



Arab American Association of Engineers & Architects

P. O. Box 1536, Chicago, IL 60690-1536

Voice Mail: (312)409-8560 Email: aaaaea@aaaea.org

www.aaaeae.org

NEWSLETTER

President's Message



We are putting out the this edition of the Newsletter early to better inform everyone on some recent activities and to give coverage to the Semi-Annual Meeting held on December 8 that many of you couldn't attend due to the terribly bad weather. Please see inside for full coverage on the event, including our honorees, scholarship awards, and guest speakers. Our keynote speaker was Amer Husaini, Vice-President at Motorola. Also included in this issue are mid-term committee reports.

One of the things I discussed at the meeting is the changes the AAAEA is going through. When we started 8 years ago, much of the membership was experienced civil engineers. In recent years there have been more electrical engineers and, more recently, many IT professionals have joined our ranks. The membership base is getting younger, with many recent grads becoming members and we now have over 30 student members, the most in our history. The number of women engineers in the AAAEA is also growing and is the most ever. We also have members in a dozen states. Also consider that we have members that trace their roots back to many Arab nations (almost every country is represented). Overall, I am proud to say that the AAAEA has a much diversified membership.

Another new development is the emergence of interest in Arab American engineering associations in other locations. Michigan (which was featured in the November Newsletter) is growing rapidly and has scheduled elections in the new year. The Michigan representative, Sermed Saif, was our guest speaker. Texas had a successful meeting on December 9 in Houston and their next meeting is on February 4. Wisconsin had a kick-off meeting on December 17 in Milwaukee. See inside for articles on all three groups. Other areas are still in the development stage. With all this activity nationally and requests for our assistance in their development, I have created a new ad-hoc committee called the National Outreach Committee. I welcome Dr. Mustafa Mahamid as the Outreach Committee Coordinator. He will be assisted by our most experienced members and different individuals acting as liaisons to other cities.

In addition to receiving good reviews, our website www.aaaea.org is becoming more popular every month and is viewed worldwide. Hits increased from 2964 views in January 2005 to 7017 views in November 2005. Internationally, most substantial visits were from Canada, Great Britian, the Netherlands and the Middle East. U of Illinois-Chicago and Louisiana State U lead colleges in most visits.

Website Discussion Board: Due to the hard work of Mohammad Kleit, our IT Officer, to make it possible, I am pleased to announce the launching of the AAAEA Forum. Please register as a user, visit and participate whenever you can http://aaaea.org/Forum/

In closing, I wish you all a prosperous 2006.

Abder R. Ghouleh, PE



Upcoming Events Roadway Planning and Design Topics – Part III 3-4 Semi-Annual Photos 5 Honoree Profiles Scholarship Awards Michigan Engineers Update **National Meeting** Outreach to Wisconsin / National Engineers Week 12-13 Committee Reports 14-15 Texas News 16 New Members & Announcements 17 Science Fair 18 Technical Seminar / **Business Profile** 19

Visit our Website www.aaaea.org





AAAEA CALENDAR OF EVENTS

January 2006

- EIT Review Classes Begin
- Business Owners Meeting
- Women Engineers Meeting
- Family Bowling Event

February 2006

- Career Workshop
- Technical Seminar
- Chicago Engineers Week

March 2006

- Professional Caucus Reception
- Technical Seminar
- Social Dinner (Hafleh)

April 2006

- Field Trip
- Election Nominations

 Deadline
- Career Workshop

UPCOMING EVENT

Family Bowling Party

Date: Sunday, January 29, 2006

Time: 2:30PM – 5:00PM

Place: Orland Bowl

8601 West 159th Street Orland Park, IL 60462 Tel: (708) 532-8868

Cost: \$5 per person includes: 2.5

hours of bowling. Bowling shoes and Pizza are paid for

by AAAEA.

Reservations: Please fill out the reservation

form available on our website. Tickets will not be sold at the door.

For more information please visit www.aaaea.org

EDITOR'S NOTE

I would like to thank all members who contributed to the Newsletter.

We are always in need of articles for the Newsletter,

so we strongly encourage you to send in material to us.

Thank you, Ibrahim Shillo Publication Committee

aaaea@aaaea.org

Arab Professionals Networking

RECEPTION

COMIMG SOON!!!

At Chicago Athletic Club
All members will receive
invitations!









The AAAEA

is now accepting nominations for all 2006-2007 Board positions









Next career workshop is February 9, 2006

Roadway Planning and Design Topics - Part III: VALUE ENGINEERING

By Dr. Soliman Khudeira, PE

This is the third article in a series of articles to follow that discuss various topics related to roadway planning and design which include: roadway classification, needs assessment, project scope and timeline, stakeholders participation, project phases, funding sources, projectsí environmental process, value engineering, right-of-way acquisition, cost methodologies, and maintenance of roadway elements. Each topic will be discussed in limited detail and is illustrated by citing a typical roadway project. Part I of this series discussed Roadway Classifications. Part II of this series discussed Needs Analysis. Part III of this series discusses Value Engineering.

Value Engineering

The Society of American Value Engineers (SAVE - www.value-eng.org) defines value Engineering (VE) as ithe systematic application of recognized techniques which identify the function of a product or service, establish a value for that function, and provide the necessary function at the least overall cost. In all instances, the required function should be achieved at the lowest possible life-cycle cost consistent with requirements and/or performance, maintainability, and aesthetics." Value engineering is also called value methodology, value analysis, or value management. The American Association of State Highway and Transportation Officials (AASHTO) has a website (http://www.fhwa.dot.gov/ve/index.htm) with VE information, guidance, and federal requirements.

Benefit of a value engineering program

Value Engineering has proven to be an effective management tool for achieving improved design, construction, and cost effectiveness in the various transportation program elements. Value engineering techniques can be used to improve productivity or the benefit-to-cost ratio in nearly every aspect of transportation program, including preliminary engineering, maintenance, standard plans and specifications, design criteria and guidelines. VE provides a mean to

analyze and control the total cost of the project. This total cost control is accomplished by a systematic analysis and development of alternative means of achieving the function and cost.

Value Engineering Project Plan

A typical VE plan follows seven steps: general phase, information phase, function phase, creation phase, evaluation phase, investigation phase, and recommendation phase. AASHTO classifies the VE phases slightly different from the above, which are: investigation phase, analysis phase, speculation phase, evaluation phase, development phase, presentation phase, and resolution/implementation phase.

Design value engineering guidelines

To comply with the Federal value engineering requirement, a VE analysis needs to be performed on all Federal-aid funded projects on the National Highway System having an estimated cost of \$25 million or more (including design, construction, right-ofway, and utilities). The typical characteristics of a potential VE projects are:

- * Projects that substantially exceeded the initial cost
- * Complex or multiple phase projects
- * Items using high-cost materials
- * Items requiring difficult construction or fabrication procedures
- * Items performing questionable functions
- * Items appearing too costly to build, operate, or maintain
- * Projects that have grown complex, possibly by development over a long period o time
- * Major structures, and
- * Projects with complicated or costly traffic control or detours.

Construction value engineering guidelines

Value engineering proposals by contractors is different from the design VE in that the recommendation is



developed by the construction contractor, who chooses weather or not to participate. The benefit of a construction VE are:

- * Design enhancement at reduced cost
- * Results in net saving
- * Advanced the project completion date

A contractor may submit a VE proposal for modifying the contract documents to provide innovative, alternative lower cost construction without impairing the essential functions and characteristics of the facility. The Illinois Department of Transportationis Standard Specification (Reference 1), for example, provides guidelines for calculating the amount to be paid to the contractor based on the awarded contract value and the cumulative VE value to date that the contractor has submitted.

Value Engineering Team Structure

A value engineering team of five to seven persons with diverse area of expertise ususlly produces the best results. A team of fewer than five tends to limit the amount and variety of creative input, and a team of more than seven can be unproductive. Teams should be structured so there with varying expertise, e.g. in the case of a highway project: traffic, right-of-way, structures, soils, paving, etc. Including general expertise from the areas of design, construction, right-of-way, maintenance, or traffic operations makes for good team balance.

Value Engineering Project Plan

Value engineering plan generally has several phases: Investigation Phase, Analysis Phase, Speculation Phase, Evaluation Phase, Development Phase, Presentation Phase, and Resolution/Implementation Phase. A VE study as a step-by-step record of the analysis is prepared summarizing all the VE phases.

Investigation Phase

In this phase, the VE team gathers information about the project. The designers in this phase may be asked to formally present the project to the team. The team may also visit the project site.

Analysis Phase

In this phase, the team identifies the elements with the greatest potential for values improvement. This phase requires the team to ask and answer basic questions: what is it, what does it do, what must it do, what is it worth, and what does it cost.

Speculation Phase

In this phase the team applies brainstorming techniques to develop good alternatives to the proposed design. The team uses the generic format of the function to speculate on all possible solution to the problem presented in that function statement.

Evaluation Phase

The evaluation phase determine the best alternatives by listing the advantages and disadvantages of each alternative. If the disadvantages far outweigh the advantages of any alternatives, they are dropped at this point.

Development Phase

Once the best alternatives are selected, they are fully developed through sketches and cost estimates to determine if any assumptions made during the study in fact valid.

Presentation Phase

The VE team presents its recommendation to the client who must evaluate and implement the findings.

Resolution/Implementation Phase

All recommendations must receive consideration; however, it may not be possible to implement all recommendations. Conducting a VE study is only part of the VE program. Full evaluation of all proposals and implementation of those determined to be viable is also a major part of the VE program.



2005 SEMI-ANNUAL MEETING



President Abder R. Ghouleh welcoming guests



Chairman Dr. Soliman Khudeira at podium



President Abder R. Ghouleh & Amer Husaini, Motorola



Master of Ceremonies Bilal Almasri



Michigan Engineers' President Sermed Saif



Keynote Speaker Amer Husaini, VP at Motorola



Trustee Ayoub Talhami and guests



Member Engineers with keynote speaker Amer Husaini



2005 Semi-Annual Honoree Profiles



Dr. Hiba Abdalla

Dr. Hiba Abdalla received her BSCE degree from Sudan, MSCE degree from Illinois Institute of Technology in 1997 and Ph.D. degree from the University of Illinois at Subsequently, she joined Alfred Chicago in 2001. Benesch & Company in Chicago as a Structural Engineer. During her Ph.D. degree, she worked as a Research Assistant on several projects including one from the Illinois Department of Transportation. Dr. Abdallaís research focused on analysis and modeling of concrete and steel bridges as well as joints in seismic regions. In 2000, Dr. Abdalla joined AAAEA as a student member and became a full member in 2001. Through her hard and sincere work, Dr. Abdalla has made significant contributions and has excelled in her positions as the Secretary for AAAEA, and now the Chairperson during the inaugural year of the Women Engineers Committee. She has devoted her time to this organization in an unwavering manner and has proven her worth as an outstanding member.

Dr. Abdalla is a member of other professional organizations and societies including ASCE. She has published several papers in refereed journals and proceedings and has made numerous lectures and presentations. She also participated in AAAEA EIT review courses as a lecturer for the past two years. Dr. Abdalla has contributed significantly in several projects at Benesch including design of the New Mississippi River Bridge in St. Louis, the signature arch bridge on I-94 over Telegraph Road near Detroit, Michigan and the post-tensioned deck of the Wacker Drive Reconstruction project. She is a valuable part of the structural team at Benesch as attested through the work she accomplished in analysis, design and detailing for several projects in the states of Illinois, Michigan and Pennsylvania.

Eyad Elqaq was born in 1966 in Kuwait. He grew up in a small family, with one sister and one brother. During his school years Eyad was able to maintain his high grades and finished in the first place between his classmates in every single year. And during his last year in high school he accomplished more by ranking 20th in the whole country. Eyad earned his BS in electrical engineering at the Kuwait University. He then moved to Chicago in pursue of his higher education. He earned his master degree in electrical engineering from the University of Illinois at Chicago in 1990. While working full time and starting his family and his new engineering business, Eyad was able to continue his dream of completing his Ph.D. In, 2005, this dream became realty when Eyad graduated from UIC with a Ph.D degree in Electrical Engineering. Eyad is married and has two children.



Dr. Eyad Elgag, PE

At work Eyad was able to distinguish his design and capture the respect of all the people working with him. His latest project in 17 North State received the honor of The Landmarks Preservation Council of Illinois for his work and leadership in preserving this 19 stories historical office building. Eyad is licensed in Illinois and many other states as an electrical engineer.

Eyad has been working with the AAAEA since it started and has contributed greatly to the Association through the career enhancement workshops. Eyad assisted many engineers in getting new jobs and prepared them for interviews.

2005 AAAEA Scholarship Awards

This scholarship award has been established by the AAAEA and is administered by the Scholarship Committee. The award is presented to an Undergraduate or Graduate, Engineer, Architect or Computer Science student who is also a student member of AAAEA.

The main objective is to promote Engineering, Architecture and Computer Science as worthy professions and to foster stronger ties to the AAAEA and to the Arab American Community.

In recent years, AAAEA has sufficient funds to award multiple scholarships. A scholarship in the amount of a thousand dollars (\$1000) is presented during the

AAAEA's winter semi-annual meeting. The recipient is recognized by presentation of a certificate and the check at the semimeeting. annual The AAAEA scholarship award is open only to student members of the AAAEA who are attending any of the accredited four year Colleges or Universities in the state of Illinois

12/08/2008

Presentation to scholarship winner Mohammad Alhassan (2nd from left)

The AAAEA Scholarship Committee received six applications in 2005. The committee evaluated all the applications, graded them and awarded two scholarships of \$1,000 each to the following students: Mr. Mohammad Alhassan and Mr. Elyes Boundaoui.

Mr. Mohammad Alhassan is a Ph.D. student in the Civil and Materials Engineering Department at the University of Illinois at Chicago (UIC). A letter of recommendation from one of his professors highlights that "Mr. Alhassan has proven himself to be intelli-

gent, hard working and motivated student with excellent theoretical and experimental backgrounds. In the courses that he had at UIC, he can be easily placed in the top 3% amongst his contemporaries. He has finished the Ph.D. course requirement at UIC with GPA of 4.0/4.0". Mr. Alhassan would like to teach at a good university and the most important issue for him is to design buildings and bridges that have sufficient resistant to earthquakes and hurricanes.

Mr. Elyes Boundaoui is a senior student studying Civil Engineering at the Illinois Institute of Technology (IIT). A letter of recommendation from one of his professor highlights that "Mr. Boundaoui ranked among the top 5% of the students. I consider

him one of my best students. He always shows enthusiasm working on projects in order to put what he learned in class to the practical engineering."

Mr. Boundaoui would like to start his career by participating in a project for the protection of human life by designing safe structures.

The AAAEA Scholarship Committee highly encourages all students to apply for the scholarship. Please check the AAAEA web site for more information.

Signed: Jamil Bou-Saab, P.E AAAEA Scholarship Committee Chairman



Michigan Engineers Association Update

By Sermed K. Saif, PE - President Arab American Engineers & Architects Association (AAEA) -Michigan



Dear fellow professionals:

On December 8, 2005, we were honored to attend the 2005 AAAEA Chicago Semi Annual Meeting held in Oakbrook Terrace, Illinois. Representing the Michigan AAEA, I gave a brief synopsis of the Association's history.

During 1996, 1998, and 2003 there were several attempts to create the Michigan Association but failed due to lack of interest and disagreements. In June of 2005, a group of 19 professionals attended a dinner meeting and agreed to go forward with the Michigan Association. Since then, general monthly meetings have been held where interest and dedication increased. During these meetings, board members have been selected, by-laws adopted, and the Michigan Association has been registered with the State.

Our website www.aaeausa.com is uploaded and is approximately 70% complete. We are currently working on our e-magazine, committees, advisory board, and are still in the process of recruiting members. Today, we have 45 full active members, 2 associates, and 1 student out of 250 prospective professionals.

We have been in contact with Chicago Association from day one and in September of 2005, we met with Bilal Almasri and Talal Almasri during their visit to Detroit. The meeting was very beneficial to us as we discussed many issues that Chicago has already been through.

Hours prior to the Chicago Semi-Annual Conference, a meeting was held with the Chicago Board and representatives from other states to discuss the status of each state and future common goals. I also had a chance to present our draft 10-Year Strategic Plan and it received a positive response. It was agreed that a national association should be considered. An ad hoc committee will be formed and one contact will be assigned from Louisiana, Texas, Wisconsin, Michigan and two contacts assigned from Chicago. During 2006, this committee will put together a draft plan for going national and also will allow the other chapters to establish their base.

I would like to thank all of you and especially Abder Ghouleh, for the invitation and the chance to meet with you. I would also like to recognize Bilal Almasri and Talal Almasri for their help.

Allah yateeku il afya and God bless you all. Thank you very much.



NATIONAL ARAB ENGINEERS MEETING AT THE SEMI-ANNUAL 2005

By Bilal Almasri





Prior, during and after the program in the Semi Annual Meeting, discussions were held regarding the relationships between AAAEA and Arab engineers in other states. In these discussions, three other states were present in addition to AAAEA. The representative from Michigan, Steering Committee President Sermed Saif, presented a ten year plan, where he expected a national organization with 25,000 members. Also it was decided (subject to approval) to create an ad-hoc committee with 2 members from Chicago and 1 from Michigan, Wisconsin, and Texas. Dr. Ziad Salameh from Wiscosin attended these meetings. It should also be noted that an engineer from Louisiana, Ms. Menat Salem, flew into Chicago and joined our discussion.

AAAEA was very pleased meeting and having these discussions with all our guests. Furthermore, it was decided to meet again in our next Semi Annual with all the states available to further discuss going national. Our goal is to assist engineers in all states to create associations, where at the right time a national convention will be called to form the national organization.

In order to reach that goal, it is essential that each and every member of this association reach out to a friend, relative or co-worker in other states, and expose them to the great work this association have accomplished, and encourage them to create an association similar to ours, where they can use our website to create a mission, bylaws, activities, etc. without the efforts of all of you, we would not have approached this accomplishment.

Thank you for your support.

National Outreach - Wisconsin Trip

By Dr. Ahmad Hammad, SE, PE



I am pleased to report to our members on the visit the AAAEA made to Milwaukee in an effort to encourage and assist Arab-American engineers there in the establishment of their own engineering association. The meeting was held on Saturday December 17, 2005 in Milwaukee at the University of Wisconsin -Milwaukee Engineering Building. The Chicago AAAEA members included: Abder R. Ghouleh (President), Soliman Khudeira (Chairman of Board of Trustees), and Board of Trustees members Bilal Almasri, Ghaffar Kazkaz, Mohammad Dasogi and Ahmad Hammad. Also in attendance were Mustafa Mahamid and Issam Rayyan. The Wisconsin engineers included: Ali Shireh, Mahmoud Malas, Wessam Daoud, Raniah Ziadah, Shirin Selmi, Fadi Alkhatib, Emad Abutabanjeh, Aziz Aliow, Adeeb Rahman, Rami Hawileh, Sami Obaid and Nader Jaber.

The meeting started with introductions by Abder Ghouleh, Bilal Almasri and Soliman Khudeira. Dr.

Khudeira then went on to show a PowerPoint presentation that he had prepared on the AAAEA local activities. The presentation was well received. Discussion then ensued regarding the establishment of a Wisconsin Engineering Association. Chicago answered questions and assured Wisconsin engineers that they will be available to assist in the establishment of such an association in anyway possible. It was stressed that the association should always stay as non-political and non-religious. A timeline was also discussed and a steering committee was formed. The steering committee will meet on a monthly basis and register the association in Wisconsin. John Dasoqi of Chicago donated \$500 for that purpose. We are very grateful to have an opportunity to meet with the Milwaukee engineers and we will always be in contact and will continue to work with them to make this happen. We are very excited about Wisconsin and believe that they have great potential.



2006 Annual Dinner Social (Hafleh)

Saturday March 18 2006 5:30 p.m. -10:30 p.m.

Drury Lane Oak Brook Grand Ballroom

100 Drury Lane Oakbrook Terrace, IL 60181 (630) 530-8300

Cost: \$35/Member & Spouse

\$45/non-members

For Reservations & Tickets:

Easily fill out form on website: www.aaaea.org

or Email: aaaea@aaaea.org or Call: (312) 409-8560

or Mail: AAAEA

P.O. Box 1536

Chicago, IL 60690-1536

Tickets also available from:

Omar Alsharbini: 708-444-7138 and Abder Rahman Ghouleh: 312-613-3713

Reserve No Later than Friday, March 10

(Tickets will not be available at the door) (Absolutely no children, Management orders)

Directions:

WHEN APPROACHING FROM THE NORTH OR THE SOUTH ON ROUTE 83 (KINGERY): Exit at Roosevelt (Rt. 38)/Butterfield Road. Follow the sign to Drury Lane.

WHEN APPROACHING FROM THE EAST OR WEST ON ROOSEVELT ROAD (Rt. 38): Exit Rt. 83 (Kingery Hwy) south to Roosevelt Rd East and follow sign to Drury Lane.

WHEN APPROACHING FROM DOWNTOWN CHICAGO: Take the Eisenhower Exp. (I-290) West to I-88 West, Exist at Cermak, Proceed straight through the stop light, Continue on Spring Rd. to Drury Ln., Right onto Drury Ln.

WHEN APPROACHING FROM THE WEST ON I-88: Exit at Midwest Road, turn right, proceed North to Butterfield Road (Rt. 56), Turn right onto Butterfield Road, Exit Roosevelt Road East/Drury Lane.

WHEN APPROACHING FROM I-294 (TRI-STATE: Exit I-88 West, Exit at Cermak, Proceed straight through the stop light, Continue on Spring Rd. to Drury Ln., Right onto Drury Ln.



NATIONAL ENGINEERS WEEK EVENTS FEBRUARY 19-25

MATHCOUNTS

The MATHCOUNTS competition is the first nation-wide competition to combine the efforts of education, business, government and technological communities to promote math excellence among junior high school students. The MATHCOUNTS Foundation was formed over 20 years ago by the National Society of Professional Engineers (NSPE), the CNA Insurance Companies and the National Council of Teachers of Mathematics. The MATHCOUNTS pilot program was conducted in the Chicago Public Schools (CPS) with the support of the Chicago Board of Education. This year's Chicago area competition was co-hosted by the Chicago Chapter of the Illinois Society of Professional Engineers and the American Public Works Association.

The competition is conducted through the state and local chapters of the NSPE. Illinois has 21 chapters of the ISPE. Each chapter holds their competition during the first three weeks of February. Each chapter sends winning Mathletes to the State Competition to be held during early March. The state finalists vie for the top four individual spots, which form the team to represent the State of Illinois at the National MATH-COUNTS Competition.

MATHCOUNTS lets smart middle school pupils compete to solve complex math problems. It's spread to more than 6,000 schools and 500,000 students.

"It's very different from math class," said Adam Grainawi, an eighth-grader at Walter Sundling Junior High School in Palatine, Illinois. "You can come up with your own ways of solving the problems."

Adam and four other students from his school competed last year and are scheduled to compete again this year in early February 2006. To him, even the hours of practice are fun. "You don't just look at math as a bunch of numbers and figures."

The 2004 national competition was won by mathlete Gregory Gauthier, who answered: "How many five-digit positive integers have the sum of all five digits equal to 8 and the product of all five digits equal to 8?" (Answer: 10 integers) He attends Monroe Middle School in Wheaton, Illinois. Illinois, won the team competition, beating out California.

You can visit the home page at http://www.math-counts.org/

Jamal Grainawi represented AAAEA last year and will be grading the test results in this Februaryis competitions.

Please volunteer to be a grader for the competition. Please ask you children to pass this info to their math teachers so they can register to enter in the competition next year.

High School Student Bridge Building Contest

For more than thirty-one years the high school student bridge building contest has excited students about their education and increased their interest in the science and engineering. During that time it has grown from a local event to an international one. Students design, build, and test bridges made of bass wood. The bridges weigh no more than twenty-five grams and span a 300-mm gap. Competitions are held on three levels: school, regional and international. The top finishers at each level are eligible to go on to the next contest. Bridges are judged on their efficiency, which is defined as the mass the bridge supports during the testing divided by its own mass. Local engineers volunteer to be judges during the testing of the students' bridges to failure. Prizes range from cameras and gift certificates at the regional contest to a college scholarship at the international contest. The Chicago regional contests will be held on February 7, 2006, and the International Bridge Building Contest will be held on Saturday, April 8, 2006 in Oak Ridge, Tennessee, USA.

AAAEA engineers have volunteered to judge the regional contest every year since 1998. Jamal Grainawi has been involved with this contest since 1994 and he is a member of the contest committee. Jamal judged the regional and the international contests for several years and is planning on being a regional judge on February 7th, 2006. Dr. Ahmad Hammad, Dr. Soliman Khudeira, Dr. Moussa Issa, Shaker Asfour and Omar Alsharbini were judges in previous years. You can visit the contest home page at:

http://www.iit.edu/~hsbridge/database/search.cgi/:/public/index

Future City Competition

The National Engineers Week Future City Competition, for 7th & 8th grade students, fosters

interest in engineering, math and science through hands-on, real world application. The competition is in its thirteenth year and has been recognized by the education and engineering communities as an innovative learning program. Students: learn how engineers turn ideas into reality; use the award winning computer software, Sim City 3000TM, to design their city; build a scale model illustrating a section of their city with an emphasis on using recycled materials; work as a team under the guidance of an engineer and a teacher; write a 500-700 word essay on a specific engineering topic; and apply their knowledge to real world situations.

Chicago has been the only city to compete in this competition for the last thirteen years. It recruits schools primarily from the City of Chicago and suburbs. However, teams have competed and are welcome to compete from all parts of the state. Twenty-five schools registered to participate this year. Last year's regional competition was held at the University of Illinois at Chicago (UIC) on Saturday, January 29, 2005. All of the schools competing did a fantastic job and put much time and effort into completing the competition.

This year's regional competition is tentatively scheduled for Saturday, January 28,2006 at U.I.C. Additional info can be found on the national website at www.futurecity.org or the Chicago region website at www.futurecitychicago.org.

Submitted by Jamal Grainawi, SE, PE



COMMITTEE REPORTS (December 2005)

Jamal Grainawi, Vice President

During the past year, as a Vice President, I worked on the following with the help and contributions of our officers and members:

- 1. Updated AAAEA electronic documents to include our new officers and board members.
- 2. Designed and ordered Coffee Mugs to be distributed at AAAEA semi-annual meeting and to be included with the new member's welcoming package.
- 3. Assisted the committee chair persons as needed.
- 4. As a Public Relation chairman, I represented AAAEA at the IEC annual meeting. I am also on the IIT bridge contest committee and encourage our members to volunteer as judges.
- 5. I am working on creating a how-to manual with step by step directions to help other engineers create a local association.
- 6. I will be creating evaluation forms to allow members to voice their opinion and evaluate our activities, newsletter, web site, AAAEA officers and committee chairs and the board of trustees.
- 7. Join us in February for National Engineers Week 2006 in Chicagoland as we celebrate the profession's contribution to our quality of life and reach out to our community's next generation of innovators. I will be organizing activities during Engineers Week to encourage elementary and high school students to consider careers in engineering, especially through hands-on school projects. Volunteers are needed.

Abdul Basraoui, Treasurer

I am pleased to report that we are maintaining a strong financial record and operating performance that is necessary to increase AAAEA accounts. Nevertheless, we recognize that we need to maintain the operating performance close to the next level to generate more sufficient development programs. This will provide a significant growth in the future. As Treasurer of the AAAEA, I can say that we have a strong financial record for this year.

Cheking Account	\$10,768.08
Saving Account (CD)	\$9,962.39
Paypal Account	\$1,147.29
Scholarship Fund	\$15,414.37

Hiba Abdalla, Secretary

Keeping in touch with members and coordinating member-board correspondence are part of the responsibilities entailed by the Secretaryis position. We encourage our members to update their contact information so as to ease the relay of announcements and events. As always, the Association welcomes your suggestions, comments and complaints in order to better serve our professional community.

Mohammad Kliet, I.T. Officer

- * Maintained and updated organization web site.
- * Posted events, announcements, photos, and resumes to web site.
- * Created electronic membership application and member record update forms on the web site.

Currently finalizing work on a new electronic forum which will be accessed from the web site.

Omar Alsharbini, Activity Committee Chairman

The following is a list of the activities during the past year:

- * The picnics were a success, we had 3 family picnics: South Side, North Side and Oakbrook.
- * The Bowling Party was a success. There was a good showing of members and all had a great time.
- * The Annual Dinner Social (Hafleh) took place in April 2005.
- * Semi-Annual Meeting-December 8, 2005.

The following is a list of the activities we planned for next year (2006):

- * Bowling on January 29, from 2:30-5:00; we reserved 22 lanes
- * Social Dinner on March 18 at the Drury Lane Oak Brook.
- * 3 family picnics; the dates and locations will be announced later in 2006.

<u>Maher Abu Mallouh, Education Committee</u> Chairman

- * AAAEA Technical Conference in November.
- * Saturday tutoring is continuing every Saturday at Universal.
- * WYSE course is being provided at Universal.



* EIT/PE courses given by AAAEA instructors starting in January 2006.

<u>Izeddin Awaidah, Financial Committee</u> Chair

The committee was assigned to raise funds from sponsors for the annual Scholarship fund, which is designated for the promising engineers of tomorrow.

Suha Saber, Membership Committee Chair

The principle function of the membership committee is to keep an active and up-to-date log of our membersí information. I am pleased to announce that we currently have 207 Active members; an increase of 84 members since the elections. We met our goal of 200 for the Semi Annual meeting. Our plan is to increase membership by 50 more members before elections. Also, we are working on the new Membership Directory and Member ID cards.

Your help and support in keeping this association a viable one is needed. This can be achieved through your commitment to timely renewal of your membership and your active participation in the association's activities. Your membership committee has always strived to enhance our service and communication with our current and new members. This year, we will create a "Welcome Package" to our new members. This package will provide our new members invaluable information about our association and its activities. Together, we can help our association prosper and grow. Finally, please make sure you update your contact information by filling out the appropriate form found on the AAAEA web site.

G.M. Sadat, Career Enhancement Committee Chairman

The career enhancement committee conducted several workshops to discuss resume writing and offer job leads including interview tips. The committee served many members by reviewing their resumes via emails. We have several members looking for engineering positions in civil, mechanical, and electrical disciplines. We urge all our members to forward any job openings to us, so we can improve our networking.

<u>Ibrahim Shillo, Publication Committee</u> <u>Chairman</u>

This year the publications committee continued providing the newsletter with information and articles featuring our memberis accomplishments, informative engineering stories and general information about the AAAEA. I am pleased to say that the Publication Committee is very happy with the feedback we've gotten from the past two newsletters and are looking forward to continuing to improve upon the recent success. Currently we have already begun work on the next edition. The quality of the newsletter depends very much on the articles and suggestions we receive, therefore, I would like to thank everyone who has contributed to the newsletter, especially those who have submitted articles, and encourage everyone to make some type of contribution or suggestion. Special thanks to President Abder Ghouleh for his time and support. The newsletter is mailed to all AAAEA active members and is available to all online at www.aaaea.org .

<u>Hiba Abdalla, Women Engineers Committee</u> Chair

The Women Engineers Committee was created in May of 2005 following a networking meeting that was held on March, 12 2005. The primary goal of this committee is to promote engineering as a career of choice, and it will be achieved by creating a base for women engineers to convene and share experiences, demonstrating to younger student generations that engineering is an exciting profession, changing perception among families about engineering, and honoring women's achievements in engineering.

AAAEA invites everyone to participate in this effort in order to realize its benefits to the fullest. As always, we encourage comments and suggestions, and we welcome constructive critique!

Texas Engineers Update



The **Arab American Engineers & Architects Association** (AAEAA-Texas) successfully had its first meeting in Houston, Texas on Friday, December 9, 2005 at Terracon Consultants Inc.

In summer 2004, a small group of engineers and architects held a few meetings to discuss the need for and feasibility of establishing the organization. After more than a year of inactivity, we sincerely want to work together to bring this organization to life in Texas.

The Friday meeting was attended by 18 engineers, architects and students. The list of attendees includes: Hosam Salman, Ahmad Alboorenie, Ayman Shannak, Rula Khalaileh, Mohamad Ghosn, Fadi Faraj, Omar Mabsout, Fouad Hammoud, Hossam Esmail, Mahmoud Ghanem, Ahmad Sayah, Hachem Domloj, Ahmad Abu-Shaban, Jamal Fadda, Rami Tuffaha, Diaa Mounir, Hatem Ltaif, Bilel Hadri.

The following topics were discussed:

- * Background summary of previous steps taken for establishing the AAEAA.
- * The AAEAA is a non-political, non-religious, social, and professional organization.
- * Time is valuable for all members, so this organization will focus on both skilled and efficient work.
- * The importance of networking and advertisement to expand the organization in order to attract more members. Need for volunteers to search and inform the Arab community.
- * Suggestion to acquire some sort of legal service (e.g. an Attorney/CPA) to provide financial guidance.
- * Elections are mainly for the Houston chapter at this time as the headquarters for Texas, although registration will be for all Texas residents who wish participate in the organization.



* Selecting a Steering Committee of five members with one person to act as a coordinator, the following is the list of the elected members: Hosam Salman (Coordinator), Ahmad Alboorenie, Omar Mabsout, Ahmad A. Sayah, Mohammad Ghosn (Student Rep)

Representatives of other cities: Hossam Esmail (for Dallas) & Tareq Ismail (for San Antonio)

- * The duties of the steering committee are as follow:
- * Register the organization at the State of Texas
- * Revise the By-Law.
- * Prepare for the first election that is coming in three months.
- * Networking and effective ways to bring more members to the organization.

AAEAA monthly meetings will be scheduled to be the first Saturday of each month (next meeting will be February 4, 2006) at 3:00PM at The ACC-The Arab-American Cultural & Community Center-10555 Stancliff Road, Houston, Texas 77099.

On behalf of the AAEAA-Texas, I would like to thank the Arab-American Engineers in Chicago for their continuous support and help. We have been in contact with Mr. Abder Rahman Ghouleh, P.E., since the first day of our plan to establish this organization in Texas. We are very grateful to have this opportunity and to work together towards our goal to have significant professional role in the USA. If you are interested in joining AAEAA-Texas or you know a friend, please contact me at "h_salman@hotmail.com" or call me at 832-633-1699.

Hosam Salman, P.E. Steering Committee Coordinator AAEAA-Texas



Welcome New AAAEA Members

Ranad Shqeirat
Ahmed Abdelaziz
Ahmad Anbari
Ashraf Hayek
Rashed Gulaid
Wael G. Mansour
Abdel Q. Abuyasin

Altaf Rahman Ali Shrih Shirin Selmi Usama NourEldin
Moosa Matariyeh
Khaled Omari
Muhamad Dabbouseh
Ahmad AbuSabha
Mohammad Ali Abdo
Ali J. A. Alwardi
Mohamad Nasir
Belal Nasir
Jamal Jarad

ANNOUNCEMENTS AND NEWS

A special thanks to Bilal Almasri, Issam Rayyan and Amani Ghouleh for their much appreciated help at the Semi-Annual Meeting.

Congratulations to Suha Saber on her recent promotion.

Congratulations to Mouris Boles on his recent promotion.

Congratulations to Hesham Al-Hajje on his recent promotion to Engineer 4.

Congratulations to Dr. Maher Abu-Mallouh on his new position.

Congratultaions to Issam Rayyan on his new position.

Congratulations to Samar Megdadi on her new position.

Congratulations to Haytham Mostafa on his new position.

Congratulations to Omar Alsharbini on his new position with CDOT.

Congratulations and good luck to Nabil Fares on his new position in Washington, DC. Congratulations to Hayat Issa and husband on the birth of their new baby boy Abdallah.

Congratulations to Naim Mansour and wife on the birth of their new baby boy Luqman

Get well wishes and speedy recovery to Fadi Sultan.

Get well wishes and speedy recovery to Omar Alsharbini's son. Get well wishes and speedy recovery to Mahmoud Issa's son.

The Arab Voice of Chicago Community Radio Program is on WCEV 1450 AM every Saturday 3:05-5:00 pm Director/Producer Yousif Marei 773-879-9229

If you have an announcement on any member, please email it to us at aaaea@aaaea.org



Science Fair at Universal School



On Friday, December 2nd Universal School held its 8th Annual Science Fair for the 8th and 9th grade classes. Over 50 science projects were displayed. Students from 10th, 11th and 12th grades were helping to calculate scores and serve as runners. Members of the Motheris Club provided refreshments and snacks.

The breakdown of winners for each class is as follows:

8th Boys 9th Boys

1st place: Ahmad Ahmad & Omar Ali 1st place: Karim Abuzir & Muhammed ElSheikh

2nd place: Zayd Zayyad2nd place: Amr Kawji2nd place: Ahmad Atallah3rd place: Ali Aldabe

8th Girls 9th Girls

1st place: Nabiya Arshad 1st place: Sana Said
1st place: Duhah Hamayel & Alaa Mohammed 2nd place: Adlah Zegar & Amani Khater

2nd place: Nisreen Amir 3rd place: Nur Malas

I am writing this article to encourage the members of the Arab American Association of Engineers and Architects to get involved and become Science Fair judges.

The students involved in the science fair have to select a research subject as a part of their education. They review the literature, generate ideas to investigate, acquire research equipment and material, conduct experiments, analyze results, make conclusions and write reports. Students spend a great deal of effort on these projects and they learn skills that later on they will use in college. These projects are as important as the junior and senior engineering projects at college. They are an integral part of the studentis education and their development of an investigative mind.

The science fair is the reward of the studentsí hard work. Without the fair and the judging, their research would have no meaning. In the fair, they look forward to be seen by professional engineers. These engineers represent the models the students want to be in the future. The students want to show the judges their work and obtain their confirmation.

In this last fair there were five engineers from AAAEA that served as judges among a total of twenty-eight volunteers. I would like to express my appreciation to all the judges on behalf of the association.

By Dr. Ghaffar Kazkaz



November Technical Seminar



We are pleased to report that our November Technical Seminar held November 19th was a success. Presenters included: Dr. Soliman Khudeira, P.E., with his "Transportation Project Management (Design and Construction)" presentation. Dr. Maher Abu-Mallouh, P.E., with his "Home Inspections" presentation, and Shaker Asfour, P.E., with "Emergency Bridge Repair". The AAAEA would like to thank the presenters for their efforts, as each presentation offered many valuable insights and information. With 30 engineers participating, we would also like to thank all members who made this a well attended event.

Business Profile

Gado Architects, Inc. Ashraf Abdelhamid, Principal

3505 Tamarind Dr., Northbrook, IL 60062. Phone: (847) 508-1110 E-mail: aahamid@comcast.net

Gado Architects, Inc. is a full service architecture firm committed to excellence by providing affordable, accurate, and timely design solutions. Our attention to detail and personalized service results in successful projects and long-term relationships. This relationship begins with a careful definition of the clientís goals and expectations. A designer- client partnership develops through the process to assist in the identification of a design direction. The net result is a well designed, well built environment that is budget responsible and schedule sensitive.

PROFESSIONAL PROFILE

Registered architect with over 20 year of experience in residential, educational, commercial & corporate projects. Project management skills that monitor a projectis progress and synthesize the collective strength of the project team. Strong technical experience and project specification writing that ensure a thorough process and fulfills both aesthetic and functional criteria. Sophisticated problem solving abilities and well integrated architectural and engineering solutions. Excellent contract negotiation skills with owners and consultants.

Postage

AAAEA P.O. Box 1536 Chicago, IL 60690-1536

AAAEA Executive Board and Board of Trustees

President:

Abder Rahman Ghouleh, PE (708) 229-9235

Vice President: Jamal Grainawi, SE, PE (847) 705-6376

Secretary / Women Engineers: Dr. Hiba Abdalla

Treasurer:
Abdul Basroui

(312) 328-9915

(847) 994-5764
IT Officer:
Mohammad Kleit

(847) 247-8549

Activity Committee: Omar Alsharbini (708) 444-7138 Education Committee: Dr. Maher Abu-Mallouh, PE (773) 619-8897

Financial Committee: Izeddin Awaidah, PE (773) 695-0977

Membership Committee:

Suha Saber (708) 925-6298

Publications Committee: Ibrahim Shillo (773) 585-2657

Career Enhancement Committee:

GM Sadat, PE (847) 708-7500

National Outreach Committee: Dr. Mustafa Mahamid (312) 493-8105 Board of Trustees:

Chairman

Dr. Soliman Khudeira, PE

Members

Dr. Ahmad Hammad, SE, PE

Bilal Almasri

Hasan AlGholeh, PE

Ahmad Basrawi

Jamil Bou-Saab, PE

John Dasoqi, SE

Dr. Sam Elmoursi, PE

Dr. Mohsen Issa, SE, PE

Dr. Ghaffar Kazkaz

Suheil Nammari, PE

Ayoub Talhami, PE

