

Greeting address of Maya Graf,

Member of Parliament for the Green Party of Switzerland

Former President of the National Council of Switzerland

at the 15th International Symposium on Persistent Toxic Substances

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The spoken word applies

**Dear ladies and gentlemen, dear scientists, students and staff, dear guests
from all over the globe**

Welcome to Basel. Welcome to Northwestern Switzerland, to the bio-valley of Basle. You are here to discuss and advance one of the most important issues of our time:

The eminently important research on Persistent Toxic Substances.

Let me share a few words, why this branch of research is particularly important for us in this part of Switzerland. This northwestern part of our country is a triangle region that brings together the economy, culture and people of three different states: Switzerland, Germany and France. It is one of the world's leading centers, so to say the Silicon Valley of Life Sciences.

Life Sciences belong to the leading industries of the 21st century. With Roche and Novartis, two of the five leading global pharmaceutical companies have their origins and global headquarters in Basle. But the region is home to another 600 Life Sciences companies and biotech Start-ups. First-class research institutions - such as the University of Applied Sciences and Arts, which is our host today - establish the reputation of Basle as a Life Sciences hub. This dense academic and industrial setting and the availability of venture capital provide resources for the further growth of this knowledge cluster for the upcoming years.

But along with this promising future, run environmental hazards like a red thread. They have created risks and disasters and represent the downside of our scientific history in this region.

In the early days of industrialisation, color chemistry posed a constant burden for humans and the environment.

In 1976 hit the disasters of Seveso (Icmesa/Roche) and in 1986 Schweizerhalle (Sandoz). Thousands of fish were killed in the Rhine. The disaster of Schweizerhalle was not only a shock for the corporations. It also destroyed the confidence of the population in the industry. It was then, that the public learnt about pesticides and their effects, about **Persistent Toxic Substances**. The storehouse, which was completely destroyed by the fire in the night of November 1, 1986 contained pesticides, solvents, dyes, and various raw and intermediate materials.

The majority of the approximately **1,250 tons** of stored chemicals burnt up in the fire and large quantities were released into the atmosphere, into the Rhine River through runoff of the fire-fighting water, and into the soil and groundwater at the site. The river turned blood red contaminated from Basle to its estuary near Rotterdam in The Netherlands. Life in the ecosystem was wiped out.

Tons and tons of dead fish floated down the Rhine. On a length of 400 km there were no more eels. The outcry from the public was enormous; human chains of protest formed along the river. Demonstrations and a flood of political demands followed.

This environmental disaster had a lasting impact on our region. Nothing was the same anymore: in politics, business and society. Environmental protection and safety became the number one issues - there was a great need for action. Let me remind you, that this happened only a **few months after the Chernobyl accident and two years after Bhopal. It destroyed the myth of immunity of Switzerland regarding such catastrophes.**

And it motivated many of us to address environmental issues in new ways. I am one of those people. These events drew me into politics and made me become a dedicated environmentalist. Like many of you, I shared the opinion, that we must act urgently as we cannot leave future generations with destroyed and poisoned livelihoods. That we have to install and enforce environmental protection rules. That

more knowledge and skills are needed to protect our environment effectively and sustainably.

Much positive has been taken on since then: Safety standards for the industry were enacted, environmental protection and energy laws created, protection and environmental technology integrated into education - also thanks to my party, the Green Party of Switzerland. Members of the Greens were first time elected to parliament as a result of "Schweizerhalle". I'm proud to say that the two cantons of Basle were pioneering cantons in environmental protection in the 1980s and early 1990s.

30 years have passed since the accident, the situation on the Rhine has improved significantly. The salmon has returned to its old home waters. People can once again bath safely in streams and rivers.

Last but not least the Schweizerhalle catastrophe of 1986 has fostered the transboundary cooperation in our triangle of neighboring states. It has significantly improved the willingness for international cooperation. The applied river basin approach gives an example on a global scale for other river systems, which are still more heavily polluted.

Today, we know a lot more about the toxic effects of environmental pollutants. But simply not enough: **We need more research, more energetic policies and we need to improve the responsible behaviour to decrease environmental and human contamination by such pollutants.** The Rhine is no longer red in color and cloudy, however damage caused by chemical substances in the ecosystem has become invisible, more complex and unpredictable. It is difficult to assess what this means for human health and the environment in the future. What we already know, though, is frightening.

The concentration of persistent compounds in water systems is still too high. It is caused by thousands of industrial chemicals, medicines, corrosion inhibitors in machine dishwashing detergents or components of sunscreens. Although these substances only occur in concentrations of one millionth of a gram per litre of Rhine water - as "pseudohormones" they still have harmful effects on all aquatic organisms and maybe also on us.

Global warming and its consequences are putting not only water bodies to the test, but also the very basis of our existence. The need for environmental education and the examination of the role of humans in the environment for our future are central: for sustainable development, we are therefore forced to transform our economic system into a green economy.

With your research and insights into Persistent Toxic Substances, you can help develop solutions and communicate these competently to the public. Switzerland as a business hub needs this research, Switzerland as a society needs it for the preservation of healthy livelihoods for future generations. But societies all around the globe need your skills and your ambitions as well as we do here.

Thank you very much again for taking part in this grand and challenging journey of science and let me say thank you for your interest and attention tonight.