

AIME ANNUAL REPORT/1978

Mining, Metallurgical, Iron & Steel and Petroleum Progress



Wayne L. Dowdey, President

With proud humility and keen anticipation, I accepted the office of President of the Institute one year ago, and it is with a great deal of pride in you—our membership—that I make this report. You are the reason for a productive and prosperous year for AIME. Superior, good or satisfactory results were experienced in 1978 from almost everything we did as a leading engineering technical society. I recognize and pay tribute to the WAAIME organization. Their work is vital to our efforts, and their programs have proven effective.

WAAIME can depend upon our con-

tinuing support.

I recognize the excellent professional staff members of the Societies and AIME Headquarters, and I simply say—Thank You—on behalf of all members.

Next I report the financial status, because all factors considered, we are fortunate. The total operating revenue of the Institute in 1978 was approximately \$6.7 million, with expenses of \$6.5 million. Assets increased about 10 percent. The 1979 budgets show a small operating surplus. The intention is to build a modest reserve as a hedge against harder times.

I mention membership next because it is most important. Services, and the opportunities provided for learning,

are the reasons men and women join a society such as ours. This year the value of membership services throughout the Institute maintained an advancing level. One indication of this is growth in membership. In January 1978, the total membership was 64,810. On January 1, 1979, membership reached 68,670, about a six percent increase. Everyone involved can take a great deal of pride in this membership development achievement.

The conduct of technical meetings is a key function of AIME. Most importantly, most local Sections hold monthly or bi-monthly meetings. Additionally, this year some 40 topnotch regional and interregional meetings were well attended; in particular, the 1978 AIME Annual Meeting, the four Constituent Society annual conferences and meetings, and the annual Offshore Technology Conference were quite successful. A special Joint Conference between AIME and the Australasian Institute of Mining and Metallurgy held in Canberra, Australia, was an especially successful event.

Publication of journals, books and reprints of technical papers, a cornerstone of AIME activity, continued at a brisk pace. The Society staffs and publication committees have coped with inflation and escalating costs through innovative actions and budgetary constraints.

All Constituent Society Headquarters are now in locations outside New York City. As you know, TMS and ISS are in Pittsburgh, SME in Denver, and SPE in Dallas. AIME Headquarters will remain in the United Engineering Center in New York because of contractual relationships with other large societies with which we jointly own the building. During the year material progress was made, through efforts of AIME and the other Founder Societies, toward formation of the American Engineering Councils. The plan is to regroup the joint activities now conducted under other organizations into a new structure to achieve effective coordination, to eliminate duplication of effort, and to establish an organization which represents the engineering profession where common objectives are involved.

We are now in a period of endless hearings, surveys, debates and litigation over land rights, environment, or jurisdiction. The principle upon which these can be foreclosed is that government should concentrate on protecting us from wrong and leave to us the business of doing good. We have a responsibility, not simply to our companies, but to our communities as citizens, to educate people to a new understanding that some of their fears are unreal and that some are possible of solution. We have long passed the point that we can simply deny that the fears, and the problems, exist. We have a responsibility to act, because it is the community, rather than the industry or individual companies, which will suffer most severely from any idealistic or simplistic attempts at solution. It is not that we need necessarily speak more loudly, but we need to convince more members of the public and public bodies, and the general community, of two things: first, that what we are doing is vital to their good; and second, that we are doing it well. We have to make mining, metallurgy and petroleum recovery really matter positively in their viewpoint. The task is a tremendous challenge. A beginning has been made, but it is only a beginning. Our GEM and TIC committee activities are making progress, but there must be more. Long range planning is a part of our responsibility. Eighteen months ago, the AIME Board authorized President Nedom to appoint an Institute Long Range Planning Committee to make a comprehensive study of our proper role and function, to recommend future activities, and to recommend plans for responding to the future. It delineates the authority of the Institute, that it reserves to itself, particularly in establishing policy and

in dealing with outside engineering societies, federations, national affairs, and conduct of the Annual Meeting. It delineates responsibility of the Constituent Societies in the direction of serving individual members, conducting meetings, publishing, and supervising local Sections, conducting continuing education programs and similar activities oriented toward individual members.

In all of this, the Institute history reflects the great value of the service rendered to our nation and our members. A primary objective of the Institute is to maintain a strong, progressive and united organization that will promote the best interest of the entire membership and the public. This can be accomplished if the individual regards himself primarily as a member of the Institute, as I believe we do, and secondarily as a member of a Society. It is the membership of the Institute that makes possible the formation of the Societies.

In conclusion, there is one more thing I must say. No matter what the policies, no matter what the guidelines, nothing beats having the right attitude. We are truly in an age of challenge, and with that challenge comes opportunity. What we can create in our minds we can make happen. We have proven many times that we can do whatever we resolve to do. The limit to our reach is our own complacency.

While I have no regrets about the course my life has taken, I would not refuse a second chance to join the youngsters in this country today in making the most of the opportunities their resources can give them. Attitude is the key. In loyalty to AIME, I urge the membership to fight for the right of our industries to give of their best.

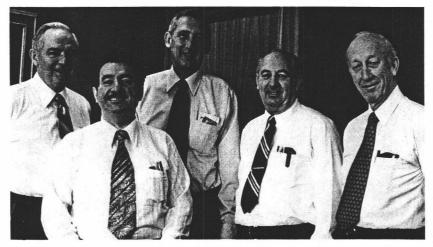
Mayne L. Dowdey

AIME and Engineering Unity

The primary function of engineering societies has been, and continues to be, the dissemination of new knowledge and the development of technology. The trend in engineering during recent decades has been toward increased specialization, but no engineering specialty or branch can thrive in isolation. In like manner, no individual engineer can thrive and develop his maximum potential alone. He needs contact with colleagues in his group, and his group needs relationships with other groups. There are more than 100 engineering and technical societies in the United States and abroad, some of whose activities may affect the entire profession and thus have an impact on individual careers. To monitor and influence some of these efforts, AIME provides an interface with the rest of the engineering profession and represents its members who work in the energy and mineral resources industries.

Leaders of the engineering profession have sought for many years to bring engineering societies together in an effective organization to handle professionwide issues and to speak for the profession as a whole when needed. The five Founder Societies (AIChE-chemical, AIME-energy/minerals, ASCE-civil, ASME-mechanical, IEEE-electrical/electronics) have always been leaders in joint activities for the profession, and the growing awareness in recent years of the need for a more effective umbrella organization to deal with the special challenges to the engineering profession has brought about extensive discussion among these and many other engineering organizations and societies. The result is a proposal for development of a new organization to be named American Engineering Councils, which will consolidate and supplant activities now being carried on by several professionwide groups, Engineers Joint Council, the Association for Cooperation in Engineering, and Engineers' Council for Professional Development. Societies, such as AIME, will participate in the new umbrella organization through the activities of any or all of its four subsidiary councils operating in broad areas of the profession: Education, professional affairs, public affairs and international affairs. Governance and financial support of the organization will be based on proportional representation.

AIME has had a leadership role in the movement from its inception in the fall of 1977, and 1977 AIME President H. A. Nedom still serves as Chairman of the AEC Organizing Committee. Detailed plans have been developed and excellent progress is being made. Present expectation is that the new organization will become operational in 1980.



1978 officers of the five Founder Societies attending a meeting in April 1978. (From left to right: Wayne L. Dowdey, President, AIME; S. Peter Kezios, President, ASME; James Y. Oldshue, President-Elect, AIChE; William R. Gibbs, President, ASCE; and Robert M. Saunders, Past President, IEEE)

ont Cover left to right) AIME Presidents in 1978: ROBERT I. JAFFEE, The Metallurgical Society; ROBERT S. SHOEMAKER, Society of Mining Engineers; HUGH S. BARTON, Society of roleum Engineers; WAYNE L. DOWDEY, AIME; and ARTHUR MARCANTONIO, Iron and Steel Society



Society of Mining Engineers of AIME

Perhaps the most significant activity in 1978 centered around relocation of the Society's headquarters to Denver. Operations closed in Salt Lake City by July 28; opening in temporary quarters August 1 in Denver. Construction is well under way at the 2-acre site on the Ken-Caryl Ranch: anticipated move-in date is July 9, 1979. In publications, 1978 saw the implementation of some decisions made the previous year. The separate Transactions journal was discontinued and a Technical Papers section inserted in MINING ENGINEERING. In spring, 1979 the annual Transactions volume will be published containing the Technical Papers from the magazine and an additional section of papers deemed by the publications committees as of limited interest to a broad audience but of value to the permanent technical literature. The first Annual Review issue of MINING ENGINEER-ING, produced as a joint project of Divisional Contributing Editors and staff, was published in May. July contained a bigger-than-ever Membership Directory. Preprints were distributed on a "sold-only" basis during the year. An addition to the program were Mini Symposia, booklets containing the papers from single-theme meeting sessions.

Book publishing continues to be a major Society activity. Three new books were published in addition to seven existing titles reprinted. On behalf of the AIME Richards Award Fund, the Society has reprinted and is distributing *Quest for Ore* by Russell H. Bennett, originally pub-

lished in 1963.

At the Annual Meeting in Denver, Society Divisions and Committees arranged 50 sessions with 230 papers being presented. Included was the Mineral Processing Plant Design Symposium, sponsored by the Mineral Process-

ing Division.

The Fall Meeting was a special-format one, since there was no Technical Information Exchange Exhibit because the American Mining Congress held its equipment show in Las Vegas. A highlight of the meeting was exten-

sive short course offerings.

Membership in SME-AIME continued its growth curve, rising from 24,211 to 25,280 members, a 4.5% increase, Development efforts continued to be centered on four annual contests: (1) Annual Membership Contest for the member recruiting the most new members: winner for the fourth straight year was Charles Speltz, Golden, CO; (2) Division Contest won by the Coal Division; (3) Local Section Contest won by the Northwest Texas Section; and (4) Continuing Incentive Membership Contest, in which approximately 1,180 members participated. Membership growth was reflected in each of the three Regions of Local Sections. The Trinity Section was established in the Dallas/Ft. Worth area, Texas. Three new Student Chapters were formed—Alderson-Broaddus College in West Virginia, Sheridan College in Wyoming, and Indiana Vocational Technical College. AIME Sections administered by SME-AIME total 63 and the number of Student Chapters is 58, 55 of which are domestic. There are now GEM committees in 58 sections and subsections. The SME-AIME Board established a GEM Award to recognize outstanding contributions to the Society's GEM program within the scope of GEM activities and it will be given at the local section level only, commencing in 1979.



The Metallurgical Society of AIME

In December the Society moved into its new headquarters building in the Thorn Hill Industrial Park, Warrendale, Pennsylvania, culminating 2½ years of study and implementation of the decision to relocate.

Relocation planning and implementation were the dominant theme of 1978: hiring and training of new staff, packing and unpacking, meetings with architects, contractors, and lawyers on a weekly schedule, the myriad of related activities became part of the daily office routine. The combined efforts of the architect and legal committees and staff effected a smooth transition.

Four staff members relocated from the United Engineering Center in New York City with the remaining seven

staff members hired in Pittsburgh.

The Society was particularly hit by the rising inflation which resulted in an operating deficit of \$41,774 for the year. The impact of inflation on all service areas—publications, meetings, and general member services has necessitated a dues increase for 1979.

The meetings of the Society in 1978 were all well attended and included a special conference—

"International Conference on Composite Materials II."
The ICCM/2 drew an international attendance of 290 from 18 countries. The 107th AIME Annual Meeting in Denver, Colorado, had an overall attendance of 4150, with nearly 1000 TMS-AIME members in attendance. The Society programmed 109 technical sessions, with about 675 papers presented

pers presented. The 1978 TMS-AIME Fall Meeting had an attendance of 920, with 506 papers presented within 73 technical ses-

sions.

members.

Publications in 1978 received special attention. An Ad Hoc Book Publishing Committee was formed to examine the possibility of publishing textbook and monograph series and other publications. Four new books, one reprinted book, one short course notebook, and three abstract bulletins were published in 1978 along with 142 paper selections. Book orders exceeded 2,800 volumes and some 7,500 paper selections were sold, for a total book and paper selection revenue of \$80,000. JOURNAL OF METALS saw many changes with the complete staffing that took place with the relocation. Revised page layout and design, new monthly departments, and a new editorial approach have all been positive changes to the journal. Increased emphasis and promotion on advertising were begun late in 1978 to increase the number of advertising pages in the journal. Subscriptions totaled 2,950, of which 750 were from other AIME

METALLURGICAL TRANSACTIONS continued in its role as the archival journal of the Society. Met Trans A Physical Metallurgy, up to 4,700 subscribers, and Met Trans B Process Metallurgy, up to 1,900 subscribers, had a combined net subscription increase of 375 for the year. Membership remained stable, with the total slightly over 8,000. A new prospectus for the Society is now being utilized to spur membership recruitment in 1979. Some 311 new members were recruited in 1978, with approximately half coming from non-members who registered at the Annual or Fall Meeting.

TMS-AIME begins 1979 in its sparkling new headquarters building with renewed vigor and optimism, dedicated to serve the professional metallurgical community.



Iron and Steel Society of AIME

The year of 1978 was a year of fulfillment and completion for the Iron and Steel Society of AIME.

The year started on a high point with the 35th Annual Electric Furnace Conference held in Chicago, December 6-9. The keynote session was on the subject of Energy in the Form of Electricity. Attendance exceeded 1200. The success of the Electric Furnace Conference was followed by the not-so-successful 20th Annual Mechanical Working and Steel Processing Conference (MWSP) also held in Chicago, January 24-26. Unfortunately, the timing of the Conference coincided with a blizzard which crippled air transportation and severely reduced attendance. In April, the Iron and Steel Society successfully completed its most ambitious undertaking: hosting the Third International Iron and Steel Congress. The four-day Congress was attended by over $5\bar{5}0$ people from all over the world. The Congress was held concurrently with the 61st Annual National Open Hearth and Basic Oxygen Steelmaking Conference and the 37th Annual Ironmaking Conference. Attendance at all three conferences exceeded 2200 people. All papers were presented in English. The first two general sessions were simultaneously translated into four languages. Iron and steelmaking industries from 25 countries outside of North America were represented. Authors from every major steel producing country in the European Common Market and Poland, Hungary, Yugoslavia, and Czechoslovakia presented papers. Attendees and authors came from Brazil, Venezuela, Australia, New Zealand, India, and South Africa. Every major steel company in Japan, every major metallurgical research center in the world was rep-

Programming for 1978 was further expanded when the Ironmaking Division joined with the Coal Division of our sister Society of Mining Engineers in sponsoring a special theme conference "The Mining and Coking of Coal" in Pittsburgh; 220 registrants attended.

Those attending rated the Special Conference an unqualified success. In fact, the requests for a repeat Conference in the near future is under study by the Ironmaking Executive Committee.

From an administrative viewpoint the activities of the Society were awesome. In February a construction contract was signed by the Iron and Steel Society and The Metallurgical Society to build a \$500,000 office building in Warrendale, Pennsylvania. Construction on the building was undertaken in June and occupancy by the two Societies was completed by December 12, 1978.

The Society leased an in-house computer and completed the input of Society data by July 1. The success to date of the computer and its service and availability to the headquarters staff and the Society has exceeded our most optimistic projections.

The Society's consolidated income for fiscal 1978 totaled \$674,577. Total operating expense equaled \$668,056. The surplus for the year was \$6,521.

AIME assets under custodial assignment to the Iron and Steel Society increased by \$325,000.

The Society has a membership target of 5,000 members in good standing by January 1, 1980. To meet the goal, a drive is planned to attract 500 new members in 1979.



Society of Petroleum Engineers of AIME

The work of hundreds of SPE members lies behind the encouraging statistics marking 1978 as a period of exceptional growth and accomplishment for the Society. Membership for the first time surpassed 30,000 (30,797) for the 15th consecutive year of annual increases, the second largest in SPE history, and the fourth consecutive period for record numbers of applications received. Four new student chapters reflected an overall 18 percent in-

crease in student members.

Nearly 8,000 persons registered at the SPE Annual Technical Conference & Exhibition, while the first European Offshore Petroleum Exhibition & Conference in London, the Society's largest meeting effort outside the U.S., attracted more than 15,000. The Offshore Technology Conference had 79,000 registrants enhancing the Society's reputation as organizer of large-scale international meetings. The 1978 Fall Meeting featured 200 technical papers and 300 exhibits. Eleven SPE-sponsored regional and topical meetings drew 6,000 registrants and authors of more than 200 technical papers.

The JOURNAL OF PETRÔLEUM TECHNOLOGY and SPE JOURNAL recorded significant increases in circulation and number of pages published: JPT circulation

rose to 33,813; SPE circulation to 7,622.

The Society completed renovation and expansion of its headquarters adding an in-house data processing system to enhance its information capabilities and facilitate communication with local sections. A monthly newsletter to section officers was initiated.

Seven Monograph projects proceeded toward publication, including SPE's first Spanish-language book with the first SPE-sponsored textbook completed. Manuscripts for the *Drilling* and *Improved Recovery* textbooks progressed. The Reprint Series gained a revised, two-volume edition of *Well Completions*. These publications involved members of seven committees, with Joseph G. Richardson of Exxon Production Research Co. serving

as Senior Technical Editor.

The Career Guidance Committee produced a slide/tape program "Careers in Petroleum Engineering" while revising the collateral booklet of the same title. The Education and Accreditation Committee worked for closer links with the petroleum engineering curriculum accreditation process in the U.S. Continuing education activities included presentation of 16 short courses at local sections and the Fall Meeting, and a test program for Society-wide administration of five different short courses. Distinguished Lecturers delivered 180 presentations during the 1977-78 season.

presentations during the 1977-78 season.
The 35 local section Technical Information Committees
(TIC) and monthly TIC Fact pages in JPT supported
SPE's advisory role to public groups, news media, and
government. The Society continued its cooperation with
other technical groups in sponsoring Energy Seminars

for the press and public officials.

Two steps were taken in response to Long-Range Plan recommendations. First: activation of projects of the new Technical Coverage Committee. This group began groundwork for a new feature series in JPT to summarize the state of the art in diverse technical areas. Second: establishment of the International Advisory Committee, a body conceived to forge stronger ties with local sections in areas outside the existing SPE regional structure.

Professional Recognition

AIME Council of Economics

The AIME Council of Economics is composed of some 2,300 AIME members, encompassing all four Constituent Societies, whose primary interest is in the economics of the mineral and energy industries. Its principal activity is providing technical programming on an interdisciplinary basis at AIME Annual Meetings. The Council of Economics presented nine special sessions at the Denver Annual Meeting on such subjects as non-fuel mineral policy, energy regulations and economic implications, Western energy resource development, and economic and social constraints on the applications of metals. Published Proceedings of the Council of Economics, 1978 AIME Annual Meeting, as well as proceedings from previous years, are available through AIME Headquarters in New York. The Council is currently developing plans for a more active publications program, which will include the preparation of a fourth edition of Economics of the Mineral Industries.



C. H. Burgess (1) presents 1978 Daniel C. Jackling Award to Alfred Weiss (r).

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 1978:

HONORARY MEMBERSHIP
Jesse F. Core
Edwin H. Crabtree, Jr.
Melvin E. Nickel
Eugene P. Pfleider
JAMES DOUGLAS GOLD MEDAL
Milton E. Wadsworth
WILLIAM LAWRENCE SAUNDERS
GOLD MEDAL

Russell H. Bennett CHARLES F. RAND MEMORIAL GOLD MEDAL

Ian MacGregor ANTHONY F. LUCAS GOLD MEDAL

G. E. Archie
ERSKINE RAMSAY MEDAL
Nicholas T. Camicia
ROBERT H. RICHARDS AWARD
Frank F. Aplan

BENJAMIN F. FAIRLESS AWARD Dennis J. Carney HAL WILLIAMS HARDINGE AWARD

Robert L. Bates ROBERT EARLL McCONNELL AWARD

Carl Rampacek
ENVIRONMENTAL CONSERVATION DISTINGUISHED
SERVICE AWARD
Kenneth W. Nelson

ROSSITER W. RAYMOND AWARD Edward J. Novotny, Jr.
MINERAL INDUSTRY EDUCATION AWARD

Albert W. Schlechten
MINERAL ECONOMICS AWARD
William A. Vogely

Outstanding contributions in its fields were also recognized by each of the Constituent Societies of AIME. In 1978, nine outstanding honor and/or achievement awards were conferred by the Society of Mining Engineers of AIME, nine by The Metallurgical Society of AIME, five by the Iron & Steel Society of AIME and six by the Society of Petroleum Engineers of AIME. In addition, SME-AIME, TMS-AIME, and ISS-AIME each honored select members by inducting them as Fellows or Distinguished Members of the Society.

Scholarships Approximately 195 young people preparing for careers in the minerals, materials and energy fields have benefited from the five scholarship programs directed by AIME and the Constituent Societies.



President Wayne L. Dowdey visiting with Edwin H. Crabtree on the occasion of presentation of AIME Honorary Membership to him.

Engineering Societies Joint Awards With its sister Founder Societies and other professional organizations, AIME sits on the Board of Award of the John Fritz Medal, Hoover Medal, Alfred Noble Prize and the Washington Award. In 1978, for the second consecutive year, an AIME member, John E. Killough, was the recipient of the coveted Alfred Noble Prize.

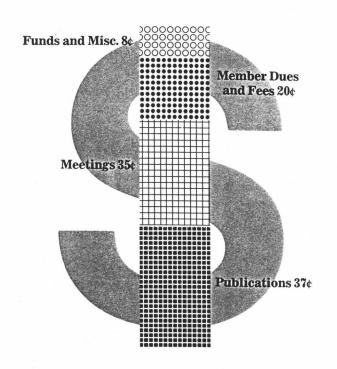
25 Year/Legion of Honor 50 Year Members In appreciation of their professional responsibility evidenced by their long-time loyalty to the Institute, Twenty-five Year Certificates were issued to 952 members. Inducted in the Legion of Honor in 1978: 53 50-year members each received a certificate and a gold lapel pin.

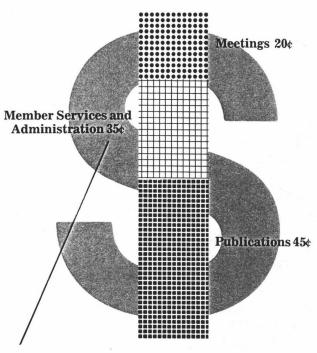
The Woman's Auxiliary to AIME Bylaws for the Auxiliary were revised in 1978 through the cooperation and tireless efforts of the National Bylaws Committee and the Revision Bylaws Committee. Diligent efforts were made to improve communications between Sections and National. Membership increased slightly during the year. WAAIME granted 51 scholarships. Forty-one recipients graduated in June 1978 and eight in December. One hundred students received funds from WAAIME in 1978. The Engineers-for-Tomorrow remains active; 28 of the 44 WAAIME Sections conduct Engineers-for-Tomorrow programs. The film "A World Without" is well-received in the States as well as abroad. WAAIME/GEM is active in a number of Sections. Newsletter is sent to the membership on a regular basis.

During 1978 AIME total operating expenses were \$6,211,955. This was approximately \$90 per member, considerably above invidual member dues. The charts illustrate where revenue came from and functions for which it was spent.

AIME Revenue Dollar

AIME Expense Dollar





Society Business Services and Operations 24¢ Membership Development and Section Rebates 4¢ AIME Institute-Wide and Engineering Federations 7¢

AIME Balance Sheet

November 30, 1978 (dollars in thousands)

A	SS	e	ts

Cash and Temporary cash investments	\$ 1,423
Receivables	534
Inventories of Publications	791
Investments (Market \$7,602)	7,582
Plant and Equipment, net of depreciation	845
Advances to United Engineering Trustees, Inc.	265
Other assets	77
	\$11,517

Liabilities and Fund Balances

Accounts payable	\$ 866
Dues received in advance	633
Other advance revenues	176
Annual Meeting surplus fund	50
Endowment and custodian funds	5,694
Property fund	265
Operating surplus	3,833
	\$11,517

1978 Officers and Directors:

AIME BOARD OF DIRECTORS

PRESIDENT

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

PRESIDENT-ELECT

William H. Wise, Airco Alloys, Niagara Falls, NY

PAST PRESIDENT

H. Arthur Nedom, Weeks Petroleum Limited, Westport, CT

VICE PRESIDENT-FINANCE

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

VICE PRESIDENTS

Thomas V. Falkie, Berwind Natural Resources Company, Philadelphia, PA

Charles A. Hutchinson, Jr., Atlantic Richfield Company, Houston, TX Marvin L. Katz, ARCO Oil and Gas Company, Dallas, TX

Robert E. Lund, St. Joe Zinc Company, Monaca, PA

Edward J. Ostrowski, National Steel Corporation, Pittsburgh, PA

Donald O. Rausch, NL Industries, Inc., Golden, CO

DIRECTORS

Charles L. Bare, Continental Oil Company, Houston, TX Hugh B. Barton, Exxon Company, U.S.A., Houston, TX G. Robert Couch, AMAX Specialty Metals Corporation, Greenwich, CT

Theodore M. Geffen, Amoco Production Company, Tulsa, OK 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

William M. Shepard, AMAX Exploration, Inc., Denver, CO
Robert S. Shoemaker, Bechtel Corporation, San Francisco, CA
Arlie M. Skov, Sohio Petroleum Company, San Francisco, CA
Robert Stefanko, Pennsylvania State University, University Park, PA

Edmond J. Whittenberger, United States Steel Corporation, Pittsburgh, PA

EXECUTIVE DIRECTOR

Joe B. Alford, AIME, New York, NY

SOCIETY OF MINING ENGINEERS OF AIME

PRESIDENT

Robert S. Shoemaker, San Francisco, CA

PRESIDENT-ELECT

Robert Stefanko, University Park, PA

PAST PRESIDENT

Donald O. Rausch, Golden, CO

TREASURER

Alfred Weiss, New York, NY

EXECUTIVÉ DIRECTÓR

Claude L. Crowley, Denver, CO

THE METALLURGICAL SOCIETY OF AIME

PRESIDENT

Robert I. Jaffee, Palo Alto, CA

PRESIDENT-ELECT

G. Robert Couch, Greenwich, CT

PAST PRESIDENT

Robert E. Lund, Monaca, PA

TREASURER

William R. Opie, Carteret, NJ

EXECUTIVE DIRECTOR

Alexander R. Scott, Warrendale, PA

IRON AND STEEL SOCIETY OF AIME

PRESIDENT

Arthur Marcantonio, Cleveland, OH

PRESIDENT-ELECT

Edmond J. Whittenberger, Pittsburgh, PA

PAST PRESIDENT

Edward J. Ostrowski, Pittsburgh, PA

TREASURER

George W. Knepshield, Pittsburgh, PA

EXECUTIVE DIRECTOR

Lawrence G. Kuhn, Warrendale, PA

SOCIETY OF PETROLEUM ENGINEERS OF AIME

PRESIDENT

Hugh B. Barton, Houston, TX

PRESIDENT-ELECT

Charles L. Bare, Houston, TX

PAST PRESIDENT

Charles A. Hutchinson, Jr., Houston, TX

TREASURER

T. Don Stacy, Tulsa, OK EXECUTIVE DIRECTOR

David L. Riley, Dallas, TX



1978

OFFICIAL ANNUAL REVIEW



AIME

and its
FOUR CONSTITUENT SOCIETIES









1978

OFFICIAL AIME ANNUAL REVIEW

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

REPORT OF THE EXECUTIVE DIRECTOR, AIME FOR 1978

AIME enjoyed another very good year in 1978. Extensive data on all phases of the operations of the Institute and its Constituent Societies are contained in this Annual Review, which is the official record of AIME for the year. All activities and operations were efficiently and well handled; several outstanding meetings were conducted, and meeting attendance in general was high. Overall AIME membership increased by 3,860 members to 68,670, a 5.96 percent increase. Financial resources had a substantial increase, and all operating units are in excellent condition.

Two significant events occurred during the year with the completion of the new building in the Pittsburgh area for The Metallurgical Society and Iron and Steel Society of AIME. Both Societies occupied the new building in Warrendale, Pennsylvania, in mid-December 1978. The other move was that of the Society of Mining Engineers of AIME from Salt Lake City to Denver into temporary quarters and the start on construction of a new headquarters building in the Ken-Caryl Ranch area of southwest Denver for the Society. Construction was started in October and is expected to be complete by mid-1979.

AIME officers and staff were very active during the year toward the restructuring of some of the joint activities in the engineering profession into a single, more effective umbrella organization for the profession. This is now proposed to be named the American Engineering Councils, with interested national engineering societies, such as AIME, participating in the umbrella through the activities of four organized Councils: Education, Professional Affairs, Public Affairs and International Affairs. Each member society will have representatives on the Board of Governors of the AEC and on the Executive Committees of the four Councils. Present plans are for the activities now conducted by several of the other joint groups in the profession to be combined into the AEC, which is expected to become operational on January 1, 1980.

Publications issued by the four AIME Constituent Societies continued to grow and be of highly valuable service to AIME members. Details presented in this Annual Review reflect the fundamental importance of AIME publications to the continual development of technology in the minerals, energy and materials industries and fields of engineering.

President Wayne L. Dowdey contributed much to the leadership of the Institute during the past year. We are indebted to him and to other AIME officers and directors, and to the Society officers and directors, and all of our efficient staff members for their continuing contributions to the Institute. Most of all, we are indebted to the interest and work of many thousands of AIME members in making the Institute what it is today and for continuing to build toward the future.

Respectfully submitted,

ge B. Alford

Executive Director

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

RECORD OF HONORS AND AWARDS PRESENTED BY AIME IN 1978

The following Honors and Awards were presented by AIME in 1978, in addition to those presented by our Constituent Societies and described elsewhere in this Annual Review:

HONORARY MEMBERSHIP was conferred upon

James B. Austin, "For major contributions to steelmaking as a scientist and able research administrator, and for distinguished and tireless service to AIME as President, Director, and Honorary Lecturer."

Lincoln F. Elkins, "For his many significant contributions in the field of reservoir engineering which have led to increased recoveries of petroleum and for his dedicated service to the Society of Petroleum Engineers and the Institute."

M. King Hubbert, "For his significant contributions in the areas of hydrodynamic entrapment of petroleum; and the mechanics of faulting and fracturing; and for his early warning and his accurate prediction of the current shortfall in discovery and production of petroleum."

Frank W. McQuiston, Jr., "In recognition of his significant contribution to the technologies of mineral processing and plant design, particularly in the fields of gold, uranium, copper, lead, and zinc; and for his unselfish service to his profession through his technical writings and his dedication to educational institutions for the minerals industry."

Stanley D. Michaelson, "For significant contributions to the technology and technical literature of mining, particularly within the scope of mine plant and engineering practice, and for his continuing responsiveness to the needs of the professional arena through consulting and leadership activities in the Society of Mining Engineers and the Institute."

The JAMES DOUGLAS GOLD MEDAL to Milton E. Wadsworth, "For his distinguished contributions to extractive metallurgy in research and education, exemplified by his fundamental understanding and teaching of the hydrometallurgy of non-ferrous metals."

The BENJAMIN F. FAIRLESS AWARD to Dennis J. Carney, "For his record of technical and managerial leadership, covering over twenty years of service in research, operations, planning and general management."

The HAL WILLIAMS HARDINGE AWARD to Robert L. Bates, "Educator, author, and geologist. For his laudable contribution and dedication to the advancement of authorship and communications in the field of industrial minerals."

The ANTHONY F. LUCAS GOLD MEDAL AWARD to G. E. Archie, "For the pioneering development of methods for determination of porosity and hydrocarbon saturations from well logs and classification of complex carbonate rock and pore types."

The ROBERT EARLL McCONNELL AWARD to Carl Rampacek, "In recognition of his research in the extraction of iron ore and a variety of metallic and non-metallic minerals, and his leadership in the advancement of the minerals industry."

The ERSKINE RAMSAY MEDAL to Nicholas T. Camicia, "For total commitment to Coal and enhancement of Coal's acceptance by Society when Coal can play a crucial role in developing energy for mankind."

The CHARLES F. RAND MEMORIAL GOLD MEDAL to Ian MacGregor, "In recognition of outstanding achievements in management as evinced by his company's growth and prosperity, and for his worldwide leadership in the metals industry."

The ROBERT H. RICHARDS AWARD to Frank F. Aplan, "In recognition of many contributions to the mineral industry by his excellence in education and research, integrating theory and practice, covering metallic ores, industrial minerals and coal."

The WILLIAM LAWRENCE SAUNDERS GOLD MEDAL to Russell H. Bennett, "For his entrepreneurial and engineering accomplishments in the finding and development of challenging mineral enterprises throughout the world and his dedication to his fellow man."

The ENVIRONMENTAL CONSERVATION DISTINGUISHED SERVICE AWARD to Kenneth W. Nelson, "In appreciation of his early recognition of the importance of industrial hygiene and environmental control measures to the maintenance of an efficient and productive nonferrous mining and metals industry, and his strong and enlightened leadership in advancing the adoption of appropriate technology in this field."

The MINERAL INDUSTRY EDUCATION AWARD to Albert W. Schlechten, "For his inspiring teaching of many successful extractive metallurgists, and for distinguished and effective professional representation of mineral industry education to government and industry."

The MINERAL ECONOMICS AWARD to William A. Vogely, "For outstanding professional accomplishment in his government, industry, and university teaching careers and for leadership in all aspects of the objectives of the Council of Economics, AIME."

The ROSSITER W. RAYMOND AWARD to Edward J. Novotny, Jr., for his paper, "Prediction of Stimulation from Acid Fracturing Treatments Using Finite Fracture Conductivity."

LEGION OF HONOR FIFTY-YEAR MEMBER INSIGNIA were conferred upon the following fiftythree members: B. R. Albin, Walter V. Aldridge, Joseph C. Allen, Helen A. Antonova,
Ross J. Beatty, Harold T. Blackwood, James Boyd, C. S. Crouse, Albert W. Demmler,
Kenneth R. Eckrote, B. Egeberg, Julian W. Feiss, Arthur W. Furbank, Henry Emmett
Gross, Philip D. P. Hamilton, Ray A. Hancock, Henry B. Hanson, Thomas G. Harvey,
L. G. Immonen, John S. Ivy, J. Clarence Karcher, Godfrey F. Kaufmann, Charles P.
Knaebel, E. G. Leonardon, Karl V. Lindell, Charles L. Mantell, J. A. McCutchin,
Henry S. McQueen, George L. Nye, C. P. Overfield, John W. Pamplin, Mercer H. Parks,
H. L. Pierce, R. Poliakoff, Robert N. Pursell, Spangler Ricker, J. Walter Scott,
Lynton W. Shaner, John F. Shaw, Quentin D. Singewald, Cloyd M. Smith, Cyril S. Smith,
Laurence E. Snow, Hugh Sweyn Spence, William H. Spice, Jr., Noel H. Stearn, Blair W.
Stewart, Robert E. Tally, W. V. Vietti, Morgan Walker, Warren B. Weeks, Harold Henry
White, Clyde H. Wilson.

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, 1978 and 1977, 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 1978), surplus, and changes in endowment 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, 1978 and 1977, and the results of its operations and the changes in its 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, 1978, all in conformity with generally accepted accounting principles applied on a consistent basis.

Coopers & Lybrand

New York, January 18, 1979.

AMERICAN INSTITUTE of MINING, METALLURGICAL, and PETROLEUM ENGINEERS, INC. BALANCE SHEETS, November 30, 1978 and 1977

ASSETS:	1978	1977	LIABILITIES and FUND BALANCES:	1978	1977
Operating fund: Cash and temporary cash investments	\$ 1,155,882	\$1,171,678	Operating fund: Accounts payable and accrued liabilities	\$ 866,026	\$ 228,086
Accounts receivable	533,552	183,661			
Inventories of publications (Note 1b)	647,237	473,841	Annual meeting surplus fund	49,809	199,64
<pre>Investments, at cost plus accrued interest (at market quotations plus accrued interest, approximately \$2,453,000 in 1978 and \$1,986,000 in 1977) (Notes 1d and 3)</pre>	2,396,734	1,966,866	Membership dues received in advance	633,249	335,915
Equipment, furniture and fixtures, net of accumulated depreciation of \$147,200 and \$69,400, respectively (Note 1c)	339,106	202,238	Other deferred credits, principally publications and meetings (Note 6)	175,736	179,875
Construction in progress - TMS and ISS (Note 2) Investment in SME building (Note 2) Prepaid expenses deferred charges and other assets	506,133 301,454 77,413	63,846	Loan payable to endowment fund plus accrued interest (Note 2)	299,340	
	5,957,511	4,062,130	Advance from endowment fund for SME building investment (Note 2)	100,000	
Endowment and custodian funds: Investments, at cost plus accrued interest (at market quotations plus accrued interest, approximately \$4,448,000 in 1978 and \$4,802,000 in 1977) (Notes 1d and 3)	μ, 484, 111	4,547,870	Surplus (per statement annexed)	3,833,351	3,268,590
Inventories of books (Note 1b) Cash and temporary cash investments	143,658 267,003	121,992 307,935	Endowment and custodian funds: Fund balances (per statement annexed):		
Loan receivable from operating fund plus accrued interest (Note 2) Advance to operating fund for SME building investment (Note 2)	299,340			4,947,476 346,636 5,294,112	4,627,831 349,966 4,977,797
	5,294,112	4,977,797			
Founder Society advances to United Engineering Trustees, Inc. (Note 4)	265,000	265,000	Property fund (no change during 1978 and 1977) (Note 4)	265,000	265,000
	\$11,516,623	\$9,304,927		\$11,516,623	\$9.304.927

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

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STATEMENTS of REVENUE and EXPENSES for the years ended November 30, 1978 and 1977

			Society of	The	Iron &	Society of	Elimination of Dues		
		Headquarters and All-Institute	Mining Engineers of AIME	Metallurgical Society of AIME	Steel Society of AIME	Petroleum Engineers of AIME	Allocated to Headquarters from Societies	Total 1978	Total 1977
. 0 :: 20 ::					Management of the country of the cou				
Members' dues and entrance fees		\$244,965	\$ 580,051	\$165,768	\$121,718	\$ 520,392	(\$244,965)	\$1,387,929	\$1,303,181
Advertising and publication sales			862,489	213,777	244,882	1,258,464		2,579,612	2,062,225
Appropriations from endowment funds		129,500	9,583					139,083	177,736
Offshore Technology Conference: Attendance and membership distribution		53,754	70,005	22,272	11,575	627,557		785,163	791,771
Management fees						183,600		183,600	147,000
Exhibit space commission						40,703		40,703	41,215
Meetings, interest and miscellaneous		6,935	226,043	252,914	298,524	707,398		1,491,814	1,249,239
		435,154	1,748,171	654,731	649,929	3,338,114	(244,965)	6,607,904	5,772,367
Expenses: Publications			1,083,638	265,029	280,456	1,293,140		2,922,263	2,484,777
Society direct expenses			598,948	405,148	370,717	1,436,197		2,811,010	2,162,770
AIME headquarters		478,682	84,962	26,328	18,949	114,726	(244,965)	478,682	405,783
		478,682	1,767,548	696,505	670,122	2,844,063	(244,965)	6,211,955	5,053,330
		(43,528)	(19,377)	(41,774)	6,577	494,051	•	395,949	719,037
Contributions, net, for SME building construction	n (Note 2)		168,812			The second secon		168,812	
Excess (deficiency) of revenue over exp	expenses	(\$ 43,528)	\$ 149,435	(\$ 41,774)	\$ 6,577	\$ 494,051		\$ 564,761	\$ 719,037

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

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STATEMENTS of SURPLUS for the years ended November 30, 1978 and 1977

	1978	1977
Balance, beginning of year	\$3,268,590	\$2,535,041
Excess of revenue over expenses for the year	564,761 3,833,351	719,037 3,254,078
Transfer (to) deferred credits for relocation (Note 6)		(15,000)
Transfers from custodian funds		29,512
Balance, end of year	\$3,833,351	\$3,268,590

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

STATEMENTS of CHANGES in ENDOWMENT and CUSTODIAN FUNDS for the years ended November 30, 1978 and 1977

	Endowment Fund Accounts	1978 Custodian Fund Accounts	Total	Endowment Fund Accounts	Custodian Fund Accounts	Total
Balance of fund accounts, beginning of year	\$4,627,831	\$349,966	\$4,977,797	\$4,442,028	\$324,120	\$4,766,148
Revenue:	37.713	32,384		15.928	19.436	
Net gain (loss) on sale of investments	117,190	(116)		140,666	06	
Interest and dividends	301,510	24,110		246,134	20,919	
Sales of books, volumes, etc.	120,061	17,079		137,034	55,616	
Revenue from conferences and committee meetings, net		1,260			34,212	
Royalties from publishers and oil deeds	27,860			27,766		
	3,491	006		455	1,611	
	607,825	75,617	683,442	567,983	131,884	699,867
			5,661,239			5,466,015
Fynenses and annronriations.						
ation	89,220	6,743		101,842	40,041	
Awards	32,314	31,918		22,532	27,583	
Lecture series and student travel	10,909			8,729	333	
Sundry expenses	16,654	40,286		20,783	8,569	
Appropriations to operating fund	139,083			228,294		
	288,180	78,947	367,127	382,180	76,526	458,706
	4,947,476	346,636	5,294,112	4,627,831	379,478	5,007,309.
Transfers to operating fund surplus					(29,512)	(29,512)
Balance of fund accounts, end of year	\$4,947,476	\$346,636	\$5,294,112	\$4,627,831	\$349,966	\$4,977,797

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

NOTES to 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 socie-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. 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, 1978 the OTC's net assets are 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. The appropriations have been included in the statements of revenue and expenses of the operating fund.

b. Inventories

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

c. Equipment, Furniture and Fixtures

Equipment, furniture and fixtures are recorded at cost and are depreciated on the straight-line method over their estimated useful lives. Depreciation expenses for 1978 and 1977 were as follows:

	<u>1978</u> <u>197</u>	<u>'7</u>
Charged to publications Charged to Society direct	\$ 9,200 \$ 9	00
expenses Charged to AIME Headquarters	75,200 30,8 3,100 1,8	
	<u>\$87,500</u> <u>\$33,5</u>	00

Continued

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.

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.

2. Buildings under Construction

Construction in Progress - TMS and ISS

In connection with the new headquarters building for The Metallurgical Society (TMS) and the Iron and Steel Society (ISS), the Institute's Board of Directors approved a loan of \$300,055 from the endowment fund to the operating fund. The loan was made on August 1, 1978, payable over twenty years at a floating interest rate based on the endowment fund's net earnings after management fees. At November 30, 1978, the balance of the loan plus accrued interest at 5.5% per annum was \$299,340. Subsequently, on December 8, 1978 the Institute obtained a loan of \$206,400 from the

Pennsylvania Industrial Development Authority to finance the remaining portion of the construction costs. The loan, secured by a mortgage on the building, bears interest at the rate of 4% per annum and is payable in 240 equal monthly instalments beginning May 1, 1979.

Investment in SME Building

In connection with the construction of the headquarters building for SME in Denver, separate accounts are being maintained to identify all transactions related to the project. At November 30, 1978, the investment in the SME building consisted of the following:

Construction in progress	\$101,143
Land	87,134
Cash and temporary investments	22,576
Pledges receivable	90,601
	\$301,454

During 1978, SME recorded contributions of \$179,136 for the purpose of defraying the cost of the project net of related fund raising expenses of \$11,520. The net amount of \$167,616 plus interest of \$1,196 on temporary investments aggregating \$168,812 has been included in the operating fund.

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 construction of the building and stipulated that the Fund shall hold a proportionate share of the building. In addition, the Institute's Board of Directors has approved additional appropriations of \$467,000 from the endowment fund for the completion of the project. When the building is completed, the additional appropriations will be repaid over twenty years at a floating interest rate based on the endowment fund's net earnings after management fees.

Continued

3. Changes in Investments

1978	1977
\$1,966,866 546,039 2,512,905	
116,171	1,073,551
\$2,396,734	\$1,966,866
	\$4,424,330 2,147,130 6,571,460
3,133,475 4,367,037	2,164,346
117,074	140,756
\$4,484,111	\$4,547,870
	\$1,966,866 546,039 2,512,905 116,171 \$2,396,734 \$4,547,870 2,952,642 7,500,512 3,133,475 4,367,037 117,074

^{*}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 portion of the operating costs of the building. The Institute's share of these costs during 1978 and 1977 was \$70,000 and \$85,000, 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%.

Continued

5. Pensions

Pension expense amounted to \$68,300 in 1978 and \$60,500 in 1977. The actuarially computed value of vested benefits exceeded pension fund assets by approximately \$7,200 at November 30, 1978.

6. Restatement of Prior Year's Financial Statements

In October, 1977, the Institute's Board of Directors appropriated \$15,000 from the operating fund relating to relocation expenses to be incurred by TMS in fiscal 1978; such appropriation was not reflected in the 1977 financial statements. The 1977 financial statements have been restated (operating fund surplus decreased by \$15,000 and other deferred credits increased by \$15,000) to give effect to this transaction.

7. Commitments

Rental commitments under leases primarily for office space approximate \$129,000 in 1979, \$121,000 in 1980, \$59,000 in 1981 and \$59,000 in 1982. Rental expense under these leases was approximately \$135,000 and \$87,000 during 1978 and 1977, respectively. The Society of Petroleum Engineers has commitments to purchase certain equipment aggregating \$42,000 at November 30, 1978.

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

TOTAL FINANCIAL RESOURCES OF AIME

AS AT NOVEMBER 30, 1978

AIME ENDOWMENT FUNDS

	\$ 70,493	628,976 206,686 260,151 2,667,045 .\$3,833,351	\$ 877,000
OPERATING SURPLUS FUNDS	AIME Corporate Headquarters Operating Reserve All-Institute Deficit from Prior Years Net Headquarters Reserve	SME-AIME TMS-AIME ISS-AIME SPE-AIME TOTAL OPERATING SURPLUS FUNDS	Approximate value based on 1977 Section Treasurers' Reports
AIME ENDOWMENT FUNDS	Medal and Plague Award Funds \$ 210,925 Scholorship Funds 188,903 Specific Use Funds 2,004,383 General Purpose Funds 2,543,265 TOTAL ENDOWMENT FUNDS \$ 4,947,476	ASSIGNEMENT TO CONSITUENT UNITS n Funds: porate Headquarters \$ 82,29	IMS-AIME ISS-AIME SPE-AIME Equity in Undistributed OTC Surplus TOTAL CUSTODIAN DUNDS \$ 396,445 *Represents surplus distributable to AIME and Constituent Societies

SUMMARY

ENDOWMENT FUNDS 3,947,476 CUSTODIAN FUNDS 396,445 OPERATING SURPLUS FUNDS 3,833,351	SUBTOTAL ADVANCES TO UNITED ENGINEERING TRUSTEES, INC	TOTAL FINANCIAL RESOURCES OF AIME\$ 12,393,623	Includes Endownment Fund Loans and Investment as follows; Loan for TMS/ISS Building \$299,340	Investment in SME Building 100,000 S399,340
ENDOWMENT F CUSTODIAN F OPERATING S	SUBTOTAL ADVANCES TO RESOURCES S TOTAL R LOCAL SECTI	TOTAL F	* Includes	

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

MEMBERSHIP DATA

Year	Member Total	Year	Member Total	Year	Member Total	Year	Member Total	Year	Member Total
1870	22	1880	832	1890	2,0 00	1900	2,450	1910	4,210
1871	157	1881	1,031	1891	2,1 34	1901	2,897	1911	4,169
1872	254	1882	1,213	1892	2,25 8	1902	3,262	1912	4,290
1873	273	1883	1,345	1893	2,3 92	1903	3,741	1913	4,284
1874	345	1884	1,467	1894	2,3 91	1904	3,530	191	4,150
1875	554	1885	1,439	1895	2,4 37	1905	3,886	1915	4,650
1876	628	1886	1,504	1896	2,39 0	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	2,5 62	1908	4,241	19 18	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	15,856
	1927	7,434	1,004	8,438	1947	15,000	3,117	18,117
	1928	7,488	1,000	8,488	1948	15, 5 80	4,069	19,649
	1929	7,823	1,033	8,8 56	1949	16,315	4,952	21, 267
	1930	7,831	1,162	8,993	1950	17,082	4,534	21,616
	1931	7,843	1,131	8,974	1951	17,482	2,229	19,711
	1932	7,685	975	8,660	1952	18,643	1,964	20,607
	1933	7,155	672	7,827	1953	19,718	2,195	21,913
	1934	6,887	628	7,515	1954	21,816	2,179	23,995
	1935	6,916	1,006	7,922	1955	23,723	2,825	26,548
Ì	1936	7,326	1,620	8,946	1956	26, 29 8	3,415	29,713
	1937	8,279	2,147	10,426	1957	28,823	3,974	32,797
	19 38	9,005	2,898	11,903	1958	30, 553	3,757	34,310
	1939	9,614	3,760	13, 374	1959	33, 37 8	2,332	35,710

Year	Corporate Members	Student Members	Grand Total	Year	Corporate Members	Student Members	Grand Total
1960	34,852	1,893	36,745	1970	43,095	3,863	46,958
1961	34,368	1,633	36,001	1971	44,627	3,962	48,589
1962	34,437	1,857	36, 294	1972	45,742	3,652	49,394
1963	34,838	2,289	37,127	1973	45, 154	4,572	49,726
1964	35,740	2,370	38,110	1974	46,702	4,988	51,690
1965	36,87 8	2,561	39,439	1975	50,085	6,663	*56,152
1966	38,912	2,706	41,618	1976	52,642	7,131	59,773
1967	40, 278	3,183	43,461	1977	56,00 8	8,802	64,810
1968	42,015	3,437	45, 488	1978	59,385	9,285	68,670
1969	43,300	3,438	46,738		•		•

^{*}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, 1979

	C	000	6 7 10 10	122	16 17 19 20	222 223 254 254	309876 309876	38321 54321	8884 008 009	4444 19844 1984	444 644 60 64 64	55 55 55 55	55876 609876	621 63 65 65	66 69 70 70	722 73 75 75	76 77 78 79 80
	GRAND	892 892 370 370	1,224 1,224 1,808 1,347	1,262 1,262 299 510 158	4,982 174 246 997 649	242 326 1,316 248 404	305 931 231 153 1,286	2,210 723 723 824 416	797 521 135 221	727 527 382 161 614	126 290 301 109 95	119 293 119 1,388	174 354 354 469 532	182 83 76 1,353	85 271 223 1,047 135	1,076 107 65 30 59	165 106 277 77 59
	Total	1,855 3 18 2 39	2	1,188 509 40	4,981 145 994 19	248 248	930 6 1,268	34	521	60 382 160 65	15 66 109 3	38 288 117 276 1,370	169 15 453 38	181 82 73 73 1,352	271 272 1,046 125	1,063 107 62 1	123 106 277 77 59
	2 8	289 7 1 3		186 76	820 16 182 182 4	4 4 4	145	2 2	118	9 71 25 14	100 181 188	56 15 51 237	32 86 5	30 13 16 210	24 57 44 178 13	178 21 15	23 24 12 6
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AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC. MEMBERSHIP STATISTICS January 1, 1979

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

CLASSIFICATION OF MEMBERS

AIME - THREE YEAR TALLY

					1978	Breakdown	17
	<u> 1976</u>	<u> 1977</u>	1978	SME	TMS	ISS	SPE
Honorary Members	40	41	42	<u> 15</u>	5	5	17
Members	33,575	34,944	36,120	12,461	3,928	3,097	16,634
Associates	9,842	10,199	10,565	3,597	1,130	1,094	4,744
Juniors	9,031	10,509	12,049	4,426	746	274	6,603
Assoc. Juniors	154	315	609	169	, j. 44 j. 1	Va. 400	440
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TOTAL	52,642	56,008	59,385	20,668	5,809	4,470	28,438
Students	7,131	8,802	9,285	4,612	2,290	25	2,358
GRAND TOTAL	59,773	64,810	68,670	25,280	8,099	4,495	30,796

1978 NET MEMBERSHIP GAINS (LOSSES)

SME-AIME	1,069
TMS-AIME	32
ISS-AIME	247
SPE-AIME	2,512
AIME	5,660

AIME 5,660 APPROXIMATE MEMBERSHIP RATIO BY SOCIETY FOR LAST 18 YEARS

DECEMBER SME-AIME	TMS-AIME IS	SS-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

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

REPORT ON THE

107TH AIME ANNUAL MEETING

The major downtown Denver hotels and Convention Center were used for the 107th AIME Annual Meeting.

The Colorado/Denver Petroleum Section Annual Meeting Committee, under the chairmanship of Mr. Richard Broom was active in planning and organizing the meeting. A special thank you was extended to the committee for their outstanding contribution.

A comparison of estimated and actual registration figures and percent of member attendance is shown below:

Registration

	Estimate	Actual
AIME Member	3300	3159
Non-Member	500	881
Authors	300	356
Students	250	498
WAAIME	400	506
TOTAL	4750	5400

Percent of Member Attendance

Society of Mining Engineers of AIME	• .		.66%
The Metallurgical Society of AIME	•		.29%
Iron and Steel Society of AIME			
Society of Petroleum Engineers of AIME			

A comparison of budgeted and actual registration revenue and expense is shown below:

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	Actual	Budget	
Registration revenue Total expenses charged	\$191,987.00	\$174,150	.00
to registration revenue	130,578.08	167,400	.00
Revenue over expenses	61,408.92	6,750	.00
Distribution of Revenue:			
SME-AIME	\$44,575.51		
TMS-AIME	19,798.38		
ISS-AIME	966.06		
SPE-AIME	1,101.72	** *** ****	
Annual Mtg. Surplus		•	
Fund	(5,032.75)		
Total Distribution		\$61,408.92	

SOCIETY OF MINING ENGINEERS OF AIME

REPORT

of the

Executive Director

1978

The most significant occurrence in 1978 was the relocation of The Society Headquarters to Denver, Colorado. The decision to relocate, buy land, and build a Headquarters Office Building was made by the SME-AIME Board of Directors and concurred in by the AIME Board of Directors at the Annual Meeting in February. Implementation was delayed by a petition, signed by more than 100 SME-AIME members, requesting the SME-AIME Board to reconsider the decision to move and if the decision was not rejected to submit the matter to a ballot vote of the SME-AIME membership according to the Bylaws of the Society. The Board did not reject its decision to move and the Petitioners did not withdraw their petition; therefore, the matter was referred to the membership for vote.

18,844 ballots, with discussion by the Petitioners and the Board, were mailed (1st class, U.S.; Airmail, other) on May 1, 1978, to all voting members of SME-AIME in good standing as of that date--address correction was requested for all. The discussions were also included in the May issue of MINING ENGINEERING. The Post Office returned 45 ballots as "undeliverable" reducing the voting universe to 18,799. During the six-week voting period (May 1 through June 14), Price Waterhouse & Company of Chicago, Illinois, received 9,169 ballots representing 48.77% of the voting universe. Of these ballots, 252 were not properly executed (i.e., vote marked but ballot not signed; ballot signed but vote not marked; both voting options marked; etc.) and were not tallied. Under the supervision of a Special Talley Committee, Price Waterhouse and Company tallied 8,917 votes which were cast 5,348 (59.98%) "For" the Board's decision and 3,569 (40.02%) "Against" the Board's decision. On July 1, 1978, the Special Talley Committee (which consisted of 1965 SME-AIME President Jack M. Ehrhorn as Chairman; 1973 SME-AIME President Robert H. Merrill; and, 1974 SME-AIME President Donald A. Dahlstrom) certified this vote to the Board of Directors. The results were reported to the membership in the July issue of MINING ENGINEERING and by post card indicating the temporary Denver address of the Society until the Headquarters Building would be available. The office space in Salt Lake City was subleased and the Society closed its operations there on July 28. Operation began in the Denver area on August 1. Eight employees transferred with the Society and an additional five provided transition and training assistance on a temporary basis. Eighteen positions were filled in Denver and two part-time positions remain vacant.

The two acre building site was purchased at the Ken-Caryl Ranch on September 7, 1978, and a Building Construction Committee was appointed with Mr. R.L. Druva as Chairman and Messrs. J.F. Havard and R. Kent Comann as members. This Building Construction Committee selected Hensel Phelps Construction Company as General Contractors and negotiated a guaranteed maximum contract which was approved by the AIME Executive Committee.

A ground breaking ceremony was held on October 16 and construction is under way with an anticipated move-in date of July 9, 1979. The Project Costs, Land and Building, are now expected to be \$818,420, up \$40,207 (5.17%) from the cost estimates considered by the Board when the project was approved in February-most of this increase is attributed to inflation during the delay in implementing the decision.

Project Financing is to come from a loan from the AIME Endowment Funds of \$467,000; an investment from the Rocky Mountain Club Fund of \$100,000; and the remaining \$251,420 from donations, commercial loans, or the SME-AIME Surplus Fund. As of the end of Fiscal Year 1978, SME-AIME Past President D. O. Rausch, Chairman of the Building Fund Drive, reported that almost \$194,000 had been raised in donations and pledges and expressed confidence that the remaining \$57,420 will be donated. The early success of the Fund Drive indicates the possibility that the need for financial assistance from AIME may be reduced.

The following eight employees were transferred:

Claude L. Crowley, Marianne Snedeker,

David W. Rome,
Ta M. Li,
Ruth M. Orologio,
John D. Wiebmer,
Darline D. Daley,
Linda M. Kingsley.

Executive Director
Assistant Executive Director and
Manager of Publications
Manager, Administrative Services
Editor, Mining Engineering
Meetings Manager
Associate Editor, Mining Engineering
Publicity Coordinator
Meetings Secretary

Three SME-AIME employees retired in 1978:

Robert P. LaRusso, William Jackson, Evelyn Burke,

Production Manager, Mining Engineering Accounting Supervisor Secretary, General Member Services

The move went well and the new staff members assumed their duties with little loss of momentum. During the controversy over the move and the membership vote, the Society continued to function at a near normal pace.

Membership increased by 4.42%--4.18% in student membership and 4.47% in corporate membership. The growth in student membership is down from a rate of 22.7% in 1977 due at least in part to the student member dues increase implemented for 1978. The growth in corporate members is slightly down from a rate of 4.89% in 1977. Corporate membership (all members except students) exceeded 20,000 for the first time with a year end total of 20,668. Added to the 4,612 student members the total membership of the Society reached 25,280--exceeding 25,000 for the first time.

One new section started while none were discontinued bringing the total number of AIME sections administered by SME-AIME to 63. The Society added three new Student Chapters and now administers 58--55 domestic.

SME-AIME attendance at the Annual Meeting was good because of the Denver location and a special format Fall Meeting drew 96% of the expected attendance.

Publications continue to be a major-used service and innovations and changes decided in 1977 and implemented in 1978 were well received. Readership approval of MINING ENGINEERING continues to grow and there is pressure to expand the book publishing effort. Preprints remain popular; however, prices will have to be increased if this program is to be placed on a breakeven basis.

FINANCES

The Society experienced its first deficit since 1972. The 1978 loss of \$19,377 was a self-induced deficit brought about by relocation activity costs of \$184,191 (referendum=\$43,961; move=\$140,230). The actual deficit is \$97,408 less than the \$116,785 deficit projected because of an increase in Revenue of \$63,397 and a decrease in Expenses of \$34,011. The following shows the surplus (deficit) for the Society since it was started in 1957 (000's omitted:)

1957	1958	1959	1960	1961	<u>1962</u>	<u>1963</u>
\$11.4	\$. 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)
1971	<u>1972</u>	<u>1973</u>	1974	1975	<u>1976</u>	<u>1977</u>
\$(58.9)	\$(32.5)	\$10.7	\$16.6	\$120.4	\$137.9	\$119.7
1978						

\$(19.4)

PUBLICATIONS DEPARTMENT

Although publishing activities continued at the brisk pace of recent years in the journals, books, and preprint areas, 1978 was also a year of consolidation and a learning process in regard to decisions made the previous year and implemented in the current year.

January marked the first publication in MINING ENGINEERING of the Technical Papers section, replacement for the discontinued Transactions quarterly.

Distribution of "free" preprint coupons was discontinued in 1977. Relatively few inquiries or complaints have been received as a result.

The major, continuing problem with all aspects of the Society's publishing programs is escalating costs and inflation. Staff continues to explore ways to reduce the cost-inflation factor as much as possible, for example, by prebuying paper for the magazine. Because of postal increases in late spring, postage and handling fees for book orders were increased from \$1.50 to \$2.00 and the fee for large orders was raised from 50¢ per book to 75¢. Strict budgetary constraints will continue to be exercised in the foreseeable future.

An area requiring some attention and concern in 1978 has been the effects of the new US Copyright Law that went into force on January 1. Under the provisions of the law, the author holds copyright as soon as he has a formal manuscript. For publishers to copyright a work in which that author's manuscript appears, a copyright transfer must be obtained. SME-AIME has such a form, which has been reviewed legally and is now being rewritten to simplify the language. There has been effort by some companies to impose their own release form upon publishers. SME has completed satisfactory negotiations with two of these companies. Another area of confusion has been the "Fair Use" exclusion in the law which is supposed to allow a certain amount of copying for educational purposes without a royalty payment. It has been found that most organizations involved in such use are being supercautious and are requesting written permission from publishers for reuse of copyrighted works.

MINING ENGINEERING

1978 was an innovative year for the magazine. In addition to inclusion of the Technical Papers section, the May issue was the inaugural one for Annual Review by a new system. Each Division had appointed Contributing Editors who solicited and prioritized input for their respective reviews. The material was sent to staff who prepared the actual review articles. These articles were then reviewed by the respective Contributing Editors prior to publication. The Industrial Minerals Division review also had articles prepared by experts in the various commodity areas. Contributing editors for the 1977 review were Alan Burton and Charles Bruce, Mining and Exploration; Burt Mariacher, Mineral Processing; Edgar Winegartner, Coal; and Stanley J. Lefond, Industrial Minerals. The Contributing Editors met with staff in the fall to review their first year's experience and to make plans for the 1978 review. Efforts will be made to encourage greater input to the review from the various Divisional technical people.

A number of special features and/or special issues were published during the year. Instrumentation and maintenance, respectively, were featured in February and March. A three-part series on rotary drills appeared in June, July and August. October was devoted to a special report on the uranium industry, stressing the current situation and projected future. July, of course, contained the annual Membership Directory.

Because of relocation to the Denver, CO, area there were a number of staff changes. Relocating employees were Ta M. Li, Editor, and John Wiebmer, Associate Editor. New employees, hired in August, are Barbara Schickner, Associate Editor; Robert Young, Production Manager; Phyllis Bulock, Production Clerk; and Roz Hayward, Department Secretary. Although relatively new in terms of service, all have learned their responsibilities quickly and Publications Department personnel are developing a real "team" concept.

Advertising rates were increased on July 1, 1978, by approximately 13-15% as one way to cope with inflation and escalating costs.

Comparative advertising statistics are:

	FY 197	<u>'8</u>	FY 1977		
	Pages	\$ Income		Pages	\$ Income
Display	333 10/12	409,282.60		335 2/12	350,206.82
Class.	42 11/12	52,127.25		49	46,170.83
Prof. Ser.	63 10/12	12,951.00		67 6/12	12,070.50
Totals	439 7/12	474,360.85		441 8/12	408,448.15

In FY 1978, 680 1/12 editorial pages of all types (feature articles, regular columns, Society news, etc.) were published. In addition, the magazine contained material for other aspects of the Society's programs: advance publicity for the Fall Meeting, the relocation referendum insert in May, membership contest insert in October, and a regular insert and contributor information for "Build for the Future," the SME-AIME building fund drive.

Advertising promotional efforts continue through use of the audited circulation statement, (MINING ENGINEERING has had a more rapid growth in recent years than other mining-oriented publications), authorized media data form, media kit, house ads in MINING ENGINEERING with followup mailings to advertisers and prospects, ads in "Standard Rate and Data Service," and letter mailings. Encouraging response was received to a mailgram sent to solicit advertising for the July issue. MINING ENGINEERING was represented at the American Mining Congress show. A professionally conducted readership survey was done on a spring issue. Good readership of the Technical Papers section was indicated by the survey.

TRANSACTIONS

The Technical Papers section was published in 11 issues of MINING ENGINEERING (omitted in July because of inclusion of the Directory) and a total of 296 pages were published. Originally it was intended that 32 pages would be published, for a total of 352 pages for the year. In addition, extra pages would be published in the bound volume only. Publications committees have the option of accepting a technical paper for the MINING ENGINEERING section or for the bound volume, the latter papers being those of significance for the record, but of limited interest. As the year evolved, more papers than had been anticipated were being accepted for the volume. As a consequence, 56 pages have been allocated to the bound volume from the magazine section. Papers accepted for the magazine section are being published within two-three months after acceptance. The total additional pages to be included in the bound volume will be 112, including the index.

After some format difficulties with the first two issues, staff was able to evolve a compact and readable layout for the Technical Papers section. In the coming year, the Transactions Committee will be concerned with quality of illustrations, with the objective being an upgrade of those published. The Committee continues to monitor review quality and timeliness.

PREPRINTS

In FY 1978, a total of 37,725 copies of preprints were produced: 200, 1977 Fall Meeting; 20,085, 1978 Annual Meeting; 14,400,1978 Fall Meeting; and 3,040, 1979 Annual Meeting. Production cost of preprints in 1978 was \$28,952.39 and the cost per preprint in FY 1978 was \$0.767. Preprint income was \$19,415.35.

For the Fall Meeting, five "Mini Symposia" were preprinted. These are booklets containing all the papers for a session, usually a theme session. Fourteen such Mini Symposia are planned for the Annual Meeting in New Orleans, including one for an All-Institute session on boom towns.

For FY 1978 the Publications Board decided to maintain preprint prices as they had been: \$1.00, AIME members and \$2.50 nonmembers. At the end of the fiscal period, income vs. expense was to be analyzed and the price structure reviewed, in order to put the program on as close to a self-sustaining basis as possible.

BOOK PUBLISHING

In FY 1978, SME-AIME newly printed or reprinted ten titles. New titles are:

"Geology of the Porphyry Copper Deposits of the Western Hemisphere" by V. F. Hollister, 219 pages, hardcover, illus., index, February 1978.

"Mineral Processing Plant Design," A. L. Mular and R. B. Bhappu, eds., 883 pages, hardcover, illus., February 1978.

"Primary Crushing Plant Design" by F. W. McQuiston, Jr., and R.S. Shoemaker, 246 pages, foldout illus., hardcover, March 1978

Reprinted in 1977 were "Coal Preparation" (reprinted twice), "International Symposium on Hydrometallurgy," "Gold and Silver Cyanidation Plant Practice," "Geotechnical Practice for Stability in Open Pit Mining," "SME Mining Engineering Handbook," and "Ore Deposits of the United States, 1933-1967."

New books to be published early in 1979 are "South Texas Uranium Seminar" in January and "International Laterite Symposium" in February. Eighteen book projects are in process, including "Open Pit Mine Planning and Design," "Computer Methods for the 80's," proceedings of the 1979 RETC proceedings.

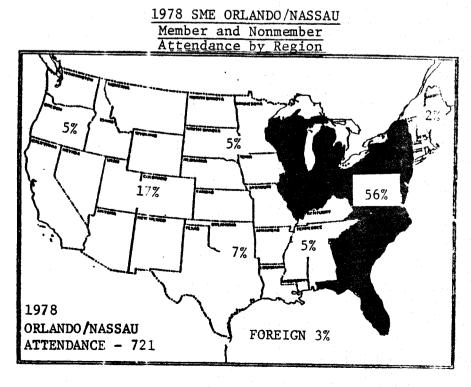
In addition to scrutinizing book proposals for quality, marketability, and organization, the Book Publishing Committee is beginning to look at how to accomplish the project with the staff capability available. Using 1 as a base, staff handling of the project is 1; a competent freelance person is 1 1/2; and an outside service agency is 2, all in terms of cost. The Committee may have to consider prioritizing new projects as they are approved. When SME relocated to the Denver area, a very competent Book Production Secretary - Carmen Nietes - was hired and is presently working on three projects in addition to camera-ready books when the material for these has been received. A fourth is being handled freelance by Linda Bono, who had worked for the Society in Salt Lake City. A fifth is being handled by a service agency in Denver.

Book sales of all types grossed \$283,323 in 1978, cost of sales was \$158,779 and 16,423 books were mailed.

MEETINGS

The 1978 SME-AIME Fall Meeting was held September 11-13 at the Contemporary Hotel in Orlando, Florida and reconvened offshore at Loew's Paradise Island Hotel in Nassau, Bahamas, September 13-16. The meeting which had 721 paid registrants was successful in attendance as well as technically. Programming was held in both places along with extensive short course offerings. Registration for this meeting was 1,031.

Members	592
Nonmembers	129
Students	23
Ladies	287
TOTAL REGISTRATION	1,031



Every fourth year the American Mining Congress holds it equipment show in Las Vegas. By Board policy, SME does not hold a Technical Information Exchange Exhibit in that year but plans a special format Fall Meeting like Orlando/Nassau.

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. The following chart shows the success of this policy as the attendance at the meetings has been strongly supported by the region in which it is held:

SME-AIME FALL MEETING

ATTENDANCE BY GEOGRAPHIC REGIONS

(Members & Nonmembers Only)

	(Members 2 Nonmembers Only)												
Region	1966 Tampa	1967 Las Vegas	1968 Mpls.	1969 Sait Lake	1970 St. Louis	1971 Seattle	1972 B'ham.	1973 Pittsburgh	1974 Acapulco	1975 Selt Lake	1976 Denver	1977 St. Louis	1978 Orlando
1	23	20	14	22	23	3	8	10	4	11	17	22	12
2	240	145	135	181	162	63	71	244	77	113	112	143	115
3	417	69	55	58	74	28	88	66	45	47	68	49	207
4	186	122	235	139	133	54	97	81	51	114	129	205	. 80
5	62	17	18	14	44	4	177	21	10	20	18	55	35
6	56	54	438	93	199	28	39	31	19	54	57	220	40
7	94	97	43	79	107	30	27	15	19	64	53	61	49
8	80	424	98	1,948	285	154	29	48	135	597	де	202	126
9	56	241	51	215	97	185	27	24	64	163	124	83	36
10	51	59	126	163	288	95	22	28	270	57	175	54	21
Total	1,265	1,248	1,113	2,012	1,412	644	585	56 8	642	1,340	1,534	1,094	721

REGION LEGEND

- NEW ENGLAND: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.
- 2. 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.
- 5. EAST SO: CENTRAL: Kentucky, Tennessee, Alabama, Mississippi,

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

Year Location Number Percent 1963 Dallas, Texas 1079 47.0% 1964 New York, New York 1221 44.2% 1965 Chicago, Illinois 1073 48.2% 1966 New York, New York 1438 47.7% 1967 Los Angeles, California 1421 48.5% 1968 New York, New York 1632 51.1% 1969 Washington, D. C. 1478 63.1% -Institute of Metals Div. of TMS Stopped Programming 1970 Denver, Colorado 2399 69.4% ing 1971 New York, New York 1460 62.0% 64.3% Average 1972 San Francisco, California 1581 72.8% 64.3% Average 1973 Chicago, Illinois 1145 62.9% 64.3% Average 1975 New York, New York 1263 65.0% -Institute of Metals Div. of TMS Resumed Programming 1976 Las Vegas, Nevada 1840 64.0% -Institute of TMS Resumed Programm			Attendance					
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1973 Chicago, Illinois 1145 62.9% 64.3% Average 1974 Dallas, Texas 1235 63.2% 1975 New York, New York 1263 65.0% 1976 Las Vegas, Nevada 1840 64.0% of TMS Resumed Programming	1971	New York, New York	1460	62.0%]			
1974 Dallas, Texas 1235 63.2% 1975 New York, New York 1263 65.0% 1976 Las Vegas, Nevada 1840 64.0% Institute of Metals Div. of TMS Resumed Programming	1972	San Francisco, California	1581	72.8%				
1975 New York, New York 1263 65.0% 1976 Las Vegas, Nevada 1840 64.0% 1977 Atlanta, Georgia 1381 55.0% Institute of Metals Div. of TMS Resumed Programming	1973	Chicago, Illinois	1145	62.9%	64.3% <u>Averag</u> e			
1976 Las Vegas, Nevada 1840 64.0% ——Institute of Metals Div. 1977 Atlanta, Georgia 1381 55.0% of TMS Resumed Programming	1974	Dallas, Texas	1235	63.2%	Single Automotive to the second			
1977 Atlanta, Georgia 1381 55.0% of TMS Resumed Programming	1975	New York, New York	1263	65.0%	ing the state of t			
ing	1976	Las Vegas, Nevada	1840	64.0%	Institute of Metals Div.			
1070	1977	Atlanta, Georgia	1381	55.0%				
	1978	Denver, Colorado	2076	66.0%	/ - -118			

SME-AIME

FINANCIAL PERFORMANCE - OFFSHORE TECHNOLOGY CONFERENCE (OTC)

FY70 THROUGH FY78

Year	Surplus to SME-AIM	Ξ
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	<u>70,005</u>	
40 .	\$403,792	

Plans for the fourth RETC on June 18-21, 1979 in Atlanta, Ga. 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 1979.

The 1979 SME-AIME Fall Meeting and Exhibit and the 17th Ap Com will be held October 17-19 in Tucson, Ariz. Plans for this meeting are also well under way.

The 1980 SME-AIME Fall Meeting and Exhibit will be held October 22-24 in Minneapolis, Minn.

GENERAL MEMBER SERVICES

MEMBERSHIP DEVELOPMENT

I. Statistics

Through 1978, membership in SME-AIME grew from 24,211 to 25,280.

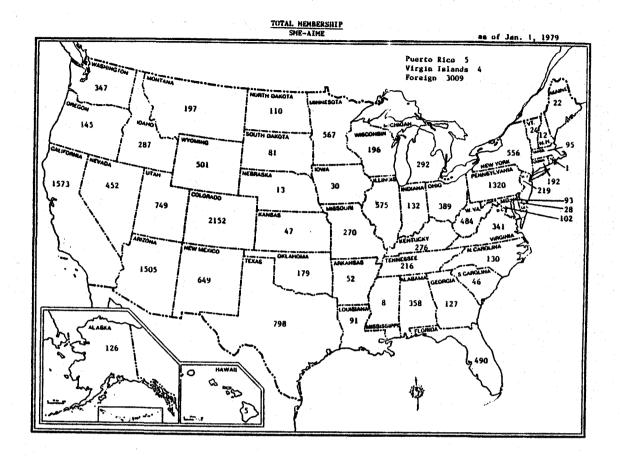
Membership by Divisional Interest

#200 PM			,					Section 1	TOTAL	CORPORATE
AS OF	M & E	COAL	IndMD	MPD	EDUC	ECON	STUD	INCLASS	MEMBERS	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

Membership by Grade

AS OF	TOTAL MEMBERS	CORPORATE MEMBERS	FULL MEMBERS	ASSOC.	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

Membership by State



Corporate Membership Changes - 1975-1978

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

II. Membership Development Contests - 1978

In 1978, SME-AIME Membership Development efforts were centered around four contests:

- A. Annual Membership Contest. This contest began October 1, 1977 for the 12-month period ending September 30, 1978. The prize in 1978 was round-trip airfare to the AIME Annual Meeting and lodging; registration and social function tickets for the winner and guest. For the fourth straight year, the grand prize was awarded to Chas. Speltz of Golden, Colorado, who was responsible for 24 new members in 1978 and 140 since 1974.
- B. <u>Divisional Membership Contest</u>. The Division recording the highest percentage growth for 1978 was the Coal Division. The award is recognized in <u>MINING ENGINEERING</u> and at the SME Dinner at the AIME Annual Meeting.
- C. <u>Local Section Membership Contest</u>. The Section recording the highest percentage growth for 1978 was the Northwest Texas Section. The award is recognized in <u>MINING ENGINEERING</u> and at the SME Dinner at the AIME Annual Meeting.
- D. <u>Continuing Incentive Membership Contest</u>. With over 1,100 participants to date, 1978 marked the fourth successful year for the Continuing Incentive Membership Contest. Over 2,100 new members have been recruited under the contest program. Approximately 1,180 of the eligible membership participated in the 1978 Incentive Program, up from 1,008 in 1977.

					<u> </u>
New Members Recruited	1975	1976	1977	1978	Total Prizes
5	17	25	30	30	102
10	4	6	16	6	32
25	1	1	1	2	5
50	1	-	_	_	1
100	-	-	1	-	1

III. Membership Development Programs

In 1978, the Society, outside of its own meetings, maintained an informational exhibit aimed at, among other things, membership development. In May, an exhibit was established at the Offshore Technology Conference in Houston, Texas. In September, the Society participated in Mining & Petroleum Days in Grand Junction, Colorado. Finally, the Society's exhibit attracted vigorous traffic at the AMC International Mining Show in Las Vegas, Nevada in October.

SME-AIME SECTION ACTIVITY

I. Eastern Region

The eleven sections comprising the Eastern Region of SME-AIME experienced another active year. Financially, all sections reported healthy revenues and a balanced budget. The emphasis in 1978 was upon membership growth within established sections with an average increase of nearly seven members per section.

In the area of meetings, most sections again held regular monthly or bi-monthly meetings. Inter-city meetings included the Carolinas Fall Meeting, the Central Appalachian Fall Meeting and Mineral Economics Annual Symposium in Washington, D.C. The Florida Section hosted the 1978 SNE-AIME Fall Meeting in Orlando.

II. <u>Central Region</u>

The fifteen sections comprising the Central Region became sixteen in 1978 with the creation of the Trinity Section #156 in September. The section, with nearly 170 members by year's end, is headquartered in the Dallas/Ft. Worth metropolitan area but includes all SME members in central and eastern Texas. Just to the north and east, the Arkansas Section #58 was granted permission to expand into the entire state of Arkansas. All sections reported financial health and recorded steady growth with an average of nearly 25 new members per section throughout the region. Most sections met on a regular basis. In Corpus Christi, Texas, the South Texas Minerals Section hosted the 2nd Annual Uranium Mining Seminar and in Minnesota the Minnesota Section held its Annual Meeting and Mining Symposium.

III. Western Region

Steady growth was experienced by the thirty-four sections comprising the Western Region, with an average growth of over twelve members per section throughout the region.

Financial stability marked all sections. Most sections met regularly. Large conferences within the region included the Intermountain Minerals Conference, Mining and Petroleum Days, the Arizona Conference and the Pacific Southwest Minerals and Energy Conference and the Pacific Northwest Metals and Minerals Conference. The Colorado Section hosted the 107th AIME Annual Meeting in Denver.

SME-AIME STUDENT AFFAIRS ACTIVITY

Three new SME administered student chapters were established in 1978, bringing the total to 58 (55 domestic and 3 abroad). The three new chapters were: Alderson-Broaddus College in West Virginia, Sheridan College in Wyoming, and Indiana Vocational Technical College in Indiana.

Evidenced by registration at national meetings and award proposals received in 1978, student activity within SME-AIME is at a steady pace with 1977. To increase student participation and accountability, however, an SME-AIME working party was formed in 1978 to recommend long-range programs. They are expected to make their recommendations to the SME Planning Committee in 1979.

After reviewing nearly 40 proposals, a Student Awards Committee selected the following to be recipients of the following student awards:

1978 Best Student Chapter - Southern Illinois University-Carbondale 1978 Best Undergraduate Student Paper - Robert Weaver; Pennsylvania State University

1978 Best Graduate Student Paper - James Poole; University of Arizona

SCHOLARSHIPS

1978 was an extremely active year in the area of scholarship development. In September, the SME-AIME Board of Directors voted to adopt a National SME Merit Scholarship. The funding of the three \$1,000 scholarships began in 1980 by way of a dues billing checkoff system.

At the divisional level, 21 scholarships were awarded in 1978, totalling \$13,450. The recipients were:

Coal Division Scholarship:

Larry D. Frey
Douglas G. McQuaid
S. Dan Thompson
James A. Calvert
Richard B. Erickson
Kevin T. Humphrey
*John C. Ronan, Jr.
Scott A. Johnson
Mark Zik
David C. Reed

Julian A. Deaton, Jr.
James R. Wade
Bradley W. Settles
Larry S. Wood
John R. McClellan
Edward V. Knight
David F. Wagner

Bevlee A. Watford

Martin B. Covington

West Virginia University
West Virginia University
West Virginia University
University of Missouri

Pennsylvania State University Pennsylvania State University Pennsylvania State University

University of Kentucky University of Kentucky University of Kentucky University of Alabama University of Alabama University of Alabama

Virginia Polytechnic Institute & State University

Virginia Polytechnic Institute & State University

Virginia Polytechnic Institute & State
University

Industrial Minerals Division Scholarship:

Susan P. Gunning

University of Florida

Mineral Processing Division Scholarship:

James J. Komadina

University of Arizona

* George C. Breidenbach Scholarship

At the local SME-AIME Section level, scholarship availability increased with 21 sections reporting scholarships ranging from \$60 to \$1,000. Scholarship funds at the section level exceeded \$67,000 in 1978.

Total SME-AIME available scholarship funds including national, divisional, and local section groups amounted to \$83,860 in 1978.

HENRY KRUMB LECTURE SERIES

1978 marked the twelfth year of the Henry Krumb Lecture Series. A joint venture between SME and TMS, the series took three distinguished professionals to twenty AIME Section meetings throughout the U.S. and Mexico. The lecturers for 1978

were: Dr. Herbert D. Drechsler, Professor, University of Vancouver; Dr. Thomas V. Falkie, President, Natural Resources Division, The Berwind Corporation; and Dr. Laurence H. Lattman, Dean, College of Mines & Mineral Industries, University of Utah.

GEM

SME-AIME members continued to interface with the public, media and government bodies through their local Government, Energy and Minerals Committee (GEM). By year's end, 58 sections and subsections had formed or were anticipating the formation of a GEM Committee.

At the national GEM level, workshops or symposia were held in Denver and in Orlando.

The SME-AIME Board of Directors in September, approved the creation and funding of a GEM Award beginning in 1979. The award will recognize outstanding contributions to the SME Government, Energy, and Minerals (GEM) program within the defined scope of GEM activities. It will be made for activities at the local section level only.

CONTINUING EDUCATION

The Society's continuing education program entered a new phase in 1978 with the adoption by the Board of Directors of the "CEU" or Continuing Education Unit. Beginning with the 1978 Fall Meeting, participants received this non-academic credit which is useful in meeting the "experience" portion of the professional certification and registration examination. To record all credits, agreement was reached with the American College Testing Program (ACT) to participate in its National Registry Service. By year's end, 76 participants maintained a transcript with ACT.

The Society offered the following short courses in 1978:

Statistical Analysis of Industrial Mineral Data
Materials Handling - Part I
Materials Handling - Part II
The Underground Mining of Limestone
Blasting
Coal Mining Practices - Part I
Coal Mining Practices - Part II
Economic Principles for Property Valuations of Industrial Minerals

HONORS AND AWARDS

The following honors and awards were selected in 1973 for presentation to SME-AIME members during 1978 and 1979:

Installed as Honorary Member of AIME

Jesse F. Core

Edwin H. Crabtree, Jr.

Eugene P. Pfleider

AIME Rock Mechanics Award
Donald F. Coates

SME Best Presentation Award

Laurence H. Lattman

G.C. Sresty

Joseph A. Kleinpeter

Howard N. Eavenson Award

Robert G. Heers

Environmental Conservation Distinguished Service Award Beatrice E. Willard

A. M. Gaudin Award

Maurice C. Fuerstenau

Hal Williams Hardinge Award

Walter D. Keller

Daniel C. Jackling Award

Paul A. Bailly

Robert Peele Award

Michael W. Roper

Erskine Ramsay Medal Edwin R. Phelps

Charles F. Rand Memorial Gold Medal

Ian M. McLennan

Robert H. Richards Award

Strathmore R. B. Cooke

SME Distinguished Member Award

Frank F. Aplan

Russell H. Bennett

Strathmore R. B. Cooke

G. Donald Emigh

Maurice C. Fuerstenau

George M. Potter

Carl Rampacek

Donald O. Rausch

Chester A. Rowland, Jr.

Simon D. Strauss

F. Stewart Turneaure

Milton E. Wadsworth

William Lawrence Saunders Gold Medal Henry T. Mudd

Taggart Award Ronald L. Wiegel

Young Engineer Award Thomas J. Sawarynski

AIME Henry Krumb Lecturers
Herbert D. Drechsler
Thomas V. Falkie

Laurence H. Lattman

AIME LEGION OF HONOR (50 Years of Continuous Membership)

The following 31 SME-AIME Members will become members of the AIME Legion of Honor during 1979:

Paul Audibert James P. Bradley Charles M. Brinckerhoff William C. M. Butler, Jr. Elis M. Dahlstrom Edmund L. Dana G. L. De Huff, Jr. Edwin L. Derby, Jr. Alphonse O. Dufresne Arthur H. Fischer Edward F. Fitzhugh, Jr. Herbert W. Hard John B. Knaebel Albert S. Konselman Robert Lenon Robert L. Loofbourow F. Luchsinger William J. McKenna Ellwood B. Nelson

Ellwood B. Nelson
Don O. Noel
Harry I. Phemister
Lawrence T. Postle
Richard H. C. Leb. Ross
Edward Sampson
M. Clifford Smith, Jr.
Jasper L. Stuckey
Leonard Telfer
E. D. C. Van Dissel
Herman H. Vogel

John L. G. Weysser Lawrence B. Wright

ADMINISTRATIVE SERVICES

The major challenge in the administrative services area during 1978 was to recruit and train a new staff in Denver, since no one except the manager relocated. Selected personnel in accounting, computer and publication sales provided transition and training assistance to work in Denver on a temporary basis (up to 60 days). At this time, all positions have been filled by permanent employees who have been trained in their primary responsibility. Cross training to provide back up for all positions is still in progress.

The Society continues to use the IBM 370 computer at Kennecott Copper Corporation at Salt Lake City, through the access of a telephone long line, for membership record keeping and other accounting activities. There has been a substantial increase in the requests for mailing labels, (provided to local sections and student chapters on a no charge basis and to other appropriate continuing education activities at a cost plus charge). The membership records have been expanded to record pledges and contributions to the building fund. A proposal by Kennecott to provide immediate on-line access to the Society's membership data base is being studied.

The Society's cost and general accounting system (converted to the Kennecott 370 computer in 1977) was expanded during the year to provide:

- 1. Monthly budget reports for all Society activities and expenses, and
- 2. Monthly inventory, sales and cost reports for all Society book publications by title.

A lock box operation was started in September at the United Bank of Denver to handle cash receipts from the 1979 billing for member dues and subscriptions. This new procedure has improved the cash flow timing on such receipts and reduced the clerical work required to handle these transactions.

Respectfully submitted,

Claude L. Crowley, Executive Director REPORT

of the

EXECUTIVE DIRECTOR OF THE METALLURGICAL SOCIETY OF AIME

for 1978

TMS-AIME moved its headquarters offices from the skyline of Manhattan views of the United Nations and East River to the rolling wooded hills of western Pennsylvania during 1978.

The staff moved from the United Engineering Center in New York City in two stages during May and June of 1978 to temporary offices in north suburban Pittsburgh. Four staff members relocated, with the remaining seven staff members hired in Pittsburgh.

On December 13, 1978, the Society moved into its new headquarters building in the Thorn Hill Industrial Park, Warrendale, Pennsylvania. This brought to a culmination some $2\frac{1}{2}$ years of study and implementation of the decision to relocate the Society offices.

The relocation planning and implementation were the dominate theme of 1978. The hiring and training of new staff, packing and unpacking, and all the myriad of related activities became part of the daily office routine. Meetings with architects, contractors, and lawyers were on a weekly schedule. The combined efforts of the Architect and Legal Committees and staff brought about a smooth transition of staff changes and the thrill of moving to a new and beautiful headquarters building. The building architecture, construction, and interior decorating have all blended together to compliment the natural wooded setting.

Special thanks and recognition are due Past Presidents Harry Paxton and Bob Lund who represented TMS-AIME on the various architecture and construction committees and indeed gave considerable extra time and effort to the relocation.

The Society was particularly hit by the rising inflation which resulted in an operating deficit of \$41,774 for the year. The impact of inflation on all service areas - publications, meetings, and general member services has necessitated a dues increase for 1979. The Board also plans to expand our publication of books and introduce textbooks to improve our revenue sources.

The meetings of the Society in 1978 were all well attended and included a special conference - "International Conference on Composite Materials II." The ICCM/2 drew an international attendance of 290 from 18 countries. The 107th AIME Annual Meeting in Denver, Colorado, had an overall attendance of 4150, with nearly 1000 TMS-AIME members in attendance. The Society programmed 109 technical sessions, with about 675 papers presented.

The 1978 TMS-AIME Fall Meeting had an attendance of 920, with 506 papers presented within 73 technical sessions. The Meeting was held in St. Louis, Missouri at the Stouffers Riverfront Towers Hotel.

Publications in 1978 received the special attention of President Jaffee who has great interest and experience in the publication of conference volumes through his active role in the International Titanium Conferences and their Proceedings. An Ad Hoc Book Publishing Committee was formed to examine the possibility of publishing textbook and monograph series and other publications. Four new books, one reprinted book, one short course notebook, and three abstract bulletins, were published in 1978 along with 142 paper selections. Book orders exceeded 2800 Volumes and some 7,500 paper selections were sold, for a total book and paper selection revenue of \$80,000.

Journal of Metals saw many changes with the complete staffing change that took place with the relocation. Revised page layout and design, new monthly departments, and a new editorial approach have all been positive changes to the Journal. Increased emphasis and promotion on advertising were begun late in 1978 to increase the number of advertising pages in the Journal. Subscriptions totaled 2950, of which 750 were other AIME members.

Metallurgical Transactions continued in its role as the archival Journal of the Society. Both Met Trans A - Physical Metallurgy, up to 4700 subscribers, and Met Trans B - Process Metallurgy, up to 1900 subscribers, had a combined net subscription increase of 375.

Membership for the year remained stable, with the total slightly over 8000. A new prospectus for the Society is now being utilized to spur membership recruitment in 1979.

TMS-AIME begins 1979 in its sparkling brand new headquarters building with renewed vigor and optimism, dedicated to serve the professional metallurgical community of which our headquarters building is the latest proud symbol.

TMS-AIME

STATEMENT OF INCOME AND EXPENSE

YEAR END, NOVEMBER 30, 1978

REV	EN/	UE
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gage was always to		
Member Due	s and Fees	\$165,768
Publicatio		94,145
	n Monthly Journal	•
AIME Endow	ment Funds	123,008
	nd Dividends	1,239
	AIME Annual Meeting	19,093
	Offshore Technology Conference	56,780
	Fall Meeting	22,272
	Electronic Materials Conference	34,915
	Short Course	18,671
		10,825
Relocation	International Conference on Composite Materials II	32,129
Other	rund	61,841
other	•	14,045
TOTAL REVENUE		\$654,731
		7034,731
EMPENAR		
EXPENSE		
AIME Corpor	rate Headquarters	\$ 26,328
	adquarters and Business Services	-
Publication	s: Books, Paper Selections and Proceedings	163,568
Publication	Monthly Journal	87,108
	Development	177,921
	l Student Chapter Rebates	27,056
	AIME Annual Meeting	11,610
necerngs.		55,835
	Offshore Technology Conference Fall Meeting	293
		39,233
	Electronic Materials Conference	13,258
	Short Course	3,260
Annan Jana ma	International Conference on Composite Materials II	26,230
	IS-AIME	1,635
Relocation	Expense	63,170
TOTAL EXPENSE		\$696,505
		100,000
EXPENSE OVER R	EVENUE	(\$ 41,774)

MEETINGS DEPARTMENT

TECHNICAL CONFERENCES

The Metallurgical Society of AIME, sponsored or co-sponsored five technical conferences during 1978.

Conference	Attendance	Number of Technical Sessions	Number of Papers Scheduled
107th AIME Annual Meeting; Executive Tower Inn, and Denver Convention Center; Denver, Colorado February 26 - March 2	4,150 919 TMS	109	674
The International Conference on Composite Materials (ICCM II); Toronto Harbour Castle Hilton; Toronto, Ontario, Canada April 16-20	290 II	29	160
10th Annual Offshore Tech- nology Conference; Houston Astrodome; Houston, Texas May 8-11	79,800 46 TMS		
20th Electronic Materials Conference; University of California at Santa Barbara; Santa Barbara, California June 28-30	411	12	108
1978 TMS-AIME Fall Meeting; Stouffer's Riverfront Towers St. Louis, Missouri October 15-19	920	73	506

SCHEDULE OF TMS-AIME CONFERENCES FOR 1979 AND 1980

|--|

January 22-24

High Strength - Low Alloy Steel Conference;

Versailles, France

January 31 - February 2

1979 Golden Gate Metals & Welding Conference;

Sheraton Palace; San Francisco, California

February 18-22

108th AIME Annual Meeting; New Orleans Marriott; New Orleans Hilton; The International House, and

other hotels; New Orleans, Louisiana

April 30 - May 3

11th Annual Offshore Technology Conference;

Houston Astrodome; Houston, Texas

June 18-21

Rapid Excavation and Tunneling Conference and

Exhibit; Atlanta Hilton; Atlanta, Georgia

June 24-29

International Conference on Martensite; Kresge

Little Theatre; Massachusetts Institute of

Technology; Cambridge, Massachusetts

June 28-30

21st Annual Electronic Materials Conference;

University of Colorado at Boulder; Boulder,

Colorado

September 16-20

TMS-AIME Fall Meeting; Milwaukee Exposition Center and Arena (MECCA); The Marc Plaza and

The Downtowner Motor Inn; Milwaukee, Wisconsin

1980

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

June

22nd Annual Electronic Materials Conference

(dates and location to be announced)

August 25-28

The International Conference on Composite Materials III (ICCM III); Paris, France -tentative-

October 5-9

TMS-AIME Fall Meeting; The William Penn Hotel, The Hyatt House; Pittsburgh, Pennsylvania

MEMBERSHIP DEPARTMENT

This department continued in 1978 with one full-time staff member and one part-time temporary employee. Included in its activities are processing new member applications, change of address and status, and membership promotion. Of special significance was the transfer of membership records and billing to a new in-house Sperry Univac BC/7 computer.

Membership promotion campaigns through meetings, direct mail, and various follow-up work brought in 311 new members in 1978. The membership contest initiated in 1975 had participation by more than 100 members.

TMS-AIME MEMBERSHIP JANUARY 1, 1979 BY GRADE CLASSIFICATION

Member	3,689
Associate Member	1,130
Junior Member	746
Student Member	2,290
Honorary Member	7
Senior Member	231
Life Member	6
GRAND TOTAL	8,099

The following table shows TMS-AIME Membership by Technical Division for 1975 - 1978

TMS-AIME MEMBERSHIP 1975 - 1978

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
E&PM	1,715	1,863	2,103	2,041
AM&MS	2,973	2,998	3,090	2,964
Education	- * 25 - 2 - 4	39		53
Economics	51	52	, • 53 °	47.
Unclassified	1,124	892	780	704
Total Members	5,888	5,844	6,070	5,809
No. of Members Gained (Lost)	167	(44)	226	(261)
Percent Change	2.83	(.99)	3.84	(4.30)
Student	2,183	1,974	1,997	2,290
GRAND TOTAL	8,071	7,815	8,067	8,099

PUBLICATION DEPARTMENT

Journal of Metals and the TMS Publication Department have a common staff. This staff is entirely new in the move of TMS from New York City to Warrendale, Pa. The staff is:

> Director of Publications John B. Ballance

Editor, Journal of Metals

Manager of Publications Ronald W. Sommer

Managing Editor, Journal of Metals

Advertising Manager Linda L. Morgan

Linda W. Flindt Associate Editor, Journal of Metals

Production Coordinator Barbara Pontello

Graphic Artist Judith M. Uhl

Linda Hilliard Advertising Administrative Assistant

1978 TMS-AIME PUBLICATIONS

Light Metals 1979, edited by John J. Miller, from 107th AIME Annual Meeting in Denver. Two volumes, total of 960 pages. Paperback.

Hardenability Concepts With Application to Steel, edited by D.V. Drane and J.S. Kirkaldy, from a symposium held at the 1977 TMS-AIME Fall Meeting in Chicago. 626 pages. Hardback.

Formability: Analysis, Modeling, and Experimentation, edited by S. S. Hecker, A. K. Ghosh, and H. L. Gegel, from a symposium held at the 1977 TMS-AIME Fall Meeting in Chicago. 284 pages. Hardback.

ICCM/2: Proceedings of the 1978 International Conference On Composite Materials, edited by B. Noton, R. Signorelli, K. Street, and L. Phillips, from a symposium held in April, 1978, in Toronto. 1657 pages. Hardback.

Solvent Extraction in Process Metallurgy, TMS-AIME Short Course prepared by G. M. Ritcey and A. W. Ashbrook, for presentation at the 107th AIME Annual Meeting in Denver. 213 pages. Paperback.

Reprinted in 1978: Light Metals 1978 was completely sold out by November, 1978; a reprinting of 200 copies of the two-volume set was made, and sales continue to be strong.

ABSTRACT BULLETINS PUBLISHED IN 1978:

TMS-AIME Sessions for the 107th AIME Annual Meeting
TMS-AIME Fall Meeting
Electronic Materials Conference

PAPER SELECTIONS

A total of 142 papers were published in the TMS-AIME Paper Selections program, of which 58 were from the Light Metals volumes.

JOURNAL OF METALS - ADVERTISING

1978 Advertising for the Journal netted \$57,565, down from the \$68,852 from 1977. Very strong efforts are underway to strengthen the advertising efforts. Unproductive representatives have been replaced by more aggressive salesmen.

JOURNAL OF METALS

For the fiscal year ended November 30, 1978, the JOURNAL OF METALS published 746 pages. This breaks down as follows:

Technical articles	272	2/3 pages
Society News & Promotion of Society sponsored events (e.g. meeting programs)	105	1/2 pages
Directory	102	pages
Departments	181	1/6 pages
Display Advertising	29	1/2 pages
Classified Advertising	35	5/6 pages
House Advertisements	7	1/3 pages
Covers	12	pages
TOTAL	746	pages

The technical programs for three meetings were published in <u>Journal of</u> Metals during 1978:

107th AIME Annual Meeting 1978 Offshore Technology Conference (TMS-AIME Sessions only) 1978 TMS-AIME Fall Meeting

The 1978 theme issues were as follows:

January Environment and Economics Advances in Mechanical Properties Testing February Annual Review of Extractive and Process Metallurgy March April Modern Steels for Offshore Technology May Process Control in Metals Production June Analysis in Metallurgical Systems July Copper Technology August Materials Availability: TMS Membership Directory September Light Metals Technology October | Welding and Joining November Lead-Zinc-Tin Technology

The concept of theme issues has been replaced by a policy of attempting to address all major areas of TMS metallurgists in each monthly issue.

TMS-AIME INVENTORY AND BOOK STATUS YEAR END, NOVEMBER 30, 1978

				,				
	Number	Cost	Inv	Inventory 11/30/78	1978	Overal1		income over
	Printed	Per Copy	Quantity	Value	Income	Income	Expense	(Expense)
Failure Modes II ('74)	550	\$ 4.33	289	\$1,251.37	\$ 485.60	\$ 3,695.25	\$ 1,480.11	\$ 2.215.14
Failure Modes III ('76)	220	6.65	13	86	1,389.50	7	-	3,305.
1977 (1,100	11.51	59	679.09	1			
1978 (178)		9.08	424	3,849.92	20,445.10	75,054.60	33,598.49	41,456.11
	1,042	2.33	248	577.84	999.40	11,248.10	4,103.60	7,144.50
- 1								
Thermodynamics ('75)	491	3.40	110	374.00	2,919.00	15,689,20	2.265.59	13,423,61
Extractive Metallurgy							i	
of Copper ('76)	2.540	5.65	885	5.000.25	5,602,60	50.767.22	17,512,99	33,254,23
es Theory P								
Transformation ('76)	1,044	1.39	240	333.60	1,944,40	7,576,90	1.651.97	5.924.93
ICCM	Vol	. I 10.49	6	94.41	ł		4	
Proceedings I ('76)	800 Set		99	1,343.36	2,523.00	16,005.34	16,770.88	(765.54)
					N			
Proceedings II ('78)	716	24.01	537	12.893.37	5,448,00	2 448 00	17.507.88	(12,059,88)
Computer Control ('76)	275	3.23	2	9	077	284	104	6.179
Effect Hydrogen Behavior								
of Materials ('76)	871	8.89	144	1,280.16	3,768.00	15,859,30	7.327.60	8.531.70
Hot Deformation ('77)	550	9.03	142	1,282,26	849	113.	•	151
Work Hardening ('77)	490	3.87	166	642.42	2,786,20	.678	.897.	781
Electro & Thermo Transport(77)	525	2.20	318	699.60	1,685.20	•	٠.	٠
Materials Selection For The							ŧ	4
Minerals Industry ('78)	297	2.30	150	345.00	2.088.80	2.378.30	1,116,07	1 262 23
	695	11.85	413	4.894.05	.966	611		
							4	
callurgy ('7	220	5.14	131	673,34	0.00	00.0	1,131,84	(1,131,84)
Hardenability Concepts ('78)	1,257	5.48	1,191	6,526.68	1,001.50	1,001.50	7,075,47	073
	٠							
				\$42,833.63	\$64,371.90	\$237,449.31	\$127,828.42	\$109,620.89

METALLURGICAL TRANSATIONCS A AND B COMBINED

Technical Papers Published

	No. of TPs	No. of Pages	Total Pages
A Sub+ and ASM B Sub++ ISS	215 48 22	1,706 382 177	
TOTAL	285	2,265	2,265
	Communications Published	·	
A Sub+ and ASM B Sub++ ISS	46 8 <u>9</u>	108 15.5 20.5	
TOTAL	63	144	144
Title Pages and Table of Blank Pages	Contents, etc.	•	76 <u>141</u>
Total Pages in METALLURGI	CAL TRANSACTIONS A AND B		2,626*

^{*} 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.

⁺ TMS-AIME A Subcommittee

⁺⁺ TMS-AIME B Subcommittee

METALLURGICAL TRANSACTIONS A AND B - REPORT FOR 1978

METALLURGICAL TRANSACTIONS A

<u>Technical</u>	Papers Publish	ed	
	No. of TPs	No. of Pages	Total Pages
A Sub+ and ASM B Sub++ ISS	202 3 0	1,608 26 0	region de la ci- color designation
TOTAL	205	1,634	1,634
Communic	ations Publish	<u>ied</u>	and the second of the second o
A Sub+ and ASM B Sub++ ISS	45 0 0	105	
TOTAL	45	105.	105
Title Pages and Table of Contents, Blank Pages	etc.		56 101
Total Pages in 1978 MET TRANS A	l iga		1,896
METALLURGIC	AL TRANSACTION	IS B	
<u>Technical</u>	Papers Publish	<u>ied</u>	
	No. of TPs	No. of Pages	Total Pages
A Sub+ and ASM	12	98	A service of the serv

	No. of TPs	No. of Pages	Total Pages
A Sub+ and ASM B Sub++ ISS	12 45 22	1//	- 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1946 - 1946 - 1946
TOTAL	79	631	631
Communication of the second se	ons Publishe		
A Sub+ and ASM B Sub++ ISS	1 8 9	3 15.5 20.5	
TOTAL HOLD WAS IN SAME WAS IN THE BOOK AND T			39
Title Pages Table of Contents, etc. Blank Pages	ling o karenî		40
	erin statten.		730

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HONORS AND AWARDS

TMS-AIME Board of Directors has elected the following members to the grade of Fellow in 1979.

Robert E. Lund
Robert Maddin
Allen S. Russell
Paul G. Shewmon
Gareth Thomas

The following awards were presented by The Metallurgical Society of AIME to recognize our 1978 award recipients.

Robert Lansing Hardy Gold Medal

Ronald Gronsky 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 William D. Nix for his important contribution to the understanding of the role of diffusion in the mechanism of creep in metallic solid solutions.

Extractive Metallurgy Science Award

Robert G. Barton and J. Keith Brimacombe were selected for this award for their paper "Influence of Surface Tension-Driven Flow on the Kinetics of Oxygen Absorption in Molten Copper."

Extractive Metallurgy Technology Award

Hart F. Graff and John A. Thornton were selected for this award for their paper "An Analytical Description of the Jet Finishing Process for Hot-Dip Metallic Coatings on Strip."

William Hume-Rothery Award

The William Hume-Rothery Award was bestowed posthumously upon Lawrence S. Darken.

LECTURES

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

Professor Herbert H. Kellogg: "Toward a Materials-Conservation Ethic"

Extractive Metallurgy Lecture

Professor Terkel Rosenqvist: "Phase Equilibria in the Pyrometallurgy of Sulfide Ores"

Institute of Metals Lecture and R. F. Mehl Award

Professor James C. Li: "Physical Chemistry of Some Microstructural Phenomena"

ACKNOWLEDGEMENT

Appreciation is extended to all members, Officer, and Directors of The Metallurgical Society of AIME. Special thanks to President Robert I. Jaffee.

Thanks also to the staff who have performed most admirably. The staff as of January 1, 1979, by position:

<u>Title</u>	Name	Years of Service
Executive Director	Alexander R. Scott	8
Administrative Assistant	Marilyn Zabel	1
Director of Administration	Peter D. DeLuca	5
Conference Manager	Thomas J. DeSalvo	2
Program Coordinator	Joan DeLuca	3
Membership Records Manager	Frank Denio	1
Director of Publications	John B. Ballance	. 1
Manager of Publications	Ronald W. Sommer	1
Advertising Manager	Linda L. Morgan	1
Advertising Admin. Assistant	Linda Hilliard	1
Associate Editor	Linda W. Flindt	1
Production Coordinator	Barbara Pontello	1
Graphic Artist	Judith M. Uhl	1
Mail Room Supervisor	Ed DeTrude	1

Respectfully submitted,

Alexander R. Scott Executive Director

allyander 11.0

REPORT

of the

EXECUTIVE DIRECTOR OF THE IRON AND STEEL SOCIETY OF AIME

for 1978

The year of 1978 was a year of fulfilling and completion for the Iron and Steel Society of AIME. In fact, it is doubtful that the Society will ever be called upon to match the accomplishments achieved in 1978.

The fiscal year started on a high point with the 35th Annual Electric Furnace Conference held in Chicago, December 6-9. The keynote session was on the subject of Energy in the Form of Electricity. Attendance at the Conference exceeded 1200. The success of the Electric Furnace Conference was followed by the not-so-successful 20th Annual Mechanical Working and Steel Processing Conference (MWSP) also held in Chicago, January 24-26. Unfortunately, the timing of the Conference coincided with a blizzard which crippled the air transportation system in the Midwest and Northeast. Thus, attendance at the Conference was severely reduced. However, if anyone questioned the wisdom of the MWSP Executive Committee's decision to hold the 1979 Conference in October instead of the traditional January meeting date, the blizzard quickly justified the decision.

In April of 1978, the Iron and Steel Society successfully completed its most ambitious undertaking: that of hosting the Third International Iron and Steel Congress. The four day Congress was attended by over 550 people from all over the world. The Congress was held concurrently with the 61st Annual National Open Hearth and Basic Oxygen Steelmaking Conference and the 37th Annual Iron-making Conference. Attendance at all three conferences exceeded 2200 people. All papers were presented in English. The first two general sessions were simultaneously translated into four languages. Iron and steelmaking industries from 25 countries outside of North America were represented. Authors from every major steel producing country in the European Common Market presented papers. Papers were presented from Poland, Hungary, Yugoslavia, and Czechoslovakia. Attendees and authors came from Brazil, Venezuela, Australia, New Zealand, India, and South Africa. Papers were presented from every major steel company in Japan. Every major metallurgical research center in the world was represented.

The Society's Conference programming for 1978 was further expanded in October of 1978, when the Ironmaking Division joined with the Coal Division of our Sister Society of Mining Engineers in sponsoring a special theme conference "The Mining and Coking of Coal" in Pittsburgh. The Conference attracted over 220 registrants.

Those attending rated the Special Conference an unqualified success. In fact, the requests for a repeat Conference in the near future is under study by the Ironmaking Executive Committee.

From an administrative viewpoint the activities of the Society were awesome. In February a construction contract was signed by the Iron and Steel Society and The Metallurgical Society to build a \$500,000 office building in Warrendale, Pennsylvania, approximately 20 miles directly north of Pittsburgh located at the intersection of Exit 3 of the Pennsylvania Turnpike and the Warrendale access to U. S. Interstate 79 Highway. The 12,000 square feet two-story office building is located on a beautiful four-acre lot in the Thorn Hill Industrial Park. Construction on the building was undertaken in June and the building was available for occupancy by the two Societies, the first week of December. The Iron and Steel Society Headquarters staff occupied the new office quarters December 12, 1978.

Only four of the eleven-person New York staff relocated to Pittsburgh: Lawrence Kuhn, Claire Schmitt, Theresa Nine and Peter Haft. The Society regretfully terminated Otto Johnson, twenty-one years service with AIME, Vera Dailey, ten years service, Rosa Rivera and Mary Lillian Irvine with four years service, and Yolanda Chan with over three years service. All were offered the opportunity to relocate to Pittsburgh and declined. Severance pay based on years' service was paid to all upon termination.

In addition to hiring replacements for those who remained in New York (See last page of this report.) the Society leased an in-house computer and completed the input of Society data by July 1, 1978. The computer was utilized for the membership billing in October, and the membership rolls, (addresses, membership classification, etc.) since August. On December 1, 1978 the program for book inventory and sales was put into operation. Programs for membership promotion, book promotion, and magazine subscription promotion have been drawn up and will be implemented early in 1979. The success to date of the computer and its service and availability to the Headquarters staff and the Society has exceeded our most optimistic projections.

FINANCE

The Society's consolidated income for fiscal 1978 totaled \$674,577. Total operating expense equaled \$668,056. The surplus for the year was \$6,521.

ISS-AIME LOCAL SECTIONS

At the end of fiscal 1978, 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, 1978.

1)	Eastern Iron and Steel Section of AIME	588
2)	Cleveland Iron and Steel Section of AIME	262
3)	Detroit Iron and Steel Section of AIME	186
4)	Globetrotters Iron and Steel Section of AIME	423
5)	Niagara Section of AIME	152
6)	Penn-Ohio Section of AIME	166
7)	Western Iron and Steel Section of AIME	133
8)	Chicago Section of AIME	654

In November 1977, the AIME Executive Committee approved the formation of a subsection of the Chicago AIME Section. The new subsection, which will be affiliated with ISS-AIME has taken the name of the Greater Chicago Steelmaking Group.

In addition to the local sections and subsection there are two study groups affiliated with the above ISS-AIME Sections. There is the Northern Ohio Steelmaking Division, which operates in the Penn-Ohio geographical area, and the Buffalo Hamilton NOH group which operates in the Niagara geographical area.

AWARDS

The James B. Austin Award will be presented to Arthur Marcantonio, 1978 President of the Iron and Steel Society on February 20, 1979 at the ISS/PTD luncheon, at the New Orleans Marriott. 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 1979. 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 1979 are:

Harry L. Bishop, in recognition of his contribution in process metallurgy of stainless steels and his dedication to Society Affairs as 1976 President.

William H. Wise, in recognition of his contributions in the manufacturing of ferro alloy and his distinguished participation in Society Affairs as 1975 President. Mr. Wise is 1979 President of AIME.

Kurt R. Mattson, (deceased) in recognition of his contribution to the founding of the Iron and Steel Society of AIME.

The following awards were presented by the Iron and Steel Society of AIME during 1978:

Robert W. Hunt Silver Medal Award

D. J. Wilson, E. Snape, and J. J. deBarbadillo were selected for this award for the best original paper on iron and steel, "Desulfurization, Deoxidation, and Sulfide Shape Control with Nickel-Magnesium".

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 1978 recipient was Donald G. White for his contribution to blast-furnace technology through the development of probes for measuring the gas temperature and composition in the stack of the blast furnace, the use of top-gas analysis for computer control of the blast furnace and the application of theoretical relationships for projecting furnace performances.

Frank B. McKune Award

This award is given for the best paper on open hearth or basic oxygen steel-making written by an author or authors under forty years of age. The recipient of the 1978 award was Kenneth G. Kemlo, for his paper "Reduction of Ingot Butt Losses".

Conference Award

This award is the "runner-up" to the Frank B. McKune Award and was presented in 1978 to J. Stravinskas and M. R. Deamer for their paper "Influence of Operating Variables on BOF Yield".

Charles H. Herty, Jr. Award

S. K. Sharma, J. W. Hlinka, and D. W. Kern were selected for this award for the best paper presented at the 1977 National Open Hearth and Basic Oxygen Steel Conference, and published in the Conference Proceedings. The title of the paper is "The Bath Circulation, Jet Penetration and High-Temperature Reaction Zone in BOF Steelmaking".

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 1978, the award was bestowed upon E. T. Turkdogan for his paper "Reaction Mechanisms in Q-BOP Steelmaking".

Ironmaking Conference Award

The 1978 Ironmaking Conference Award was presented to S. Hashimoto, O. Suzuki, and H. Yoshimoto for the best paper presented at the 1977 Ironmaking Conference. The paper title is "Burden and Gas Distribution in the 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. Tennenbaum Award, honoring one of the earliest Chairmen of the Mechanical Working and Steel Processing Committee. In 1978, the Award was presented to S. K. Kyriakides and J. M. Hambright for their paper. "Production Quality of Strand Cast Steel".

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 1978 recipients of this award were C. D. Hopkins and R. J. Bassett for their paper, "The Effect of Lubricant Behavior on Product Quality and Cold Rolling Mill Performance" and H. Matsubara, I. Kozasu, J. Nose, K. Kunioka, and J. Tanaka for their paper, "Characteristic Features of Heat Treated Line Pipes".

Charles W. Briggs Award

This award is conferred for the best paper presented at the Annual Electric Furnace Conference. The 1978 award was given to R. I. L. Guthrie for his paper "Addition Kinetics in Steelmaking".

Joseph Becker Award

This award is given for distinguished achievements in coal carbonization and was presented in 1978 to John H. Walsh.

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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 1978 award was presented to Charles M. Squarcy.

Reinhartz 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 1978 to Jane Ellen Cahl.

MEETINGS DEPARTMENT

TECHNICAL CONFERENCES

The Iron and Steel Society of AIME, through its Divisions, sponsored or cosponsored seven technical conferences during 1978.

Conference	Attendance	Number of Tech- nical Sessions	Number of Papers Scheduled
20th Mechanical Work- ing and Steel Process- ing Conference, McCormick Inn, Chicago, IL	173	6	20
January 26-27			
107th AIME Annual Meet- ing, Holiday Inn Downtown, Denver, Colorado February 26-March 2, 1978	91	14 (1) (1) (1) (1) (1) (1) (1) (1	76 ************************************
3rd International Iron & Steel Congress Palmer House Chicago, IL April 16-20, 1978	550	17	97 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
61st National Open Hearth and Basic Oxygen Steel Conference, Palmer House, Chicago, IL April 16-20, 1978	960	12	56
37th Ironmaking Conference Palmer House, Chicago, IL April 16-20, 1978	637	13	55
Mining & Coking of Coal, Holiday Inn - Airport, Pittsburgh, PA October 2-3, 1978	218	3	12
36th Electric Furnace Conference, Royal York Hotel, Toronto, Ontario December 5-8, 1978	1336	10	47

SCHEDULE OF ISS-AIME CONFERENCES FOR 1979 and 1980

1979

February 18-22

108th AIME Annual Meeting, New Orleans Marriott,

New Orleans, Louisiana.

March 25-28

62nd National Open Hearth and Basic Oxygen Steel Conference

and 38th Ironmaking Conference. Detroit Plaza Hotel,

Detroit, Michigan.

October 24-25

21st Mechanical Working and Steel Processing Conference,

Cleveland Marriott, Cleveland, Ohio.

December 5-7

37th Electric Furnace Conference, Plaza Hotel, Detroit.

Michigan

1980

February 24-29

109th AIME Annual Meeting, Las Vegas, Nevada.

March 23-26

63rd National Open Hearth and Basic Oxygen Steel Conference and 39th Ironmaking Conference, Washington Hilton, Washington,

23

C. C.

October

22nd Mechanical Working and Steel Processing Conference.

December 10-12

38th Electric Furnace Conference, Pittsburgh Hilton,

Pittsburgh, Pennsylvania.

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 1978 are as follows:

Conference	Exhibitors
61st National Open Hearth and Basic Oxygen Steel Conference/37th Ironmaking Conference and 3rd International Iron and Steel Congress.	35
36th Electric Furnace Conference	23

MEMBERSHIP DEPARTMENT

The Iron and Steel Society has a membership target of 5,000 members in good standing by January 1, 1980. As of December 31, 1978 there were 4,495 members in good standing. To meet the Society's goal, a membership drive is planned to attract over 500 new members in 1979.

PUBLICATION 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.

During the year, the Publications Department published four conference proceedings books.

ISS PUBLICATIONS IN 1978

Electric Furnace Proceedings, 1977, Volume 35, Chicago, Illinois 64 papers, 322 pages

Ironmaking Proceedings, 1978, Volume 37, Chicago, Illinois 54 papers, 637 pages

Steelmaking Proceedings, 1978, Volume 61, Chicago, Illinois 51 papers, 584 pages

Mechanical Working and Steel Processing Proceedings, Volume XVI Chicago, Illinois
19 papers, 350 pages

OFFICERS OF IRON AND STEEL SOCIETY OF AIME

Arthur Marcantonio

President

Edward J. Ostrowski

Past President

Edmund J. Whittenberger

President-Elect

George W. Knepshield

Treasurer

IRON AND STEEL SOCIETY OF AIME HEADQUARTERS STAFF

Lawrence Kuhn

Executive Director

Claire Schmitt

Conference Director

Ruth Kline Azar

Manager - Publications

Peter Haft

Manager - Membership Affairs .

Robert Keil

Manager - Finances

Bernard Queneau

Technical Editor

Theresa Nine

Administrative Ass't. to Director

Beatric Gondek

Conference Assistant

Ronald Jesiolowski

Graphics and Production

Judith Connolly

Publication Assistant

Altha Shoup

Secretary

Respectfully submitted,

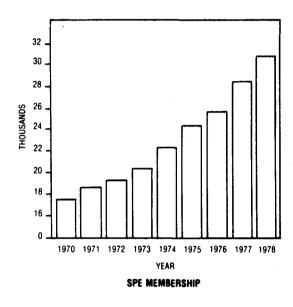
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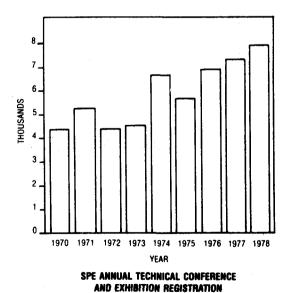
Lawrence G. Kuhn Executive Director

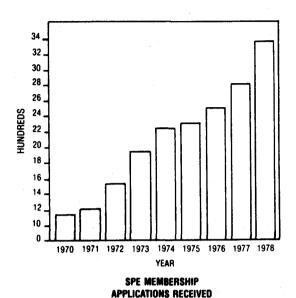
REPORT OF THE EXECUTIVE DIRECTOR OF THE SOCIETY OF PETROLEUM ENGINEERS OF AIME

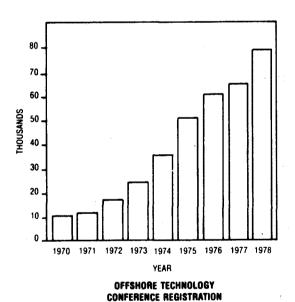
OVERVIEW

Expanded meetings and publication programs, enlarged continuing education and member service activities, and a total membership that exceeded 30,000 for the first time in the Society's history all combined to make 1978 a highly successful year for the Society of Petroleum Engineers of AIME.









	EUROPEC '78
NUMBER (OF REGISTRANTS
NUMBER (OF EXHIBITS 450
NUMBER (OF NET SQUARE METRES FOR EXHIBITS . 1.300
NUMBER (OF TECHNICAL PAPERS:
ACCEPT	ED
PRESEN	ITED

PLANNING

Because of the large number of high priority programs initiated in late 1977 and early 1978, the Board voted to undertake no new activities during the latter half of 1978. However, further implementation of the Plan will be discussed at the June, 1979, meeting of the Board of Directors.

INTERNATIONAL ADVISORY COMMITTEE

In February, 1978, the SPE Board of Directors approved the establishment of an International Advisory Committee (IAC). This action was the outgrowth of a recommendation by the Society's Long Range Planning Committee that a group be formed to cope with the problems of, and to strengthen the ties between, Sections outside the SPE regional administrative structure and in areas where there are a significant number of SPE members but where no established Section exists.

Meetings of the IAC will be held in association with regularly scheduled international technical meetings. Initially, the IAC will be composed of representatives from four geographical areas—Europe/West Africa, Middle East/North Africa, Far East, and South America.

The first meeting of the IAC was held in conjunction with the Region X Section Officers Conference on October 23, 1978, during the European Offshore Petroleum Conference and Exhibition in London. Committee members in the Middle East/North Africa area will meet in Bahrain with the officers of Sections in that area during the Middle East Oil Show in March, 1979.

MEMBERSHIP

SPE membership topped the 30,000 mark for the first time in the Society's history. It marked the fifteenth consecutive year in which SPE membership had increased over the previous year. The net gain of 2,512 members during the year (an 8.9 percent increase) was the second largest net increase for SPE, just behind the 2,689 gain recorded in 1977.

For the fourth consecutive year, a record number of new member-reinstatement applications (excluding students) was received--3,335, as compared with 2,710 in 1977, 2,540 in 1976, and 2,273 during 1975.

In October, 1977, an ad hoc committee was appointed to discuss various problems encountered by the Membership and Admissions Committees concerning membership endorsements and application procedures. As a result, the requirements for Associate Junior Member were broadened and the requirements for Member and Associate Member grades clarified. A new Application for Membership was printed in June, 1978, which clearly defines each of the grades of membership and the requirements for each.

In June, 1978, the Board approved a proposal by the SPE Membership Committee to credit each Local Section and member for obtaining a new member following approval of the application by the Admissions Committee. (In the past, credit has always been given upon receipt of the application in the SPE office.) This practice went into effect on July 1, 1978, for a one-year trial period.

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

^{*} Excludes Students

Seven Local Sections were recognized for outstanding membership development in 1977-1978--the Northern Plains (Omaha, Nebraska); South Plains (Lubbock, Texas); Egyptian (Cairo, Egypt); Singapore; East Texas (Tyler, Texas); London Petroleum; and Denver Petroleum Sections.

Kenneth W. Robbins, with Otis Engineering Corporation, received recognition at the 1978 Fall Meeting in Denver for obtaining 100 new-member applications, and David Stewart Smith of Marathon Oil Company was the winner of the special Membership Development Contest.

LOCAL SECTIONS

In 1978 SPE officers visited 55 of the Society's 72 Local Sections and attended all Regional Section Officers Conferences. During the year new services were made available to Local Sections, including the providing of (1) address labels at no charge for the mailing of monthly meeting notices; (2) Local Section membership rosters to both the Local Section Secretaries and the Membership Chairmen; and (3) a monthly newsletter to apprise the Section officers of activities and programs being carried out in other Sections and to bring to their attention new programs and serves that are available from headquarters.

STUDENT ACTIVITIES

SPE's Student Chapter and Student Development Programs were major activity areas during 1978. Student membership jumped 18 per cent from 2,070 in June, 1977, to 2,531 in June, 1978.

By the end of 1978, 33 schools had officially been granted SPE Student Chapter charters. Four new Chapters were established during the year at the Muskingum Area Technical College, Michigan Tech, Tulane University, and the University of Ciaro. Additionally, eight other schools have begun the process of petitioning for an SPE Student Chapter charter.

During the 53rd Annual Technical Conference and Exhibition in Houston, Texas A & M University was recognized as the Outstanding SPE Student Chapter for 1978. The 1979 SPE President, Charles L. Bare, presented the award to A & M Chapter President Mark Ellis at the Student Session. For the first time, a Student Chapter Officers Workshop was held preceding the Student Session. Officers, faculty sponsors, and industry sponsors representing 17 schools attended.

During the 1977-1978 academic year an SPE Student Chapter Speakers Bureau was established. Fifty-two speakers accepted invitations to participate on a voluntary basis for one year.

Twenty-six SPE Student Chapters participated in four SPE regional Student Paper Contests during the 1978 spring semester. Increased coverage in <u>JPT</u> through a monthly student page allowed Chapters to submit reports on field trips, seminars, fundraising projects, Distinguished Lecturer guest appearances, awards and banquets, sponsoring Local Section/Chapter activities, social and Engineering Week activities, and intramurals.

SCHOLARSHIPS

The Society's Board of Directors limited the amount of money it would contribute to the Local Section Scholarship Support Program in the future to a total of \$60,000 per year, with a maximum of \$4,000 to any one Section. This maximum sum of \$60,000 was contributed in 1978 when 54 SPE Local Sections pledged \$67,046.50 for the 1979-1980 scholastic year. Since the beginning of the program five years ago, more than \$435,000 has been granted to students through the SPE Local Section Scholarship Support Program.

The Society also cooperates in selecting outstanding petroleum engineering students to receive the annual Petroleum Equipment Suppliers Association (PESA) scholarships.

MEETINGS

A total of 7,950 persons registered for the 1978 SPE Annual Technical Conference and Exhibition in Houston, which featured a 198-paper technical program. An all-time record 298 booths were displayed as part of the technical exhibition.

Registration at the first European Offshore Petroleum Conference and Exhibition (EUROPEC), which was held October 24-27, 1978, at Earls Court in London, topped the 15,300 mark. Featured at EUROPEC were a 100-paper technical program and an exhibition of almost 140,000 net square feet. Plans are being made to stage the second edition of EUROPEC in 1980.

SPE maintained its role of leadership in the Offshore Technology Conference. More than 79,000 registered for the Conference in 1978, and OTC continued its ranking as the world's leading forum for the exchange of technology on offshore resource development in addition to being recognized as the largest annual technical conference and exhibition in the U.S. SPE had 38.2 per cent of the registered Sponsor Society members at the 1978 Conference. The SPE staff managed the Conference, as it has done annually since the 11 Sponsor Societies approved formation of the Offshore Technology Conference in 1968.

Plans are currently underway to stage two SPE "Forum Series" meetings in 1979. These off-the-record conferences provide in-depth looks at specific technical areas.

1978 REGIONAL-TOPICAL MEETINGS

Meeting/ Meeting Site	Registration	Papers on Program	Number of Papers Printed
California Regional Meeting San Francisco, California	715	44	800
Eastern Regional Meeting Washington, D.C.	274	14	250
Engineering Manpower Conference Houston, Texas	65	8	150
Formation Damage Symposium Lafayette, Louisiana	579	18	675
Gas Technology Symposium Omaha, Nebraska	116	13	400
Improved Oil Recovery Symposium Tulsa, Oklahoma	1431	53	1600
Nigerian Symposium Lagos, Nigeria	250	8	0
Offshore Southeast Asia Conference Singapore	1800	12	12
Production Technology Symposium Hobbs, New Mexico	142	18	200
Rocky Mountain Regional Meeting Cody, Wyoming	334	17	350
Southwest Texas Regional Meeting Corpus Christi, Texas	124	6*	150
TOTAL	5830	211	4587

^{*}Had a panel in addition to papers presented.

The first SPE engineering manpower conference—"Petroleum Engineering Manpower Supply and Demand—The Critical Balance"—was held in Houston in June, 1978. The conference brought together representatives of industry and the academic community to review present manpower demands and university enrollment statistics and to forecast future petroleum industry manpower requirements. The Conference was organized by a Society ad hoc committee but, at the suggestion of participants that these Conference be held periodically in the future, the SPE Board of Directors has given permanent status to the committee. The standing committee is charged with conducting petroleum engineering manpower surveys and conferences to assist industry and academia in assessing the number of petroleum engineering graduates needed to meet the future requirements of the petroleum industry. A second survey has been launched as the basis for a second conference planned for June, 1979.

PROGRAMMING

The Technical Coverage Committee was established by the SPE Board in late 1977 as a recommendation of the Long Range Planning Committee. The major responsibilities of the Committee are to constantly survey the technical areas encompassed by the Society's technology and to work with program and editorial committees to ensure proper coverage of these topics in the meetings and publications programs.

Current projects of the Committee include (1) developing a new feature series in JPT--"Technology Summary;" (2) increasing participation by operating personnnel in SPE programs; (3) increasing programming in the geophysics/engineering area; (4) assisting SPE Sections in forming study groups on special subject areas similar to the former API Chapter Study Groups; (5) developing recommendations to the SPE Board that will clarify the sponsorship issue on topical meetings; and (6) interfacing with other technical societies on joint programming matters.

PUBLICATIONS

SPE publications programs experienced continuing expansion and realignment during 1978. Purchase of typesetting and related production equipment for installation in spring, 1979, will provide greater control over production schedules and expenses. Conversion of periodical publications to the SI metric system began with editing of dual-unit papers for publication in early 1979. Publication projects involved members of seven committees throughout the year, during which Joseph G. Richardson served as Senior Technical Editor.

The number of pages published in the 12 issues of the <u>Journal of Petroleum Technology</u> increased 7.5 per cent to 1,890. Circulation rose 9.5 per cent to 33,813. Both figures exceed all previous records. Special-emphasis issues included coverage of offshore technology, engineering-geology synergy, and meetings including the Offshore Technology Conference, Fall Technical Conference and Exhibition, and EUROPEC. Three <u>JPT</u> readership surveys were conducted.

The bimonthly <u>Society of Petroleum Engineers Journal</u> recorded increases of 5.4 per cent to 540 pages published and of 10.6 per cent to 7,622 in circulation. The 1978 Transactions, Vol. 265, will appear in spring, 1979.

Work on seven Monograph projects included initial editing of F. F. Craig, Jr.'s Spanish-language The Reservoir Engineering Aspects of Waterflooding. Acidizing

Fundamentals by B. B. Williams, J. L. Gidley, and F. S. Schecter neared completion and is scheduled for publication in March, 1979. J. J. Jorden and Frank Campbell's Well Logging is more than half finished. Michael Prats completed all but two chapters of the Thermal Recovery Monograph. Second printings of Cementing and Advances in Well-Test Analysis followed minor revisions to each Monograph.

Writing of the first SPE-produced textbook was completed during 1978. Well Testing by W. John Lee entered review and should reach the editing phase in mid-1979. Other textbook projects active during 1978 include <u>Drilling</u> by A. T. Bourgoyne, F. S. Young, and Martin Chenevert, which reached the second-draft stage. G. Paul Wilhite and Don Green of the University of Kansas began writing <u>Improved Recovery</u>. Frank Stermole and R. D. Seba agreed to write <u>Petroleum Economics</u>.

The Reprint Series gained a revised, two-volume edition of <u>Well Completions</u>. Among the 10 other active Reprint Series projects are books on three new topics: <u>Economics</u> and <u>Finance</u>, <u>Phase Behavior</u>, and Offshore Operations.

The quarterly Enhanced Oil-Recovery Field Reports reached a circulation of 760. The publication's supervising committee received a 33 per cent response to its survey of subscribers. Results indicated that 78 per cent of its readers find the reports very useful in their work. The committee also contacted new reporting agencies to expand sources outside the U.S. and moved to expand information presented in each project report.

EDUCATION AND ACCREDITATION

The Education and Accreditation Committee was successful in creating a 3-man Accreditation and Review Advisory Panel for the purpose of advising the Society's representative to the ECPD Engineering Education and Accreditation Committee. The purpose of this panel is to assist SPE's EE&A Committee representative by reviewing the accreditation reports, both the preliminary reports submitted by the schools seeking accreditation and those of the visiting teams.

While ECPD's EE&A Committee agreed to the creation of such a review group on a trial basis, the Engineering Technology Committee of ECPD expressed some reservations as to the group's input to the accreditation process for technology curricula. The SPE E & A Committee will discuss this matter at its spring meeting and reply to the ET Committee of ECPD.

CAREER GUIDANCE

The Career Guidance Committee has completed production of a slide/tape program entitled "Careers in Petroleum Engineering." The program is available for loan to Local Sections and Student Chapters of the Society, or a set may be purchased for \$40. The availability of the program has been advertised through the monthly "Section Officers Newsletter" and JPT.

The Committee is presently working on revising the existing booklet, "Careers in Petroleum Engineering." Plans call for the development of a 1-page "broadside," which summarizes the salient points of the bigger pamphlet. These broadsides will be sent in quantities of up to 500 free, with the larger pamphlet sent only in single copy to serious inquirers.

ENGINEERING REGISTRATION

The Engineering Registration Committee continues to develop and grade petroleum engineering examinations (Principles and Practices) administered through the National Council of Engineering Examiners. SPE has been successful in gaining representation on the Participating Organizations Liaison and Uniform Examinations and Qualifications Committees of NCEE.

In response to growing demand and in the face of more SPE members seeking registration by examination, the Registration Committee has written a Study Guide for engineers taking the Principles and Practices exam. The Study Guide will be published in early 1979. Additionally, the Committee will develop a short course, based on the Study Guide, and offer the course through the Continuing Education Program.

CONTINUING EDUCATION

The Society's Continuing Education Program saw a sizable increase in activity over the previous year. Eight live short course presentations were made at Local Sections and at the 1978 Annual Fall Technical Conference and Exhibition, and eight Sections have presented video-tape courses. This level of activity is expected to continue to increase with the development of new materials and new programs.

The Continuing Education Committee has launched a pilot program that will present five short courses in the spring of 1979. The purpose of the program is to test the feasibility of headquarters-sponsored (as opposed to Section-sponsored) short courses. Four newly developed courses and one successful course from the standing list of short courses will be presented. The five courses are:

<u>Title</u>	Author	Dates 1979	Site
Gas Well Testing Pressure Buildup Analysis Project Profitability Drilling Fundamentals Fundamentals of Reservoir	Elmer Templeton A. S. Odeh John M. Campbell Martin Chenevert	April 3-4 April 19-20 May 8-9 May 15-16	Denver Oklahoma City Midland New Orleans
Engineering	Dan Bass	May 22-23	Dallas

A Society-wide mailing in February or early March of 1979 will advertise the availability of these courses. Registration and logistical matters will be handled by the Communications Department at SPE headquarters. The Committee will evaluate the success of these courses and, following Board approval, will present four additional courses in the fall of 1979.

Two new video-taped courses in Continuing Education were completed in 1978: A 10-hour course entitled "Well Stimulation," and a 12-hour course on "Workovers."

In view of the countless delays that have been experienced in producing multi-hour video-tape programs, the Continuing Education Committee has developed a new approach to the Society's video-tape program. The approach centers on the development and

production of several mini-series of video-tape courses. One-hour lectures within the series will be designed to stand alone, covering a very limited area of a more comprehensive subject. This approach will create more flexibility, both for the author of the course and for the user.

In June, 1978, the Board expanded the guidelines for the programs to permit the selection of author/lecturers of Continuing Education Programs from consultants whose primary occupation is the teaching of continuing education courses and, if necessary, from nonmembers of SPE.

Nine Distinguished Lecturers presented 180 lectures to SPE Local Sections during 1977-1978.

PUBLIC INTERFACE AND THE TIC

The Society's Technical Information Committee continued efforts on both national and local levels to offer technical assistance to public groups, including governmental agencies, civic groups, and the news media, on matters encompassed by the Society's technical scope. Some 35 SPE Local Sections currently have active TIC groups.

Monthly "TIC Facts" are published in \underline{JPT} . The one-page features illustrate technological and economic facts on energy-related matters, and these features are reprinted for distribution by the TIC and Local Section groups.

During the 1978 Annual Meeting in Houston the TIC staged a Public Interface Workshop for TIC Chairmen, Local Section officers, and interested SPE members.

SPE also continued its cooperation with the American Association of Petroleum Geologists, the American Association of Petroleum Landmen, and the Society of Exploration Geophysicists in the conduct of Energy Seminars for members of the press and public officials.

AWARDS

The Society presented the following major awards during the 1978 SPE Annual Technical Conference and Exhibition in Houston:

John Franlin Carll Award - John M. Campbell, John M. Campbell and Company

<u>DeGolyer Distinguished Service Medal</u> - Joseph G. Richardson, Exxon Production Research Company

Cedric K. Ferguson Medal - D. J. Hammerlindl, Atlantic Richfield Company

SPE Distinguished Service Awards - Charles W. Arnold, Exxon Production Research Company and H. A. Nedom, Weeks Petroleum Corporation

<u>Lester C. Uren Award</u> - Thomas K. Perkins, Atlantic Richfield Company

FINANCES

In 1978, income for Society operations exceeded expenses by \$389,319, with income totaling \$3,233,382 compared with expenses of \$2,844,063. These figures do not reflect annual earnings of \$104,060 from the Society's Reserve Account.

SPE HEADQUARTERS

The expansion and renovation of the SPE headquarters office that was approved by the Board in October, 1977, has been completed; the in-house data processing system installed; and the conversion from service bureau to an in-house data processing system nearly completed.

The 38-member staff is as follows:

Headquarters Administration

David L. Riley, Executive Director Corky Barth, Secretary

Dan K. Adamson, General Manager/Programming Manager LaMerle Martin, Secretary

Douglas L. Ducate, Associate General Manager/Manager Meetings & Advertising Department Janelle Stewart, Secretary

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
Ladonna Plunk, Receptionist
M. C. Sirles, Mailroom Supervisor
Alfredo Arroyo, Mailroom Assistant

Communications Department

John C. Rash, Manager
Beverly Smith, Secretary
Dee Brint, Local Section Coordinator
Larry Lauck, Manager Public Relations
Carol Arensman, Secretary
Susan McHam, Membership Supervisor
Susan Gilmore, Membership Clerk

Meetings and Advertising Department

Douglas L. Ducate, Manager
Karen Lee, Meetings Manager
Melissa Schuchard, Secretary
Cynthia L. Davis, Exhibits Manager
Donna R. Anderson, Assistant Exhibits Manager
Pati Berger, Secretary
Jack Cozier, Advertising Sales Manager

Technical Services Department

Jim McInnis, Manager Publications/Editor
Barbara Pritchard, Secretary
Jim Fuquay, Associate Editor
Sondra Stewart, Assistant Editor
Patricia Pate, Editorial Assistant
Ann Gibson, Production Manager
Rebecca Baker, Programming Assistant
Sabrina Rundle, Secretary
Judith Lester, Production Assistant

In September, 1978, the Board approved the installation of an in-house typesetting system and up to three additional people to staff the operation. These people will be added to the staff in 1979.

Respectfully submitted,

David L. Riley, Executive Director Society of Petroleum Engineers of AIME REPORT

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WAAIME

1978 was a challenging year for WAAIME. The first contested election in WAAIME's history occurred. The first order of business was to have better communication between the Sections and National. It was apparent at the Annual Meeting in 1978 that the membership felt the Bylaws passed in 1977 to be inadequate and ambiguous. A Bylaws Revision Committee was elected at the Annual Meeting (contrary to 1977 Bylaws). The Board felt that in the interest of harmony that the National Bylaws Committee (1977 Bylaws) and the Revision Bylaws Committee could work together. We feel that the cooperation and tireless work of these two Committees has resulted in a very comprehensive and workable set of Bylaws. They are to be voted upon at the 1979 Annual Meeting. WAAIME membership has remained stable throughout the year. There have been several inquiries about forming new Sections, but nothing has materialized.

In May 1978 WAAIME granted 51 scholarships. 41 recipients graduated in June 1978 and 8 in December. In all 100 students received funds from WAAIME in 1978. Since 1920, when the first Scholarship was granted by WAAIME, \$1,202,000. has been awarded students.

Our <u>Engineers for Tomorrow</u> - EFT- program has been active throughout the year. The film "A World Without" produced in 1977 continues to be received not only here in the United States but abroad.

The <u>Chest Assistance Program</u> - CAS - a part of our Chest program has been very active. 7 students were helped in 1978 with funds to buy needed books, field trips and living expenses.

Our <u>Government</u>, <u>Energy</u>, <u>Minerals</u> - <u>GEM</u> - program continues to be active in a number of Sections. Mrs. C. DeWitt Smith is editing GEM Facts each month for Mining Engineering.

<u>Library</u> has been active in many areas. One Section contributes money toward the purchase of books for a WAAIME Scholarship student at the Colorado School of Mines. Subscriptions of mining and technical magazines are being sent to Lima, Peru.

<u>Newsletter</u> is sent to our membership on a regular basis. The slowness of the mail system has been a handicap. We are experimenting by sending Newsletter first class mail to see if we can improve on the distribution of Newsletter.

<u>Publicity</u> has had a number of releases printed in the various Society publications.

The Woman's Auxiliary to AIME is proud of the work it has done and is doing. We are particularly appreciative of all the help and advice Mr. Joe B. Alford gave us throughout the year. Our grateful thanks to Mr. Alford and to the many others of AIME who have been so helpful to us.

Respectfully submitted,

Manuelle H. Hayes

Mrs. Julian L. Hayes President - WAAIME