



Living Lab On Air

University of Pardubice
Czech Republic

LIVING LAB LOOKS FOR RECOGNIZED SCIENTISTS AND REVEALS THEIR WORK

The University of Pardubice and the Czech Radio: a well-established tandem of the Living Lab programme broadcasting every week in one of the most popular radio station. Since the academic year 2012/13 a joint project focusing on research and development popularization discloses in the Czech Radio Pardubice curiosities of the modern world of science and technology.

“THE LIVING LAB DISCLOSES SECRETS, NEW MATERIALS, NEW IDEAS. THE LIVING LAB IS A PROGRAMME ABOUT SCIENCE THAT MAKES OUR LIFE EASIER.”

The motto regularly announces the Living Lab programme broadcasting nowadays every Saturday afternoon. The programme about the university and scientific discoveries reveals to its listeners the news in research and development in different fields.

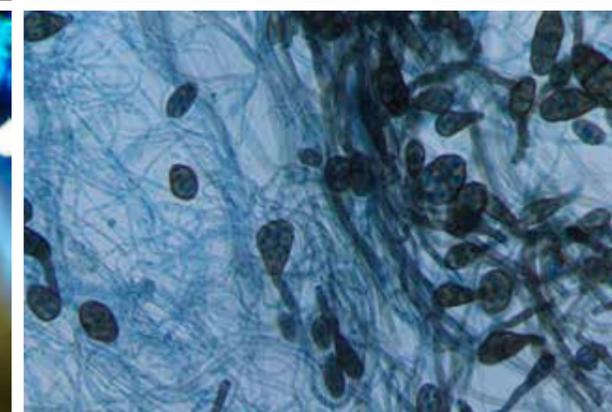
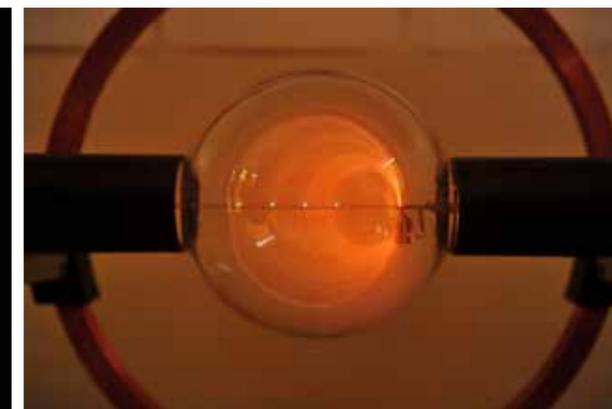
The programme is composed in cooperation with the Czech Radio Pardubice and contributes to the popularization of the scientific disciplines devel-

oped at the University of Pardubice and beyond, thus increasing the awareness about the university work among the general public and promoting the university's reputation.

“Communication of science, research and development results and bringing scientific work closer to the general public is an integral part of a public university's mission as well as informing about our work and achievements,” Valerie Wágnerová, University spokesperson and PR specialists comments on the Living Lab programme.

Almost every day scientists across the world pronounce “eureka” and fill the specialist journals with descriptions of new inventions. Sometimes it is revolutionary, sometimes it is just a minor discovery. However, without any of these, the progress would slow down.

The Living Lab looks for Czech scientists who might have experienced their first discovery or might be waiting for it, yet they have something to offer. The listeners thus have a unique opportunity to find the way into a number of scientific fields.



TENS OF SCIENTISTS OF THE UNIVERSITY OF PARDUBICE POPULARIZE SCIENCE AND TECHNOLOGY

Both academic year 2012/2013 and 2013/2014 saw already 82 programmes released by the Czech Radio. Feature editor – journalist Jana Davidová interviewed a number of academics who spoke about their real work and contributed to popularization of science in general.

On her way to meet the scientists, Jana Davidová did not leave any of the seven University faculties aside. Research and development presents varied activities and each scientific field embraces a great number of curiosities to be brought to the light. The listeners can form an idea about the matters that put the recent world in motion and the issues the Pardubice scientists have currently been involved in. The opening set of programmes were the first year piloted within the project Regional Coordinator to support technical and science

fields in the Pardubický Region and within other projects.

Since 2012, the popularization project called BRAVO – Open Door to Scientific Knowledge has enabled to continue with the programme and broadcasting.

The University of Pardubice under the project BRAVO aims at active involvement of the young generation in the world of knowledge, showing the entertaining and interesting side of modern science, research and development in the scientific fields developed at the seven faculties. All of this is carried out in the form of contact science popularization adventure events, exhibitions, excursions, lectures, talks and also through the Living Lab Radio programme.

LIVING LAB

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EVERY WEEK IN A DIFFERENT LABORATORY

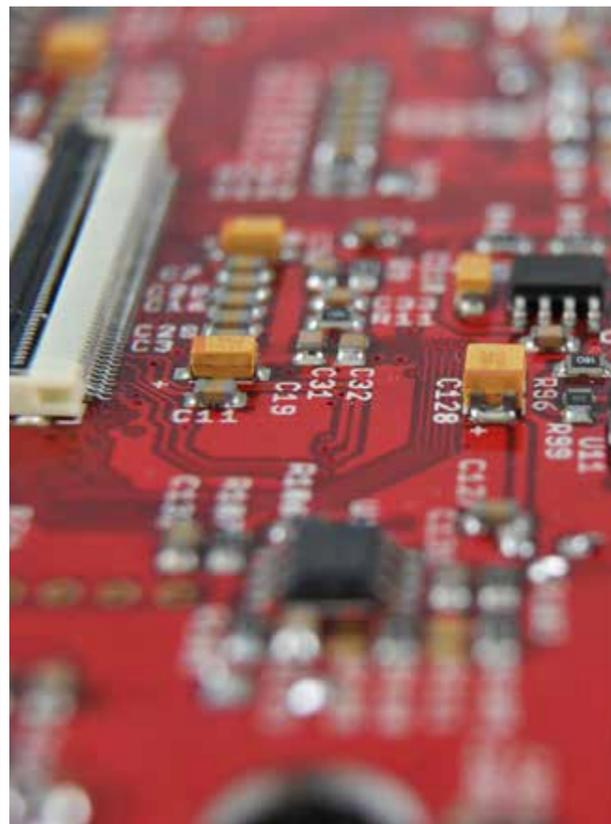
The current science is varied and rich in curiosities. The offer is large and infinite; and there are no limits to science popularization. No matter how complicated is the research, it can always be transferred into the lay language. Fortunately, Jana Davidová knows how to do it.

Every week, together with her, we knock on one of the doors of the University's lab to reveal its secrets. Sometimes the lab cannot be seen for a number of different devices, other lab is full of various chemical substances and sometimes we are in a medical environment full of white coats. In certain labs we are surprised to see small robots whose role in modern science soon becomes obvious. Jana Davidová never misses a trick, and nor do we thanks to her effort.

It seems that chemistry is the most attractive branch of science. Besides the traditional organic and inorganic chemistry, there are bio-chemical sciences, physical chemistry, graphic art, energy

materials or hidden explosives, advanced materials and nanotechnologies.

Such specific terms hide the research into the already existing parts of our everyday lives. Even these are being replaced by the new ones and we will soon hear about them. However, chemistry is not the only scientific branch at the University of Pardubice. There exist a number of other interesting fields starting from philosophy and anthropology, health studies, information science, electrical engineering and many others. We can witness major findings in history and literature. Transport engineering brings to life new materials and technologies to be used in bridge constructions, rails and designs new forms of graphic train diagrams and logistics. Many primacies survive in localization systems and data transfer systems. This is just a small example of science and technology in which one can find new ideas and extraordinary discoveries for our everyday life.



SAMPLE PROGRAMMES

FIGHT OF ROBOTS OR ARTIFICIAL INTELLIGENCE FORM "THINKING" ROBOTS

Mechanical models present a most welcome need for the scientists and students at the Department of Process Control at the Faculty of Informatics and Electrical Engineering. They designed robotic vehicles to be able to verify the new neuron systems-based control systems.

One of the options of their way of thinking is the behaviour in a battle. The control algorithms of two robots are set up in two phases – a rough fight from the front and intelligent fight based on avoiding the obstacles. Such fights can form an artificial neuron system resulting in the "thinking" of the robotic vehicles.

Who wins the on-line battle?

„It is a motivation model for students,” say Petr Doležel and Libor Havlíček. Both of them are involved in the research into the neuron systems based control algorithms. The recent technical world cannot do without artificial intelligence or Soft computing. The two scientists therefore look for new control algorithms to equip the “robot-explorer” with, e.g. in an environment unsuitable for humans.



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SCIENCE FAIR: UNIVERSITY OF PARDUBICE ATTRACTS CHILDREN

White clouds coming out of the kiosks, colourful solutions boiling in the flasks. Some kiosks produce a nice scent while the others make us choke. Enthusiasm of school children as well as adults keep the young scientists busy.

A massive wooden block looks suspicious at a distance however, on taking a closer look, you find out that it is used for the minting of the Middle-Age groschen with the first Czech inscription. The time-honoured square recalls the atmosphere of the old-time open air market. The twenty-first century is perhaps reminded by the meteorology station or by curious vehicles getting under our feet and flying over our heads.

The Science Fair started in Pardubice on June 18th.

The academic staff and university students prepared for the audience attractive scientific curiosities that have already become a part of everyday life. Contemporary science also came up for discussion. Each visitor to the Fair took home, besides a Middle-Age groschen, a certain knowledge of dry ice, the use of a simple raindrop. Children could produce a jelly-bean from alginat snakes or tried to drive the latest model of a rescue robotic vehicle yet waiting to be manufactured.



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THE LIVING LAB ADDRESSES A WIDE SPECTRUM OF LISTENERS

Popularization of research and development is the University's task number one in looking for the new ways of addressing the young generation and make the science and technology attractive. The University of Pardubice decided to complete the task in cooperation with the Czech Radio.

The Czech Radio regularly occupies the fifth to sixth position in the audience rating among the regional radio stations in the Czech Republic. Its great advantage is the high quality programmes abounding in interesting information that attracts the listeners' attention. Among such programmes is the Living Lab. The joint work of the Czech Radio and the University of Pardubice guarantees the complexity: the programme addresses the elderly as well as the young generation which is its priority. Many young people have a close relationship with their grandparents who function as guides in the world of science and technology. And they are the ones to use similar programmes to be on the right track. The listeners then find new ways to think about science: they start to get involved, search for details or turn directly to the scientists from the radio broadcasts. And this is the heart of the matter: the way to the public and especially to the young.

The Living Lab on the Czech Radio pages

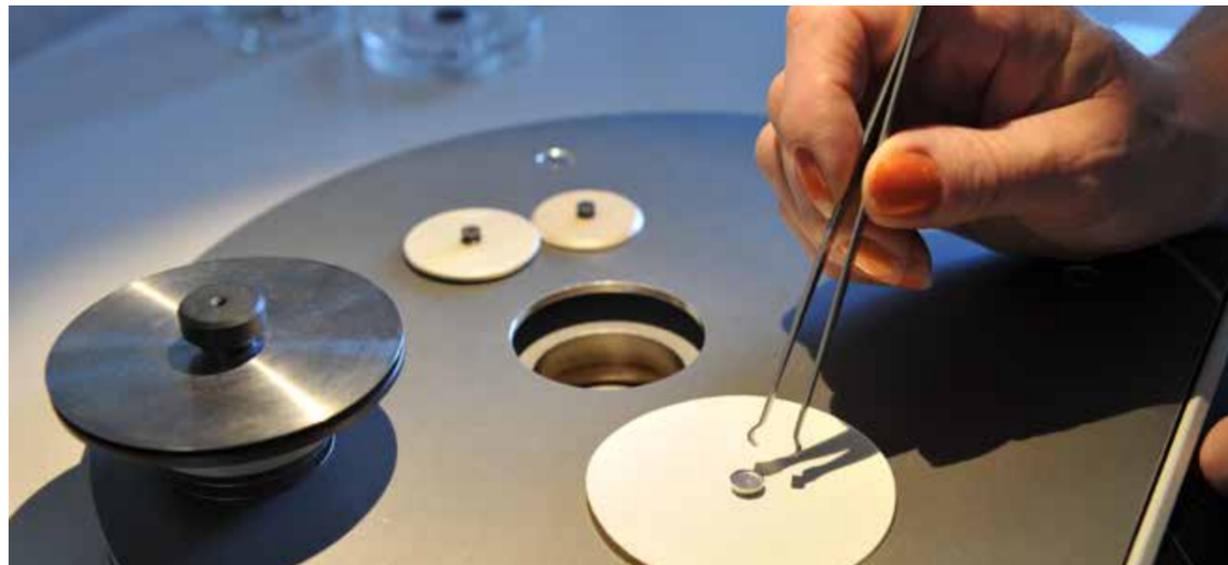
The Living Lab also has its website where Jana Davidová houses all the interviews. The web programme lists among the most frequently visited programmes of the Czech Radio Pardubice judged by the listeners' attendance of the web pages. It seems that even such a complex topic as research and development can address the target group of the University of Pardubice.

The Living lab on the website of the University of Pardubice

The Living Lab trailer is on the University website giving the basic information and the link to the Czech Radio.

The Living Lab keeps abreast of the times on Facebook.

The Facebook profile of both the institutions is a major promotion tool. The websites contain invitations to the programme: "Listen to the Living Lab with us and be smarter. Science will show you a number of options to win recognition". There are 7,500 Facebook friends complemented by another 1,500 listeners of the Czech Radio, which is quite a large target group to be addressed by the Living Lab programme.



WHO IS JANA DAVIDOVÁ?

Every week one of the University's scientists opens the door to his or her lab and thanks to Jana Davidová, the feature-editor, even to the public and those interested in the world of science and technology can take a look.

Jana Davidová, the feature editor, talks with the academic staff and young researchers about the achievements and the backstage of scientists and researchers. She investigates about the background, the demanding points and challenges of the relentless work of a researcher. She tries to "pick their brains" to find out the secrets, plans and longed for wishes in the scientific fields. She can manage all of this in a regular 15-minute programme.

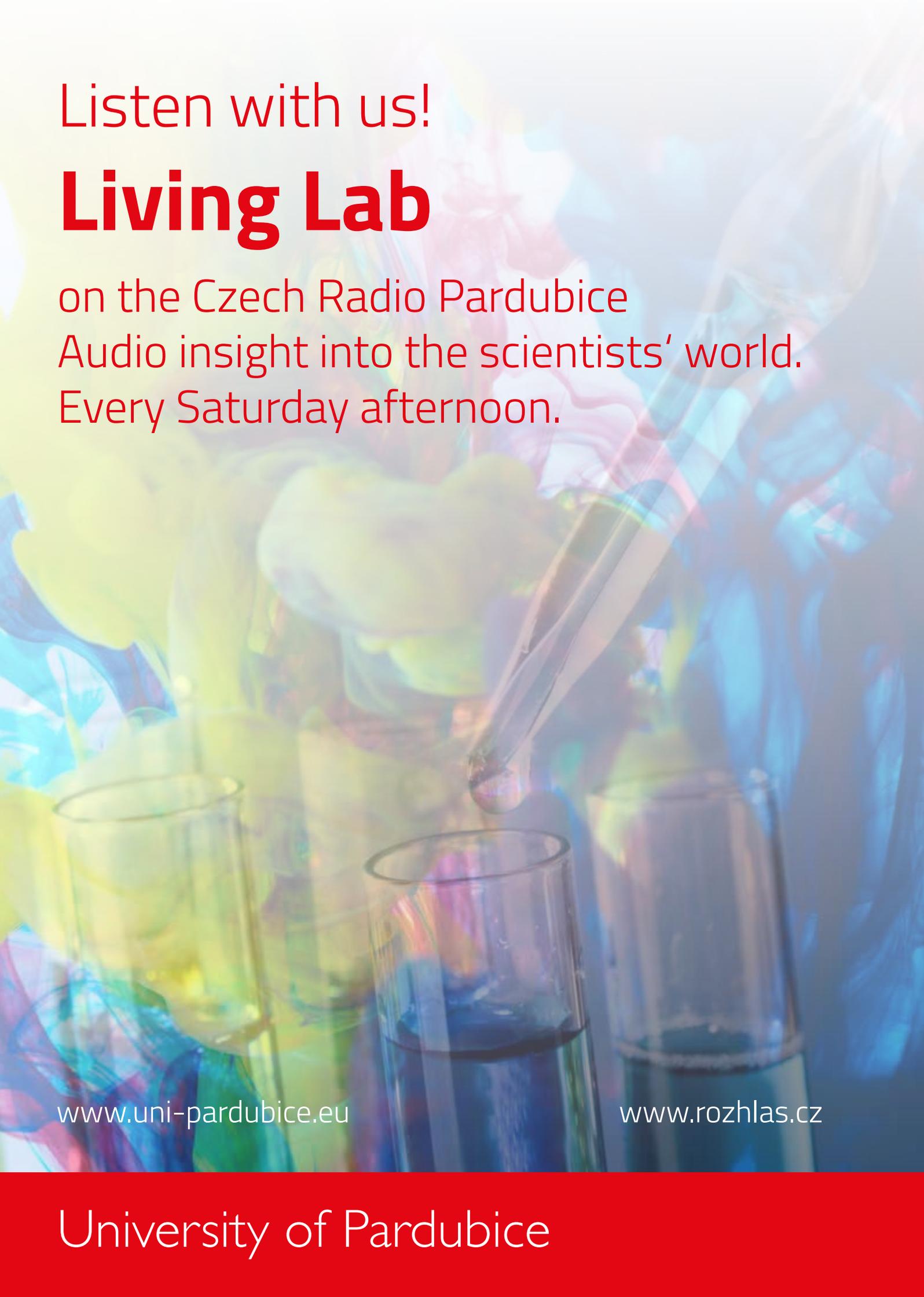
„I wish that the listeners felt joy, esteem, involvement, politeness, enthusiasm and heard the information they are interested in,“ says Jana Davidová about her work.

Since she joined the Czech Radio, Jana has made a number of programmes: Traditional Customs and Lore, Witnessed Stories, or Centuries-old Trees – Natural Jewels. She participated in the

programme The Way They Live. She has been for past three years involved in the Living Lab Radio programme.

“The programmes enable me to convey all the life stories and good experiences wrapped in the technical magic of radio broadcasting onto the listeners – no matter whether they are interested or listen to the programme just by a mere chance. It is up to them how they use the information,“ says Davidová.

She became involved in science popularization immediately after her studies bringing domestic and foreign literary art and philosophy treasures closer to high school students. She taught literary seminars about the Czech literature at the department of the Czech language and literature of the J. E. Purkyně University of Ústí nad Labem, published in specialist journals and worked as an editor in publishing house Horizont in Prague. Jana Davidová also wrote several scenarios and topics for the Czech TV and Czech Radio, participated in the making of the book Moral Opinions of T. G. Masaryk and prepared a series of lectures about communication.



Listen with us!

Living Lab

on the Czech Radio Pardubice
Audio insight into the scientists' world.
Every Saturday afternoon.

www.uni-pardubice.eu

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University of Pardubice