# *Ethics - A Personal Commitment And Responsibility*

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## *1.0 Introduction*

One dictionary definition describes ethics in broad terms as "the study of the general nature of morals and of the specific moral choices to be made by the individual in his or her relationship with others". Another perhaps sharper definition, and one more closely aligned to what IEEE does, states that ethics are "the rules or standards governing the conduct of the members of a profession".

But it is one thing to define "ethics" and quite another to write effective rules, standards or guidelines for proper behavior. It becomes even more difficult to introduce, where applicable, penalties for non- compliance to those rules. Add to all this we have other challenges. Because our technologies are so pervasive in society, ethical issues come to our attention which, in order to resolve would require a certain amount of confrontational action with other institutions. Finally, the IEEE is a worldwide organization embracing many different cultures, not all of which would necessarily agree with every approach we might wish to pursue.

All in all, the IEEE has established a middle ground policy on ethics and while it may not fit every member's desire for a more proactive approach, it does strike the right note on what our organization expects of its members. But what is probably more important, it does require the individual member to take charge of his or her conduct under these guidelines. That is why I headlined this talk "Ethics - A Personal Commitment and Responsibility".

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## *2.0 The Ethics And Member Conduct Committee*

To assist each IEEE member in the discharge of this responsibility we have in place the Ethics and Member Conduct Committee (EMCC). Unfortunately most of our members are unaware of the committee's role and for that reason we have redrafted our vision, and mission statements in the proper context of our current mandate and emphasized the limits on our activities. Those words now read:

**Vision:** A world in which engineers and scientists are respected for their exemplary ethical behavior and the IEEE and EMCC are recognized as major drivers in this regard.

**Mission:** EMCC advises the Board of Directors on ethics policy and concerns, as well as fostering awareness on ethical issues and promoting ethical behavior amongst individuals and organizations working within the IEEE fields of interest. EMCC also manages an open process whereby complaints by one IEEE member against another concerning ethical conduct can be heard and resolved.

**Limits:** EMCC will not be involved in employer-employee disputes.

In short our primary role is to define what should constitute ethical behavior among our members and promote adherence to those principles as defined in the IEEE Code of Ethics. The principles of our Code were first expounded in 1906 and have been updated several times since then. The current 1990 version is regarded by many institutions as a fine example for emulation.

EMCC does not engage in "fishing expeditions" to determine whether breaches of ethical behavior have occurred, but we do react to formal complaints made by a member, will constitute formal hearings and will recommend to the IEEE Board of Directors disciplinary measures that might be appropriate.

With respect to advisory services for individual members we limit that role to pointing them in the direction of other institutions that may be in a position to assist. In addition we keep a membership in and a close contact with the National Institute for Engineering Ethics (NIEE) and the Ethics Officer Association (EOA), two U.S. groups which are active in this field.

Our only plea to members is to recognize the scope and limitations of our committee's activities and to understand that all requests of the IEEE EMCC office at headquarters may not receive the positive answers one may have expected.

## *3.0 Our Profession*

I would be very remiss if I did not take this opportunity to say a few words on the importance of our profession to humanity as a whole and how important each of you are to the continuing success of the IEEE.

Having only wood as a material, Leonardo de Vinci's detailed plans for a rotary construction crane, similar to the ones we see around our cites today, (those plans) had to gather dust until the advent of steel some centuries later. Likewise on the technology front it was a long time between the discovery of electricity and the days of Samuel Morse and Thomas Edison whose ingenuity found ways to put electricity to work.

Today, each of us has access to a vast array of metals, glass, plastics, ceramics and epoxies to name just a few of the exciting new materials. Equally, we have been witness to an unprecedented explosion in new technologies and we haven't seen the end yet. All this activity has served too compress the time needed to turn a dream, your dream, into reality. And this is the bright new world that we now enter. What an opportunity! What a challenge!

The expansion in technology and materials development, particularly in the fields of medicine, communications and computer engineering has been so rapid that, for the first time in our history, we have made obsolete many of the rules and much of the infrastructure that has served society's needs up until this time.

We have experienced and will continue to encounter tremendous change, quantum leaps in available technologies and exponential growth in the rapidity of implementation of those technologies. We are in the business of engineering. I like to refer to it as the business of creating. It is a very privileged role to play in our society. Think about it - with the exception of the artist and perhaps the teacher, no other profession is so honored or aspires to so great a task.

Important as the work of other professionals is, they are not the ones designated to create and build - only engineers are. The medical profession has a maintenance function, it is responsible for our minds and bodies as long as we inhabit this planet; the legal profession is a service and operates mainly as a consequence of our weaknesses and not our strengths; the accounting profession is also a service, it is an aide to the orderly reckoning of our activities; the priesthood is dedicated to the maintenance of our spiritual needs and I could go on and on. Now please don't get me wrong, all of these professions are important, all of them are needed, but they are after all only maintenance and service functions.

You, the engineers, are the ones that will be creating and building new facilities and devices for people's enjoyment and comfort. This exclusive profession of ours has numbered many great people in its ranks, role models if you like, worthy of emulation.

As an engineer you must accept the building challenge with the same zeal that Imhoptep had in 2700 BC when he constructed the step pyramid of Zoser, the forerunner of the great pyramids along the Nile; you must accept it with the feeling that General Meng Tien experienced in 215 BC when he was ordered by his Emperor to build the Great Wall of China; and with the exultation of Hiram when he was appointed master builder of King Solomon's Temple in Jerusalem.

You stand side by side with Michelangelo, the designer of St. Peter's in Rome; along side Leonardo Da Vinci, who before he became famous as an artist and sculptor, was a great 15th Century military engineer; side by side with Linet and Mongel, who designed the Suez Canal for Delesseps, and the hundreds of thousands who have followed in their footsteps. The calling of an engineer, which includes ethical conduct, is a noble one and I hope you will speak out in public on its behalf every chance you get.

Let me close by referring back to the responsibility each of you have to act ethically in performing the work of your profession.

When visiting a university a few years ago in Lebanon, I was impressed to see a statement carved in the wall of the foyer that read like this:

***"To Strive, to Seek, to Find and Not to Yield."***

**Engineer's and Architect's Oath**

*"Using the heritage left by my professional forebears, I dedicate myself to the pursuit of knowledge and the search for truth in the extension of the benefits of my profession to humanity. I will strive always to disseminate what professional knowledge I acquire. And I will fully accept my responsibility for the instruction of the younger members of my profession.*

*Zealous of the high repute of my calling, I will strive to protect the interests and the good name of any member of my profession.*

*To all, I pledge integrity and fair dealing, tolerance and respect, and devotion to the standards and dignity of my profession. I gladly accept the obligation to use my special knowledge and expertness to serve humanity with complete sincerity.*

*I will serve faithfully to fulfill the solemn obligations of my profession and to govern my life and practice by its canons of ethics."*

# IEEE Canada News

## *Rumblings From Canadian Life Members*

### *1.0 Organizational Move*

Commencing in 2003 the Western Canada LM Chapter Chair will be Om Malik of Calgary, Alberta. Om also sits on the IEEE LM Committee and in that role will provide us with a better link with our parent body. Many thanks to Mo Sachdev for filling this slot in the interim.

### *2.0 Two Major LM Chapters In The Incubator, Another Close*

#### 2.1 Vancouver Chapter

At the invitation of Gruja Blagojevic, Vancouver Section Chairman, a number of Life Members (LMs) from the area gathered for lunch on July 8, 2002 to explore the possibility of forming a Life Member Chapter. There are 130 LMs on the Section register and it was felt that many of them would welcome the opportunity to serve the Vancouver Section and IEEE further.

George Davies acted as Chair for the meeting and Wally Read, who was in the area at the time, attended serving as a resource person. A very open discussion took place and it soon became clear that a positive attitude prevailed. So we are off and running with the formation of a new LM Chapter in Canada. The application will have been filed by the time you read this and the first meeting is planned for October 9th. Ron Potts, Chair of the IEEE Canada Life Members Committee will be attending the inaugural event.

Congratulations Gruja, George and all who attended the organizing meeting. It truly is Vancouver's day in the sun.

#### 2.2 Toronto Chapter

At an exploratory session with Toronto Section Chair Bob Hanna, Wallas Khella and Bob Alden, Ron Potts outlined his views on the value of an LM Chapter for Canada's largest IEEE Section and one which will shortly be celebrating its centennial. Again the concept was well received and quickly the conversation shifted to how fast they could mobilize and energize potential members.

Bob Alden and Wallas Khella stepped up to the mark and agreed to co-direct the organizational activities. With over 200 LMs on the roster it looks like full steam ahead for registration and a first meeting on October 29, 2002.

The Section has pledged its support and this first luncheon will provide the opportunity for prospective members to meet with Ron Potts and Neil Magrath, CCC representative to IEEE Canada's Life Member Committee. Well done guys.

#### 2.3 Montreal Chapter

Montreal Section is taking the first steps toward forming its own LM Chapter with Arthur Yelon acting as initial Chair and Renato Bosisio as the Volunteer Representative to the Eastern Canada LM Chapter. We look forward to great results.

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**Newfoundland, Canada.**