Inaugural Address at INWES Regional Conference – 12th October, 2012

Women Engineers – Innovate, Excel and Create a New World Order

Prof. P.B. Sharma

Vice Chancellor Delhi Technological University

Ladies and Gentlemen,

I consider it a matter of great privilege and honour to have been invited to inaugurate the International Network of Women Engineers and Scientists Regional Conference at Delhi, INWES – Delhi 2012, a regional conference focussing on inspiring women engineers and scientists to create a better future worldwide.

Your motto of "building a better future worldwide" inspires me to think of the unique privilege women have as against men, as you as women have an inbuilt caring concern for not only yourself, your family, your near and dears but to the whole humanity. This unique privilege, which a woman has, made them so respectful that the mother commands the highest respect in all civilizations of the world.

It is this unique characteristic of women that enables us to identify the earth, on which we all exist, as mother earth, the beautiful surrounding, so rich in bio-diversity, as mother nature and the goddess who provides the vital energy to create goodness and to eliminate all evils also as mother Goddess *Durga* and what more the Goddess who inspires us to educate

ourselves and to excel in this world of great opportunity also as mother Goddess *Saraswati*. No wonder the Goddess of prosperity likewise, is Goddess *Lakshmi* and above all our country in which we are born as our motherland. This respect for women is unique and speaks volumes for the recognition which the mankind has bestowed upon the womenhood.

Just imagine, therefore, if a women becomes a scientist or an engineer, she shall alongside innovating and excelling, shall have an unending quest for excellence on one hand and never ending quest for the protection of mother nature and care and concern for the entire humanity, in fact, the entire creation and shall work up to the last breath for building a better future worldwide.

No wonder, therefore, that INWES has thought it fit to focus on women engineers and scientists worldwide to build a better future around the world.

At the inauguration of this Regional Conference of INWES I would, therefore, urge you to get an added inspiration from the motto of your parent organisation INWES and work relentlessly to achieve perfection in your chosen domain of work activity and yet exhibit the highest concern for man and nature. Let you be the great achievers in your chosen domain of activity and let your work ethics, professional morality and conduct become the role model for the professionals of the world so that we all join in this great knowledge revolution which is ushering a new world full of bliss and happiness provided we use our capabilities for creating a better tomorrow.

Let me also take immense satisfaction in seeing the ever-increasing numbers of girls opting for professional courses including applied sciences, engineering, bio-technology, bio-medical, medical sciences, legal profession and also increasing their share of entrepreneurial activity. It is also highly satisfying that we in India have very many outstanding women who rose to glory during their professional life. After all we produced the strongest women Prime Minister of the world namely Smt. Indira Gandhi Ji and also the first women President of India Hon'ble Smt. Pratibha Devisingh Patil Ji. India also gave to the world two outstanding Astronauts for space exploration namely Kalpana Chawla who graduated from the famous Punjab Engineering College now PEC University and Sunita Williams whose ancestry is traced to Gujarat in India.

There are a large number of outstanding Indian women scientists, engineers and entrepreneurs who have brought tremendous amount of glory to their motherland and have added to the pride of women engineers and scientists worldwide. Just to name a few Ms. Kiran Wallace Shaw, CMD of Biocon Ltd, Ms. Indra Krishnamurthy Nooyi, CEO of PepsiCo, Ms. Tessy Thomas from DRDO popularly known as "Agni Putri" and a number of outstanding academicians such as Prof. (Dr.) Bharti Bhat of Centre of Advanced Studies of IIT Delhi, Prof. (Dr.) Indira Verma of Polymer Science Division of IIT Delhi, Prof. (Dr.) Parekh of IIT Bombay, Prof. (Dr.) B. Chandra of Applied Mathematics Department of IIT Delhi and Prof. (Dr.) Pratima Rani Bose the former Professor and Dean of DTU, Prof. (Dr.) Sneh Anand of Bio-Medical Department of IIT Delhi, Ms. Sunita Narayan of Centre for Science and Engineering, Prof. Indira Nath, world renowned authority on leprosy and a recipient of Padma Shri (1999) for her contribution to the field of immunology to name a few. You may discover many more outstanding women scientists and engineers who are relentlessly engaged in empowering our country with the richness of science and technology and engaged in powering the growth of the economy.

On this momentous occasion when we are assembled here for this regional Conference of INWES, let us look at the profession of science and engineering and what it entails to the professionals specially those who are women scientists, engineers and entrepreneurs. First and foremost, it must be clearly understood every profession is associated with the privilege to serve and privilege to excel. As such, the profession of Science and Engineering is a profession of great privilege. Here, you have a privilege to use your capabilities, your knowledge power, your mind power and the power of science and might of technology for the betterment of the quality of life of our people and to become a major support to the nation's economy.

But then, it requires a firm resolve and commitment to use this privilege of the profession of science and engineering with a relentless missionary zeal and with selfless service with the singular objective of making what otherwise looks impossible as possible. Monumental challenges lies in front of us in our own country, India in respect of making profound contribution of science and engineering to make India energy surplus, environmentally benign, to mop out pollution levels both in the industry as well as outside in open and built environment, use science and technology to create a green, clean and sustainable habitat engaged in use of green technologies for powering the growth of knowledge intensive, technology savvy growth and development.

You as women scientists and engineers can do it and do it even better than your men counterpart specially that you have the desired sensitivity to the care and concern for people and environment. The question, however, remains do we have that inbuilt inspiration and a missionary zeal to pursue the profession of science and engineering for such a noble cause. This is the prime question which often is seen to be

failing the graduates of science and engineering as they are often seen to be more career conscious then being conscious of the privilege of the profession.

Science and engineering do not have a gender bias nor they restrict a sincere seeker from achieving the human excellence through science and technology endeavours no matter what background one comes from or to what cast, creed or colour one belong to as science and technology are neutral to such a bias. I, therefore, urge upon you to take the profession of science and engineering with utmost sincerity, commitment and fullest of dedication to serve the society and mother-nature, in turn achieve excellence, respect and recognition of the society and the bliss of mothernature and divine. What you need to do is to nurture in you the human values, adorn scientific values and abide by the professional code of conduct of S&T professionals so that you succeed in integrating your capabilities and values for the cause of science and technology for the society and mother-nature.

Let me not also hesitate to add that if we fail to recognise the value and worth of human values and professional morality the new knowledge age shall lead us to a world of capabilities devoid of values, creating untold miseries and immense unhappiness. The choice is ours. If we wish to build a bright future for us and for the coming generations then we need to integrate in our professional quest a perfect blend of capabilities and values as together they promise a bright future, not otherwise.

I have every reason to believe that INWES, the parent body has set out this agenda for the women scientist and engineers from across the globe. I am happy that this Regional Conference in India has attracted participation from as many as 20 countries and that you have your focus on

building up that vital ecosystem for the women scientist and engineers to enable them to contribute significantly to the growth of a happy and prosperous world order in countries across the globe.

Ladies and Gentlemen, at DTU we have a highly talented and inspired student community, a vibrant academic and research environment gravitating with the power of innovation in which the synergy between science and engineering has found a new expression in our academic and professional activities. We also have a well qualified and talented pool of faculty brainpower comprising of almost a 1/3rd of faculty members belonging to women scientists and engineers category. They together with the talented student community are engaged in shaping DTU as a world class technological University. With our 71 years of illustrious history, a high national and international repute for our innovations, a strong alumni power worldwide and our firm resolve and unconditional commitment to creating the power of science and might of technology from our lush green technology savvy campus, we are committed to creating a brighter future for the mankind. At DTU we have a strong IEEE Student Branch and also a Chapter of WIE (Women in Engineering) which is engaged in inspiring women engineers to serve the society with commitment and devotion. Let me, therefore, assure you that Delhi Technological University is with you in your resolve to preparing the women scientists and engineers to create a better tomorrow worldwide.

I wish you all success in your chosen endeavour and express my profound gratitude to the organisers of this Conference for giving me this opportunity to share some of my thoughts with you this morning.

May I thank you ladies and gentlemen for your patience hearing and wish this Conference a great success.

For delivery at the INWES Regional Conference on 12th – 13th, October, 2012.

The author is a former Professor of IIT Delhi, Former Director, Delhi College of Engineering and the Founder Vice-Chancellor of Delhi Technological University and can be contacted at **pbsharma48@yahoo.co.in** and **vcdtu@dce.edu**. The views expressed are the personal views of the author.