

NEDAC News

NED Alumni Association Canada

Winter/Spring 2009
President's Message

Vol. 2, Issue 1

CONTACT US:

Mailing Address:

3569 Aquinas Avenue, Mississauga, ON, L5M 7L7

E-Mail:

info@nedalumnicanada.org

Website:

www.nedalumnicanada.org

Inside this Edition:

NEDAC Board Elections 2

NEDians in the News 3-5

Article on Piping
Engineering 6-7

Election Day Photos 8-10

I have great pleasure in addressing you for the first time as President NEDAC after the recent elections. I would like to thank you for electing my team and me for the next two years. We are all charged with tremendous energy to serve NEDAC and its members to the best of our abilities.

Thanks to the efforts of my predecessors, NEDAC has risen to greater heights during the last two years since its inception. It would be the goal of my team and me to take NEDAC to the peak it deserves. I would also like to ensure that NEDAC becomes a major force and be part and parcel of the life of every NEDian in this country.

We have prepared code of conduct for board members and finalized our vision and mission statements for 2008–2010. Work on planning and programming of various activities has commenced. We

Editor's Note

Dear Fellow NEDians,

I hope and pray that the Year 2009 will bring peace to the citizens of this world.

You will see more technical and social events and activities in the coming days. We will do our best to bring you information and news through this quarterly newsletter on your respective engineering disciplines, members' achievements and news back from our Alma Mater, NED University of Engineering and Technology, Karachi-Pakistan. NEDAC always look for dedicated members who can help as

have conducted a very successful technical seminar for the benefit of NEDAC members. Other skill upgrading and social events will follow.

After election, we had two NEDAC Board meetings in which we have discussed the job description of chairpersons of NEDAC Committees and given them directives to proceed speedily with their work. Members will see some newer and interesting activities soon.

In the end, on behalf of board members and on my own behalf, I wish you all a very Happy New Year!



Ismat Kamal P.Eng., President NEDAC

volunteers by sparing time from their busy work and life schedule for NEDAC publications (newsletters and annual souvenirs) and various technical/non-technical events and activities throughout the vear for our well-attended especially Annual Get-together event. It will be held on May 22^{nd} , 2009. Its announcement was made through NEDALUMNICNADA yahoo group on Feb 1st, 2009. Please keep visiting NEDAC website for the latest news and updates. Thanks. Happy New Year!

> Sadiq A. Pirani, P.Eng.

NEDAC Board (2008-2010)

<u>President</u> Ismat Kamal, P.Eng.

<u>Vice-President</u> Mahmood Manzoor, P. Eng.

General Secretary
Anis Muhammad, P.Eng.

Joint Secretary Shiraz Rehmani P.Eng.

<u>Information Secretary</u> Ghulam Hussain Malik

Finance Secretary Aslam Mirza

Social Secretary Masood Rao

NED Liaison Secretary Muhammad Najmi

Executive Members

Arshad Azhar P. Eng Islam Nabi Khan Osaid Syed Sahir Zamir Irfan Arab Latif Nizamani Syed Imran Ahmed

NEDAC Committees

- -By-Laws
- -Finance Committee
- -IT Development
- -Media & Publication
- -Membership
- -Professional Development
- -Social Activities
- -Sponsorship
- -Sports & Recreation
- -Website

NEDAC Board Elections 2008-2010

NED Alumni Association Canada (NEDAC) election were held on November 8th, 2008 to elect NEDAC board members in Annual General Body Meeting (AGM) for the term 2008-2010 at Olympian Lounge in Toronto, Ontario.

A large number of NEDAC members showed up and the whole election process was completed in a very peaceful and organized manner.

Before start of the voting candidates were introduced to NEDAC members. Each candidate got sufficient time to inform members about their past accomplishment and their vision for NEDAC.

Election committee efforts were highly appreciated by the members. In the AGM one by-law article was also introduced and it was approved / accepted by the members.

NEDAC Committee's Chairpersons

Professional Development Committee: Shiraz Rehmani 2008-2009

Arshad Azhar 2009-2010

Web Site Committee: Ghulam Hussain Malik

Social Activities Committee: Masood Rao Sponsorship Committee: Islam Nabi Khan

Media and Publication Committee: Ghulam Hussain Malik

Sports & Recreation Committee: Irfan Arab

By-Laws Committee: Mahmood Manzoor

Membership Committee: Osaid Syed Finance Committee: Aslam Mirza

IT Development Committee: Syed Imran Ahmed

Group photo of NEDAC board Members, See more Election Photos on Page 8-10



Ghulam H. Malik, Anis Muhammad, Ismat Kamal, Mannzoor Mahmood (seating starting LHS)
Sahir Zamir, Osaid Syed, Imran Ahmed, Muhammad Najmi, Irfan Arab, Arshad Azhar (standing starting LHS)

The first meeting of newly elected NEDAC board members 208-2010 was held on November 16, 2008 at 10:00 a.m. at Maple Banquet Hall. The following board members participated in it:

Mr. Ismat Kamal , Mr. Mahmood Manzoor, Mr. Anis Muhammad, Mr. Shiraz Rehmani , Mr. Masood Rao, Mr. Gulam Hussain Malik, Mr. Aslam Mirza , Mr. Islam Nabi Khan, Mr. Muhammad Khaleeq Najmi, Mr. Arshad Azhar, Mr. S. Imran Ahmed, Mr. Sahir Zamir, Mr. Osaid M. Syed, Mr. Latif Nizamani and Mr. Irfan Arab

The Board discussed future programs, strategies, targets and objectives. Fateha was also offered for "Eisale sawab of former NED registrar late Professor Azizul Hasan Khan.

Discussions on the formation of various committees were held and chairmen of certain committees were also selected. The committees will work to achieve the objectives and targets in a very effective manner. Handing over / taking over of the documents from the previous board also took place during the meeting.



The second meeting of NED Alumni Association Canada (NEDAC) board members was held on December 13th, 2008 at 10:00 a.m. at Maple Banquet Hall. Mr. Ismat Kamal President of NEDAC chaired the meeting. The following board members attended the meeting:

Mr. Mahmood Manzoor, Mr. Anis Muhammad, Mr. Shiraz Rehmani , Mr. Masood Rao, Mr. Gulam Hussain Malik, Mr. Aslam Mirza, Mr. Muhammad Khaleeq Najmi, Mr. Arshad Azhar, Mr. S. Imran Ahmed, Mr. Islam Nabi Khan , Mr. Osaid M. Syed, Mr. Latif Nizamani and Mr. Irfan Arab

The Board discussed and approved the following items:

1. Approved minutes of the last meeting and discussed the progress of action items.

- 2. Approved NEDAC vision, mission and code of conduct for 2008-2010.
- 3. Discussed the date and location for the next annual get together.
- 4. Completed nomination of chairpersons for all the committees.
- 5. Reviewed and agreed with the job descriptions of various committees.
- 6. Discussed and approved Yahoo groups email policy.
- 7. Finalized the date and topic for the next professional development seminar.
- 8. Finalized Media and Publication policy.

The next meeting of NEDAC board will be held in the middle of February 2009 on the east end of GTA and its final location and exact date will be announced soon.



On January 24, 2009 the NED Alumni Association of Canada (NEDAC) arranged a training seminar at the Etobicoke Olympium for the benefit of its members and other engineers. The seminar's topics, Resume Development & Interviewing Skills were very much in-tune with the harsh economic realities of today, focusing on the foreign trained engineer's job quest in the Canadian market. There were two back-to-back presentations given by very senior members of the association. The first one on Resume Development was by Mr. Shiraz Rehmani, P.Eng. who is also the Chairperson of NEDAC's Professional Development Committee. He kept the audience spell bound with his high powered self-marketing approach to the process of developing a resume. Mr. Mohammad Khalid, P.Eng. took on the next step in the process of landing a job, i.e. the job interview. He thrilled the audience with his keen sense of humor and casual style, and gave superb pointers on the Do's and Don'ts of interviewing. The logistics of the seminar were efficiently handled by the members of the Professional

Development Committee, Mr. Arshad Azhar, Mr. Imran Ahmed and Mr. Masroor Hasan aptly assisted by several motivated volunteers led by Mr. Osaid Syed. The emcee for the event was Mr. Imran Ahmed who kept the proceedings flowing smoothly. After the second Q&A session, the president of NEDAC, Mr. Ismat Kamal spoke eloquently about NEDAC. He thanked the speakers for their efforts and presented them with gifts.

The delightful refreshments added a touch of class to the one hour long networking session which followed. This session afforded the participants the opportunity to meet each other and obtain useful pointers which would help them in their job search.

Overall the seminar was a great success with the participants leaving satisfied that they had had a good learning experience.



Piping Engineering – A Good Career Option for Mechanical & Structural Engineers Shiraz Rehmani, P.Eng. Chairperson, NEDAC PDC

Many engineers when first confronted with the term "Piping Engineering" are at a loss as to what this field of specialty really means. This is not difficult to understand as this discipline is usually not formally taught in most engineering schools – at best fluid flow in pipes is covered in Hydraulics or Fluid Mechanics courses. It is nevertheless worthwhile to know about Piping Engineering as there are many exciting job opportunities available in this field. With familiarity and some targeted training in this area many never before considered career paths open up.

Piping is ubiquitous in industry whether it is petroleum or chemical processing plants, nuclear or conventional power plants, air conditioning & refrigeration plants or general manufacturing plants. The engineer who is skilled at piping engineering can use his/her talents in any of these industries. However, his/her employment prospects are best in engineering firms that design and build these plants. It may come as a surprise to many engineers to know that piping in the process industry represents 25 to 50 percent of the capital investment of the completed plant and absorbs as much as 33 percent of the engineering effort required to design it. Piping design also has a significant impact on the safety and reliability of operations of the plant.

To provide a rudimentary understanding of what piping engineering is, it is necessary to look at what piping actually consists of. Piping comprises of all the components that go into a properly designed and operating system, viz. the line pipe, flanged, screwed or welded joints, valves, fittings, filters, steam traps, expansion joints, etc.



Mr.Shiraz Rehmani, P. Eng., author of the article

It also includes pipe support elements including shoes, springs and hangers but does not include the actual supporting structures such as building steel work, stanchions or foundations. All of these components must be properly designed and constructed and this activity comes under the purview of the Piping Engineer.



Process piping designed by the author

After the pipe size is determined based on the established fluid flowing conditions, a detailed mechanical design process is initiated which will end in preparing construction drawings to build the piping system. Some of the key steps in achieving this result are as follows:

- Establish mechanical design conditions including pressure, temperature, and any other conditions such as wind, earthquake, fluid shock, thermal gradients and cycles.
- Select piping materials based on design life, strength, corrosion and other special requirements.
- Select the flange and valve class rating based on design conditions.
- Select other piping components.
- Calculate minimum pipe wall thickness required to sustain the design pressure and temperature.
- Establish an acceptable layout between the terminal points for the piping.
- Perform a stress analysis of the piping. This usually includes flexibility and dead weight analyses.
- Perform special analyses for earthquake or other dynamic loads, wind, thermal gradients or fatigue as required.
- Design the piping support details. This would include the actual hardware.

One or more of the above design work is carried out by different groups of Engineers that specializes in those areas of piping design. For example the analysis work may be carried out by Mechanical or Structural Engineers using special computer programs designed for that purpose. Some training would definitely be required for engineers without experience in this field to work as Piping Engineers but it is not at all difficult to make the transition once one identifies the specific area of interest and the employment prospects in that area.

In case NEDAC members are interested in acquiring familiarity and training in this field, the Professional Development Committee can arrange an intensive Piping Engineering Workshop for their benefit. Please email the author at shirazr@hotmail.com if you are interested in participating in such a training workshop.



Marine piping designed by author





NEDAC Board Members (2008-10) Election Day Photos





NEDAC Board Members (2008-10) Election Day Photos



