$149,967.34	\$ 80,543.81

#### METALLURGICAL TRANSACTIONS A AND B COMBINED

#### Technical Papers Published

	No. of TPs	No. of Pages	Total Pages
A Sub+ and ASM B Sub++ ISS	215 37 30	1,748 288 247	
TOTAL	282	2,283	2,283
Commun	ications Publis	hed	
A Sub+ and ASM B Sub++ ISS	50 6 5	118 13.5 10.5	
TOTAL	61	142	142
Title Pages and Table of Contents Blank Pages	, etc.		78 139
Total Pages in METALLURGICAL TRANS	SACTIONS A AND	B	2,642 *

<sup>\*</sup> An Annual Index appears in the December issue of both A and B

METALLURGICAL TRANSACTIONS serves the needs of the entire metallurgical profession. Thus, Society distinctions are eliminated through both the review and publication process. Consequently, the tabular data represent the distribution of effort in the Board of Review and not the source of the papers.

<sup>+</sup> TMS-AIME A Subcommittee

<sup>++</sup> TMS-AIME B Subcommittee

#### METALLURGICAL TRANSACTIONS A AND B - REPORT FOR 1979

#### METALLURGICAL TRANSACTIONS A

#### Technical Papers Published

	No. of TPs	No. of Pages	Total Pages
A Sub+ and ASM B Sub++ ISS	207 0 0	1,684 0 0	
TOTAL	207	1,684	1,684
Communica	tions Publish	ned	
A Sub+ and ASM B Sub++ ISS	48 0 0	114 0 0	
TOTAL	48	114	114
Title Pages and Table of Contents, e Blank Pages	etc.		56 108
Total Pages in 1979 MET TRANS A			1,962

#### METALLURGICAL TRANSACTIONS B

#### Technical Papers Published

	No. of TPs	No. of Pages	Total Pages
A Sub+ and ASM B Sub++ ISS	8 37 30	64 288 <u>247</u>	
TOTAL	75	599	599
Communicat	ions Publishe	<u>ed</u>	
A Sub+ and ASM B Sub++ ISS	2 6 5	4 13.5 10.5	
TOTAL	13	28	28
Title Pages Table of Contents, etc. Blank Pages			4 18 31
Total Pages in 1979 MET TRANS B			680

#### HONORS AND AWARDS

TMS-AIME Board of Directors has elected the following members to the grade of Fellow in 1980.

Wayne C. Hazen
Mats Hillert
Eugene S. Machlin
Dale F. Stein
Jack H. Wernick

The following awards were presented by The Metallurgical Society of AIME to recognize our 1979 award recipients.

#### Robert Lansing Hardy Gold Medal

Sheree Hsiao-Ru Wen is the recipient of the Robert Lansing Hardy Gold Medal in recognition of exceptional promise of a successful career in the field of metallurgy. This award is given annually to a metallurgist who has not reached his thirtieth birthday before the end of the calendar year during which his selection is made.

#### Champion H. Mathewson Gold Medal

The Champion H. Mathewson Gold Medal was bestowed upon J. Keith Brimacombe for his outstanding contributions to the understanding of transport phenomena in metallurgical processes.

#### Extractive Metallurgy Science Award

Ernest W. Dewing was selected for this award for his paper "Thermodynamics of the System NaF-AlFa: Part V."

#### Extractive Metallurgy Technology Award

Robert Gee and Derek J. Fray were selected for this award for their paper "Instantaneous Determination of the Hydrogen Contents of Molten Al and Its Alloys."

#### William Hume-Rothery Award

The William Hume-Rothery Award was bestowed upon Thaddeus B. Massalski.

#### LECTURES

#### ASM/TMS-AIME Joint Distinguished Lecture in Materials and Society

Dr. Glenn Seaborg: "Our Heritage of Elements"

#### Extractive Metallurgy Lecture

Professor Akira Yazawa: "Thermodynamic Evaluation of Extractive Metallurgical Processes"

#### Institute of Metals Lecture and R. F. Mehl Award

Professor Erhard Hornbogen: "Combined Reactions in Metallic Materials"

#### ACKNOWLEDGEMENT

Appreciation is extended to all members, Officers, and Directors of The Metallurgical Society of AIME. Special thanks to President G. Robert Couch.

Thanks also to the staff who have performed most admirably. The staff as of January 1, 1980, by position:

Title	Name	Years of Service
Executive Director	Alexander R. Scott	9
Administrative Assistant	Marilyn M. Zabel	<b>2</b>
Director of Administration	Peter D. DeLuca	6
Conference Manager	Thomas J. DeSalvo	3
Program Coordinator	Joan DeLuca	4
Membership Records Manager	Frank Denio	2
Director of Publications	John B. Ballance	2
Manager of Publications	Ronald W. Sommer	2
Advertising Manager	Linda L. Morgan	2
Associate Editor	Linda W. Flindt	<b>2</b> 2
Production Coordinator	Barbara Pontello	2
Graphic Artist	Judith M. Uhl	2

Respectfully submitted,

Alexander R. Scott Executive Director

#### IRON & STEEL SOCIETY OF AIME

#### REPORT

of the

EXECUTIVE DIRECTOR OF THE IRON AND STEEL SOCIETY OF AIME

for 1979

On December 15, 1979, the Iron and Steel Society completed its first full year in the new headquarters building in Warrendale, PA, approximately 20 miles directly north of Pittsburgh. The myriad of details in moving into and settling has been accomplished. For the past six months, the Society staff has made giant strides toward more efficient operation of the Society.

In June of 1979, ISS joined with The Metallurgical Society in the dedication ceremonies of the new office building. The dedication was attended by the AIME Board of Directors and the Boards of both TMS and ISS.

In April of 1979, the Society staff was strengthened with the addition of Frederick C. Motts, who assumed the position of General Manager. Fred's duties encompass the general administration of the Society and its services to the members. His presence on the staff will allow the Executive Director to spend more time in the Publications efforts of the Society.

In 1979 the Society continued the level of excellence in conferences. Four national conferences were held in addition to the Society participation with TMS in the 1979 Annual Meeting in New Orleans (see Conferences). In the area of membership, the Society attracted over 955 new members in 1979. A good bit of this success can be attributed to the efforts of President Whittenberger, who contributed much of his time toward membership development.

At year end, negotiations with the American Society for Metals were completed; and the Iron and Steel Society undertook full partnership with the Metals Society of the United Kingdom in the publication of Ironmaking and Steelmaking Journal, an international journal published six times a year. This publication will compliment the Iron and Steelmaker magazine, and provide ISS members a much broader scope of the iron and steel industry. Furthermore, participation in this international publication will promote the Society's recognition throughout the world as the source of iron and steelmaking technology in North America.

#### Finance

The Society's consolidated income for fiscal 1979 totaled \$663,039. Total operating expense equaled \$668,342. The deficit for the year was \$5,303. The deficit was primarily the result of writing off over \$8,000 in book inventory. The assets of the Society at year end totaled \$723,328, an increase of almost 250% since its founding five years ago.

#### AWARDS

The James B. Austin Award will be presented to Edmond J. Whittenberger, 1979 President of the Iron and Steel Society, on February 26, 1980, at the ISS Reception and Luncheon at the Las Vegas Hilton. The Past President Award was named after Dr. Austin to honor him for his contribution of time, effort, and ability toward the formation of the Iron and Steel Society of AIME.

The Grade of Distinguished Member will be presented to three members of the Society in 1980. A Distinguished Member of the Iron and Steel Society of AIME is a member of the Society who has made outstanding contributions toward the production of iron and steel or in fields embracing the activities of iron and steel technology and the Iron and Steel Society of AIME.

The three members who will be elevated to the Grade of Distinguished Member in 1980 are:

John J. Bosley, in recognition of his long service in the Iron and Steel Society of AIME. Specifically for his contributions to the Society Publications Committee and the Steering Committee of the International Iron and Steel Congress.

Robert D. Pehlke, in recognition of his untiring effort toward the successful completion of the BOF Monograph Series and his leadership in the Iron and Steel Society's Continuing Education Program.

Edward J. Ostrowski, in recognition of his long service to the Iron-making Division and the Iron and Steel Society. His untiring efforts as President of the Society made possible the successful completion of the new Iron and Steel Society Headquarters.

The following awards were presented by the Iron and Steel Society of AIME during 1979:

#### Robert W. Hunt Silver Medal Award

S. K. Sharma, J. W. Hlinka and D. W. Kern were selected for this award for the best original paper on iron and steel, "The Bath Circulation, Jet Penetration and High-Temperature Reaction Zone in BOF Steelmaking".

#### J. E. Johnson, Jr. Award

This award is given to encourage young men in creative work in the metallurgy or manufacture of pig iron. The recipient of this award must be under forty years of age when he completes the work that merits recognition. The 1979 recipient was John E. R. Holditch for his work in the use of homogenized oil for tuyere injection, the development of blast furnace practices for use with external hot metal desulfurization, and the development of methods to control alkalis in the blast furnace.

#### Frank B. McKune Award

This award is given for the best paper on open hearth or basic oxygen steelmaking written by an author or authors under forty years of age. The recipient of the 1979 award was S. N. Singh for his paper, "A Practical Solution to the Problem of Alumina Buildup in Nozzles During Continuous Casting of Aluminum-Containing Steels".

#### Conference Award

This award is the "runner-up" to the Frank B. McKune Award and was presented in 1979 to A. M. Smillie and R. A. Huber for their paper, "Operating Experience at Youngstown's Brier Hill Works with Injected Salt Coated Magnesium Granules for External Desulfurization of Hot Metals".

#### Charles H. Herty, Jr. Award

Jan T. vonKonijnenburg and E. P. Westerdijk were selected for this award for the best paper presented at the 1978 National Open Hearth and Basic Oxygen Steel Conference and published in the Conference Proceedings. The title of the paper is "Measuring the BOF Lining During the Campaign by Means of Interferometer".

#### John Chipman Award

This award was established in April 1971 by the Process Technology Division of the Iron and Steel Society to perpetuate the inspiration of John Chipman's outstanding contribution to the science of iron and steelmaking. In 1979 the award was bestowed upon J. K. Brimacombe and W. Venkateswaran for their paper, "Mathematical Model of the SL/RN Direct Reduction Process".

#### Ironmaking Conference Award

The 1979 Ironmaking Conference Award was presented to P. K. Strangway and M. O. Holowaty for the best paper presented at the 1978 Ironmaking Conference. The paper title is "Blast Furnace Test with 20,000 Net Tons of FMC Formcoke at Inland's No. 5 Blast Furnace".

#### Michael C. Tenenbaum Award

The award was established in 1971 as the Mechanical Working and Steel Processing Division Highest Award, given for the best paper presented at the previous year's conference and published in the Proceedings. In 1978 the award was re-named the Michael C. Tenenbaum Award, honoring one of the earliest Chairmen of the Mechanical Working and Steel Processing Committee. In 1979 the award was presented to A. P. Coldren, G. Tither and J. W. Morrow for their paper, "Continuous-Yielding Dual-Phase Strip Product".

#### Mechanical Working and Steel Processing Meritorious Award

This award is "runner-up" to the Michael C. Tenenbaum Award and is given for two papers chosen as "runner-up" to the best paper presented at the previous year's conference and published in the Proceedings. The 1979 recipients of this award were J. A. Straatmann and Y. E. Smith for their paper, "Quenched and Tempered Oil Country Tubular Goods Provide Improved Performance Properties for Hostile Oil and Gas Drilling Environments", and E. R. SuVegas for his paper, "Engineering and Manufacturing of Transverse Torsion Bars".

#### Charles W. Briggs Award

This award is conferred for the best paper presented at the Annual Electric Furnace Conference. The 1979 award was given to R. A. Swift and W. W. Scott, Jr. for their paper, "Advantages of Ladle Injection of Calcium and Magnesium Reagents for Steel Desulfurization".

#### Joseph Becker Award

This award is given for distinguished achievements in coal carbonization and was presented in 1979 to James P. Graham.

#### T. L. Joseph Award

The award is conferred for distinguished contributions to ironmaking operations to a person who has significantly increased iron production or decreased the cost of doing so. The 1979 award was presented to Robert L. Stephenson.

#### Reinartz Scholarship Award

This award was established by AIME in honor of Leo R. Reinartz, a graduate of Carnegie-Mellon University, to recognize each year an outstanding student in the University's Department of Metallurgy and Materials Science. The award, a \$2,000 scholarship, was presented in 1979 to Alvin K. Miller.

#### MEETINGS DEPARTMENT

#### TECHNICAL CONFERENCES

The Iron and Steel Society of AIME, through its Divisions, sponsored or co-sponsored five technical conferences during 1979:

Conference	Attend- ance	Number of Tech- nical Sessions	Number of Papers Scheduled
108th AIME Annual Meeting New Orleans Marriott New Orleans, LA February 18-22, 1979	102	14	88
62nd National Open Hearth & Basic Oxygen Steel Conference Detroit Plaza Detroit, MI			
March 25-28, 1979  38th Ironmaking Conference Detroit Plaza Detroit, MI March 25-28, 1979	917 761	13	34 54
21st Mechanical Working and Steel Processing Conference Cleveland Marriott Cleveland, OH October 24-25, 1979	292	6	26
37th Electric Furnace Conference Detroit Plaza Detroit, MI December 5-7, 1979	1399	11	53

#### SCHEDULE OF ISS-AIME CONFERENCES FOR 1980 AND 1981

#### 1980

February 24-29	109th AIME Annual Meeting, Las Vegas, Nevada
March 23-26	63rd National Open Hearth and Basic Oxygen Steel Conference, 39th Ironmaking Conference, and 1st Process Technology Conference, Washington Hilton, Washington, D.C.
October 6-7	Mining and Coking of Coal Conference

October 27-30	22nd Mechanical Working and Steel Processing Conference, Harbour Castle, Toronto, Ontario
December 10-12	38th Electric Furnace Conference, Pittsburgh Hilton, Pittsburgh, Pennsylvania
1981	
March 8-12	110th AIME Annual Meeting, Chicago Marriott, Chicago, Illinois
March 29 - April 1	64th National Open Hearth and Basic Oxygen Steel Conference and 40th Ironmaking Conference, Royal York Hotel, Toronto, Ontario
October 24-25	23rd Mechanical Working and Steel Processing Conference, Pittsburgh Hilton, Pittsburgh, Pennsylvania
December 9-11	39th Electric Furnace Conference, Shamrock Hilton, Houston, Texas

#### TECHNICAL INFORMATION EXCHANGE

Technical Information Exchange is a small exhibit that is put on at three of the Iron and Steel Society's Conferences each year: The National Open Hearth and Basic Oxygen Steel Conference/Ironmaking Conference and the Electric Furnace Conference.

The purpose of the Technical Information Exchange program is to provide an opportunity for supplier companies of the iron and steel industry to display their products and services by purchasing exhibit space at these conferences.

Each exhibit is held adjacent to the registration area at a conference, thus promoting maximum interchange between conference attendees and representatives from the supplier companies demonstrating the equipment the attendees use every day in their jobs.

Results of the TIE programs held during 1979 are as follows:

Conference	Number of Exhibitors
62nd National Open Hearth and Basic Oxygen Steel Conference and 38th Ironmaking Conference	31
37th Electric Furnace Conference	31

#### ISS-AIME LOCAL SECTIONS

At the end of fiscal 1979, there were eight local sections under the administration of ISS-AIME. The sections are listed below with the number of AIME members in good standing as of December 30, 1979:

1.	Eastern Iron and Steel Section of AIME	660
2.	Cleveland Iron and Steel Section of AIME	311
3.	Detroit Iron and Steel Section of AIME	243
4.	Globetrotters Iron and Steel Section of AIME	503
5.	Niagara Section of AIME	163
6.	Penn-Ohio Section of AIME	181
	Western Iron and Steel Section of AIME	
8	Chicago Section of AIME	136
•	onleago bection of Alme	729

#### CONTINUING EDUCATION

In 1979, ISS-AIME sponsored four short courses at their four national conferences. 166 people took the courses listed below:

March 28, 1979. Ironmaking - Control, Consistency and Cost

October 25-26, 1979. Thermomechanical Processing: Heating, Rolling and Cooling

December 3-4, 1979. Continuous Casting

December 4, 1979. Tonnage Maximization of Electric Arc Furnace Carbon Steel Production

#### MEMBERSHIP DEPARTMENT

The Iron and Steel Society upon its inception, December 1, 1974, had an approximate census of 3100 members. The Board of Directors set a five-year goal of 5000 members by December 31, 1979. On June 1, 1979, the census of the Society exceeded 5000 members. As of December 31, 1979, there were 5192 members in good standing in ISS-AIME.

It is the consensus of the Board of Directors and the Membership Committee that the Society will maintain a minimum 10% growth through the next five years and should approximate 8000 by 1984.

Programs to facilitate this continued growth of the Society are already underway.

#### PUBLICATIONS DEPARTMENT

The Iron and Steelmaker (I&SM) magazine is the monthly publication of the Iron and Steel Society. The magazine publishes award-winning conferences papers, papers of wide interest to Society members, Society conference programs, news of the iron and steel industry, plus news of Society activities.

This year the magazine staff was shocked and quite saddened by the death of our United Kingdom correspondent. W. Eyton (Bill) Jones. Bill had contributed the column, the "British Scene", for the Iron and Steelmaker for over four years. Bill died quite suddenly at his home early this year.

On the positive side, the I&SM staff was significantly strengthened when Dr. Bernard Queneau agreed to serve as Editorial Consultant on the staff. We were also quite fortunate to have John Craig fill the vacancy left by Bill Jones' death as our British correspondent.

In addition to publishing the magazine, the Publications staff produced three conference proceedings books, and the first of a proposed series of softbound reference texts on special subjects.

#### Iron and Steel Society Publications in 1979

Electric Furnace Proceedings, 1978, Volume 36, Toronto, Ontario 322 pages, 51 papers

<u>Ironmaking Proceedings</u>, 1979, Volume 38, Detroit, Michigan 461 pages, 60 papers

Steelmaking Proceedings, 1979, Volume 62, Detroit, Michigan 260 pages, 33 papers

#### OFFICERS OF THE IRON AND STEEL SOCIETY OF AIME

Edmond J. Whittenberger

President

F. Donald Nelson

President-Elect

Arthur Marcantonio

Past-President

George W. Knepshield

Treasurer

#### IRON AND STEEL SOCIETY OF AIME

#### HEADQUARTERS STAFF

Lawrence Kuhn

Executive Director and Publisher

Frederick C. Motts

General Manager

Claire Schmitt

Conference Director

Ruth Kline Azar

Managing Editor

Altha Shoup

Member Services Manager

Robert Keil

Financial Manager

Bernard Queneau

Technical Editor

Judith Connolly

Marketing Manager

Bea Gondek

Conference Secretary

Ronald Jesiolowski

Graphics and Production

Cheryl Stueber

Graphics and Production Assistant

George Crankovic

Editorial Assistant

Elizabeth McGrath

Membership Fulfillment

Martha Novak

Sales Publication

Respectfully submitted

Lawrence G. Kuhn Executive Director

#### REPORT

of the

EXECUTIVE DIRECTOR, SOCIETY OF PETROLEUM ENGINEERS OF AIME

#### OVERVIEW

The Society continues its commitment to become increasingly international in scope and service through its expanded meetings and publications programs, and continuing education and member service activities. SPE closed the decade of the 70's with a membership exceeding 33,000 - virtually double the figure in 1970. These factors combined to make 1979 a dynamic year for the Society of Petroleum Engineers of AIME.

#### **MEMBERSHIP**

At the end of 1979, SPE membership stood at a record 33,871. This represents a 10 percent increase over the 1978 year-end membership of 30,796, as well as an equal percentage increase in number of new member applications received, which totaled 3,664 in 1979, compared with 3,335 in 1978.

This growth acceleration, in both membership numbers and rate of increase, reflects dramatically the success of SPE's broadened member services generally, as well as its intensified emphasis on international projects.

Three active membership development workers received special recognition: Hal Stanier, J. Raúl Soria-Galvarro and Bob O. Pace all received special awards, with 100 application credits or more each. Soria-Galvarro, of Santa Cruz, Bolivia, was winner of the Special Membership Development and Incentive Award Contest.

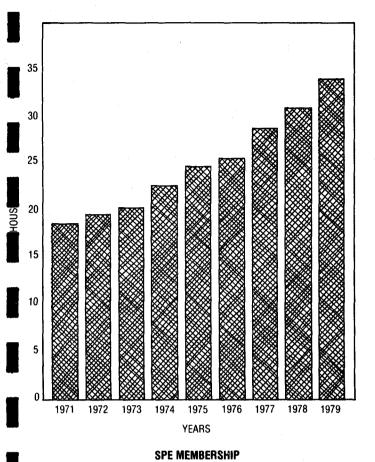
#### LOCAL SECTIONS

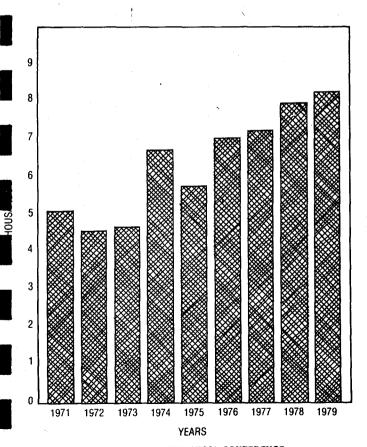
1979 saw the addition of two new SPE local sections: Kalimantan (Balikpapan, Kalimantan, Indonesia) and Salt Lake Petroleum (Salt Lake City, Utah). These brought the total of local SPE sections to a new high of 74.

The vitality of the sections reflected at the local level the total SPE program. Through the sections, almost 95 percent of the Society's members can participate personally in discussions of timely and important technical topics. Individual activity in continuing education and scholarship programs, as well as interface with the public, are part of the local section program. Many of the local groups also sponsor regional and topical meetings as part of their regular activity.

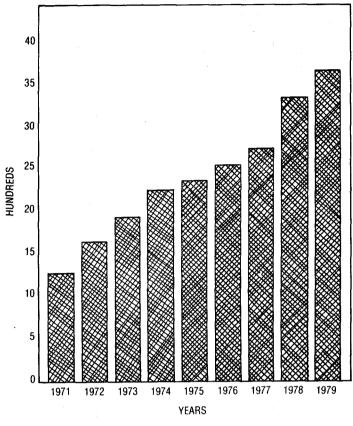
Most local sections are included in one of 10 administrative regions, each of which is represented on the SPE Board. Last year more than 700 SPE members donated their time and effort as local section officers or regional directors.

Direct contact between SPE headquarters and local sections increased in 1979, as SPE officers of staff members visited 50 local sections during the year.

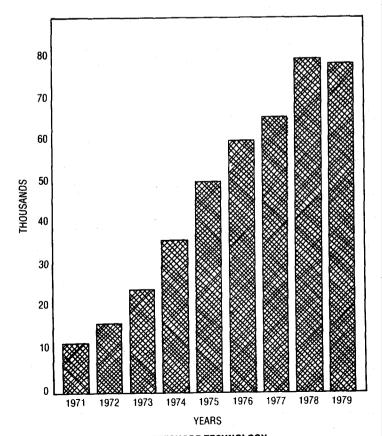




SPE ANNUAL TECHNICAL CONFERENCE AND EXHIBITION REGISTRATION



SPE MEMBERSHIP APPLICATIONS RECEIVED



OFFSHORE TECHNOLOGY CONFERENCE REGISTRATION

#### STUDENT ACTIVITIES

For Student Chapter and Student Development Programs, 1979 was a year of unprecedented activity and growth.

New student chapters on 11 campuses brought the total to 42. Five of the chapters were outside the U. S., and included Heriot-Watt U., Ibadan U., Petroleum Training Inst., Rogaland Regional College, and the U. of the West Indies. New chapters in the U. S. are Colorado Northwestern Community College, Nicholls State U., Tanana Valley Community College, and Tulane U.

The SPE Student Chapter's Speakers Bureau was revamped to provide speakers for both student chapters and local sections, and renamed the SPE Speakers Bureau. In 1979 about 100 speakers participated in the local lecture program on a voluntary basis.

Beginning in 1979, the <u>Journal of Petroleum Technology</u> introduced a monthly student section that reports and recognizes student chapter and sponsoring section activities.

In accordance with the goals of the SPE Distinguished Lecturers Program, a Distinguished Lecturer appearance was scheduled at most of the schools with active campus groups.

The Annual Student Chapter Officers' Workshop preceded the Student Session at the SPE Annual Technical Conference and Exhibition in Las Vegas, with chapter officers, faculty, and industry sponsors meeting to discuss chapter programs and projects, officers' roles, and continuing SPE membership after graduation.

At the Student Session, Texas A&M U. was recognized the second consecutive year as Outstanding SPE Student Chapter.

#### SCHOLARSHIPS

In the area of student scholarships, the SPE Board cooperated with both local sections and the Petroleum Equipment Suppliers Association (PESA).

The Board approved \$60,000 to match commitments of 54 local sections for the 1979-80 SPE Scholarship Program. Since local sections requested \$67,171.50, the SPE matching funds were pro-rated at \$0.89/\$1. Since 1975, SPE and participating local sections have committed more than \$425,000 to scholarships.

The PESA Scholarship Program, administered by SPE, awarded \$3,400 in scholarship funds to outstanding petroleum engineering students. Recipients of the 1979-80 PESA scholarships were Monte G. Mason and Michael J. Bolkovatz, Montana Tech U., and Paul L. Buller, U. of Tulsa.

#### MEETINGS

Regional and international SPE meetings offered rich and varied experiences for SPE members. Here are notes on some of the most interesting or significant:

#### REGIONAL-TOPICAL MEETINGS

Meeting	Registration	Papers
Oilfield & Geothermal Chemistry Symposium Houston, Texas	195	36
Reservoir Simulation Symposium Denver, Colorado	222	27
Hydrocarbon Economics & Evaluation Symposium Dallas, Texas	654	37
Production Operations Symposium Oklahoma City, Oklahoma	580	16
Permian Basin Oil & Gas Recovery Conference Midland, Texas	381	17
Deep Drilling & Production Symposium Amarillo, Texas	1,050	18
Southwest Texas Regional Corpus Christi, Texas	139	12
California Regional Meeting Ventura, California	739	55
Low Permeability Gas Reservoirs Symposium Denver, Colorado	1,107	37
Eastern Regional Meeting Charleston, West Virginia	399	12
Production Technology Symposium Lubbock, Texas	273	15

Middle East Oil Technical Conference & Exhibition - Bahrain

In Manama, capital of an independent island sultanate in the Arabian Gulf, some 4,000 representatives met for 5 days in March. Primary purpose was to provide Middle East SPE members an opportunity to view equipment and services available, and to exchange technical information. Ahmed Zaki Yamani, Saudi Arabian minister of oil and minerals toured the show, escorted by Isa bin Sulman Al Khalifa, ruler of Bahrain, whose ministry of development and industry cooperated with SPE in presentation of the event.

Offshore Technology Conference - Houston, Tex.

The 11th annual Offshore Technology Conference featured displays by business firms and professional organizations from the U.S. and 22 overseas countries. Fifty-one technical sessions featured more than 300 technical papers. Among the 78,000 registrants were engineers from 96 nations, pointing up the international nature of the conference, which ran from April 30 through May 3.

Petroleum Industry Manpower Conference - Houston, Tex.

With emphasis on operational rather than technical aspects of the petroleum industry, this meeting, held June 7, drew primarily personnel managers, petroleum engineering department heads and deans of engineering schools. A panel of educators and industry leaders discussed manpower needs and potential in years to come, and answered questions centering on the Society's second annual engineering manpower survey.

Annual Technical Conference & Exhibition - Las Vegas, Nev.

Keyed to the theme of "Issues for the 80's", the annual SPE meeting attracted an all-time high of more than 8,000 persons. A field trip to the U.S. Nevada Test Site preceded the formal opening, where keynoter John E. Swearingen, Standard Oil Co. of Indiana board chairman, called for government and private sector cooperation rather than competition. One of the highlights was a presentation of the results of a year-long effort by SPE to prepare a voluntary standard for the reserve estimating process, made by Arlen L. Edgar, an independent oilman from Midland, Tex., chairman of the SPE Oil and Gas Reserves Committee, and SPE President-Elect. The meeting ran Sept. 23-26, and featured eight sessions, 271 technical papers, and 34,000 sq. ft. (3159  $m^2$ ) of exhibits. An important "first" at the '79 meeting was presentation of a paper by a delegation from the Peoples Republic of China, representing the China National Oil and Gas Exploration and Development Corp. The paper, titled "Development of Drilling Technology in China," was authored by Li Kexiang, the company's chief drilling engineer, who was accompanied to the meeting by four other company representatives.

Forum Series - Colorado Mountain College

More than 140 persons attended two forums held in late summer at Colorado Mountain College. The program provided an excellent medium through which participants were able to discuss their subject in depth. Topic for the first forum was "Properties of Saturated Rocks of Interest to Petrophysicists and Geophysicists," with "Control of Solids in Drilling Fluids" discussed at the second. Because of the success of the two initial meetings in the new Forum Series program, the number of forums scheduled for 1980 has been increased to three.

SPE MEMBERSHIP STATISTICS	1973	1974	1975	1976	1977	1978	1979
Society Membership	20,290	22,087	24,109	25,595	28,284	30,796	33,871
New Member/Reinstatement Application Received*	1,888	2,212	2,273	2,540	2,710	3,335	3,664
Members Dropped (Resigna- tions, Deaths, Dues Arrears)*	1,347	1,100	1,258	1,073	1,088	1,257	1,201

\*Excludes Students

#### **PUBLICATIONS**

SPE's publications program continued to grow during 1979. Periodicals, monographs, textbooks, and topical reprint books make the program one of the most comprehensive and respected in the field of technological and professional publishing.

#### Periodicals

Both the <u>Journal of Petroleum Technology</u> (monthly) and the <u>SPE Journal</u> (bimonthly) showed significant gains in circulation. The consistently high quality of technical features in both journals reflects the competence and dedication of the SPE Editorial Review Committee, which evaluates manuscripts and selects the most significant for publication. The record number of manuscripts submitted in 1979 continued to involve hundreds of SPE members as industry readers evaluating papers for publication.

Senior Technical Editor of the committee is Roland F. Krueger of Union Oil Co. of California, who accepted the position last year. Technical editors joining the 45 member committee last year include James Hartsock of Gruy Federal Inc., A.A. Daneshy of Halliburton Services, and Ernest L. Kistler of Kistler & Assoc., Inc. Also during 1979 the SPE Board authorized an <u>ad hoc</u> committee to evaluate editorial review procedures. Robert Earlougher, Jr. was named committee chairman.

In addition to professional and technical papers, <u>JPT</u> provided comprehensive coverage of relevant current events, like the Offshore Technology Conference, the Annual Technical Conference and Exhibition, regional and topical SPE sponsored meetings, the new Forum Series, SPE Board and committee activities, and news from local sections and student chapters. Among features of particular interest were the widely read annual survey on member salaries, and publication of SPE's new voluntary standard regarding oil and gas reserve information.

Other SPE periodicals also enjoyed increased readership in 1979, including the quarterly Enhanced Oil-Recovery Field Reports, the bimonthly JPT in Brief, and the annual Transactions and Membership Directory.

#### Monographs

Acidizing Fundamentals by B. B. Williams, J. L. Gidley, and R. S. Schecter was published by the Monograph Committee last year. Other activity in the monograph program included completion of the text of <a href="Thermal Recovery">Thermal Recovery</a> by Michael Prats. Writing proceeded on <a href="Well Logging">Well Logging</a> and <a href="Miscible Displacement">Miscible Displacement</a> and final production was begun on the Spanish translation of the late F. F. Craig, Jr.'s <a href="The Reservoir Engineering Aspects">The Reservoir Engineering Aspects</a> of <a href="Waterflooding">Waterflooding</a>.

#### Textbooks

The Textbook Committee authorized typesetting to begin on <u>Drilling</u> by A. T. Bourgoyne, F. S. Young, and Martin Chenevert. <u>Drilling</u> will be the first of a projected series of textbooks. Next in the series will be <u>Well Testing</u> by W. J. Lee, the completed text of which has been received by the committee. Other texts are being prepared for committee review.

#### Reprints

The Reprint Committee is actively working on nine projected additions to the SPE Reprint Series.

#### New Equipment

The installation of in-house typesetting equipment in 1979 provided faster turnaround and better control of quality for manuscripts to be published. The use of dual units (customary and SI metric) also became standard procedure last year for papers published in the Society's two magazines.

#### CONTINUING EDUCATION

Continuing education in the field of petroleum technology has always been of major importance; today, most professionals see it as critical. Under the direction of the Continuing Education Committee, SPE in 1979 increased significantly the kinds and scope of continuing education available to its members.

Short Courses, Video-Tape and Live

The ongoing work of revising and updating existing video-tape courses continued. Release of "Fundamentals of Reservoir Engineering" is slated for early 1980, with "Drilling Fundamentals" scheduled for completion later in the year.

In the area of live short courses, three new titles were added to the available list last year, including "Drilling Fundamentals" by Martin Chenevert; "Natural Gas Engineering" by Elmer E. Templeton, and "A Review for the Principles and Practice Examination" by G. B. Wines and G. A. Mistrot. Five additional live short courses were presented on pilot form in 1979.

There was stepped-up activity in the form of assistance to local sections preparing and presenting courses independently. In such courses, the local section is totally responsible for material presented. Continuing Education Committee members and SPE staff help in the areas of planning, advertising, registration, and financial underwriting.

Distinguished Lecturer Program

The SPE Distinguished Lecturer Program is financed by the SPE Operating Fund and a grant from the AIME Doherty Fund. The continued growth of the series' popularity is a tribute to the effort and competence of the individual lecturers and of the Distinguished Lecturer Committee.

The program includes a slate of 10 speakers. The Distinguished Lecturer schedule begins in September, with each speaker making 15 to 30 appearances. Every effort has been made in recent years to schedule at least one lecturer for each student chapter. Local sections may request as many as three lectures.

Topics are generally technical and highly specialized in nature; in some instances, however, subjects of more general interest are chosen. The lecture series serves as both an educational tool, and as a means of recognizing meritorious achievement on the part of selected lecturers.

TIS (TECHNICAL INFORMATION SERVICE)

SPE's newly instituted Technical Information Service (TIS) is an outgrowth of the work of the Technical Information Committee (TIC).

The service functions as a reference and research resource for nonprofit public interest organizations both national and international. To such groups, TIS supplies technical and economic information on the exploration, drilling, and production of petroleum and related energy resources.

TIS was activated in December 1979. It is expected to become increasingly important as an active, viable channel for supplying the public with accurate and objective information on energy.

#### **AWARDS**

The Society presented the following major awards during the 1979 SPE Annual Technical Conference and Exhibiton in Las Vegas, Nevada:

John Franklin Carll Award - Murray F. Hawkins, Jr., professor emeritus of petroleum engineering, Louisiana State U.

DeGolyer Distinguished Service Medal - Jack J. Reynolds, former chairman and managing director, Continental Oil Co., Ltd.

Cedric K. Ferguson Medal - Gurmeet S. Brar, manager of reservoir engineering and projects, T. Fekete and Associates Consultants Ltd.

SPE Distinguished Service Awards - Granville Dutton, director of government relations,
Sun Production
Richard A. Morse, petroleum engineering professor,
Texas A&M U.
Robert L. Whiting, petroleum engineering professor,
Texas A&M U.

Lester C. Uren Award - Robert C. Earlougher, Jr., manager of engineering department,
Marathon Oil Co's Denver Research Center

#### FINANCE

For 1979, income for Society operations exceeded expenses by \$659,371, with income totaling \$3,908,136, compared with expenses of \$3,248,765.

#### SPE HEADQUARTERS

David L. Riley, Executive Director of SPE since December, 1978, and Executive Manager of the Offshore Technology Conference, died in March, 1979. The decade of the 70's and the growth and expansion of programs, were a reflection of his contributions and style in working with several thousand SPE members to record an impressive list of accomplishments.

#### Headquarters Administration

Dan K. Adamson, Executive Director
Corky Barth, Secretary
Douglas Ducate, General Manager
LaMerle Martin, Secretary
Connie Gray, Secretary
Charles Aufill, Assistant to the General Manager
Rea Dolinak, Receptionist
Frances Morton, Central Office Pool Clerk
Sara Lee Pate, Central Office Pool Clerk

#### Administrative Services

Richard C. Vilven, Manager
Marietta Crow, Secretary
Betty Newcomb, Senior Bookkeeper
Rod Creecy, Computer Operator
Nancy Decker, Data Control Clerk
Judy Thompson, Book Order Supervisor
Ruth Slaughter, Book Order Clerk
Denise Wheeler, Book Order Clerk
M. C. Sirles, Mailroom Supervisor
Larry Hall, Mailroom Assistant

#### Communications Department

John C. Rash, Manager
Larry Lauck, Public Relations Manager
Kathy Letz, Local Section Coordinator
Susan McHam, Membership Supervisor
Susan Gilmore, Secretary
Beverly Smith, Administrative Assistant
Susan Barnett, Secretary

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