







Agriculture, Food, Fisheries and Forestry Research Facilities

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State or Federal Research Facilities, Institutes or Organisations

Slovak Academy of Sciences (SAS)

https://www.sav.sk/?&lang_change=en

SAS is a national, non-university science and research institution. SAS has historically played an important leadership role in the research organisations of the Slovak Republic. The first mission of SAS is to carry out top-level basic research at the frontiers of knowledge that leads to new discoveries and concepts. The second mission of SAS is to make the scientific infrastructure for technically demanding research available to all interested parties, be it universities or other organisations of research and development. The third mission is long-term strategic and applied research and development, whereby SAS intensively and effectively co-operates with the business sector, the public sector, and civil society to transfer knowledge into practice. SAS also carries out activities that are not strictly scientific and do not constitute research, but in which the expertise of SAS is irreplaceable. For example, such services to the state and to society include monitoring earthquakes in the national network of seismic stations, creating the Encyclopaedia Beliana, creating a dictionary series, and creating and maintaining archives. One important role of SAS is raising the young generation of scientists. Doctoral study in SAS is implemented in co-operation with universities and strives towards the highest possible level of autonomy. SAS is involved in the creation of the entire educational process. SAS is a platform for co-operation and development of the best scientists in Slovakia.

The SAS is a whole-of-society institution. Institutes and research centres of the SAS, which are the most relevant ones for the CRP, are as follows:

SAS – Biomedical Research Centre

http://www.biomedcentrum.sav.sk/?lang=en

The Biomedical Research Centre of the Slovak Academy of Sciences is the largest Slovak institution devoted to basic and applied research in biomedical sciences.

Areas of Competence/Research/Faculty/Department

- 1. Department of Virus Ecology
- 2. Department of Rickettsiology

SAS – Centre of Biosciences

http://www.cbv.sav.sk/en/

The SAS Centre of Biosciences consists of three Institutes: the Institute of Animal Biochemistry and Genetics, which focuses on the cell biology and membranes and their role in the energy transformation, the role of membrane antigens in the immune and reproductive process, the neurobiological and physiological control mechanisms of animal behaviour, and the application of the





knowledge of membrane process in nanotechnology, biotechnology, agricultural and medical fields; the Institute of Molecular Physiology and Genetics, which focuses on the study of molecular principles forming the basis of physiological and pathological phenomena that control cardiac contraction, transmission of neuronal excitation, and the reaction of neoplastic cells to chemotherapy; and the Institute of Animal Physiology is dealing with the basic research of animal physiology as the only one in Slovakia.

Areas of Competence/Research/Faculty/Department/

- 1. <u>Institute of Animal Biochemistry and Genetics</u>
- Institute of Animal Physiology

SAS – Institute of Zoology

http://zoo.sav.sk/en/

Research activities of the Institute of Zoology SAS comprise the basic and applied research in zoology, physiology, hydrobiology, ecology and related biological disciplines. The main areas of interest are the following:

- 1. Physiology, molecular biology, genetics, biochemistry and animal behaviour. This research is focused on identification, expression and function of bioactive molecules and their receptors in insects and ticks:
- 2. Parasitology, epidemiology and mechanisms of transmission of parasites to the host. The goal is to elucidate complex interactions between vertebrate hosts, invertebrate parasites and various pathogens causing health problems in animals and humans;
- 3. Taxonomy, systematics, phylogeny, ethology and ecology of invertebrate and vertebrate animals. Hydrobiological research is focused on spatio-temporal variability of mactoinvertebrate species diversity and bioindication of anthropogenic changes in running and standing waters;
- 4. Applied research associated with renaturalisation of water bodies and assessment of the impact of hydromorphological disturbances on running water ecosystems.

Areas of Competence/Research/Faculty/Department/

- Department of Animal Ecology
- Department of Animal Systematics
- 3. Department of Medical Zoology
- 4. Department of Molecular Physiology

SAS – Plant Science and Biodiversity Centre

http://cbrb.sav.sk/en/

The work of the Centre is focused on the research in the field of evolutionary systematics, phylogeography, phytocenology, population genetics, chronology, plant physiology and genetics, biochemistry and molecular biology, proteomics, as well as of the development of plant biotechnologies and their use in practice. The object of studies are wild growing higher plants, economically important crops and woody plants, plant communities and other components of biodiversity – algae, cyanobacteria, fungi (not lichenised and lichens), and selected group of animals.

Areas of Competence/Research/Faculty/Department/

- 1. Institute of Botany
- 2. Institute of Plant Genetics and Biotechnology

SAS – Institute of Parasitology

https://pau.saske.sk



It is a research institution of the SAS and the principal institution devoted completely to the parasitological research in Slovakia. The Institute pursues a complex studies on parasites and parasitic diseases of humans, animals, plants and is engaged in an effective and fruitful international collaboration. The researchers at the Institute are dedicated to the making discoveries primarily in basic research. However, several scientific teams are also engaged in applied and translational research.

Areas of Competence/Research/Faculty/Department/

- 1. Department of Systematics
- 2. Department of Parasitic Diseases
- 3. Department of Vector-borne Diseases
- 4. Department of Experimental Pharmacology
- Department of Environmental and Plant Parasitology

SAS – Institute of Forest Ecology

https://ife.sk

The principal area of research covers a broad spectrum of forest ecosystems in the western Carpathians. Particular emphasis is placed on the biology and ecology of organisms associated with successional processes in forest ecosystems. The Institute also deals with problems concerning long-term changes and stress factors in forest ecosystems, in both geographic and biotaxonomic terms. Studies on the structure, productivity and stability of natural, semi-natural and culture-influenced forests also feature prominently in the Institute's research program, encompassing pedology, phytoceonology, phenology, mycology, ecophaysiology, as well as invertebrate and vertebrate zoology. The Institute edits the journal of Folia Oecologica. It participates actively in internal research programs and cooperates with home and foreign organisations in the field of forest and nature conservation.

Areas of Competence/Research/Faculty/Department/

- Department of Plant Pathology and Mycology
- Department of Animal and Ecosystem Interactions Laboratory of Molecular Apidology of IFE SAS
- 3. Department of Strategic Environmental Analyses of IFE SAS

SAS – Institute of Landscape Ecology (ILE SAS)

http://www.uke.sav.sk/en/

ILE SAS is an interdisciplinary scientific institute for both the basic and applied research as well as for coordination and elaboration of ecological plans and projects. It is the mother institute of the methodics of landscape ecological planning LANDEP, which is listed in the Agenda 21 from Rio Summit '92 as recommended methodics for integrated approach to the management of natural resources (Chapter 10). The main research topics are:

- 1. The analyses, syntheses and interpretation of the abiotical, biotic and socio-economical elements of landscape for landscape ecological planning, optimal space organisation and utilisation of the landscape;
- 2. Ecological problems of territory, the impact of anthropogenic factors on the landscape, ecological optimisation and utilisation of landscape and methodics EIA;
- 3. Ecological problems of agricultural landscapes, territorial system of ecological stability, maintenance of biodiversity and geoecodiversity;
- 4. Territorial system of stress factors, structure of the present man-made landscape structure;
- The management of protected areas endangered by negative influences.





Areas of Competence/Research/Faculty/Department/

http://www.uke.sav.sk/en/about-us/organisational-structure/

- 1. Department of ecosystem analyses
- 2. Department of landscape-ecological syntheses
- 3. Department of biodiversity of ecosystems and landscape

Slovak Academy of Agricultural Sciences (SAAS)

http://sapv.sk/?lang=en

SAAS is learned society, created by a group of members - scientific workers and specialist in the sphere of agriculture, nutrition, food industries, veterinary medicine, forestry, water management, creation and protection of agricultural and forest landscape and development of countryside.

The main mission of SAAS is to be concerned about the development and realisation of scientific and research activities in the sphere of its field of activity, mainly:

- 1. Take active part in creation of conception and strategy in agricultural, food, veterinary, forestry, and water management sciences;
- 2. Elaborate conceptions and judge scientific and technical programs of development in agriculture;
- 3. Draw up prognoses of scientific and technical development and their basis, propose conceptions of scientific and technical policy and international scientific technical cooperation in the sphere of its action;
- 4. Create conditions for mutual cooperation in the sphere of research, development and education of scientific workers in collaboration with universities and the Slovak Academy of Sciences;
- 5. Grant extension services to the central organs of the Slovak Republic, elaborate scientific and professional views, expertise, proposals and expert opinions;
- 6. Perform the function of scientific advisory organ of the Board of Ministry of Agriculture and Rural Development of the Slovak Republic and represent the departmental research basis in governmental and international organisations;
- 7. Take up attitudes towards establishment, incorporation and cancelling of research and developmental workplaces within the department of agriculture;
- 8. Award excellent results in scientific and scientific technical degrees of qualification;
- 9. Execute further tasks the Ministry of Agriculture puts SAAS in charge of and which follow from the position and function of its organs.

National Agricultural and Food Centre (NAFC)

http://www.nppc.sk/index.php/en/

The NAFC focuses on comprehensive research and gathering of knowledge in the sustainable use and protection of natural resources, especially soil and water resources for crop production and animal husbandry, quality and safety, innovation and competitiveness of food and non-food products of agricultural origin, productive and non-productive impact of agriculture on the environment and rural development and the transfer of knowledge from agricultural and food research to end users. The NAFC consists from seven independent research institutes for the main branches of agricultural research, some of them have their own substructure and more specialised research institutions.

NAFC - Soil Science Conservation Research Institute (SSCRI)

https://www.vupop.sk/eng/

Is the major pedological institution in Slovakia. The institute has many significant positions in scientific world supported by accredited soil and water laboratories, remote sensing (orthophotomaps and satellite images) and GIS tools. It is aimed on basic and applied research projects.



The SSCRI is active in many areas of pedological, agricultural and environmental research. It is responsible for soil survey and pedological research and it provides the Register of Slovak Soils, comprehensive Soil Information System, and Soil Conservation Service working as separate unit, analytical services done by laboratories with international accreditation, soil map archive and national soil sample archive. Besides of that, SSCRI is the Centre for Remote Sensing of Soil and Land and Programme of Rural Development the National Focal Point of UN Convention to Combat Desertification. It participates within the EU Framework Programme for Research and Technological Development as well as in other international programmes and projects. SSCRI carries important activities in the frame of Common Agricultural Policy EU (CAP). Moreover, SSCRI provides expert services for governmental authorities, partner scientific and education institutions and other bodies conducting activities in agriculture, environment, urban planning and regional development.

NAFC – Research Institute of Plant Production (RIPP) in Piešťany

https://www.vurv.sk/en/

Research activity of RIPP in the field of technological research at present prioritises on research of factors conditioning and influencing the quantity and the quality of yield at main field crops and on sustainable improvement and optimisation of growing systems and technologies in plant production, including the alternative and ecological forms. Stand condition of field crops monitoring and yield prognosis connected with recommendations for practice are a part of activity of the institute too. In the field of genetically-breeding research is research of RIPP oriented on analyses of plant genotypes and phenotypes and their pathogens, relationships between them and creation of new biological materials with improved properties using the progressive methods, biotechnologies and breeding. Studies interactions in the system soil - microorganisms - plant by means of modern molecular methods. RIPP insures and in conditions of Slovak Republic co-ordinates collecting, studying, conservation and utilisation of plant gene pool for agriculture and nutrition within the framework relevant National programme and insures function of Gene Bank of Slovak Republic which is located at the Institute in Piešťany.

Areas of Competence/Research/Faculty/Department/

- 1. Department of Growing Systems
- 2. <u>Department of Applied Biology and Genetics</u>
- 3. Gene Bank of the Slovak and Genetics
- 4. Research Station at Borovce
- 5. Research and Breeding Station at Vígľaš-Pstruša
- 6. Research and Breeding Station at Malý Šariš

NAFC – Research Institute for Animal Production Nitra (RIAP)

http://www.vuzv.sk/index.php/en

The main purpose of the Research Institute is to find scientific and research solutions of problems in the sphere of biology and breeding of farm animals (cattle, pigs, sheep, goats, rabbits, game bred on farms, poultry, fish, bees) perform goal oriented fundamental and applied research up to the verification of realisation in the user's sphere.

Areas of Competence/Research/Faculty/Department/

- 1. Institute of Apiculture Liptovský Hrádok (IoA)
- 2. Institute for Nutrition (IN)
- 3. <u>Institute for Animal Husbandry Systems, Breeding and Product Quality (IAHS)</u>
- 4. Institute for Farm Animal Genetics and Reproduction (IFAGR)
- 5. Institute of Small Farm Animals (ISFA)





NAFC – Agroecology Research Institute (ARI)

https://www.vurv.sk/en/agroecology-research-institute-ari-in-michalovce

NAFC – Grassland and Mountain Agriculture Research Institute (GMARI)

http://www.vutphp.sk/english.pdf

NAFC – Food Research Institute (FRI)

http://www.vup.sk/en/?start

NAFC – Research Institute of Agricultural and Food Economics (RIAFE)

http://www.vuepp.sk/en/index.html

National Forest Centre (NFC)

https://web.nlcsk.org/?page_id=24175

The NFC is a state established semi-budgetary organisation, which falls under the Ministry of Agriculture and Rural Development of the Slovak Republic. The NFC in accordance with the founding list provides complex resort tasks in the areas of

- 1. Forestry science and research,
- Complex surveillance of the state of forests and forest management planning,
- 3. Planning of protection of forests and forestry activities,
- 4. Selection of the makers or the programmes for care for forests,
- 5. Forest management information system,
- 6. Thematic state maps with the content of forests,
- 7. Nurture and education in forestry,
- 8. Consulting activities,
- 9. Contact with the public communication strategy of forestry agriculture on a national level.

Areas of Competence/Research/Faculty/Department/

- 1. NFC Forest Research Institute
- 2. NFC Institute for Forest Consulting and Education
- 3. NFC Institute for Forest Resource and Information
- 4. NFC Forest Management Institute

Contact person: sackov@nlcsk.org

Universities/Higher Education Institutes

Comenius University in Bratislava

https://uniba.sk/en/about/

Comenius University in Bratislava is a modern European university which in 2019 celebrated its 100th anniversary. It is the only Slovak university to be regularly ranked in the international rankings of the best universities in the world. With thirteen faculties, it offers the widest selection of study programmes (over 800) at three levels, and several of these study programmes are the only ones of their kind offered in Slovakia. There is a wide range of areas of human knowledge to choose from when studying, be it in medicine, the humanities and social sciences, the natural sciences, mathematics, theology, and much more.





Comenius University is a research institution that runs hundreds of domestic and international research projects. As a result, many of the students engage in important research during their studies and can actively participate in projects, grants, and professional internships (including abroad).

Faculties most relevant for the CRP are:

- 1. <u>Faculty of Natural Sciences departments of biology, environmental science, chemistry, geography and geology</u>
- 2. Faculty of Mathematics, physics and informatics
- 3. Faculty of Pharmacy

Slovak University of Agriculture Nitra

https://www.uniag.sk/en/

This is the only university in Slovakia which is a specialist agriculture and agricultural sciences university. The university conducts research in areas such as: agrobiology, food resources, sustainable agriculture, agricultural production, biotechnology, food technology, engineering of agricultural machinery and equipment, computerisation and automation of agricultural equipment, operation of energy facilities on agricultural production, economics and management, international trade in agricultural commodities, marketing, development of rural tourism, project management for rural development.

Faculty/Department/Areas of Competence:

- Faculty of Agrobiology and Food Resources
- 2. Faculty of Biotechnology and Food Sciences
- Faculty of Economics and Management
- 4. Faculty of European Studies and Regional Development
- 5. Horticulture and Landscape Engineering Faculty
- 6. Faculty of Engineering
- 7. Research Centre Agrobiotech (ABT RC):

ABT RC is a university-wide, specialised facility, which performs concentrated innovative research in the relevant fields aimed at conducting new methods and procedures in research, especially within applied research, with the express goal of transferring its results into practice. It was established in 2015. It is equipped with state-of-the-art research infrastructure, thereby enabling the centre to product research at the highest level, applicable in practice, and consistent with the needs of the priorities of agrobiology, the processing technology of agricultural products and the agri-food industry, biotechnology, genetic technologies, agroecology, bioenergetics, and bioeconomy.

University of Veterinary Medicine and Pharmacy in Košice (UVMP)

http://www.uvlf.sk/en

The university is the sole university for veterinary education in the Slovak Republic and one of the two universities offering education in pharmacy. UVMP in Košice is a one faculty university providing education in bachelor study programmes Cynology, Safety of Food and Feed, Animal Science, and Man-Animal Relationship and its Use in Canistherapy and Hippotherapy, DVM (Doctor of Veterinary Medicine) degree study programmes, which include General Veterinary Medicine and Food Hygiene, and master study programmes in Pharmacy and Market and Food Quality.

Areas of Competence/Research:

http://www.uvlf.sk/en/research/scientific-research-activity





- 1. Health and morbidity of animals using methods of molecular biology in the area of diagnostics, therapy and prevention of diseases of infectious and non-infectious nature, as well as to define a predisposition to diseases
- 2. Regenerative medicine invasive and non-invasive treatment procedures at the level of knowledge of the world of science
- 3. Application procedures in molecular biology for the production of sanitary safe food, with particular regard to zoonoses
- 4. Environmental quality from the point of view of the security health of the animal and human population
- 5. Use of biologically active peptides, pharmacogenetic and toxicological interactions, the development of high quality and stable dosage forms, medicinal plants and extracts, the synergistic effect of secondary metabolites of plants and products of the probiotic bacteria to inhibit the biofilm forming pathogens

Slovak University of Technology in Bratislava – Faculty of Chemical and Food Technology

https://www.fchpt.stuba.sk/english.html?page_id=782

The Faculty of Chemical and Food Technology has an exceptional position in the system of Slovak university education. It is the only faculty providing complete university education based on first-rate chemical-engineering and natural science theoretical foundations, educating engineers for all fields of chemical and food processing industry. Research is oriented mainly towards material structure characterisation, chemical technologies and biotechnologies, food processing and nutrition, chemical processes control, cultural heritage protection and environmental engineering.

Areas of Competence/Research/Department

- 1. Department of Nutrition and Food Quality Assessment
- 2. Department of Food Technology
- 3. Institute of Biotechnology
- 4. <u>Institute of Biochemistry and Microbiology</u>
- 5. Department of Environmental Engineering

Pavol Jozef Šafárik University – Institute of Biology and Ecology, Faculty of Sciences

https://bio.science.upjs.sk/ustav1eng.html

The Institute has been involved in plant breeding since 1976 and in plant biotechnology research since 1981. The teams of the Institute are involved in the medicinal plant breeding research in collaboration with a private company "Vilora" (previously Agricultural Co-operative "Rozkvet" in Nová Ľubovňa). Their research is strongly focused on new line development and evaluation, plant biotechnology and less on germplasm enhancement.

Departments/Areas of Research

- 1. Department of Botany
- 2. Department of Animal Physiology
- 3. Department of Genetics
- 4. Department of Zoology



University of SS. Cyril and Methodius in Trnava – Faculty of Natural Sciences

http://fpv.ucm.sk/en/

The Faculty of Natural Sciences became an important part of the newly-founded University of Saints Cyril and Methodius immediately after its foundation in 1997. The main objective of the faculty consists in instructional-educational activities aimed at preparation of erudite specialists in modern and interdisciplinary areas like: applied informatics, applied chemistry and biochemistry, applied biology, applied analytical and bioanalytical chemistry, biotechnologies, environmentalist and remediation technologies.

Areas of Competence/Research/Department

- 1. Department of Biotechnologies
- 2. Department of Biology
- 3. <u>Department of Biophysics</u>

Constantine the Philosopher University in Nitra – Faculty of Natural Sciences

https://www.ukf.sk/en/faculties-and-units/faculty-of-natural-sciences

The Faculty of Natural Sciences was founded in 1993 when it started its activities as an independent, research and education faculty of a university type. The Faculty builds on the tradition of the Pedagogical Institute (1959-1963). The main task is to provide higher education and conduct creative scientific research in natural sciences, mathematics and informatics.

Areas of Competence/Research/Faculty/Department

- Department of Botany and Genetics
- 2. Department of Zoology and Anthropology
- 3. Department of Ecology and Environmental Sciences
- 4. Department of Geography and Regional Development
- 5. Research Centre Agrobiotech

Technical University of Zvolen (TUZVO)

https://www.tuzvo.sk/en

Technical University of Zvolen is a modern higher education institution providing education in all three levels of studies within the European Higher Education and Research Area. In the higher education system in Slovakia, the TUZVO has a unique specialisation within a focus on the spheres of forest – wood – ecology – environment with an appropriate expansion in other technical, natural, security, economics as well as design spheres. In the field of research, the TUZVO fulfils its mission by solving research projects and programmes of national and international character in seven research areas: agricultural and forestry sciences, construction engineering and technologies, ecology and environmental sciences, manufacturing sciences, economics and management, security services, design; as well as in other related and applied areas.

Areas of Competence/Research/Faculty/Department

- 1. <u>Faculty of Forestry</u>: The Faculty is the only faculty of its kind in Slovakia. It is focused on the problems of forests in all their aspects.
- 2. <u>Faculty of Wood Sciences and Technology</u>: The Faculty is orientated to the complex wood research and exploitation. It is the only one of this focus in Slovakia.
- 3. <u>Faculty of Technology</u>: The Faculty is technically orientated to the complex of: forest wood ecology the environment and work environment.
- 4. <u>Faculty of Ecology and Environmental Sciences</u>: The mission of the Faculty is to prepare specialists with a wide range of knowledge in the area of ecology and environmental sciences





for the needs of state administration and local self-government, especially for the needs of scientific and research institutions, administration at state level, at the level of local self-governments or non-governmental environmental organisations, as well as the development of research within these spheres.

Other Organisations/Institutes

Agroinštitút Nitra

http://www.agroinstitut.sk/en/about-us

Agroinstitut Nitra is a state enterprise of the Ministry of Agriculture and Rural Development of the Slovak Republic. It provides a broad portfolio of services mainly in the area of continuing vocational lifelong education, training and certification of agricultural advisors, develops and carries on an information system for advisory services, compiles specialised library collection, ensures effective and efficient access to information and information resources through information services and information technology. It is the National Centre AGRIS FAO and FAO Depository Library as well.

Institute of Postgraduate Education of Veterinary Surgeons in Košice

http://www.ivvl.sk/indexa.php

Institute of Postgraduate Education of Veterinary Surgeons in Košice is educational and congress centre of the Ministry of Agriculture and Rural Development of the SR, specialised on development of human resources. Emphasised is whole-life education of employees of the State veterinary and food administration of Slovak republic and the State veterinary and food institutes in all areas of veterinary care, food and foodstuff hygiene as well as food control, veterinary legislative, protection of state territory, common agriculture policy of EU and laboratory diagnostic (education with tradition since 1958).

Slovak Environment Agency (SAE)

https://www.sazp.sk/en/the-environment/

SAE is specialised agency of the Ministry of Environment of the Slovak Republic dedicated to the environment, environmental science and environmental care. Its mission is to ensure environmental services, as well as implement special environmental programs and projects. SAE is ensuring also an international cooperation, fulfilling reporting obligations within the EU, providing environmental education and environmental assessment. Activities within the SEA focuses also on the preparation of expert documents and studies, methodological and legislative documents, counselling, monitoring, educational and editorial activity in the field of care for landscape and of rural development and village renewal. SAE acts as the Regional Centre of the Basel Convention for Training and Technology Transfer for Central and Eastern Europe (BCRC Bratislava) as well. It helps the countries of Central and Eastern Europe with the implementation of the principles of the Basel Convention and to address specific regional or sub-regional needs.

Water Research Institute (WRI)

http://www.vuvh.sk/default.aspx?pid=4

WRI was established in 1951. It is a public organisation under the supervision of the Ministry of Environment of the Slovak Republic. WRI is the only organisation in Slovakia conducting comprehensive water management research and other related activities resulting from the needs of water sector in the Slovak Republic. Its main activities are aimed at research and development, expertise, professional water management consulting services and solutions for water management and ecological problems. Main fields of research: hydrology and hydraulics, water planning and



development, water quality and water treatment technology, wastewater technologies, national water reference laboratory for Slovakia, technical standardisation in the field of water.

Areas of Scientific/Research Activities

- 1. Solving complex scientific-research issues concerning quantitative and qualitative water management balance, regulation of discharge conditions, water management in geographic and local administration units.
- 2. Examination of protection and use of atmospheric, surface and ground water resources scientific research, methodological, expertise activity, monitoring and professional consulting in hydrology and hydraulics, quality and technology of water and wastewater treatment.
- Scientific research, expertise and other activities based on the activities of the National Water Reference Laboratory in Slovakia.