

UNIVERSITY  
OF ACADEMY OF SCIENCES  
OF MOLDOVA

YOU CAN TEACH A STUDENT A LESSON FOR A DAY,  
BUT IF YOU CAN TEACH HIM TO LEARN BY CREATING CURIOSITY,  
HE WILL CONTINUE THE LEARNING PROCESS AS LONG AS HE LIVES.

Clay P. BEDFORD



## **DEAR FRIENDS,**

Thoughts about the future of Moldova make us understand that its welfare strongly depends on the Science, which is the base of the perpetual progress.

Thinking about you, scientists of tomorrow, who have to put your shoulder to the creation of the knowledge based society, we make the base of this modern hostel which will be one of the important backgrounds for the preparing of young researchers - the future of national science.

### **Become professionals, state personalities, remarkable scientists**

On behalf of the Moldovan Scientific Community I would like to greet the young generation of Moldova and invite them to participate actively in the science and technology development. The Academy of Sciences of Moldova creates a lot of opportunities for the young generation for scientific carrier pursuit:

- Modern Research, Education and Innovation, Environment
- State-of-the-art equipment
- Connection to the R & D institutions in Moldova and abroad
- Involvement of the experienced Teachers and Professors in education process
- Participation in the International Projects: FP7, TEMPUS, NATO,...
- Collaboration development with Scientific diaspora.

You are welcome to accumulate all these opportunities. On you depends the future of knowledge triangle: research – education – innovation development in Moldova.

From the bottom of our heart we wish you to be happy. Scientific activity should bring you just satisfaction. You have to carry on the baton received from the forerunners. Gain knowledge and work hard for the Moldova and your nation welfare. We are convinced that you will achieve the results we have just dreamed.

Our message is coming to you, next generation, who will live in a prosperous state, Republic of Moldova. We hope you will appreciate our efforts for its prosperity.

Academician **George DUCA**,  
President of the Academy of Sciences of Moldova

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# UNIVERSITY



The University of the Academy of Sciences of Moldova is a new university based on distinguished academic achievements, pursuing an ambitious perspective goal - to establish the functional junction of the main pillars of the knowledge: Education, Research and Innovation.

From the perspective of integration of higher education with scientific research within the institutes of the Academy of Sciences of Moldova (ASM) and the best use of human potential, infrastructure, libraries, scientific equipment, an educational research cluster UnivER SCIENCE (University of Education and Research SCIENCE) was established.



# BUSINESS CARD

## Mission

The UnASM was built to sustain the excellence in science through education of a new generation of dedicated researchers. Scientific inquiry-based education generates new dimensions for conceptual understanding, skills training, intensification of analysis and systematization abilities which encourages students to integrate and apply their knowledge for identification of new hypotheses and their elaboration into projects.

## Vision

The university that will become an indispensable knowledge centre harmoniously integrated into the knowledge based society of our country is the core of our vision of evolution of the UnASM. Our work is oriented towards achievement of European and global competitiveness in education of scientists, adjusting of educational programs and curricula to the needs of science and innovation community, effective collaboration with institutes of ASM, best use of human potential, application of state of the art education technologies including the development of e-learning capacity, rational and effective use of academic facilities, strengthening of links between the training, research, innovation and business in order to assert the research, training and promotion of the young gifted students in all aspects of development and their integration into modern society.



# EDUCATIONAL SCIENTIFIC

The educational scientific cluster UnivER SCIENCE is an association of specialized highly competitive structures of innovative research and certified training, comprising the University (UnASM), high school (lyceum of the ASM), eighteen research institutes, technological park and incubator of the Academy of Sciences developed to concentrate available material and intellectual resources for scientific inquiry-based education.



## THE EDUCATIONAL SCIENTIFIC CLUSTER UNIVER SCIENCE

**C H A I R M A N**

**BOARD OF DIRECTORS**

**SENATE**

**LEADING BOARD**

18 Research Institutes  
of the ASM

Scientific Technologic Park  
and Inovation  
Incubator

Manufactory **Topaz**, SA

NGO  
**Promotion  
through Intelligence**

University of the Academy  
of Sciences of Moldova  
(UnASM)

Lyceum of the  
Academy of Sciences  
of Moldova (LASM)

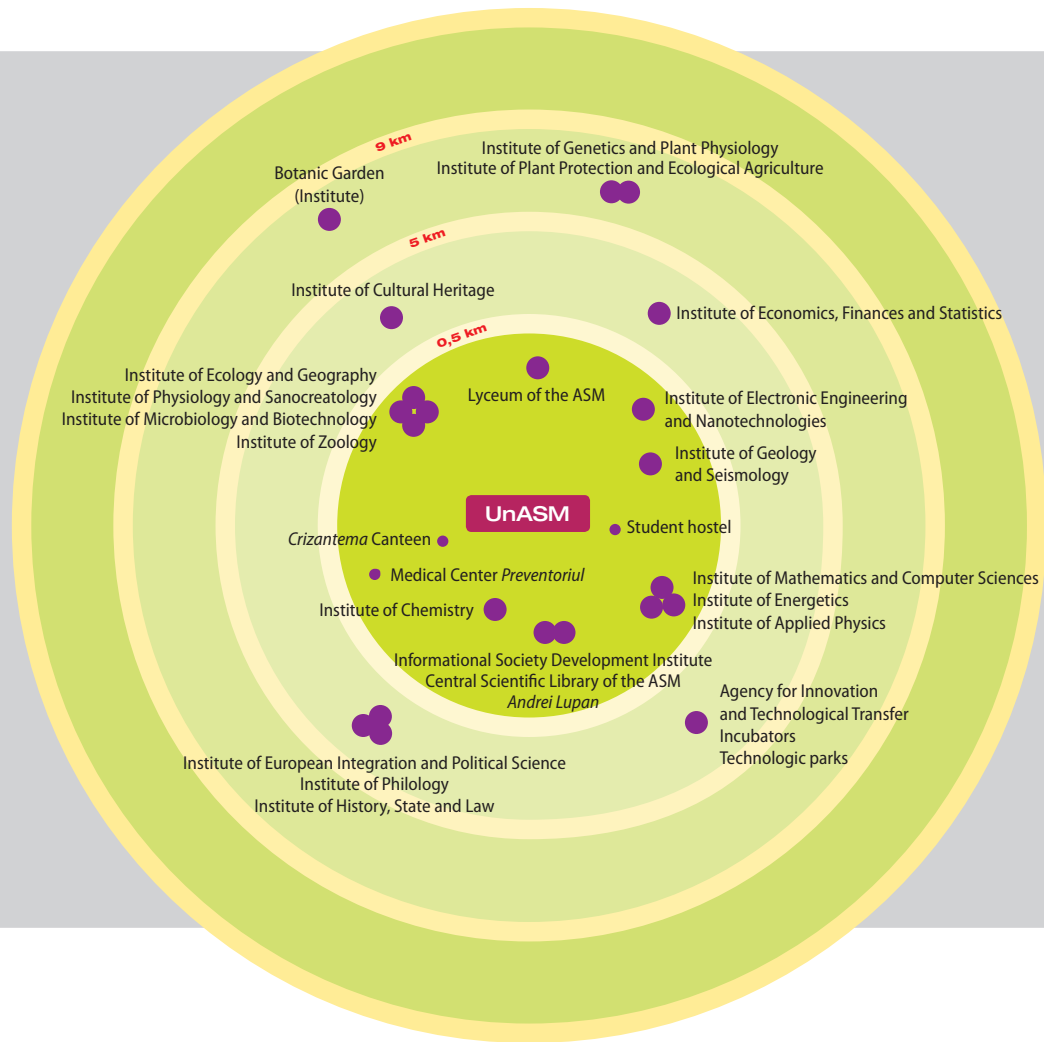
Central Scientific Library of  
the ASM „Andrei Lupan”

**Crizantema**  
State Enterprise

**Preventorium**  
State Enterprise

NGO  
**Moldovan Research and  
Development Association**

# CLUSTER UnivER SCIENCE



## CLUSTER'S ADVANTAGES

- ▶ Increased transfer of knowledge
- ▶ Enhanced advising and guidance
- ▶ Improved resilience to market changes



# Faculty

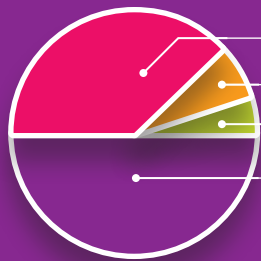


The basic part of the University's mission is to sustain an effective faculty - students partnership. Academicians and scientists from ASM's research institutions cooperate with UnASM students. This link has constructive impacts on further evolution of science in the country, diversifies areas of investigations, develops basic research in modern branches of contemporary science, highlights scientific heritage, history and culture, implements the results of scientific research in national economy. In a relatively short time the UnASM succeeded consolidate and affirm its efforts in searching for new areas of cooperation.

Academicians deliver lectures at the university that ensures close cooperation with the institutes in their academic researches. The most successful students, guided by a professor or researcher have the possibility to publish their work in academic journals including *Academos* and *Academic Bulletin*.





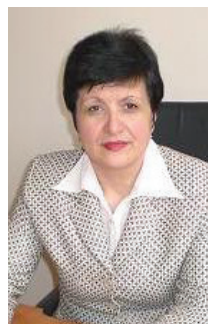


PhD, 38%

Academician, 7%

Corresponding member, 5%

Habilitated Doctor, 50%



# Technical and Material



Technical and material supply offered for students education and training consists of almost 50 modern research laboratories from the eighteen research institutions, that are counterparts of the Univer SCIENCE cluster. Many of these are linked to industry or service offering in compliance with received accreditation (national accreditation, ISO, scientific performance etc.)

The university offers wide opportunities of training in technical handling of modern and sophisticated equipment as well as methodologies that are used in research institutions.

Research institutions contribute significantly to the high-quality training of the academic personnel, offering the students the chance to involve in realization of applied and scientific studies, as well as follow on employment as researchers.



# Support



# Innovation Transfer



The UnASM intends to create an exceptional record of achievements in generation and sharing of new ideas, in education of highly demanded graduates by employers in and outside the country. Our personnel, in collaboration with specialists from leading research institutes and the Agency for Innovation and Technological Transfer, is building an exceptional environment for pioneering research by providing links with industry and public services and is searching for solutions to some of the Moldova's most pressing problems.



# Structures

Till present at the Academy of Sciences of Moldova three scientific and technological parks have been developed. Students, faculty professionals and researchers take part in the process of knowledge and technologies transfer, and have access to expertise and infrastructure offered by parks and incubators. With the aim of creating and stimulating entrepreneurial environment in frame of the Cluster, at UnASM an education and innovation incubator has been created.

State competition of the youngest innovators is one the most motivating youth activities, which is currently at its V<sup>th</sup> edition. Every year more than 100 pupils from the Republic of Moldova attend this event.



# Academic Library



The Central Scientific Library of the Academy of Sciences of Moldova Andrei Lupan is one of the largest and best supplied in Moldova with 1.420.439 books and publications. It was founded in 1928 and since then continuously supports research and education activities.

The library is comfortably located close to UnASM premises, and its staff is always ready to assist students in finding and using the most appropriate resources. Due to association to the Cluster UnivER SCIENCE, the Library grants the students a free access to a vast collection of manuals, monographs, articles and electronic documents representing a preeminent reservoir of knowledge and inspiration. The Library supplements its funds of resources through subscription for periodicals, acquisitions, exchange of publications with other libraries, donations etc. The collections are shared between the main building and the affiliates situated in the frame of Institutes, according to their scientific fields.



University's on-line access to the Central Scientific Library Andrei Lupan provides instant connection to a wide variety of learning resources, including the main library catalogue. It is an easy way to use it as a gateway to a large number of electronic journals, databases and web sites which are carefully selected by professionals according to their relevance to the educational curricula of the university. Additionally, students can use a Virtual Reading Room with on-line access to full-text databases or their CD/DVD versions with 34 available periodicals, an e-library comprising specialized collections of digital versions of old and rare books, which can be explored from computers hall.

The broad range of resources in Nature Sciences, Formal Sciences and Humanities allows students to initiate or deepen their knowledge, obtain additional information and use different ways of self-education.

The UnASM has founded its library extensions service that provides access to publications elaborated by the faculty members, acquired through national and international projects or donated by famous people.



# Personal Welfare

## CRIZANTEMA Canteen

The UnASM's canteen offers very good cuisine alternatives, being open from breakfast till afternoon. The food offer includes a wide variety of traditional dishes, healthy diet options, salads and a variety of drinks.



## PREVENTORIU Medical centre

The medical centre will facilitate and conduct regular medical investigations and will provide medical emergency aid for teenagers, students, Master and PhD students and staff and will take care of risk groups.





## ȘTIINȚA Holiday camp

The Știința holiday camp of the ASM was designed to provide a curative agreement for the scientific community, academicians and researchers of the Academy of Sciences and from the UnivER SCIENCE cluster.

### The main activities:

- ▶ Ensuring agreement for the ASM workers and their families as well as for students;
- ▶ Organizing cultural and touristic activities;
- ▶ Supporting active rest.



# GENERAL INFORMATION



UnASM promotes and implements the scientific inquiry-based education concept by developing the departments of biology, physics, mathematics, informatics, ecology and geography, that requires a highly expensive infrastructure, and through setting up of research and education laboratories. The University values its relationships with Cluster members and appreciates the support it receives from a growing alumni network and many other friends and well-wishers, including those who serve on its decision-making and advisory bodies, and who along with staff and students contribute in many ways to the vitality of the University.

## Activities

- Creation and preservation of scientific, ethic and universal values;
- Identification of scientific solutions to social problems by studying the knowledge that is sensitive to human beings and environment;
- Training of high-skilled professionals;
- Education of individuals with free, critical, productive and innovative thinking;
- Organization of interdisciplinary works;
- Contribution to the development of the country by strengthening the relations with industry and service sectors through various projects;
- Collaboration with international institutions and development of partnership projects.



# ABOUT THE UNIVERSITY

## RECTORATE

### FACULTIES

**FACULTY OF LIFE SCIENCES**  
Department of Biology  
Department of Environmental Sciences

**FACULTY OF HUMANITIES AND SOCIAL SCIENCES**  
Department of Languages and Literature  
Department of Philosophy, History and Research Methodology

**FACULTY OF NATURAL and FUNDAMENTAL SCIENCES**  
Department of Physics and Chemistry  
Department of Mathematics and Computing

### CENTERS

UNIVERSITY  
CENTER OF  
MOLECULAR  
BIOLOGY

CENTER  
FOR  
LIFELONG  
LEARNING

LABORATORY OF  
BIOINFORMATICS

CAREER ADVISING  
OFFICE

LABORATORY OF  
GENOMICS

DOCTORAL SCHOOLS  
OFFICE

LABORATORY OF  
PROTEOMICS

UNIVERSCIENCE  
INCUBATOR

### DIVISIONS

EDUCATION AND QUALITY MANAGEMENT

INTERNATIONAL RELATIONS AND  
INFORMATIZATION

STAFF AND HUMAN RESOURCES

ACCOUNTING AND FINANCES

LOGISTICS

# Learning Experience



Along with traditional teaching methods, the University of the Academy of Sciences develops and focuses on the principle of learning through research and the principle of individual learning or student-centred learning.

Training through research investigations motivates students, encourages them to integrate and apply their knowledge in developing their own hypotheses and research projects.

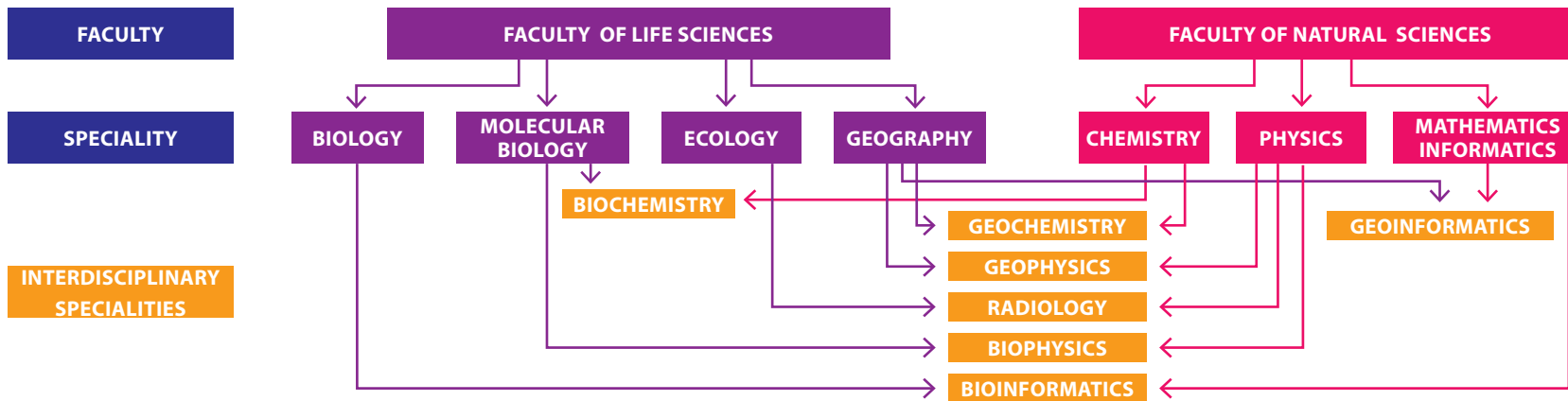
Research based education also involves students in individual investigations, which allows them to apply their knowledge and develop new knowledge and skills. Students' research works must shape the current aims and by their means they develop scientific concepts.

Studies in second cycle provide training activities focused on assurance of opportunities for individual work, mainly on research practices while traditional lecturing hours are limited.



Knowledge evaluation is based on several components, including the work done in class and activities provided in the individual work:

- Exam (there may be 1 or 2)  
Intermediate 30% of final grade
- Individual learning activities - 10% of final grade
- Research and creativity - 20% of final grade
- Course paper- 10% of final grade
- The final exam 30% of final grade



# University IT Resources



The UnASM provides academic IT services – supporting research and teaching in all disciplines. University's IT provision is constantly growing and being updated to satisfy the rigorous demands of the most computer-literate students. The University is equipped with modern computers and corresponding software, in order to provide students various learning activities, creative tasks and training. The board room is equipped with a video-conference unit, traditional conference equipment and an audio system. The University provides IT services also during various meetings, conferences and scientific events organized or hosted here.

Since IT has become a priority in the education process at UnASM, the Internet, multimedia, and on-line distance learning are made available to students to help them improve their knowledge and competence and thus maximize their academic potential. All students receive guidance, training and support on application of computer programs and electronic information resources during specially elaborated courses on Information and Communication Technologies.



# E-Learning Environment

www.e-learning.unasm.asm.md

Moreover, at the UnASM an on-line education platform for e-learning has been developed to help lecturers apply IT in teaching, bringing flexibility and creativity into the educational process. This performance allows distant teaching and implementation of non-formal methods of education. Every student has access to an advanced online portal. It is an essential tool to help organise the student's life, since the home page draws together study materials tailored to each student's registered courses, as well as provides access to an online community.

The home page provides regularly updated news feeds from various areas of the university, whilst reminding about tasks delivered by tutors to students via the "tasks box". The user can access university email, online calendar, directory of all student users, personal blog, bookmarks and can view and change his personal settings.

Universitatea Academiei de Științe a Moldovei  
E-learning

e-learning.unasm.asm.md

You are not logged in. (Login)  
English (en)

**Course categories**

- Faculty of Natural Sciences
- Faculty of Exact Sciences
- Faculty Socio-Humanity Sciences
- Developing communication performance
- Obtaining teaching and learning skills
- INNOVATION TEAM BUILDING
- Innovative entrepreneurship
- Science and society
- European integration and sustainable development
- Modulul Psiho-pedagogic NAȚIONALĂ
- Centrul Universitar de Biologie Moleculară
- All courses ...

**Mandatory curricula**

Faculty of Natural Sciences	94
Faculty of Exact Sciences	66
Faculty Socio-Humanity Sciences	66
Centrul Universitar de Biologie Moleculară	9

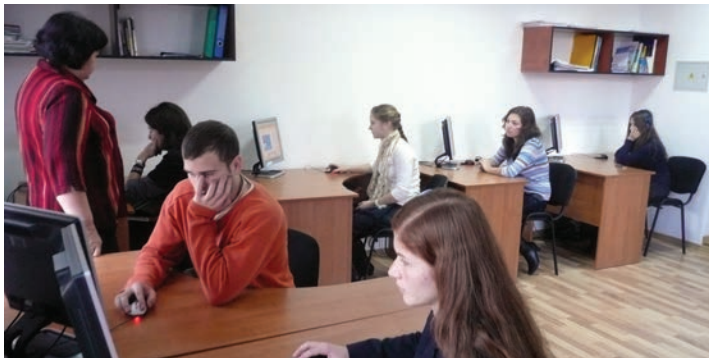
**Additional curricula**

Developing communication performance	0
Obtaining teaching and learning skills	0
Innovative entrepreneurship	0
STATUS, ȘI ANTREPRENORIALITATE, INOVAȚIONAL, INOVAȚIONAL TEAM BUILDING, MARKETING OF INOVAȚIONAL TECHNOLOGIES, BUSINESS PLANNING, ENTREPRENEURSHIP & INNOVATION	0
Science and society	0
European integration and sustainable development	0
Modulul Psiho-pedagogic NAȚIONALĂ	1
SECURITATEA NAȚIONALĂ	13
Centrul Universitar de Biologie Moleculară	9

Search courses:

Calendar: February 2012

Main Menu: Site news



TEMPIUS

GC

"ENTREPRENEURIAL UNIVERSITY AS A MODEL FOR PROPER MANAGERIAL INTERRELATION AMONG EDUCATION, SCIENCE AND INNOVATION DEVELOPMENT"

(Agreement № 144950-TB-FUS-2008-IT-34-ES)

Theoretical course

Case studies

Resources

Glossary

Forum

Feed-back

BIOCHIMIE

Elaborat: dr. Aliona GLLIN

Curs teoretic

Lucrări de laborator

Evaluare

Glosar

Resurse interactive

Forum

# Additional Curricula





Many additional degree Programmes at the UnASM allow students to study one module from a discipline area outside their field for at least one year of their course. Language modules are a popular choice.

The University offers various academic programs- intensive, evening courses, online courses- containing basic courses and optional courses, available to all students, regardless of their training field, speciality, level of education or practice.

1. Entrepreneurship and Innovation Management Program - courses in entrepreneurship and the creation of innovative startups.
2. Skills of Teaching and Learning Program - courses in psychology, teaching and learning technologies, procedures of implementation and evaluation of individual classes.
3. Development of Communication Performance Program- development of communication skills, capacity building and leadership.



# FACULTY OF LIFE

Training of specialists in life sciences is imperative nowadays. During its development the mankind permanently influenced the environment, and nowadays this influence has increased significantly due to natural boost of the population growth, rapid development of industry, usage of contemporary technologies in agriculture, development of transportation, excessive exploitation of natural resources, which resulted in environment change and natural resources extinction.



# SCIENCES



# Departments

- ▶ Department of Biology
- ▶ Department of Ecology and Environmental Sciences



# Educational Offer

## Specialities (License studies)

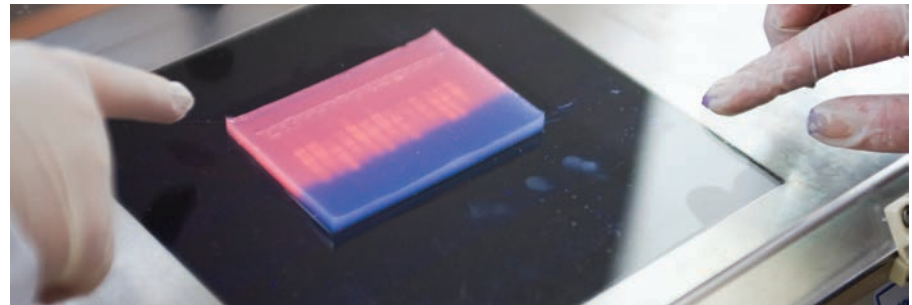
- ▶ Biology
- ▶ Molecular Biology
- ▶ Ecology
- ▶ Geography
- ▶ Soil Science

## Master programs (Master degree studies)

- ▶ Biology
- ▶ Molecular Biology
- ▶ Environmental Science

## PhD studies at specialities

Agricultural Chemistry; Biochemistry; Biotechnology; Botany; Ecology; Entomology; Environmental Protection and Engineering; General and Regional Geology; Genetics; Geophysics and Seismology; Human and Animal Physiology; Hydrobiology, Ichthyology; Hydrogeology; Meteorology, Climatology, Agricultural Meteorology; Microbiology; Paleontology; Parasitology, Helminthology; Pathological Anatomy; Plant Breeding and Seed Farming; Plant Physiology; Plant Protection; Zoology.



# Research Institutes

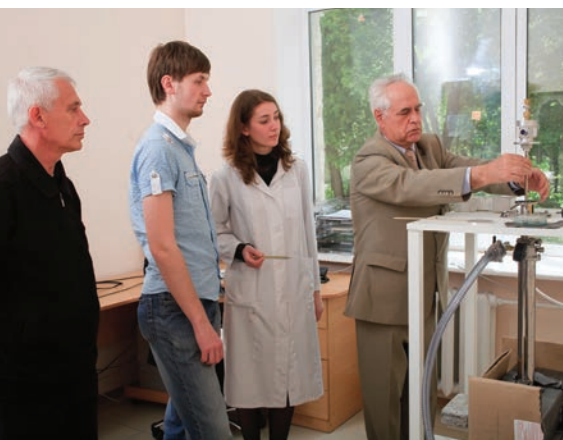
- ▶ Botanic Garden (Institute)
- ▶ Institut of Geology and Seismology
- ▶ Institute of Ecology and Geography
- ▶ Institute of Genetics and Plant Physiology
- ▶ Institute of Microbiology and Biotechnology
- ▶ Institute of Physiology and Sanocreatology
- ▶ Institute of Plant Protection and Ecological Agriculture
- ▶ Institute of Zoology



# FACULTY OF NATURAL



Nowadays, in the era of new technologies, natural sciences represent a determinant component of economic competitiveness, influencing the level of development and the welfare of society. Faculty of Natural and Fundamental Sciences provides training of specialists in the fields of Physics, Chemistry, Mathematics and Computer Science with continuous update and evaluation of scientific results.



# SCIENCES



# Departments

- ▶ Department of Physics and Chemistry
- ▶ Department of Mathematics and Computer Science



## Educational Offer

### Specialities (License studies)

- ▶ Mathematics
- ▶ Physics
- ▶ Chemistry

### Master programs (Master degree studies)

- ▶ Mathematics and Informational Technologies
- ▶ Physics
- ▶ Chemistry
- ▶ Applied informatics

### PhD studies at specialities

#### Chemistry

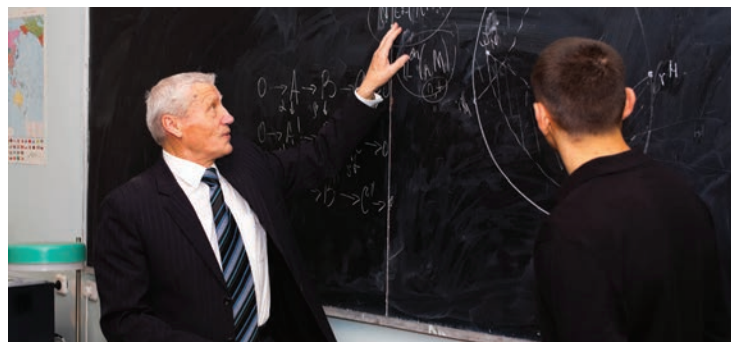
Chemistry of Natural and Physiological Active Compounds; Electrochemistry; Inorganic Chemistry; Organic Chemistry; Physical Chemistry

#### Mathematics and Informatics

Computers Programming; Differential Equations; Economical-Mathematical Methods; Economy and Management; Geometry and Topology; Mathematical Analysis; Mathematical and Theoretical Physics; Mathematical Cybernetics and Operational Research; Mathematical Logics, Algebra and Theory of Numbers; Mathematical Modelling, Mathematical Methods; Theoretical Basis of Informatics

#### Physics

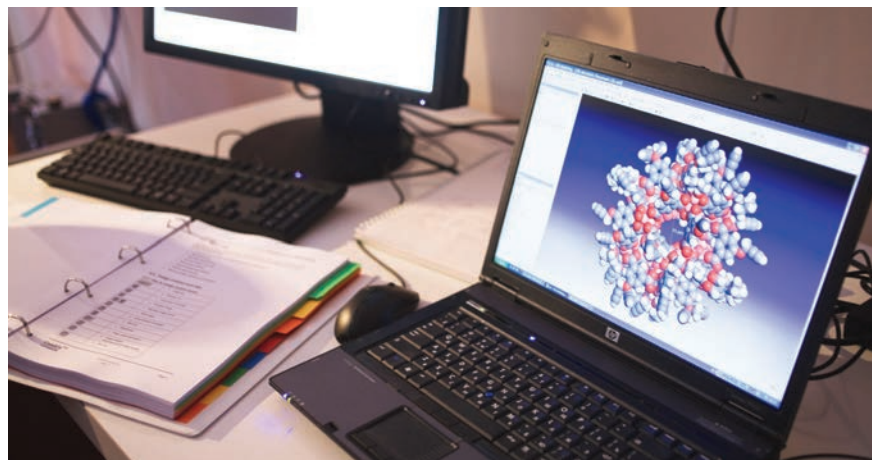
Crystallography and Crystal Physics; Devices and Systems of Energy Conversion; Electronics of Solid State, Microelectronics and Nanoelectronics; Mains Electricity and Electric Networks; New and Regenerative Sources of Energy; Physics and Engineering of Semiconductors; Physics of Condensed State; Technology of Semiconductors and Materials of Electronic Techniques; Theoretical Basis of Thermal Techniques





# Research Institutes

- ▶ Institute of Applied Physics
- ▶ Institute of Chemistry
- ▶ Institute of Electronic Engineering and Industrial Technologies
- ▶ Institute of Energetics
- ▶ Institut of Geology and Seismology
- ▶ Institute of Mathematics and Computer Science



# FACULTY OF HUMANITIES



Faculty of Humanities and Social Sciences has the mission to provide and develop resources and tools necessary for the academic performance of the specific research in the humanities field, to the high quality standards necessary to assure their competitiveness both at the national level as well as in the European Higher Education and Research area.



# & SOCIAL SCIENCES



# Departments

- ▶ Department of Languages and Literature
- ▶ Department of Philosophy, History and Research Methodology



# Educational Offer

## Specialities

(License studies)

- ▶ Romanian language and literature.  
English / French
- ▶ Philosophy and Communication

## Master programs

(Master degree studies)

- ▶ Globalization: History and Politics of European Culture
- ▶ National security

## PhD studies at specialities

Archaeology, Audio-visual arts, Criminal law, Economical sociology and demography, Ethnology, cultural and historical anthropology, General theory of law, History of Moldova, History of Romanians, Literature of Moldova, Private law, Public law, Public international law, Romanian language, Romanian literature, Social medicine and management, Social philosophy, philosophical anthropology, philosophy of culture, Social structure, institutions and social processes, Study of folklore, Theory and history of architecture, Theory and history of international relations, Theory of literature, Theory of philosophy, Theory, methodology and history of political science, Universal and comparative literature.



# Research Institutes

- ▶ Institute of Cultural Heritage
- ▶ Institute of European Integration and Political Science
- ▶ Institute of History, State and Law
- ▶ Institute of Phylology

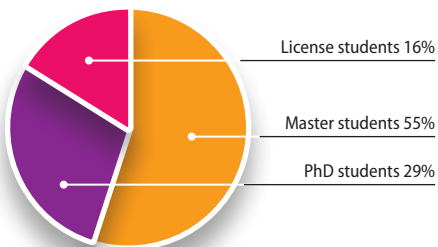
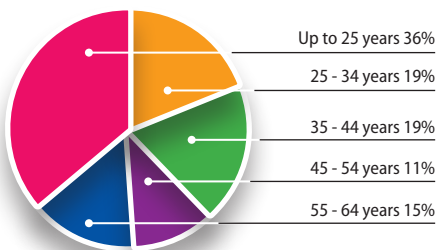


# RESEARCH CENTER



**The University Center of Molecular Biology (UCMB)** is directed to three basic areas: research, training and offering of services. The aim of the UCMB is to increase the performance of young scientists and improve fundamental and applied research in the field of modern biology and implement Molecular Biology techniques into realization of investigations and training at UnASM.

The Center promotes and stimulates participation of young researchers, thus more than half of the staff is younger than 35 years. Besides, the Center attracts many Master students and offers them training and opportunity to write a PhD thesis.



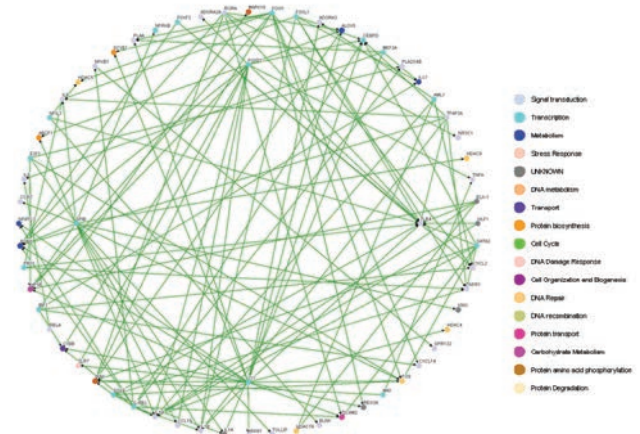
National accreditation for research in  
**Functional Genomics and Bioinformatics**

# Laboratory of Bioinformatics

Laboratory of Bioinformatics performs complex and statistical analyses of biologic data generated by other laboratories of the Center as well as of the information from biologic databases. It is particularly focused on the combination of different data types, from anatomic ones to molecular genetics, for the dissection of biologic mechanisms and phenomena. The Laboratory maintains the integrity of the scientific workflow of the Center from stages of experimental design to interpretation of results. Also, the Laboratory is elaborating work strategies for systematic surveys in Medicine and Biology.

Laboratory of Bioinformatics participates in education and training of the UnASM's students on using on-line services, created and developed by the Center. Thus, the access to on-line education platform "e-learning UnASM" for teachers and students is provided.

The Laboratory promotes Free and Open Source software application in education and research processes through usage of Linux operation system, R statistical package as well as open and free access databases.



# Laboratory of Genomics



Laboratory of Genomics conducts investigations in functional genomics, as an interdisciplinary field (genetics, molecular biology, bioinformatics), which enables to understand the integration of physiological functions and developmental programs. Genomics researches are aimed to reveal the intragenomic phenomena such as heterosis, epistasis, pleiotropy and other interactions between loci and alleles within the genome.

Main laboratory activities include researches regarding signal transduction, differential gene expression in cytoplasm male sterility – fertility restorer system, molecular analysis of pathogen resistance mechanisms in sunflower and marker technology for selection of new plant varieties with favourable traits.

Laboratory of Genomics offers a wide range of services that can open new possibilities for researching or supporting the ongoing projects.





# Laboratory of Proteomics

The Laboratory assists investigators in assessing protein expression changes that occur in a biological system, such as during disease development and progression, stress, male sterility and restoration of fertility, etc., or during normal cell and tissue development. Protein expression patterns can provide important information about the pathways involved in these processes and can lead to the identification of new biochemical markers for the diagnosis or treatment of the diseases, for example resistance to sunflower broomrape parasite.

The personnel of laboratory offers guidance to the research community regarding the feasibility of a given approach and/or advice on proteomics experiment design to enhance the probability of success.



# CENTER FOR LIFELONG LEARNING

Centre for Lifelong Learning offers a large programme of high quality courses which are available for everybody and which meet a wide range of interests and needs in the humanities, sciences and in language learning.

The mission of the Centre is to promote life-long learning among the undergraduates, master degree and PhD students as well as among researchers from the ASM, contributing to social, cultural and economic development. We make and sustain this contribution by providing:

- ▶ High quality educational services including inter-disciplinary courses, short term courses in a large range of disciplines, trainings for researchers, advanced courses in the frame of doctoral schools, etc.
- ▶ Student support and guidance.

We are using both, formal and informal learning methodologies in order to foster the continuous development and improvement of the knowledge and skills needed for employment and personal fulfilment. These share mixed connotations with other educational concepts such as Adult Education, Training, Continuing Education, Permanent Education and other terms that relate to learning beyond the formal educational system.



# Career Advising office



Career Advising Office determines students' professional education, facilitates students in determining working the fields which are mostly appropriate for them, and maintain university's dialogue with business community in order to identify the best carriers that correspond to their activities. Career Advising Office gives services in an open office where all the students can easily have meetings. Along with the library, where professional publications, periodicals, personal development magazines are made available, firm's introduction stands are also exposed.

The goals of the Office are as follows:

- ▶ To increase the percentage of services offered for students and the employment rate accordingly;
- ▶ To increase the postgraduation support for students from the Office;
- ▶ To develop a firm/student database within the frame of internship and job application;
- ▶ To organise meetings of students with companies in demand for young employees.

Aiming at improvement of experience, the university will involve students in volunteer projects of activity in business community while continuing their education.

Considering the above mentioned the Career Advising Office will perform on regular basis the following types of activities: individual Career Planning; selection and placement of the graduating students, informing about CV writing and interview techniques, international job-consulting, business world orientation programs, development programs, and firm tours.

# Doctoral Schools Office

At the UnASM we encourage our students to enrol in challenging doctoral programs that will provide for accumulation of experience and will prepare them for their future career in science. Work experience is another key asset that will help our students to stand out in the graduate labour market and demonstrate to future employers the valuable contribution they could make to their organisation. A number of departments across the university offer options for students to take a year in industry as part of their degree, often enabling them to gain an additional qualification by doing so.

Alternatively the UnASM students can undertake a year-long placement by requesting a leave of absence from the university; this is particularly popular where year placements are not a formal part of a degree course.

We have developed excellent relationships with a wide range of potential employers to keep you one step ahead of the competition in the job market. For example, you can:

- ▶ Reach a powerful network of the UnASM professionals across the Republic of Moldova;
- ▶ Access the graduate employers who advertise vacancies targeted at the UnASM students and graduates – the strong links with major employers national and international level represent major opportunities for our students;
- ▶ Meet employers face-to-face at our recruitment events, employer presentations and workshops;
- ▶ Take advantage of our professional advice on how to approach employers in areas of work where it is unusual for vacancies.



# Universcience Incubator

An important goal of the UnASM is to undertake actions in order to stimulate the entrepreneurial mind-sets of students from all levels of education and researchers. Between 2009 and 2011 two significant projects: Entrepreneurial university as a model for proper managerial interrelation among education, science and innovation development (Project financed by European Commission) and Foundation of the educational and innovational incubator UNIVERSCIENCE (Project financed by the Government of RM) were realized with the aim of accomplishing this goal. The realization of mentioned projects ended with foundation of a new entrepreneurial incubator within the University. The incubator's task is to promote the evolution of entrepreneurship through development and realization of entrepreneurial courses for students from non-economic specialities, provision of services for students who intend to develop their entrepreneurial skills and development of incentives for generation of innovation start-ups.



# INTERNATIONAL

The UnASM's international cooperation is shaped with the educational and scientific research activities focused on participation and application for international, bilateral scientific and technical research projects, such as:

- ▶ International project with the Tempus program – „Entrepreneurial University as a model for the Proper Managerial Interrelation between Education, Science and Innovation“;
- ▶ International project with Belarus – „Fingerprinting of sunflower genotypes using molecular markers“;
- ▶ International project with Germany – „Evaluation of pharmaceutical potential of medicinal plants from spontaneous flora in the Republic of Moldova“.

As legal basis for international cooperation we can list the following cooperation agreements:

- ▶ Memorandum of Understanding signed with Istituto Superiore Calabrese di Politiche Internazionali (ISCaP) (Higher Institute for International Policy, Calabria, Italy);
- ▶ Inter-Academic Cooperation Agreement signed between Lomonosov Moscow State University, Chemistry, Innovations and High Technologies department;
- ▶ General Convention of International Cooperation co-signed with the University Mohammed Premier Oujda, Maroco;
- ▶ Cooperation agreement with United Nuclear Research Institute, Dubna;
- ▶ Inter-academic partnership in environmental science and technical information for research, education and computerization activities signed with St. John International University, Concord, SUA;
- ▶ Cooperation agreement with the University of Bucharest, in name of Francophone Doctoral School of Social Sciences, signed in November, 2008.

We believe that our bilateral, international cooperation efficiency is determined by the transfer of expertise and experience in technical and scientific education, following the experience exchange of research students (MA, PhD) in the scientific centers from USA, EU, CIS etc.

The results of UnASM's international cooperation can be evaluated by taking a look at our involvement in technical and scientific activities in international class projects.



# COOPERATION



# Mobility



The UnASM has a fruitful and continuous cooperation with the Joint Institute for Nuclear Research (JINR) from Dubna, Russian Federation. This cooperation ensures a stable and efficient mobility for the Bachelor's, Master's and PhD UnASM students, which can be achieved either by short term trips (to participate in the Days of Moldovan Science in JINR, or to attend research training sessions) or by internships.

Between 2008-2012 many researchers from the UnASM had the opportunity to visit modern, high performance laboratories of the Institute. Also, they could attend lectures and study modern research methods.

At the same time, the training and research Centre of the Institute hosted 12 Master's degree students, who took educational programs in Nuclear Physics, Radiochemistry, Radiobiology, Radioecology etc. Out of them, three graduates continue their PhD studies in this prestigious institution. Today, they carry out research in co-tutoring with some renowned experts from JINR and from the research institute of the ASM.







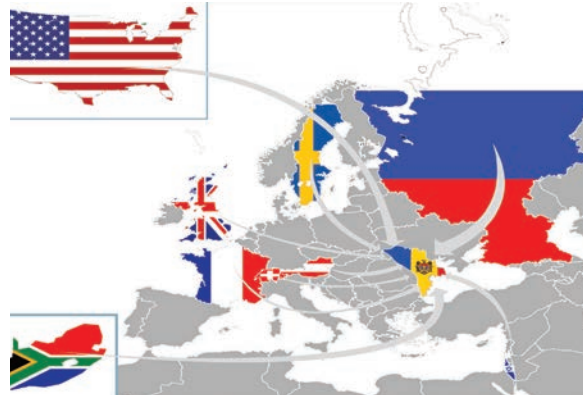
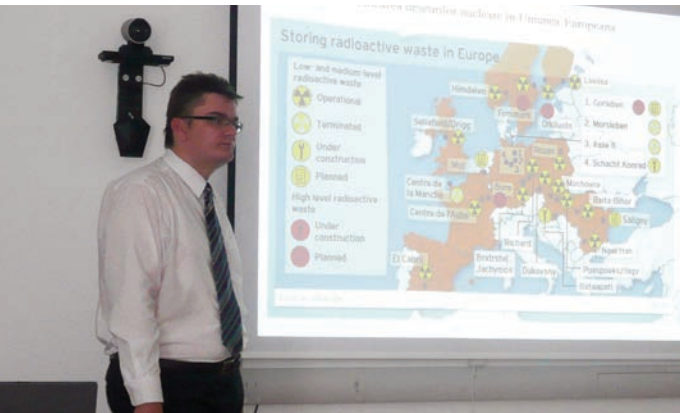
# Academic Diaspora



The University of the Academy of Science supports the networking of the Moldovan Science Diaspora members. The University has helped implement numerous mobility projects for teaching, consulting and partnerships establishing.

During 2010-2012 UnASM has hosted Moldovan scientists from Karolinska Institute of Stockholm, Sweden; Institute of Inorganic Chemistry, Viena, Austria; Loughborough University, Loughborough, United Kingdom; M.V. Lomonosov State University, Moscow, Russia; Ben-Gurion University, Negev, Israel; Pierre Mendes University, Grenoble, France; University of Bern, Switzerland; Texas University, Austin, SUA; Commission for Atomic Energy, Saclay, France; IC Bloomberg, London, United Kingdom; Bucharest Polytechnic University, Bucharest, Romania, University of Minnesota, Minneapolis, USA.

The joint projects carried out by the UnASM and Diaspora members have the following objectives: to enhance knowledge sharing, to develop the R&D sector in Moldova, to promote both the integration of Moldovan researchers into the international scientific community and cooperation within international programs such as EU/FP7, SCOPES, NATO Science for Peace Program, ENPI.



# Cooperation and Networking of Universities and Research Institutes, study by doing research-NANO-2011

16-10 October 2011, Chişinău, Moldova

The Alexander von Humboldt Foundation's goals are the following: to strengthen regional and interdisciplinary links between the scientists and the scholars sponsored by the foundation, to establish worldwide contacts, to introduce young scientists to the scholarship supported by the Humboldt Foundation and to carry out research in Germany. Following these purposes, an interdisciplinary meeting - Humboldt Kolleg: Cooperation and Networking of Universities and Research Institutes – "study by doing research" was organized.



# The IX-th International Congress of the Scientific Society of Geneticists and Breeders of the Republic of Moldova

Chişinău, October, 21-22, 2010

The Congress brought together eminent scientists from different countries to discuss critical issues in general and molecular genetics, human and medical genetics, plant and animal genetics, breeding and biotechnology. Well-known scientists from 52 universities and research institutes from eight countries (the Republic of Moldova, Russian Federation, Germany, Romania, Finland, Vietnam, Poland and Sweden) participated in that event.

The Congress strengthened the links between researchers from different countries to promote cooperation in various fields of biological sciences, especially genetics and breeding. The main discussions on the Congress were devoted to the efficient mobilization and realization of genetic resources in order to create effective mechanisms of reducing mortality, improving health and breeding of plants and animals.



# International Symposium on Broomrape (Orobanche spp.) in Sunflower

Chisinau, Academy of Sciences of Moldova, the University of Academy of Sciences of Moldova, August 26-27, 2011

The University of the Academy of Sciences of Moldova, in cooperation with the International Sunflower Association, France, Scientific Society of Geneticists and Breeders from Moldova and National Agricultural Research and Development Institute, Fundulea, Romania held an International Symposium on Broomrape (Orobanche spp.) in Sunflower. The Congress focused on the geographical distribution and relationships of the broomrape and the host plant and resistance building issues, etc.

The novel scientific results presented during the Symposium are significant in terms of basic research. Also, they represent a real economic value for the applied sciences. This was confirmed by the number of participants, over 80 representatives from academia, agricultural industry, private seed companies, farmers and others, from 13 countries (Argentina, Bulgaria, France, Germany, Ghana, Hungary, Israel, Republic of Moldova, Romania, Russia, Serbia, Turkey and Ukraine).



# Tempus Projects



Education and Culture  
**TEMPUS**



## **Entrepreneurial University as a Model for the Proper Managerial Interrelation between Education, Science and Innovation**

The Project's goal is to create an internationally integrated and country adjusted entrepreneurial innovation ecosystem, that will help efficiently support and manage the university knowledge transfer, develop innovation and invigorative lifelong learning.

The final objectives are to develop and implement, in partner universities, a model of "Entrepreneurial University" that produces effective management of knowledge triangle (education, research and innovation) and develop a transnational innovation networking.

## **Partners**

**Fondazione POLIMI, Politecnico di Milano, Italy**  
**International Center for Innovation and Entrepreneurship, Moscow State University, Russia**  
**GoGroup, Scotland**  
**Koszalin University of Technology, Poland**  
**Gravitonus, Russia**  
**Al-Farabi Kazakh National University, Kazakhstan**  
**University of the Academy of Sciences of Moldova, Republic of Moldova**



## SALiS – Student Active Learning in Science

The project aims to enhance the capacity of internationally relevant inquiry based science teaching in SALiS partner countries. Another goal of the project is to develop a curriculum of SALiS Universities for training science teachers into inquiry based science teaching methods.

### Partners

**Iliia State University**, Georgia

**Akaki Tsreteli State University**, Georgia

**The Academic Arab College of Education**, Israel

**University of Haifa**, Israel

**University of Bremen**, Germany

**Freie University Berlin**, Germany

**University of Plovdiv “Paisiy Hilendarskii”**, Bulgaria

**University of the Academy of Sciences of Moldova**,  
Republic of Moldova

**Institute of Educational Sciences**,  
Republic of Moldova



# UnASM

**The UnASM students are more than just students — they are innovators, volunteers, writers and artists.**

The University provides knowledge about social and cultural values. It contributes to educate civic responsibility, patriotic consciousness and behaviour of its students.

In this respect, on the occasion of the 20th anniversary of independence of the Republic of Moldova, the UnASM students launched an initiative to promote the image of our country. Thus, in a joint action, they drew up an administrative and territorial map of the country, of 64 square feet, which was probably the largest of that kind.

To produce the map, they used as many as 190 000 old coins. The map was placed inside a fresco, that had the shape of a large horseshoe. The fresco itself was made by 3,200 small horseshoes. The horseshoe is seen as a good luck talisman in this country.

Both the map and the fresco were proposed to be registered in the Guinness Book of World Records.





# STUDENT LIFE



# Students' Conferences

It has become a tradition for our undergraduates, Master and PhD students, to participate in conferences organized within the UnASM and other institutions both, inside the country and abroad.

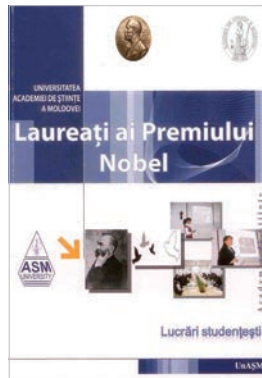
There was a great interest in the following conferences organized by the UnASM:

**FIRST STEP** – 1 year license students

**FUTURE BEGINS NOW** - license and master students

**PROVE YOU KNOW** - master students

**RESEARCH AND TECHNOLOGICAL DEVELOPMENT** - master and PhD students



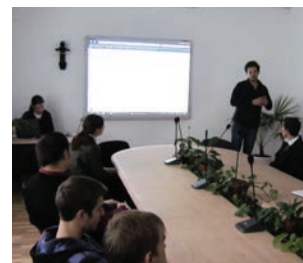


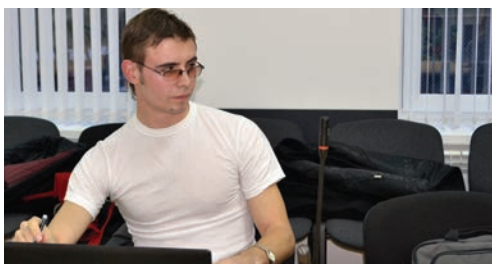
# Clubs

Extracurricular activities are an important element of education. They help to broaden and deepen the horizons of knowledge of both the students. The UnASM students are involved in several clubs depending on their interests: GENOMUS, Magellan, Philosophers Club, BRAIN UNIVERSE.

BRAIN UNIVERSE is a dynamic game, which verifies logic, insight and erudition. Teams face the direct games where speed of answering questions matters and, the game itself is very dynamic and exciting for its spectators. The students like both, to play and watch these games. The editions that have been organized during the year were successful among students.

The Magellan Club involves geographers working in the Department of Ecology and Environmental Sciences. The Master students and the associates are keen to promote knowledge about Moldova both domestically and internationally. Also they are keen to learn about the countries of the world by participating in geographical and ethnological expeditions, conferences, congresses, symposia, seminars, study camps, exchange of experiences, projects research, etc. Thus, the students have attended a training course on techniques of organizing a geographical expedition held by the Geographers Club from Romania at the European Congress of Eastern Aegean Organization Timisoara entitled "Regions: People and Resources".





The Philosophers Club was designed as an extracurricular activity for students. Its sessions are only attended by the students who are interested to do so. They propose and discuss issues that present interest to them. The topics to be discussed are announced in advance. The moderator's role is to provide information, space and technical equipment. The moderator has to ensure that the "Listen and be heard" rule is obeyed. The debates develop the skills necessary to understand problems and find solutions to scientific and social issues, because the teachers and the special guests attend the meetings as experts. During the debate sessions modern technical means are used to present statistic data and documentary films. These discussions, between students of different universities and specialities, provide the opportunity to establish an elite, open to dialogue society. The Philosophers Club is an incubator of ideas and also, a spring board for various fields of science and social life. During the Club's sessions the following topics have been discussed: "Freedom", "Happiness", "Holidays", "Manipulation and disinformation", "Subliminal manipulation and neurolinguistic programming", " Couples' Problems", "Education" etc.

The GENOMUS Scientific Circle was organized within the Biology Department. It involves students and masters interested in discussing biological and ecological issues. So far, some various events have been organized by the Circle: seminars, roundtables, paper presentations, discussions, etc. The topics were very broad. One of the most popular topics discussed were: the benefits and risks of genetically modified plants, molecular biology techniques to improve crop plants, the human genome - a great discovery of the XXI century etc.

# Success Stories

The UnASM is a higher education institution in the Republic of Moldova, therefore its students are nationally recognized as being the best.

This acknowledgment is confirmed by a number of scholarships that are granted to those students of the UnASM who exhibit the best involvement and expertise.

Every year, the undergraduates, Master and Doctoral students from UnASM are granted scholarships as a tribute to their outstanding scientific and educational results. Up to now, they obtained such scholarships as: Scholarship of the Republic of Moldova, Scholarship of merit, Scholarships for students from disadvantaged families, Scholarship Nizami, Government Excellence Scholarship, and Nominal Scholarship for PhD students.





### Student profile

My name is Acciu Adriana. I am a graduate of the Faculty of Natural Sciences (major - Molecular Biology).

I got an interest in science when I was in my second academic year. I had an opportunity then to be a trainee at the Proteomics Laboratory within the Molecular Biology Centre of the University. I was trained to handle a variety of research-grade equipment, that offered me practical abilities and knowledge of laboratory instrumentation and molecular techniques, which would help to increase my performance as a young scientist. With the support of laboratory research team, I attended a number of scientific national and international events

such as: The Ninth National Congress with international participation of Geneticists and Breeders; The Student Conference "The future starts now"; Scientific Symposium with international participation "Horticulture, Science, quality, diversity and harmony"; The International Symposium on Broomrape (*Orobanche* spp.) in Sunflower.

From the moment I first entered this "home of knowledge", I got the feeling that UnASM was place where I would be able to shape my ideals and aspirations. Here I got the title of Miss UnASM (2010), obtained the Republic Scholarship, offered by the Government of Republic of Moldova (2011) and other awards and mentions.

While spending my time with UnASM, I also have broadened my cultural horizons. Of that, I am firmly sure. Excursions to such monasteries as Curchi, Hincu and Capriana, to the archaeological complex Orheiul Vechi and to scientific and natural reservations like Codrii and Plaiul Fagului were an excellent tool for my personal and social development.

I am convinced that the UnASM superior research facilities, the nurturing academic environment, the strong faculty and quality education will help fulfil my ambition to become a scientist with great future achievements in the field I chose.

For me, the University of Academy of Sciences of Moldova is a serious momentum to new universal discoveries, it will also help me contemplate my place and purpose in the world.

# Cultural Activities



Our students benefit from expeditions to monasteries such as Curchi, Hincu and Capriana; to the archaeological complex Orheiul Vechi and to the Codru and Plaiul Fagului scientific and natural reservations, in order to learn about the historical, spiritual and natural values of their native land and about the growing spirit of national protection for these values.

For our students, visiting a monastery has a cognitive and educational meaning. It is also an act of spiritual purification.

When entering the Orheiul Vechi archeological complex, the students couldn't feel where the limit of the present civilization was, because of the shock they got when contacting the world of fairy tale carved in stone that suddenly appeared in front of them. The trip to the natural reservations has greatly impressed our students, who in the nearest future will become genuine scientists and will carry out intensive research or implement educational programs.

The UnASM aims to provide the groups of students with some travel experience that meets scientific learning goals and delivers meaningful service that will make a difference to communities and environment.



On university campus, an extracurricular involvement is a key tool for their personal development. The UnASM students become involved in extracurricular activities not only for fun or social purposes, but also, and this is most important, to gain and improve their skills. Working outside the classroom with various groups of individuals allows the students to gain more self-confidence, autonomy, and appreciation for other's differences and similarities.

It has become a tradition that every year, during March and April, the Student's Senate organizes the „Miss University” beauty contest. During this event, the prettiest and the most charismatic students have a chance to be noticed.

During fall, the University organizes Freshman Ball, which is a cultural and artistic event, with pronounced emphasis on aesthetic education. So this beautiful holiday, in which only the first year students are involved, reveals talents among the young students who perform in different genres: singing, dancing, poetry, playing musical instruments.

The University feasts are a necessary source of satisfaction and joy.



# OPEN DAYS

Every year, the Open Doors Day is organized at the UnASM. The event is designed to present the educational offer of the university to potential students. Visitors are welcome to attend the mentioned events during the autumn, winter and spring holidays. The program includes both mandatory excursions to classrooms and laboratories and attending classes, implementing experiences under the guidance of a teacher or an assistant, discussing with students and masters from UnASM.





# GOOD REASONS TO APPLY

OFFERS  
EDUCATIONAL  
PERFORMANCE



INTEGRATION  
OF EDUCATION WITH  
RESEARCH



POWERFUL  
INTELLECTUAL  
POTENTIAL



MODERN  
EQUIPMENT  
FACILITY



TEACHING  
THROUGH TUTORIAL  
SYSTEM



SCHOLARSHIPS  
FOR STUDY  
ABROAD



TRANSFER  
MANAGEMENT AND  
INNOVATIVE SKILLS



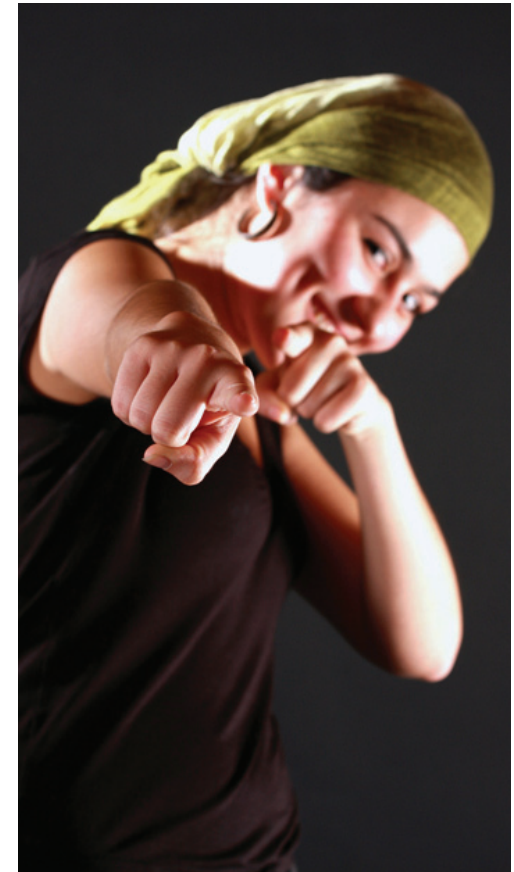
EXCELLENT  
EMPLOYMENT  
RECORD



VAST RANGE OF  
EXTRACURRICULAR  
ACTIVITIES



STUDENT LIFE  
IN A FRIENDLY  
COMMUNITY



# ADMISSION REQUIREMENTS

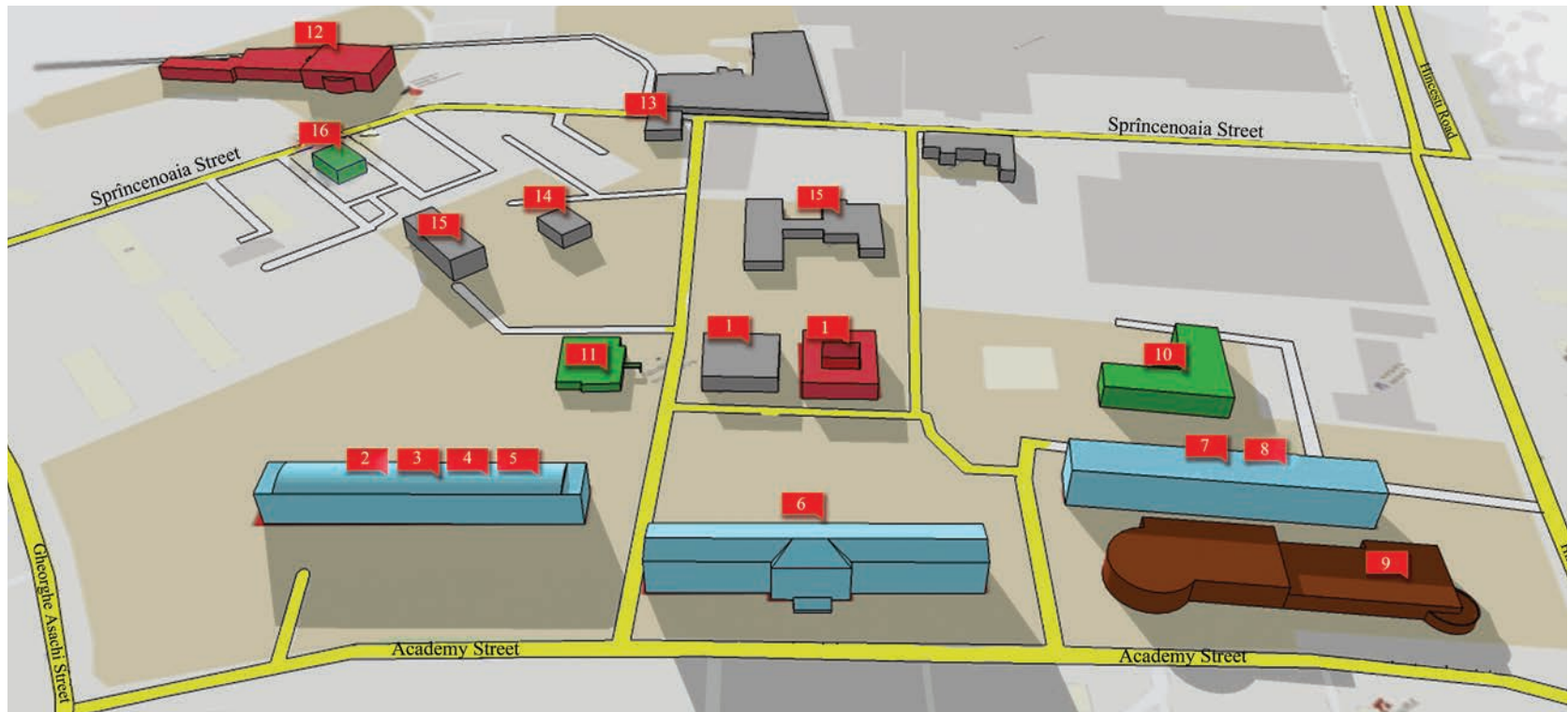


Candidates can apply to our university directly. The list of documents required for the application can be accessed on the university's web site [www.edu.asm.md](http://www.edu.asm.md).

Applicants should be less than 35 years old and be fluent in Romanian. Applicants from countries which have bilateral relations with the Republic of Moldova can make their study on the contract basis.



# HOW To Find Us



1. University of Academy of Sciences of Moldova
2. Institute of Microbiology and Biotechnology
3. Institute of Physiology and Sanocreatology
4. Institute of Zoology
5. Institute of Ecology and Geography
6. Institute of Chemistry
7. Institute of Mathematics and Computer Science
8. Institute of Applied Physics

9. Library of the Academy of Science of Moldova Andrei Lupan
10. Home of University of the Academy of Sciences
11. Canteen Crizantema
12. High School of Academy of Sciences
13. Sports Hall
14. Seismic Station
15. Geophysical Observatory of Institute of Geology and Seismology
16. Preventoriu

Our university is young, ambitious and supporting all aspects of your education, based on innovation and research. We offer an enquiry based science education. Exploration, creativity and scholarship are at the heart of UnASM.

We are investing in our staff and estate, building partnerships with research institution and business, and shaping our institution to ensure that we are a force to be reckoned with far into the future. Our success is important to you, as it will ensure the ongoing value of a degree at UnASM that will distinguish you in your long career.

Every student at the UnASM is a member of the educational scientific cluster *UnivER SCIENCE* and is the member of the academic and research community of the ASM. Cluster serves as a base for a dialogue between research and innovative entrepreneurship representatives, with an educational environment in professional training of future researchers.

As mentors of our undergraduates and postgraduates, we impart intellectual curiosity and new ideas to the next generation.

We believe that it will attract you to visit us and get a taste, at firsthand, of how you could play a part in this exciting university.

If you choose to study at the UnASM, you will be joining one of Moldova's most forward-thinking universities with a rich academic heritage of cutting-edge innovation and enterprise.

[www.edu.asm.md](http://www.edu.asm.md)

***Welcome***  
to the way of science  
with new **ideas**  
and availability of **innovation!**