Paul Scherrer Institute

The Paul Scherrer Institute, PSI, is the largest research centre for natural and engineering sciences within Switzerland. We perform world-class research in three main subject areas: Matter and Material; Energy and the Environment; and Human Health. By conducting fundamental and applied research, we work on long-term solutions for major challenges facing society, industry and science.

CURRENT NEWS FROM PSI

Nanometres in 3D\(^1\)

20. March 2015

Media Releases\(^2\) Matter and Material\(^3\) Research Using Synchrotron Light\(^4\)

Scientists at the Paul Scherrer Institute and ETH Zurich have created 3D images of tiny objects showing details down to 25 nanometres. In addition to the shape, the scientists determined how particular chemical elements were distributed in their sample and whether these elements were in a chemical compound or in their pure state.

Gasoline beats mining\(^5\)

6. March 2015

Media Releases\(^6\) Environment\(^7\)

Until it was banned, leaded gasoline dominated the manmade lead emissions in South America

Leaded gasoline was a larger emission source of the toxic heavy metal lead than mining in South America – even though the extraction of metals from the region's mines historically released huge quantities of lead into the environment. Researchers from the Paul Scherrer Institute PSI and the University of Bern have discovered evidence of the dominance of leaded gasoline based on measurements in an ice core from a Bolivian glacier. The scientists found that lead from road traffic in the neighbouring countries polluted the air twice as heavily as regional mining from the 1960s onwards. The study is to be published in the journal Science Advances on 6 March 2015.

Prepared for the SwissFEL\(^8\)

17. February 2015
For many years, PSI researchers have been testing experimental methods that will provide insights into novel materials for electronic devices. Using a special trick to make the Swiss Light Source (SLS) at PSI generate light with similar properties to that of PSI’s x-ray laser SwissFEL, the researchers were able to demonstrate that the experiments planned for SwissFEL are possible and they are now building an experimental station at SwissFEL.

**PSI expertise boosts research for the energy transition**

Energy and Environment

Researchers from the Paul Scherrer Institute (PSI) are involved in several projects under the new National Research Programme “Energy Turnaround” (NRP70) of the Swiss National Science Foundation (SNSF). The PSI experts tackle issues such as particle emissions from wood heating systems, the holistic evaluation of energy systems and the production of semiconductor components for novel transformers.

**Neuer Laser für Computerchips**

Matter and Material

Germanium-Zinn-Halbleiterlaser lässt sich direkt auf Siliziumchips aufbringen


This news release is only available in German.

More news can be found in our popular science blog "fascinating research".

**INFORMATION FOR**

**PUBLIC AND MEDIA**
Discover and investigate. Explore the world of the Paul Scherrer Institute. Gain an insight into Switzerland’s largest research institute.

**SCIENTISTS AND USERS**
Direct access for scientists, researchers and the users of our large-scale facilities. In English only.

**INDUSTRY AND THE ECONOMY**
With its expertise, PSI can support your business in solving technological problems. Within the SwissFEL project, we provide industrial partners with interesting opportunities for collaboration.

**URLs:**