

Commencement speech at PennState University

Saturday, 17th December 2016

Dear Chancellor Kulkarni,

Distinguished guests,

But most of all:

Dear graduates,

This is your day!

I am very proud to be here to say congratulations to all of you. It is an honor for me, being a part of this important ceremony. Probably it is one of the most important days of your life. Today you will receive your certificates. This indicates that you successfully finished your studies here at Penn State University Harrisburg, one of our best partners worldwide. Your university is included in our DAAD (German Academic exchange service) strategic partnership grants, which provides us with the chance for student and staff exchange and maybe one of you already spent time -at my university in Germany.

So the certificate indicates that you are able to work for a long time highly concentrated on scientific, technical, economic, and or social projects. You have learned to work on new problems. To look for the necessary information. May be to compare the problem with already solved ones, to learn from history. Putting this together you will be able to suggest new solutions. This is the basis for progress.

Highly skilled people are the most important factor for our communities. For me inventions and new ideas are even more important than raw materials and energy. Those problems could be solved by new technology or methods. In this case I am very optimistic.

The number of unsolved problems seems to be infinite. Therefore don't worry, there are enough things to do for you in future.

But it is important to recognize that no university on earth can give you all abilities, skills and information which fit for the next 50 years. The world is changing very fast and it is necessary for all of us to continue learning.

The Chinese philosopher Laozi said:

Learning is like rowing upstream; not to advance is to drop back

The most important thing you have learned is: **how to learn**

- Stay interested in new developments.
- stay creative.
- From time to time: change the point of view.
- Never say – we did it always that way or
- We never did it that way
- In many cases the best solution is the easiest solution. But sometimes it is a boring long way to the goal.

This sounds not very helpful. But being flexible is the only chance to be successful for many years. And there are other people helping you. Keep in touch with your University, with your friends and colleagues. Most problems are solved in teams.

You will be needed by your country, by the whole world to shape the future, our future.

We need inventions to overcome the major problems on earth - Ecological problems in general or in poorer countries. How can we feed billions of people on this planet? In our western countries we have to face the demographical change. How can we assist older people to have a good life? Improve Transportation, Information technology, and so on.

The question is: How can we design our societies to be sustainable.

We need to look for global solutions, not for very specific ones ignoring the world around us. Our planet is small and we live in a highly complex system. Often we cannot see the interactions between all factors. Sometimes you try to optimize on one side but you cause problems on the other side. Therefore, step back and try to look to all sides.

In an international context this means to be open minded to different cultures and approaches. I will encourage you to learn about the enormous variety of the world. Working in international companies needs such knowledge. And it makes the world safer. We all need networks of friends around the planet. And believe me it is a beautiful experience.

But our life is not only technical. Give also culture – music, paintings, theatre and other arts – a piece of your life. Enjoy the beautiful things on earth. You will work hard during the next years so you need a balance between different aspects of life.

As today. You can celebrate your success, be proud and just be joyful.

I wish you a successful and interesting life which makes you happy.

And enjoy this day.