

**Islamic Ethics and Globalization**  
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**Summary**

Ethics has been an essential part of moral values of the humanity over ages. There has been interest in ethical aspect of science and technology for several decades. Science, engineering and technology should serve the wellbeing of humankind. The new technology has a dual potential (to be used for the good or for evil purposes). All type of technology can be used for beneficial or harmful purposes. It can serve to foster the wellbeing of human kind and to make it flourish and reach a higher level of development; or it can be used to subdue, enslave, and de-humanize humans physically, intellectually, and emotionally. The danger of using engineering and technology to harm humans is real.

Engineering ethics is an important issue nowadays. During many decades of glorious Islamic civilization, implementation of Islamic ethics in science, engineering and technology as well as day to day life was practised. The contribution of Islamic ethics in engineering to globalization can do betterment to the relations among nations and mutual cooperation.

The lecture shall emphasize on: Islamic principles in engineering ethics in fighting poverty, equality among human being, respecting environment, respect of human being, perfection in performing duties, safety, etc. All these and many others give an idea about the main issues in ethics of engineering according to Islam which may give better understanding to engineers of their duties towards their nation and towards the whole humanity.

Islamic ethics principles in engineering can contribute to the globalization. However this contribution can be better shown by live actions of Muslim engineers rather than by talks.

**Introduction**

Ethics has been an essential part of moral values of the humanity over ages. With the recent accelerated progress in science and technology in the last decades, the ethics of engineering and technology has become an important issue especially after the great progress in communication and globalization.

Looking into the matter from point of view of the religion of Islam is another aspect from which the subject is to be dealt with. Here specialists in Islamic civilization may be involved to show how fundamentals of Islam can contribute to the ethical issues in the field and how it can further contribute to the future progress and prosperity of mankind. Engineering and technology can be used for beneficial or harmful purposes. It can serve to foster the wellbeing of human kind and to make it flourish and reach a higher level of development; or it can be used to subdue, enslave, and de-humanize humans physically, intellectually, and emotionally. The danger of engineering and technology being used to harm humans is real, and one should be aware of it; as well as one should be aware of the beneficial side of engineering and technology.

Ethics is defined as a set of moral principles that distinguish what is **right** from what is **wrong**. **Religion** was the mother of **Ethics**  
Why Ethics?

- Each society forms a **set of rules** that establishes the boundaries of generally accepted behavior.
- These rules are often expressed in statements about how people should behave, and they fit together to form the **moral code** by which a society lives.
- Ethical behavior conforms to generally accepted social norms, many of which are almost universal.

Islamic Context: The following are Quranic terms related to ethics

- **Khuluq** خلق
- **Salihat** صالحات
- (opposite to Sayiat سيئات)
- **Khayr** خير = goodness
- **Birr** بر = righteousness
- **Qist** قسط = equity
- **‘adl** عدل = justice
- **haqq** حق = truth & right
- **ma’ruf** معروف = known & approved
- **Amanah** أمانة = honesty
- **Taqwa** تقوى = piety

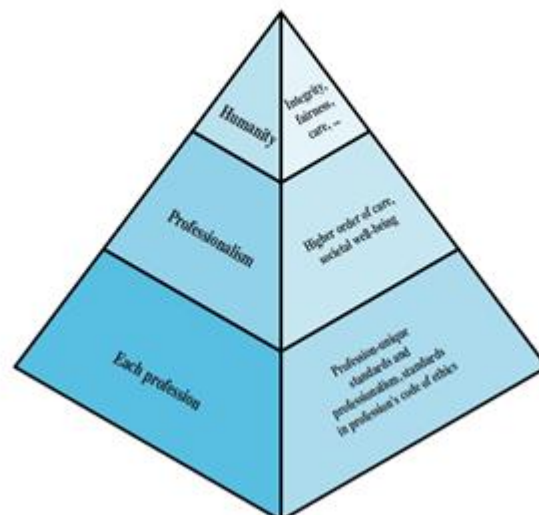
Ethics and Globalization

Scientists and Engineers should be active in Ethical problems of globalization rather than passive. All areas of Planning, Design, Construction, research, development, engineering management, environment, education and all other areas where ethics can affect decisions.

**Comparison between Ethics based on western point of view and Islamic point of view:**

**Ethics based on western point of view:**

## Ethical Hierarchy



### Main Characteristics

- Economic survival
  - based on Greco-Roman background

- Legal emphasis: secular
  - Economic survival
  - Image creation and protection: limited personal liability at the corporate level
  - Intended to persuade audience to purchase products and services
- Changing with time (based on transient values and standards)
  - It took centuries to reach a code: e.g. Human rights
- Occasional conflict between organizational and personal goals
- Differences of opinions between thinkers ( advocate ideals) and capitalists ( advocate economic benefits)
- Knowledge as commodity for sale

#### **Some reasons of conflict between technology and ethics:**

- There are direct conflicts of interest between a technology corporation's responsibility to its shareholders and the ethical responsibility to its customers' interest.
- The main aim of decision makers and agents is "The success of the corporation as an investment of the shareholders' resources."
- They have an ethical mandate to serve that end, and anything that stands in the way of that end is secondary at best.

#### **Characteristics of Ethics based on Islam**

- Fundamentals are based on Quran
- Practical examples are given in life and action of Prophet Mohammed (pbuh) and the way his companions understood and implemented his teachings
- Muslims consider ideal life was real on earth at the time of prophet Mohammed (pbuh) and the four Caliphes followed him.
- Belief in God and the Day of judgment
- Personal accountability at the metaphysical
- Purity of intent to serve just causes
- Moral courage required
- Compatibility between organizational consensus and personal consensus due to clarity of core values
- Ijtihad is able to create new solutions to modern problems based on Islamic principles
- Accepting changing of habits ('urf عرف) as part of legal interpretation
- Ideals of western thinkers agree with Islamic ethics in many cases

#### **Aims of Islamic Sharia**

- مقاصد الشريعة الكلية أو العامة Global or general aims
- مقاصد الشريعة الجزئية أو الخاصة Partial or special aims

#### **Levels of Islamic Ethics**

- Global Ethics: Mercy, Justice, Keeping Promise, looking after environment
- Professional Ethics: Safety of equipment , abiding by standards
- Contractual Ethics: Respecting dates defined, payments on time
- Personal Ethics: Taking Halal Food, paying zaka

#### **Islamic Ethics and Globalization:**

Quran gave the reasoning for sending Prophet Mohammed (pbuh) as a mercy to "A'alamin". In the Holly Quran: وما أرسلناك إلا رحمة للعالمين Indeed we sent you as a grace to the worlds

- The prophet (pbuh) described himself as: إنما بعثت لإتمم مكارم الأخلاق
- I was sent (by Allah) to perfect the best of characters

#### **How can the Prophet (Pbuh) be a mercy to the worlds?**

## Fighting Poverty

ما آمن بي من بات شبعان وجاره جائع إلى جنبه وهو يعلم به

The one who spends the night with filled stomach while he knows that his neighbor is hungry he wouldn't be a believer.

Muslim scholars gave fatwa that Zaka can be spent for scientific research and global development leading to the benefit of poor nations.

Helping the needy is an obligation on all those who can help (fardh Kifaya)

**Waqf:** It is another Islamic institution which can do a lot in this field:

- One of the most beneficial institutions in Islamic Civilization
- Muslims made waqf in every needed corner of life
- Many advantages over MGO's
- Muslims should reinforce waqf in newly developed fields and in a modernized way.

## Mercy through justice teachings e.g. justice with enemy

يٰۤاَيُّهَا الَّذِيْنَ ءَامَنُوْا كُوْنُوْا قَوَّٰمِيْنَ لِلّٰهِ شٰهَدَآءَ ۙ اَلْقِسْطَ ۗ وَلَا

يَجْرِمَنَّكُمْ شَنَاٰنُ قَوْمٍ عَلٰٓى اَلَّا تَعْدِلُوْٓا اَعْدٰٓؤُا هُوَ اَقْرَبُ

لِلتَّقْوٰى ۗ وَاتَّقُوا اللّٰهَ ۚ اِنَّ اللّٰهَ خَبِيْرٌۢ بِمَا تَعْمَلُوْنَ

المائدة: ٨

O ye who believe! stand out firmly for Allah, as witnesses to fair dealing, and let not the hatred of others to you make you swerve to wrong and depart from justice. Be just: that is next to piety: and fear Allah. For Allah is well-acquainted with all that ye do.

## Mercy to people and animals

- Mercy should be universal and global
- Mercy to human being and animals
- Reward could be unbelievable :
- Example : Amro bin Al-Ass, the famous leader and the city of "Fistat". In Egypt when he decided to leave from where he was settled to another place, he discovered that a bird had a nest on the top of his tent. So he decided to leave the tent without disturbing the bird. A city was built then around the tent and was called "Fistat" which means a big tent. Now it is part of the city of Cairo.

## Mercy to the Environment

اِنَّ اللّٰهَ يٰۤاْمُرُ بِالْعَدْلِ وَالْاِحْسٰنِ وَيٰۤاْتٰى ذٰى الْقُرْبٰى وَيَنْهٰى عَنِ

الْفَحِشَآءِ وَالْمُنْكَرِ وَالْبَغْيِ ۗ يَعِظُكُمْ لَعَلَّكُمْ تَذَكَّرُوْنَ

النحل: ٩٠

Allah commands justice, the doing of good, and liberality to kith and kin, and He forbids all shameful deeds, and injustice and rebellion: He instructs you, that ye may receive admonition.

ظَهَرَ الْفَسَادُ فِى الْبَرِّ وَالْبَحْرِ ۖ مَا كَسَبَتْ اَيْدِى النَّاسِ لِيُذِيقَهُمْ

بَعْضَ الَّذِى عَمِلُوْا لَعَلَّهُمْ يَرْجِعُوْنَ

الروم: ٤١

Mischief has appeared on land and sea because of that the hands of people have earned that (Allah) may give them a taste of some of their deeds: in order that they may turn back (from Evil).

## Mercy through Education

- Spreading Modern Technology for poor and rich should be a part of Global Engineering

- Education as basic need for human being
- Equality in educational chances

### **Mercy through Job Creation**

- Job creation as a human need
- Use of technology for job creation rather than machine replacing human for the sake of more profit whatever the consequences

### **The five "Maqasid" (necessities) of Sharia**

- Protection of : Religion, Life, Brain (or health), Property, Offspring
- Food for all human being
- Housing
- Health care
- Childhood protection
- Orphans , handicaps and needy
- War tragedies, disasters
- Job creation

### **Energy**

- Energy is a gift of God which should be properly used
- Engineering: should make a better use of energy, better utilization and better protection

### **Water**

- Water should be properly used
- Quality of water should be protected
- Water should be shared justly between neighbors
- Careful use of water even where it is plenty available

### **Brain Drain**

- Free will of living place verses brain drain
- Poor nations are suffering from brain drain
- Intellectuals, scientists, engineers and researchers staying among needy to serve them and to raise their standard of living and suffer with them is Jihad
- Technology transfer to poor nations serves for global justice
- Research and development for aiding the needy is Jihad

### **Fighting of Corruption**

- Fighting local reasons of corruption
- لا يحل لإمرئ مال أخيه إلا عن طيب نفس منه
- Fighting global reasons of corruption

### **Equality of Human Being**

يَا أَيُّهَا النَّاسُ إِنَّا خَلَقْنَاكُمْ مِنْ ذَكَرٍ وَأُنْثَىٰ وَجَعَلْنَاكُمْ شُعُوبًا وَقَبَائِلَ

لِتَعَارَفُوا إِنَّ أَكْرَمَكُمْ عِنْدَ اللَّهِ أَنْفَضُكُمْ إِنَّ اللَّهَ عَلِيمٌ خَبِيرٌ

الحجرات: ١٣

- O mankind! We created you from a single (pair) of a male and a female, and made you into nations and tribes, that ye may know each other; Verily the most honored of you in the sight of Allah is (he who is) the most righteous of you.

### **Justice: Fighting Double Standards**

وَبَلِّغْ لِلْمُطَلِقِينَ ① الذِّينَ إِذَا أَكْتَلُوا عَلَى النَّاسِ يَسْتَوْفُونَ ② وَإِذَا

كَالُوهُمْ ③ أَوْ وَزَنُوهُمْ يُخْسِرُونَ ④ أَلَا يَظُنُّ أُولَئِكَ أَنَّهُمْ مَبْعُوثُونَ ⑤

يَوْمَ عَظِيمٍ ⑥ يَوْمَ يَقُومُ النَّاسُ لِرَبِّ الْعَالَمِينَ ⑦

المطففين: ١ - ٦

Woe to those that deal in fraud, Those who, when they have to receive by measure from people, exact full measure, But when they have to give by measure or weight to men, give less than due. Do they not think that they will be called to account?-

### **Economics**

Fighting overconsumption: Economizing in consumption

Economizing in resources use

Fair balance in everything

### **Honesty**

إِنَّ اللَّهَ يَأْمُرُكُمْ أَنْ تُؤَدُّوا أَلْمَانَتَاتِ إِلَىٰ أَهْلِهَا وَإِذَا حَكَمْتُمْ بَيْنَ النَّاسِ

أَنْ تَحْكُمُوا بِالْعَدْلِ إِنَّ اللَّهَ نِعِمَّا يَعِظُكُمْ بِهِ إِنَّ اللَّهَ كَانَ سَمِيعًا بَصِيرًا

النساء: ٥٨

- Allah command you to render back your Trusts to those to whom they are due; And when you judge between man and man, that you judge with justice: Verily how excellent is the teaching which He giveth you! For Allah is He Who heareth and seeth all things

Duties of Muslim Engineers and Scientists

- Global Practice of Ethics
- Local Practice in Ethical manner
- Preach of Ethics
- Be example by practice

### Professional Codes of Ethics

- An Islamic professional code of ethics which states the principles and core values that are essential to the work of a particular occupational group is needed for every profession. Effort of Muslim scholars, scientists, engineers and researchers should be put together to lay the basis for such codes of ethics.

### **Juristic principles**

- “What leads to Unlawful is unlawful”
- Unlawful fields like: Gambling , wine manufacturing are prohibited for Muslims

### **Importance of Quality**

- ”Allah likes if one performs a task, he has to perform it perfectly”
- إن الله يحب إذا عمل أحدكم عملاً أن يتقنه
- Quality assurance is part of worship “Ibadah”.
- High care for quality assurance.
- High standards of products are must.
- It is management responsibility about quality.
- Personal responsibility about quality.
- Accountability for negligence.

### **Quality in western values**

- Quality is important for selling more goods
- Quality is defined by standards.
- If nothing mentioned in the standards about certain item, it will be legal to produce and sell that item even it is of bad quality

**Hiding deficiencies is prohibited in Islam** The prophet said; من غش فليس منا

“The one who cheats is not from us”

- Accurate definition of cheating
- Nothing hidden different in characteristics from the apparent

- Accurate description of products is required

### **Following the industrial standards**

What is decided by the common practice, it is accepted by the Sharia

ما أقر بالعرف أقر بالشرع

- Respect of profession.
- Encourage standardization set by professionals.
- Judgments by specialists.
- Religion scholars only show the general rules, limitations and exceptions in various commercial activities.

### **Respecting the differences among human kind and diversity in abilities, cultures, languages, traditions**

In Quran:

وَلَوْ شَاءَ رَبُّكَ لَجَعَلَ النَّاسَ أُمَّةً وَاحِدَةً وَلَا يَزَالُونَ مُخْتَلِفِينَ إِلَّا مَن رَّحِمَ رَبُّكَ وَلِذَلِكَ خَلَقَهُمْ (هود/ ١١٩)

**"They shall remain different save those whom Allah pities. It was for this difference that He created them"**

- Accepting differences between nations, communities, groups...
- Respect of habits, traditions, local issues
- No superiority of any race, language, culture above others

Western Civilization si:

- Enforcing western values on other nations directly or indirectly.
- Believing that only western values are suitable for mankind at present age.
- Some are trying to correct the path by accepting differences among nations after lot of failures.

### **Interest of public should be given the priority over personal interest**

- Safety first.
- Environmental issues should be highly respected.
- Mass media should abide by general rules.
- The prophet (Pbuh) said: إذا ابتليتم بالمعاصي فاستتروا
- If you are in hardship of committing sins, then don't do that in public.
- This is in order to keep the public atmosphere clean from crimes, bad habits etc..

### **Knowledge of public nature should not be hidden from public for personal interests**

The prophet (pbuh) said: "The one who hides knowledge, in the hereafter will come with a bridle made of fire".

### **Bribery is prohibited**

In Quran : وَلَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ وَتُدْلُوا بِهَا إِلَى الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِّنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ وَأَنتُمْ تَعْلَمُونَ (البقرة / ١٨٨)

Don't lay hands on each other's money unrightfully, nor should you give money to the judges in order to sinfully and knowingly lay hands on a portion of other people's money".

### **Respecting human being:**

In Quran: "We have honored the children of Adam." (الإسراء ٧٠)

The Prophet (Pbuh) said: لا يحل لإمرئ مال أخيه إلا عن طيب نفس منه

Using properties of others is only legal if they only give authorization.

The Prophet(pbuh) said: The property of your brother is illegal to you, except with his consent.

The Prophet (Pbuh) said: لا يؤمن أحدكم حتى يحب لأخيه ما يحب لنفسه

"Like for others what you like for yourself"

Trying to deal with others in same way one likes to be dealt with.

**People allocation according to knowledge:** In Quran:

قَالَتْ إِحْدَاهُمَا يَا أَبَتِ اسْتَجِرْهُ إِنَّ خَيْرَ مَنِ اسْتَجَرْتَ الْقَوِيُّ الْأَمِينُ (القصص ٢٦)

**“The best one whom you hire is the strong and honest man”**

The Prophet (pbuh) said: استعينوا لكل صنعة بصالح أهلها

“Get help for any job from one among the specialized people of best piety.”

### **Engineering Ethics for Professionals**

- **Competence** – Professionals keep up with the latest knowledge in their field and perform services only in their area of competence.
- **Responsibility** – Professionals are loyal to their clients or employees, and they won't disclose confidential information.
- **Integrity**– Professionals express their opinions based on facts, and they are impartial in their judgments.

### **Professional Code of Conduct**

- Contributes to society and human well-being
- Avoids harm to others
- Is honest and trustworthy
- Is fair and takes action not to discriminate
- Honors property rights, including copyrights and patents
- Gives proper credit when using the intellectual property of others
- Respects other individuals' rights to privacy
- Honors confidentiality
- لا ضرر ولا ضرار
- **Causing damage is not permitted**
- **Spying is against Islam whether between nations or between competitors**  
ولا تجسسوا

Being always fair In Quran: وإن عاقبتم فعاقبوا بمثل ما عوقبتم به

- **If you punish you have to punish similar to the punishment you suffered from**

### **Original copies and illegal copies**

- **Contracts are sharia of those contracting**
- العقد شريعة المتعاقدين

**Intellectual property: Intangible creations protected by law**

**Trade secret: Intellectual work or products belonging to a business, not in public domain**

**Copyright: Statutory grant protecting intellectual property from copying by others e.g. for 28 years**

**Patent: Legal document granting owner exclusive monopoly on an invention for e.g. for 17 years**

**Contractual Terms:** In Quran: يا أيها الذين آمنوا أوفوا بالعقود

- O' Believers, Respect contractual agreements

**Ownership Proof and dispute**

- Proof of ownership
- Safe guards against intruders and hackers
- Strong defense of ownership and rights
- Protection from forging
- Resolving disputes: discussion, mediation, judgments, courts

## **Islamic Fundamentals in Professional Engineering Ethics**

### **1. Islamic Fundamentals towards Products and Production**



Mid-path in spending: In Quran: وَلَا تَجْعَلْ يَدَكَ مَغْلُولَةً إِلَىٰ عُنُقِكَ وَلَا تَبْسُطْهَا كُلَّ الْبَسْطِ فَتَقْعُدَ مَلُومًا مَّحْسُورًا (الإسراء ٢٩ )

“ Don't make your hand tied to you neck nor to extend it wide open lest you would be blamed and regretful”

**Least publicity of internal matters:** The Prophet (Pbuh) said: استعينوا على قضاء حوائجكم بالكتمان “**Get help upon performing your tasks by secrecy**”

In Quran: وَلَا تَجَسَّسُوا **Don't Spy on one another**

## 2. Islamic Fundamentals Related to Public

Issues related to cultural, other religions, legal rules and laws should be respected. In

Quran: وَلَا تَسُبُّوا الَّذِينَ يَدْعُونَ مِن دُونِ اللَّهِ فَيَسُبُّوا اللَّهَ عَدْوًا بِغَيْرِ عِلْمٍ كَذَلِكَ زَيْنًا لِّكُلِّ أُمَّةٍ عَمَلُهُمْ ثُمَّ إِلَىٰ رَبِّهِمْ مَرْجِعُهُمْ فَيُنَبِّئُهُم بِمَا كَانُوا يَعْمَلُونَ (الأنعام ١٠٨)

"Don't revile those which they call besides Allah lest they revile aggressively and unknowingly Allah"

**Talk in understandable language :** The Prophet (pbuh) said: ما حدث رجل قوماً بحديث لا تبغوه عقولهم إلا كان لبعضهم فتنة “If a person talks to people with a language which they don't understand, then some of them may be confused”

**Hiding danger is prohibited** The Prophet (pbuh) said: الدين النصيحة لله ولرسوله وللمؤمنين " The religion is to give advice to Allah, his messenger, and to the Muslims"

**Safety of human being is given the top priority**

Signatures of all contracts, agreements, debts, and any legal documents (longest verse in Quran about debt).

Interest of public should be given the priority over personal interest

## 3. Islamic Fundamentals Related to Judgment

**Truth is above everything.**

**Respect of justice**

**Bribery is Prohibited:** In Quran: وَلَا تَأْكُلُوا أَمْوَالَكُم بَيْنَكُم بِالْبَاطِلِ وَتُدْلُوا بِهَا إِلَىٰ الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِّنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ وَأَنتُمْ تَعْلَمُونَ (البقرة ١٨٨)

" Don't lay hands on each other's money unrightfully, nor should you give money to the judges in order to sinfully and knowingly lay hands on a portion of other people's money".

- No gifts acceptance
- Recording of events, contracts, agreements, specifications etc
- Be just in paying every party its legal right.
- Never act as a judge and a member of parties at the same time

As a witness disclose the truth and what you know even if it is against your interest

In Quran: وَإِذَا قُلْتُمْ فَاعْدِلُوا وَلَوْ كَانَ ذَا قُرْبَىٰ وَبِعَهْدِ اللَّهِ أَوْفُوا ذَٰلِكُمْ وَصَاكُم بِهِ لَعَلَّكُمْ تَذَكَّرُونَ (الأنعام ١٥٢)

"If you say anything by testimony, you should be fair, even if the one whom you testify for is a near relative"

## 4. Islamic Fundamentals towards client and employer

- As a client or employer ‘perform duties in a faithful manner  
One should provide his services only in areas of competence.
- Keeping private information known during the proceedings of work in confidence.
- Not hiding knowledge for cheating purpose or causing wrong decisions.
- Informing client or employer in case there is any danger to their properties
- Safeguarding the interests of the client or employer in an honest way
- Don't represent any interest adverse to the employer's without his specific consent

### Contractual Agreements

- Should not be unjust to one side

- Should not contain Unlawful assets
- Should not be enforced by force
- Should not be harmful to environment, society or a third party

## 5. Islamic Fundamentals in Management

**Managing persons is a responsibility:** The Prophet (Pbuh) said: كلكم راع وكلكم مسؤول عن رعيته

"Every one is a guide and responsible upon those whom he guides"

**Employee should be well informed about matters to let them perform their duties properly**

**Assigning work only after taking into account appropriate contributions of education and experience.** In Quran: "لَا يُكَلِّفُ اللَّهُ نَفْسًا إِلَّا وُسْعَهَا"

"Allah imposes nothing on soul which is not within the limit of its capacity"

**Be just among employee and be just in rewards ,promotions, incentives as well as punishments.** In Quran:(النساء ٥٨)

"If you judge between people you shall judge with justice"

**Respecting all contractual agreements related to intellectual property and those related to employee rights.**

**Assigning the proper person to the right job**

## 6. Islamic Fundamentals of Profession

- Respect of reputation
- Insure that subcontractors, employee etc respect similar principles of honesty
- Support organizations holding good ethics of practice
- Try to rectify any breaking of ethical rules
- Taking actions to report, to correct and to hold responsibilities for any errors or mistakes. Full truth in dealings.
- Obeying any contract or agreement governing behavior or work
- Promoting professional behavior to the progress of the science of the profession.

## 7. Islamic Fundamentals related to Colleagues

**Assisting colleagues in developing their profession** In Quran:

وَأَعْبُدُوا اللَّهَ وَلَا تُشْرِكُوا بِهِ شَيْئًا وَبِالْوَالِدَيْنِ إِحْسَانًا وَبِذِي الْقُرْبَىٰ وَالْيَتَامَىٰ وَالْمَسَاكِينِ وَالْجَارِ ذِي الْقُرْبَىٰ وَالْجَارِ  
الْجُنُبِ وَالصَّاحِبِ بِالْجَنبِ وَابْنِ السَّبِيلِ وَمَا مَلَكَتْ أَيْمَانُكُمْ إِنَّ اللَّهَ لَا يُحِبُّ مَنْ كَانَ مُخْتَالًا فَخُورًا (النساء ٣٦)

"Be good to parents, to your relatives, the orphans, the poverty-stricken, the near neighbor , the far neighbor, the road companion, the wayfarer.."

**Trying to deal with others in same way one likes to be dealt with.**

" Like to others what you like for yourself"

لا يؤمن أحدكم حتى يحب لأخيه ما يحب لنفسه

- Giving credit to authors, inventions, copyright and all work of colleagues and others.
- Reviewing work of others in a just and objective way.
- Acceptance of advice of other colleagues.
- Don't interfere with professional career and affairs of other colleagues.
- Seek help from other professionals in their areas of specialization

## 8. Islamic Fundamentals towards own self

- Encouraging seeking knowledge from cradle to the grave.
- Improving the ability in techniques, safety measures, reliability, quality etc, related to the profession.
- Improving the writing, listening and speaking ability
- Paying attention to documentation of own work as it is an important part of projects.

- Improving knowledge in matters related to laws, regulations, standards . In Quran: *وتعاونوا على البرّ والتقوى ولا تعاونوا على الإثم والعدوان*
- Help one another in righteousness and piety, but don't help one another in sin and aggression.
- Piety pleases Allah and Righteousness pleases people.
- The one who pleases Allah and people is would have perfect happiness.

#### **Present Ethics in Muslim Countries**

- Legal aspects are in a developing stage
- Import of Technology is accompanied by import of western values with poor ethics
- Adaptation of technology locally is sometimes in conflict with local values
- High respect to Islamic principles in spite of neglect in practice
- Local habits sometimes are against Islamic principles.
- Trying slowly to bring into practice new rules based on Islamic Principles
- Attempts to globalize Islamic Ethics is very slow

#### **Conclusions**

- Islam can offer a lot in globalization of ethics
- Duties on scientists, engineers and technocrats to show Islamic ethics in practice on global atmosphere
- Close relations between engineers and religious scholars for detailed implementation
- Research in the field is needed