



# Guelph Engineering Society



Report on PEOSC at Queen's Univeristy,  
Nov. 27-29.

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## ***1. Purpose of Conference***

This conference was prepared in collaboration with PEO and ESSCO. The purpose of this event was to educate engineering students on the importance of engineering in relation with our future careers. The topic this year was engineering ethics.

## ***2. Personal Goals for Conference***

The goal that I had for this conference was to learn as much as I could on the given topic. Thinking back from the past PEO conference that I had attended last year, I remembered how many exciting and interesting things that are associated with being an engineer, and for this reason, I was hoping to be able to expand on this knowledge and share it with me peers at school.

## ***3. Summary of Events***

### ***Friday:***

- At around 8 oclock, upon arriving in Kingston, shortly after settling at the hotel, we were transported to the University Club for "Wine and Cheese". The venue was very nice and we all had to dress in formal attire. The event was created in order for the participants to meet each either in a socially relaxed manner. The wine and people were very nice.

### ***Saturday:***

- Wake up and breakfast around 7:30 am.

- Opening remarks and welcome at Queen's University from 8:30am - 10:00am.  
- At 10:00 am, PEO introductions by Bernie Enis, P.Eng, Manager of practice and Standards. In this section, there was discussions on the Engineering Code of

Ethics, how it was developed, how it is maintained, etc. Below are some of the notes that I took during the presentation:

- 1937-1986 : Changing public attitude on the society of science due to failure in technology and disaster. For example the Hydrogen Air Balloon (Zeppelin) and the Challenger Space Shuttle.
- Science/Society compromise = policy. Politics ask questions, science provides answers.
- Engineering attitude since beginning of 20<sup>th</sup> century was to control technology for the benefit of society.
- A code of ethics provides credibility and protect public welfare.
- PEO created early 1920's to be recognized by the government. PEO act created in 1937 changed in 1950's.
- 1980 act revised to put in safeguard of public welfare.
- 2009, proposed to create enforceable code of ethics.
- Since engineers design things that "ought to be", we are responsible, ethically for these decisions made.

- At 11:00am delegates were split into two groups to attend to different sessions. I will now elaborate on the session: "Engineering Contribute to Society" by Paula Klink from the Department of Applied Science. Below are some of the notes that I took:

- Overall talk on a perspective on how individuals have found their work as professional engineers to be meaningful and rewarding.
- 3 engineers who shaped the world in the 1970's: Leonid Brezhnev (metallurgic engineer and Soviet-Union leader), Jimmy Carter (US president, nuclear engineer, nobel laureate), Yasser Arafat (nobel laureate, civil engineer).
- Some more engineers: Rowan Atkinson (Mr. Bean, electrical engineer), Alfred Hitchcock (writer, filmmaker, electrical engineer), Tom Landry (football coach, naval engineer).
- Janet the Planet: Mechanical engineer who went into fashion designing and eventually pursued her dreams by doing both careers at the same time.
- Paula Klink (the speaker herself): After starting out in chemical engineering in university, she didn't want to go into plastics or oil therefore took English literature for a year. Found out that this was an expansive hobby. Switched into mechanical engineering. Eventually worked for CAT, Soviet-

Union, controlling smoke-stack emission monitoring, went to grad school, went to Switzerland, came to Canada to work on Groundwater (Queen's). The moral of the story is that she was able to tour the world, and do a bunch of different interesting things with her engineering degree.

I feel like this was an important session for me because it showed how diversified your engineering degree can be and how there is so many doors that I can enter when I graduate.

- At 1:30 pm, there was a Keynote talk on Government, Engineering and Community, given by John Gerretsen, Minister of the Environment of Ontario. During this section, Mr. Gerretsen spoke on the importance of Engineers and their input especially in the case of public policy, where we can have the greatest influence. He said that engineers are especially of importance in politics because of our technical as well as professional background in problem solving and science. He explained the complicated nature of working with various stakeholders to make engineering decisions that will impact a community. This session was also very important to me in showing the degree of impact that an Environmental Engineer can have in society.

- At 4:00 pm, there was a Panel Discussion on Profession Development. The following are some notes that I took during the presentation:

- Ethics course should be offered in 3<sup>rd</sup> and 4<sup>th</sup> year when students are thinking more about the actual working field.
- Should have 9 multidisciplinary course involving various programs: for example engineering, law, environmental science, etc.
- More participation in local chapters.

- At 8:00pm, after our formal 3-course dinner at the hotel, there was a guest speaker, Kevin Deluzio (Professor of Mechanical Engineering at Queen's). His talk involved stories from his past which were both extremely comical as well as inspiring. It helped remind us of the importance of engineering and also that it could still be very fun and interesting.

-At night time, after dinner, they took us out for a social event which was very fun.

### *Sunday:*

- At 9:00 am, after breakfast, we were brought back to Queen's for a talk on: "Enforcing the Code of Ethics, Tales from the Blue Pages". Unfortunately the speaker was very monotone and it was hard to pay attention and not many notes were taken. He spoke of the importance engineers following the code of ethics and how our mistakes, or negligence can lead to major disasters. He outlined some mistakes done by engineers in the past and how they lead to large amounts of people dying.

- At 11:00 am, there were group presentation by the delegates. At the beginning of the weekend we were all separated into small groups of around 4-6 people where we were given a scenario, or a real past event and had to discuss the ethics revolved around them. This was a good opportunity for students to not only learn about this topic, but to also work in a group environment with others in goal of networking as well as working on presentation skills.

## **4. Evaluation**

### *i) Conference Organizers*

This conference was extremely well prepared and organized. All the guest speakers were very good, the venues for activities as well as presentation were very good, and the timing for all the sessions were on time! Well done!

### *ii) Delegate*

I felt as though I did a good job at representing the University of Guelph as a delegate as well as Senator. I participated in all the sessions and events to my best, and felt as though I learned and expanded a lot upon my knowledge of engineering ethics and engineers in politics. I feel as though this will motivate me to become a better student and I will now try my best to pass on the information that I have learned to my peers at school. If I were to have the opportunity to attend another conference, I could possibly improve on networking to a broader extent. This was overall a very great experience. Thank you!