

Rector's speech Doctoral Awards Ceremony

Rector Gunnar Bovim's speech

Doctoral Awards Ceremony 10 March 2017, The Aula of the Main Administration Building, NTNU

Dear new doctors and honorary doctors, dear guests, dear colleagues and friends.

Congratulations! Today we celebrate the 181 new PhDs who will receive their degrees from NTNU.

You will soon be awarded your doctoral diploma, as tangible proof of what you have achieved. There are no shortcuts to a doctorate. It is about ambition, it is about hard work, it is about having a goal and never losing sight of that goal.

This has been common knowledge in these halls for more than a century. If you look over the entrance to the library, you'll see this wisdom from 1910, etched in stone: *Per aspera ad astra* - through adversity to the stars.

It is also about striving for quality.

Quality is essential in all research, whether it is basic or applied, whatever the area and no matter who does it. The demand for quality must and should be absolute.

The Government has recently conducted a review of the Research Council of Norway. The expert committee that did the review said that high scientific quality is the most important foundation for making research relevant to politics, business and research.

The committee proposed several measures to improve quality. From our perspective, the committee's proposals —support for more research centers, more world-class long-term projects and a commitment to young talent — are all very positive. We

ourselves have had excellent experience with the Outstanding Academic Fellows Programme.

Long-term basic research that is driven, not primarily by its benefits, but out of curiosity, is the mainstay in developing new knowledge. We know much of the research that today is the basis for applied technologies and commercialization has its roots in basic research that started decades ago.

At the same time, the world around us has specific and pressing needs. The major social challenges we face are both complex and interdisciplinary. NTNU has addressed this challenge by putting a greater emphasis on key areas, through our thematic initiatives on oceans, health, energy and sustainability.

With our profile, NTNU has a specific responsibility to help society make the transition from an economy and society that are largely petroleum based, to a more sustainable society—what we like to call the green energy transition.

Last week I was in China. For me, the visit underscored the urgent need for better energy solutions. We must work together to find these solutions, to meet the global challenges of climate change.

We have a special responsibility to ensure that our grandchildren and their children will be able to grow up on a planet that is livable for everyone. With a climate that does not threaten the world's food supply. With rich biodiversity. With seasons where the winter's snow comes from the clouds, not from snow cannons.

This requires both business development and consumption patterns that are sustainable. It challenges us as a research institution, as an educational institution and as individuals. This is also about values.

Some people make a difference.

Isabel Richter is a PhD candidate at the Department of Psychology, who studies consumer behaviour. She supervised an Experts in Teamwork group that focused on plastics. Together this team created five specific ideas that can help us all limit our plastic consumption.

Tuesday this week, NTNU and Statoil arranged a symposium entitled Energy Transition - Strategies for a sustainable energy future. Technologists, social scientists and humanists met to discuss how best to facilitate the realization of the Paris Agreement goals.

We need more Isabels. We need more meetings of the mind like the Energy Transition symposium. We need more action that builds on excellent research.

And we need scientists - humanists, social scientists, natural scientists, medical scientists and engineers - who understand the important relationship between knowledge development and the development of our society.

Allow me to quote Svein Richard Brandtzæg, the chairman of NTNU's Board and

CEO of one of Norway's largest industrial and technology companies, Hydro: *Technology itself is neutral in value. But it will be used in a world that is not.* For myself I would add that this also applies to research more generally: Research in itself is value neutral, but it will be applied in a society that is not.

The knowledge you have acquired and have shared with society, can make a difference. You all, each and every one of you, are stewards of knowledge that will determine what tomorrow's society looks like.

A doctoral degree gives more weight and authority to your opinions. Be conscious of that authority, and use it wisely.

It gives you a solemn and important responsibility to ensure it reflects NTNU's vision: Knowledge for a better world.