

President's Memo

Sharing Knowledge

It is a great honor to be elected by one's peers to lead a dynamic organization such as the American Concrete Institute. I accept this honor with a great sense of humility, excitement, and anticipation.

In accepting this responsibility, I am reassured that our nearly 19,000 members are well served by a dedicated and seasoned staff headed by our Executive Vice President, and that I have the strong support of an excellent Board of Direction and its Executive Committee.

I recall that 25 years ago, on its 60th anniversary, ACI adopted a new logo and motto. The new motto, *Progress Through Knowledge*, so aptly describes ACI's mission "...in gathering, correlating, and disseminating information for the improvement of the design, construction, manufacture, use, and maintenance of concrete products and structures." ACI has had a proud tradition of developing and sharing knowledge about concrete with all who use the material. That process relies heavily on voluntary efforts and the expertise of the ACI membership.

It is exciting to note some of our current activities and contemplate their future impacts. The new edition of the ACI Building Code will be published this fall. Electronic publishing methods are now being employed for *Concrete International: Design & Construction* and the two journals. The goal has been set to convert the *Manual of Concrete Practice* fully into electronic version by June 1991 so that users can access and search electronically more than 150 committee documents contained in the *Manual*. Our certification and education programs are reaching more and more engineers, constructors, materials suppliers, technicians, and inspectors. The Institute is on the verge of acquiring a

piece of land for its future headquarters. The relatively new Concrete Materials Research Council with its very modest budget has made small grants as seed monies which, in turn, have enabled several university investigators to capture research fundings of several million dollars.

So what more can we do? We must encourage more students to join ACI, who in the years ahead will be the critical human resources for the concrete industry. It is also essential that we continue to reach out for more contractor members. On the international scene we need to expand technical information exchange with our friends abroad and encourage their participation in ACI activities. Furthermore, we need to increase the attendance at our conventions by current and prospective ACI members.

With our commitments to so many worthwhile projects and initiatives, we simply cannot depend solely on the stable income of membership dues and publication sales to finance them. We face the challenge of securing additional financial resources if we are going to implement programs which would allow us to share knowledge with a wider audience.

The above needs are not new. They demand our continual attention. It is my objective to help improve ACI's position in these areas. I urge you to share your ideas and suggestions with your officers and directors. Your voice is important!



Paul Zia

President's Memo

What is SAS?

For the statisticians, SAS is the acronym of a popular computer software system for statistical analysis. But this is not what I want to discuss. Here, SAS stands for **Sponsor a Student**. It is a program which I believe could help ACI expand its student membership.

Why is it so important for ACI to increase its student members? Student membership is a way of ensuring future growth of ACI. The students who are involved in ACI activities will likely become full members when they graduate and enter the business world.

Although the American Concrete Institute has offered some fine student programs over the years, it has never had a very large student membership. In 1986, our student members reached a peak number of 1575, then in just two years the number dropped to 1209 in 1988, which is 6.4 percent of our total current membership.

Meanwhile, civil engineering undergraduate enrollment in the U.S. has been on the sharp decline for a decade. According to a recent Engineering Manpower Commission report, the nationwide enrollment dropped from 44,317 in 1979 to 32,577 in 1987, an alarming reduction of 26 percent. On the other hand, the graduate civil engineering enrollment increased by 38 percent during the same period, from 5513 in 1979 to 7623 in 1987.

In this environment we have to compete for members with other professional and technical societies. So what could we do to increase our share of membership? **SAS — Sponsor a Student!** We should focus on both the undergraduate and the graduate students. At the same time, we also need to enlarge the student pool by including those of other disciplines such as architecture, materials, geology, etc. The financial commitment for each student member by a sponsor is minimal; the value of name recognition of the sponsors would far exceed the monetary commitment. It could also help the sponsors in their personnel recruitment.

Many of us joined ACI when we were students and have benefited from our membership over the years. Nothing could be more rewarding than to help the students partake the rich experience through ACI as we have done.



Paul Zia

President's Memo

ACI's "Oriental Express"

Early in March, I had the pleasure of visiting several ACI chapters and allied concrete organizations in the Far East. Joining me were H. S. Lew and William R. Tolley, chairman and secretary respectively of ACI's Chapter Activities Committee. (See "News" article on page 17 of this issue.) It was my special pleasure to install the ACI Taiwan Chapter, the 77th and the newest in the family of ACI chapters.

In 17 days, we traveled to Beijing, Taipei, Singapore, Manila, and Tokyo, Beppu, and Kyoto, the latter three being in Japan. Seminars were given at each location except Beppu and Kyoto. Our topics included nondestructive testing, repair methods, high strength concrete, jointless bridge decks, the Armenian earthquake, the Linn Cove Viaduct in North Carolina, and present and future activities of ACI. The seminar attendance far exceeded our expectations. A total of about 450 people were present at the seminars, each of which was followed by a stimulating question and answer period.

One of the highlights of our trip was a weekend visit to Beppu and Kyoto, through the courtesy of the Japan Concrete Institute and Professor Masatane Kokubu, an ACI honorary member. We toured the site of a magnificent single span concrete arch bridge which is claimed to be the longest span in the Far East. Alongside of the bridge is a test site where we viewed an impressive long-term corrosion study of a variety of concrete and other construction materials subject to

an aggressive environment in a hot spring resort area.

Our hosts at every city were most gracious and hospitable; we could not have had a richer and more rewarding experience. It was also extremely gratifying that our visits had extended ACI's goodwill and further enhanced our contacts and linkages with that part of the Pacific Rim.

While there, we observed the enormous amount of construction activities in the region. For all these construction projects, concrete is by far the predominant material. The countries we visited are in a state of rapid growth; our colleagues in each share with us the same concerns over the issues of quality and safety of construction, diminishing of natural resources, deterioration of infrastructures, inadequate housing, protection of environment, use of waste products in construction, etc. Universities and research institutes are engaged in the same kinds of investigations.

To address these common problems, it seems appropriate and timely for ACI to sponsor a regional conference. As an international organization with more than 25 percent of its members outside North America, ACI has an excellent opportunity to collaborate with our international chapters and allied concrete organizations to develop regional conferences periodically outside of North America. In my judgment, this would be a highly worthwhile and economically feasible endeavor that reaffirms our Institute's basic educational mission: sharing knowledge.



Paul Zia

President's Memo

Resurgence of Concrete Research

For many years, the progress of concrete design and construction has relied heavily on research and development pursued in the laboratories of a few private and government agencies such as the Portland Cement Association, U. S. Army Corps of Engineers, federal and state highway agencies, the Bureau of Reclamation, and the National Institute of Standards and Technology (NIST), formerly the National Bureau of Standards. Contributions also came from many of the university laboratories.

In the early 1980s, budgets for concrete research from most sources declined sharply and the future for advances in the concrete industry looked rather bleak. With wisdom and vision, the leaders of ACI at that time questioned whether we should assume a more active role in supporting research. After a considerable dialogue among the Institute members and a thorough study of the issue by a Board committee, the Concrete Materials Research Council (CMRC) was created in 1984 with the mission to "advance the knowledge of concrete materials by soliciting and selecting research proposals, financing them, guiding the research and publishing results, all in coordination with ACI technical committees."

Since its inception, CMRC has selected six proposals to receive incentive grants of \$10,000 each, some contingent on obtaining additional funds from outside sources. This "seed" money approach has proven exceedingly successful. For example, with the CMRC funding in hand, Professor Della Roy of Pennsylvania State University secured \$1.3 million from the Strategic Highway Research Program (SHRP) for a study of concrete microstructure. Likewise, CMRC studies at the University of Illinois, Cornell University, and a multi-university study, led by the University of Missouri and Northwestern University, on fiber reinforcement have generated sizeable amounts of outside funds in support of much larger followup studies. (See "News" article starting on page 11 on the fiber research project.) The totals thus far are \$40,000 in council funding to generate over \$1.93 million for concrete research.

While the successes of CMRC are exciting, several other major research programs in the concrete field have also emerged in the past few years. SHRP, established in April 1987, is a highly focused, five-year \$150 million research program funded under the Surface

Transportation and Uniform Relocation Assistance Act of 1987. It is the largest single highway research program in the country, representing almost 25 percent of total current spending for highway research. One of the four technical areas addressed by SHRP is concrete/structures, composed of 13 projects with a total budget of \$18.3 million. This program area is aimed at "developing improved concrete materials and construction processes, and better means of controlling corrosion in steel reinforced concrete structures." Research teams from many universities and private firms are heavily involved in all these projects.

Recognizing the need for new technologies for future military constructions, the Department of Defense is sponsoring multi-year research programs in advanced construction technologies at the University of Illinois and Massachusetts Institute of Technology. These programs include several cement-based materials research projects with a total current funding in excess of \$2 million. More recently a Center of Advanced Cement Based Materials has been established at Northwestern University with a grant of \$1.75 million from NSF. Participating institutions in this venture include the universities of Illinois, Purdue, and Michigan and NIST. This five-year program is expected to receive total funding of about \$10 million.

Such a surge of activities in concrete research will unquestionably produce some significant advances in our knowledge. However, it would be unreasonable to expect that all the new knowledge will be immediately usable in our practice. Some knowledge will be quite basic. To translate it into practice would require additional investigations in which CMRC could play an important role. It can provide not only the financial support but also the guidance with appropriate user perspective. CMRC will soon solicit research needs statements from our technical committees. The council deserves the strongest support of our members so that it will be in the best position to maximize the fruits of the current resurgence of concrete research.



Paul Zia

President's Memo

University Research, Industrial Competitiveness



Paul Jia

A recent note from a well-known member of ACI came to my attention; he suggested that the Institute needs to publicize a charge by Xerox President Paul Allaire that most current university research "is not aimed at helping industry be more competitive." He further raised a rhetorical question: "Is concrete research aimed at helping our industry be more competitive?" Here I presume that he referred to the concrete research being conducted in the universities.*

Much has been written about university research and industrial competitiveness. Prompted by the searching question of whether concrete research in the universities helps the industry to be more competitive, let me share with you some of my thoughts.

Looking at the issue narrowly, one would almost have to concede that the charge made by the Xerox president can also be leveled at concrete research in the universities. It is true that not many innovations and cutting-edge developments from university research in the public domain can be documented as having helped our concrete industry to be more competitive. On the other hand, there are investigations of a proprietary nature being conducted in universities which help the industries address certain specific problems and might give them a competitive edge. Unfortunately, the level of such research effort is disproportionately small.

There are a number of reasons for such a disappointing record. First, unlike major manufacturing industries, the construction industry — the concrete industry included — is diverse and fragmented, and its financial position is more cyclical in nature. Thus, the industry has less appreciation for long term investment in R & D. According to a National Research Council report, "Building for Tomorrow: Global Enterprise and the U. S. Construction Industry (1988)," it is estimated that the U. S. design and construction industries invest 0.4 percent of sales in R & D as compared to 1.7 percent for the auto-

motive industry, 1.4 percent for the appliance industry, and 0.8 for the textile industry. Second, proprietary protection for innovations and inventions in construction technology is considerably more difficult than in manufacturing technology. Thus, there is a disincentive for the construction industry to invest in R & D without sufficient assurance of reaping the commercial benefits. Third, by adhering to the concept of free inquiry, most universities are reluctant in pursuing proprietary research unless the publication of the research results within a reasonable time can be assured. Consequently, most industry sponsored research conducted in the academic institutions is of the generic type.

To examine the issue of university research and industrial competitiveness in a broader context, one should first ask what is the real purpose of a university and why does it engage in research? The primary purpose of a university is to educate students and its interest in research is to develop new concepts and acquire new knowledge. More often than not, university research focuses on the solution of certain basic problems. Research is a vital part of the learning process; through research students acquire not only facts but also abilities for critical analysis and sound judgment. Most concrete research conducted in the universities has served to discover new and improved applications and support the development of better technical standards. Research participation by the students also results in a better educated work force for the industry. Both are significant contributions that university research makes in helping our concrete industry be more competitive.

How can we further enhance the contribution of university research to the competitiveness of our concrete industry? The answer lies with industry-university-government cooperation. Perhaps the best example of this kind of cooperation is the success derived from the combination of teaching, research, and extension service in the land-grant universities with public and private support which has made the U. S. agricultural industry the most competitive in the world. For the concrete industry, this would be an effective model in which ACI can play a vital role in stimulating and defining research needs, providing seed money for research, and disseminating the research results.

*The Allaire statement appeared in a recent news article, reporting the formation of a new international management "think tank" aimed at leading corporations into the future. Allaire noted as an example that "in quality improvement, Xerox has had to rely on benchmarking against Japanese competitors," and "it would have been nice in the mid-1970s to have been helped by outside research."

President's Memo

To San Diego We Go!

Soon many ACI members and their guests will convene in San Diego, Calif., for the 1989 fall convention hosted by our San Diego International chapter. The chapter and its convention committee have worked long and hard to ensure the success of the convention. Appropriately, the theme of the convention in this coastal city will be marine and water resources facilities and several sessions are devoted to these matters. Also, there will be a "hot topic" session on Controlled Low Strength Materials. These and other events are all part of the total program planned for all segments of members and guests — contractors, designers, consultants, professors, students, researchers, and material suppliers. (See pp. 12-19 of this issue for program details.) In addition, many of our administrative, technical, and educational committees will hold meetings at various times throughout convention week. Participation in these open committee meetings can be a stimulating and rewarding experience.

Scheduled events of special significance which I would like to call your attention to are the four sessions of the Paul Klieger International Symposium on Performance of Concrete, developed by Committees 201 and 222 in honor of a distinguished Institute member of many years. This symposium will be complemented by a special reception and dinner for Paul on Thursday evening during the October 29-November 3 convention week.

The twice yearly ACI conventions are a time for professional self-renewals. This is the time for free ex-

change and sharing of ideas. In spite of the conveniences of modern telecommunications, there is no substitute for person-to-person contacts and the mutual stimulations we receive from each other. If you have never attended an ACI convention, this is the time to make plans for doing so. I am reminded of a Chinese saying: "A journey of a 1000 miles must begin with a single step." You will enjoy the friendly atmosphere at the convention. If you have a particular interest in specialized committee work, speak to the committee chairman. Your knowledge and expertise may just be what is needed by this committee. To nonmembers, let me extend a special invitation from ACI. If this will be your first convention registration, you will receive a six-month complimentary Institute membership entitling you to receive the monthly *Concrete International: Design & Construction* and the bimonthly *ACI Materials Journal* and *ACI Structural Journal*. I would also like to urge the students, especially those in Southern California, to take full advantage of the \$5 convention registration fee. You will find your attendance at an ACI convention an exciting and enriching experience.

Attending an ACI convention is not all work and no play. Our host convention committee has planned an entertaining and varied program for the members and guests, ranging from a golf tournament to a visit to the world-renowned San Diego Zoo. So, come and join us for a week of rewarding work, enjoyable play, and enduring fellowship.

See you in the beautiful and friendly city of San Diego!



Paul Zia

President's Memo

Metriation — Are We Ready?

It has been almost 15 years since the Congress of the United States passed the Metric Conversion Act of 1975. Like other technical societies, ACI actively pursued the issue of metric conversion in the late 1970s and the early 1980s. A Metriation Committee was appointed by the Institute's Board of Direction to study the issue and develop policies and plans of implementation.

After several years of study, the Board established a target date of 1983 for producing hard metric versions of ACI standards. The date was chosen primarily to coincide with the publication of the 1983 ACI Building Code. By the end of 1983, the only standards that adopted the metric measurements were the 1983 "Building Code Requirements for Reinforced Concrete (ACI 318M)" and the 1983 "Building Code Requirements for Structural Plain Concrete (ACI 318.1M)." There was a consensus that the technical committees should be allowed the option of producing standards in which both the customary and the metric units would be contained in the same document, a practice used by ASTM and the American Association of State Highway and Transportation Officials (AASHTO).

In the fall of 1984, the Board accepted the recommendations of the Technical Activities Committee for a revised target date of 1989 for the development of metric versions of ACI standards. By the fall of 1985, having established metriation policies, the Board dissolved its Metriation Committee and assigned the responsibility of implementation to TAC's Metriation Committee.

However, in the spring of 1987, the Board rescinded all previous statements on metric policy and adopted the current policy which reaffirms that ACI supports voluntary conversion to the International System of Measurements, commonly known as SI. In addition, the Board assigned to TAC the responsibility for deciding when and which Institute publications shall be written in hard metric units. Publications not in hard metric units shall contain, as a minimum, a table of conversion between SI and the customary units. These conversions are to conform to the latest revisions of ASTM E380, supplemented where applicable by ASTM E621.

Since the 1975 act allowed voluntary adoption of the metric system, it is indeed the public perception that the movement for metric conversion in the United States has been inching along by the millimeters. (Pardon the pun!) Today, the U.S. shares with Burma and Liberia the dubious distinction as the only non-metric countries in the world. What the public is unaware of is that many multinational companies and firms engaged in export and import of services and products in this country have quietly converted fully or partially to the metric system. Examples are the auto industry, manufacturers of construction and farm machinery, and producers of wine and distilled spirits, photographic equipment, and sporting goods.

However, the impetus for a more rapid change is on the way. A little-noticed provision contained in the 1988 Omnibus Trade and Competitiveness Act directs each federal agency to convert to the metric system by the end of fiscal year 1992. The Department of Defense has announced plans to change its procurements, specifications, and standards to the metric system with a target implementation date of 1990.

ACI's past president Chester P. Siess, in one of his President's Memos in 1974, argued eloquently that there was no "if" in metriation. The issue, according to Siess, was that we must decide "when" and "what" — the latter resulting from the fact that there are two versions of the metric system, the SI system and another used mostly in continental Europe. The "when" and "what" are no longer the issue; we have decided on the SI system. With the 1988 act, can we continue to resist the move to metriation?

The time is here for us to formally declare that SI is the preferred system and be ready to publish all our technical publications using SI units with the equivalent customary unit, if given, being placed in parentheses. ACI will then be able to meet the needs of the design and construction industries as they convert to the metric system.



Paul Zia

President's Memo

Two ACI Milestones

With publication of ACI 318-89 on reinforced concrete and ACI 530-88/ASCE 5-88 on masonry, the American Concrete Institute will reach two milestones.

Of all the ACI publications, perhaps none is more significant and important than the Institute's Building Code, more accurately entitled the "Building Code Requirements for Reinforced Concrete." The 1989 edition of the Code is currently at the printing stage, meeting the objective of making major revisions to the document every six years. We would not have been able to reach this milestone without the many long hours of volunteer effort by the 74 "regular" members, voting subcommittee members, consulting members, and liaison members of Committee 318 under the skillful and effective leadership of Professor John E. Breen. They deserve a large measure of our gratitude for a job well done.

What are some of the major features of the new Code? One of these is a new format which will result in a single document including both the Code and its Commentary. In this document, the Commentary sections will appear in parallel columns adjacent to corresponding Code sections. This is a welcome feature and will make cross-referencing much easier. Another major change concerns previous Chapters 4 and 5 which have undergone substantial reorganization. Chapter 4 now contains all durability related provisions and the sections on concrete quality, mixing, and placing are now a part of Chapter 5. Also, the seismic provisions are now an integral part of the Code as a new Chapter 21 rather than as an appendix as in 318-83.

On the technical side, many refinements, simplifications, and clarifications have been made. There are also a number of new requirements based on more recent research findings. Provisions for development length have been expanded to account for concrete cover, spacing of reinforcement, and enclosing transverse reinforcement. In addition, a new section has been introduced containing provisions for general structural integrity.

With a document of this magnitude, it is understandable that the users may not agree with all of the provisions. Some may feel certain provisions are not necessary or that they will increase the costs of design and construction. Others will argue that the Code is still

too complex and it may have become even more so. If there is justification for these concerns, let us try to find the solutions and present them to the Code committee. For the time being, we must recognize that the Code has been developed by using the most democratic consensus standardization procedures. It represents the best collective engineering knowledge and judgment of a group of respected and highly competent professionals in our industry and profession.

To help engineers become more familiar with the new Code, ACI's Education Department is developing a series of seminars on the use of the document. Individuals who are especially knowledgeable about the various aspects of the Code will serve as the seminar speakers. To find out when and where you can take advantage of these seminars, contact the ACI Education Department. Perhaps a seminar can even be scheduled in your area.

While we are recognizing the fulfillment of this major Institute goal, we should also note that a second milestone was reached recently by ACI. I refer to the publication of the long awaited "Building Code Requirements for Masonry Structures" and "Specifications for Masonry Structures." These two publications, almost 10 years in development, are the fruits of the enormous efforts of the joint ACI-ASCE Committee 530 with the unfailing support of numerous organizations in the masonry industry. We owe these groups a debt of gratitude.

The new documents contain design and construction requirements for clay brick, concrete block, and brick/block composites. When widely accepted, they will supersede previous ACI publications, developed by Committee 531, including "Building Code Requirements for Concrete Masonry Structures" and its Commentary. To introduce these new documents to engineers, seminars have been developed jointly by the American Society of Civil Engineers and the Council for Masonry Research; these seminars are also available through ACI chapters. Sign up for these seminars and keep abreast of the new developments!



Paul Zia

President's Memo

ACI's Role in Continuing Education

As professionals, each one of us needs periodic self-renewal in technical competence and professional practice. The renewal process can take a number of different forms such as attending conventions and chapter meetings, participating in technical committee activities, reading technical publications, and following developments of codes and standards.

Education is one of ACI's central purposes. In 1970, recognizing the need for a more organized continuing education program for concrete industry professionals, ACI's Board of Direction established the Educational Activities Committee (EAC) to coordinate and develop educational seminars as one of its missions. Then in 1980, ACI formed the Certification Committee. The mission of this committee is to oversee the development and implementation of a national program for training and certifying concrete technicians.

The seminar and certification programs have grown steadily with the cooperation and cosponsorship of our chapters. In 1988, 33 one-day seminars were presented with 1500 individuals participating. That same year, more than 250 examination sessions for field technicians were organized and conducted in 39 states, Puerto Rico, and Ontario. Nearly 4300 examinations were given and over 3500 technicians attained ACI certification. Course materials for these seminars and certification programs have resulted in publications and videotapes. These programs will continue to grow in the years ahead.

But what more can we do in the area of continuing education? In my judgment, ACI has the opportunity to develop a more structured program of study in con-

crete technology and offer it as correspondence or short courses. There is already a wealth of instructional material available in ACI publications and videotapes. It would simply be a matter of organizing and expanding these materials into suitable and logical learning units.

There are at least two current educational trends that justify consideration of correspondence and short courses. First, nationwide civil engineering enrollment has suffered a continual decline over the past decade. Second, the typical four-year civil engineering curriculum has today become more flexible. In some schools, students may choose a sequence of technical electives, all in one of the many specialized areas of civil engineering. As a result, there are instances where a civil engineering student could receive the baccalaureate without ever taking a course in concrete materials or design. These disturbing trends suggest that, in the foreseeable future, our concrete industry will face a serious shortage of qualified manpower.

Faced with the enormous task of maintaining our massive infrastructure and the need to adapt to new technologies in materials and construction, our industry must develop a strategy to counter this manpower problem. Correspondence and short courses would provide the opportunity for entry level personnel to strengthen their technical background. Likewise, these courses could also be utilized to upgrade the present technical personnel of the concrete industry.



Paul Zia

President's Memo

As You Renew Your ACI Membership...

For the great majority of ACI members, the membership renewal date is the beginning of a new year. Therefore, most of us have received our membership renewal statements, reminders for us to pay our dues before the current tax year ends.

As you renew your ACI membership for 1990, I would like to invite your attention to the check-off boxes on your membership renewal statement. These give you an easy way to make your choices of periodicals as well as voluntary contributions which are tax deductible for those residing in the United States.

When the former ACI Journal was expanded in 1987 into two publications — the *ACI Structural Journal* and the *ACI Materials Journal* — many Institute members received both journals free for the first year by paying their dues by a certain deadline. Beginning in 1988, all members receive only one of the journals free as a part of their dues; paid subscription is required for the second journal. The record indicates that about 30 percent of our members subscribe to the second journal.

The reason for the journal expansion in 1987 was to accommodate the ever increasing amount of technical information. In 1988, the two technical publications included 96 papers and 21 committee documents, representing a total increase of 15 percent over 1987. In 1989, the two journals totaled 135 papers and committee documents were 15 percent over 1988, almost two and one-half times the number published in 1984. With so much valuable technical information contained in these two publications, one can ill afford not to subscribe to the second journal to keep pace with the advances in concrete technology.

For voluntary contributions, I urge all ACI members to give serious consideration to the support of the Concrete Materials Research Council's efforts and the scholarship fund maintained by the Institute. In an ar-

ticle by Robert E. Philleo and in my earlier memo (in the July and September issues of *Concrete International*), we described the enormously successful activities of the CMRC program. Many Institute members have expressed their confidence in the program by checking off their contributions in 1988 as reported in the December issue of *Concrete International*. What is most gratifying is the wide spread support of the program with contributions coming from 28 different countries.

The scholarship fund supports two of the four graduate fellowships awarded annually to students with a career objective in concrete materials and design. (The other two fellowships, the ACI/W. R. Grace & Co. Award and the Katharine and Bryant Mather Award, are financed independently, not by membership dues.) The scholarship program has been in operation since 1975 but perhaps what is not well known is the caliber of past recipients of the awards. Rarely can a university or college student capture one of the ACI fellowships with an overall undergraduate grade point average of lower than 3.7 out of a possible 4.0. The Institute should be rightfully proud to have recognized a cadre of truly talented graduate students who someday could be the leaders of the concrete industry.

Make your commitment to these worthy voluntary programs now and take advantage of the tax deductions by using the dues check-offs if you have not yet renewed your membership. If you have already taken care of your 1990 dues, you can still make a contribution (or contributions) by mailing your check to ACI today.



Paul Jia



ACI's Two New Initiatives

At its meeting in San Diego last November, the ACI Board of Direction made unanimous decisions to approve the formation of (1) a non-profit ACI Education and Research Foundation, and (2) a for-profit subsidiary called Association Concepts. These are two new initiatives with far reaching impact on the future of the Institute.

Why does the Institute need a non-profit foundation? ACI is a technical society dedicated to the advancement of the knowledge and application of concrete materials, design, and construction. It devotes its resources to education, scientific investigations, technical publications, and standards development in the field of concrete. Its activities are solely financed by membership dues and a small amount of annual voluntary contributions from its members. In order to expand its programs, additional resources must be found. The Education and Research Foundation was formed to do just that. It will allow the Institute to seek funds in support of education and research activities, and create endowments for special contributions. In addition, the foundation would administer the Institute's scholarships and fellowships as well as provide governance of research councils such as the Concrete Materials Research Council.

What is, then, the purpose of the for-profit subsidiary, Association Concepts? Over its long history, ACI has acquired a significant amount of resources and expertise in developing and managing technical meetings and publications. This expertise is recognized by other allied organizations. From time to time, the Institute has been asked by these organizations to develop and organize meetings and conferences on their behalf. Thus, Association Concepts was formed to render such services on a formal business basis. It will be run as a separate operation so that it will not jeopardize ACI's tax-exempt status.

It is expected that these new initiatives will generate additional financial resources. The Institute could use the income to expand its programs to serve the members and support other special projects which cannot be undertaken otherwise. The current Board of Direction has laid the foundation for these new enterprises and they will need the guiding hands of future Boards to make them a reality and a success.

A handwritten signature in dark ink that reads "Paul Zia". The signature is written in a cursive, flowing style.

President's Memo

ACI Chapters — A Valuable Resource

This is the final memo in a series of 12 through which I have been privileged to share my thoughts with you. My term of office will end at the March convention and I want to thank you, ACI members, for giving me the honor and opportunity to serve you. It has been a rewarding and enjoyable experience.

During the year, I had the opportunities to visit seven chapters in the U.S. and three international chapters in the Far East. I also participated in two Roundtable meetings where officers of a group of chapters exchanged ideas and discussed issues of common concern. It was always a pleasure to meet so many wonderful ACI members and enthusiastic, dedicated officers at the chapter level.

About 35 years ago, the idea of a local chapter to bring together people who were engaged in all aspects of concrete technology was broached to the Institute's Board of Direction. "The idea was not received with general enthusiasm," according to the late John Goetz, a past president of ACI.

After two years of debate, the Southern California chapter received its charter in 1958. Since then the number of chapters has steadily grown, and their growth has exceeded all our expectations. Today, there are 77 chapters throughout the world — 58 in the United States and Canada and 19 in other nations. In the past year, charters were granted to three chapters outside the United States — Taiwan, Manitoba in Canada, and Egypt, ACI's first on the African continent. Interest has also been expressed by a group of loyal Institute members in Europe to form a chapter, the first on that continent.

The chapters are the essence of ACI's outreach program. Through chapters, we reach out to the local concrete industries by sharing our technical knowledge and fostering quality construction. The chapters join the Institute in conducting educational seminars and short courses. Many are also involved in certification programs. Others have developed awards programs for outstanding concrete projects and/or established scholarships. Some chapters publish regular newsletters containing useful and practical technical information. Still

others have begun to participate in the "SAS" (Sponsor a Student) program. Above all, many chapters in the major population areas have played an important role by serving as hosts to ACI conventions.

On the international scene, plans are underway to present the first international conference in 1991 to be held in Singapore with cosponsorships of ACI chapters and other concrete-related organizations in the Pacific Rim nations.

Like most volunteer organizations, each chapter must develop its own programs to meet the specific needs of its members. Each enjoys varying degrees of success, depending on its size, location, and membership profile. All are faced with a common challenge of retaining and recruiting members. While most chapters focus their activities on programs of a technical nature, a few have also developed fund raising projects such as golf tournaments and sport shirt sales with the receipts supporting worthy programs.

The chapters are a valuable asset of the Institute. To improve its support of chapters, ACI established the Chapter Activities Committee as a direct link between chapters and the ACI Board of Direction. It publishes two semi-annual newsletters — *The ACI News* and *Internationally Speaking* — to keep chapter members and officers informed of developments at the Institute and makes all ACI publications available to each chapter. As ACI moves more and more towards providing information and services through telecommunication and other electronic means, support for our chapter members should further improve.

While the organizational support noted here is vital to our chapters, nothing could be more important than having all Institute members actively involved in their local chapters. By working together, we will all benefit from a worldwide network of strong chapters, thus furthering ACI's goal of improving concrete worldwide.



Paul Zia