

U N I V E R S I T Y O F N O V A G O R I C A



Annual Report of the University of Nova Gorica 2022

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Annual Report of the University of Nova Gorica 2022

Fakulteta za znanosti o okolju
v Novi Gorici

Ustanovljena: 24. 9. 1995

Ustanovitelja:

Mestna občina Nova Gorica

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Annual Report of the University of Nova Gorica 2022

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Cover design

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Published by

Univerza v Novi Gorici, Vipavska 13, Rožna Dolina, Nova Gorica

Publication year

2023

The publication is free of charge.

The publications is funded from public resources.

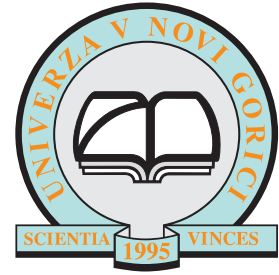


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Introduction



The year 2022 brought a change of leadership at the University of Nova Gorica, including the Rector. We thanked the previous Rector, now Honorary Rector, Prof. Dr. Danilo Zavrtanik and his team for the path they have blazed, which we are happy to continue.

Research and higher education institutions in Slovenia will remember 2022 as the year of the introduction of stable funding for scientific research, in line with the new Scientific Research and Innovation Activities Act, which has entered into force. Despite initial difficulties, the law and the funding it introduced have brought about a significant improvement in the material conditions for work in this field.

All six centres and four laboratories where research activities are carried out at the University of Nova Gorica welcome the increase in funding. Unfortunately, a significant part of the increase has been taken away by a new guest in Europe, the almost forgotten inflation. Higher labour and material costs are only a minor problem, given the need for new premises that the University has been facing for decades. On those sunny and rainy days, the University performed even better than in previous years on the global scientific stage. High-profile scientific publications were published in 2022 in the fields of environmental sciences, life sciences, organic physics and materials research. This scientific excellence is underscored by the leading role of the University of Nova Gorica in the new €10 million MSCA Cofund project called SMASH.

We are particularly proud of the Zois Award for outstanding scientific achievements awarded to Prof. Dr. Nada Lavrač, an associate of the Jožef Stefan Institute and the University of Nova Gorica. Additionally, we must also mention the Pregl Prize for outstanding scientific achievement awarded to Prof. Dr. Nataša Zabukovec Logar, an associate of the Institute of Chemistry and the University of Nova Gorica. Urška Djukić, an

alumna of the School of Arts, took Slovenia's name to the European and world animated film scene in 2022. In addition to the European Film Award, Granny's Sexual Life won the César, the French Oscar for Best Animated Short Film.

In addition to their outstanding scientific or artistic achievements, all the winners break through the glass ceiling of women in academia. In the mostly female team at the University of Nova Gorica (57% of the staff are women), we try to maintain a balance of staff throughout the entire vertical (unfortunately, the proportion of women among the higher education teachers is only 48%).

The pedagogical activity of the six schools and the School of Arts at the University in 2022 is marked by the award of the concession for the undergraduate programme Digital Arts and Practices, where interest in the study programme now exceeds the capacity even more than before. By the end of 2022, 266 doctorate graduates, 518 master's graduates and 1003 bachelor's graduates had completed their studies. On the international scene, we are strengthening our cooperation in the ACROSS International Network of Universities, a network of ten universities working in Europe's border areas. We do not forget those who leave. Alumni are the University of Nova Gorica's certificate of success, using the knowledge they have gained to build successful professional careers around the world. In 2022, we organised the reunion again, which was attended by a large number of alumni, and we expect even more in the coming years, when we will continue with the traditional reunion.

Our study programmes are attended by a number of Ukrainian students who are unable to study at home because of the horrors of Russian aggression against their country. Waiving tuition fees for these students is the least we can do; we would like to offer more help and we are actively looking for opportunities to do so.

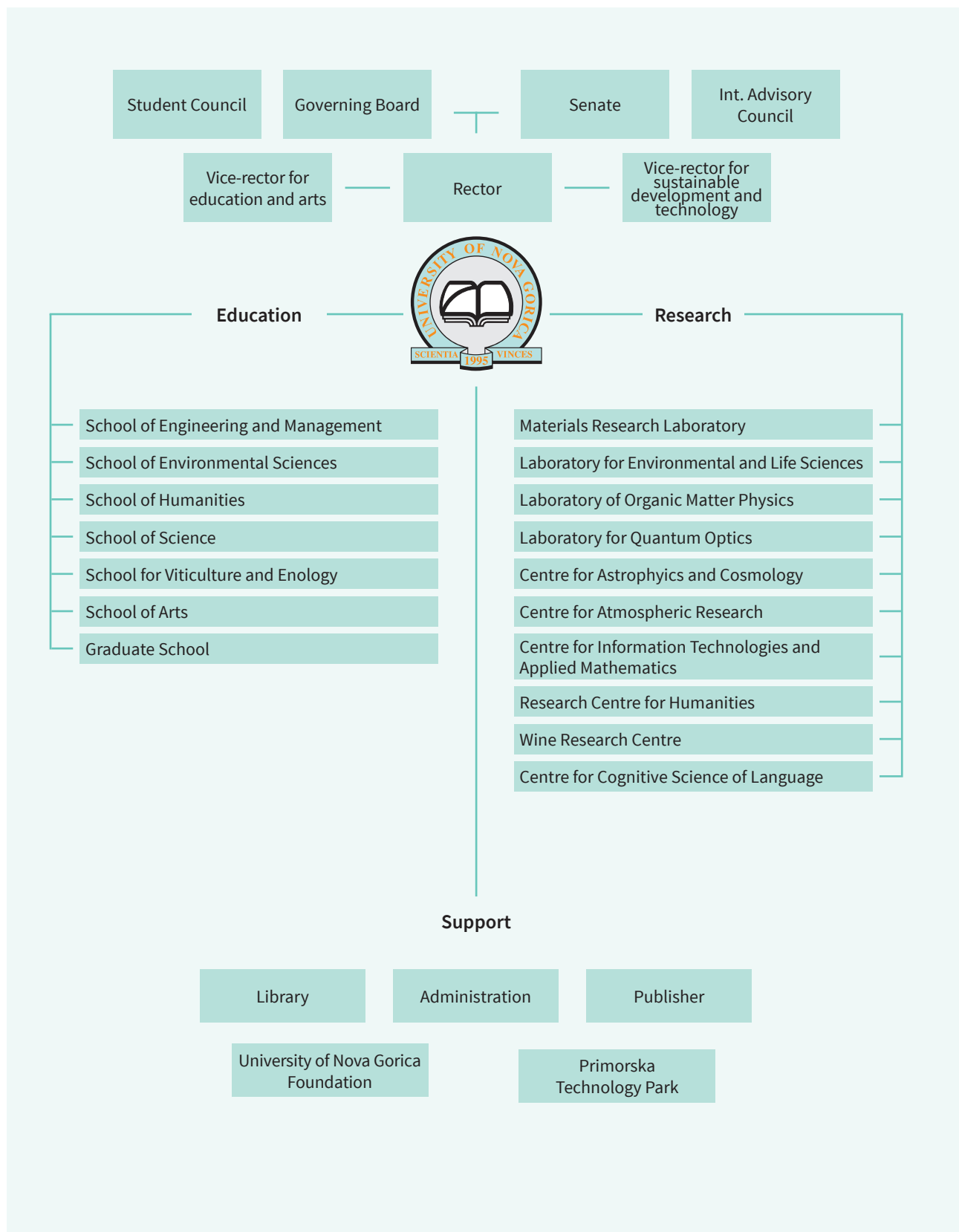


In the field of sustainable development and cooperation with the local, especially economic environment, an important milestone for the University of Nova Gorica is the establishment of the Centre for Green Technologies (Center zelenih tehnologij d.o.o.), established jointly with the Municipality of Nova Gorica. The Centre's ambition is to become a national technology development institute, establishing national policies for green technology research and development and coordinating related domestic and international organisations to support the sustainable development of Slovenia and other countries.

We are serious about our intention for the University of Nova Gorica to be an initiator and an active partner of Slovenian educational and research institutions in establishing Slovenia as a recognised centre of higher education and research in Europe and beyond.

Prof. Dr. Boštjan Golob
Rector of the University of Nova Gorica

Organisational Structure



Staff structure

As of December 2022, the University of Nova Gorica had a total of 177 regular staff members (of which 28 were shared employees with primary employment at another institution). This included 108 doctors of science, 15 research assistants, another 26 holders of bachelor's or master's degree, 22 administrative personnel, 3 librarians, 1 maintenance officer and 2 photocopy clerks; 47 staff members were foreign nationals.

	Regularly employed	Supplementary employed
2012	137	42
2013	130	42
2014	147	37
2015	121	33
2016	117	29
2017	115	31
2018	113	28
2019	118	29
2020	132	26
2021	169	26
2022	149	28

In addition, collaborating with the university were also over 200 adjunct faculty from other Slovenian universities and from universities outside of Slovenia.

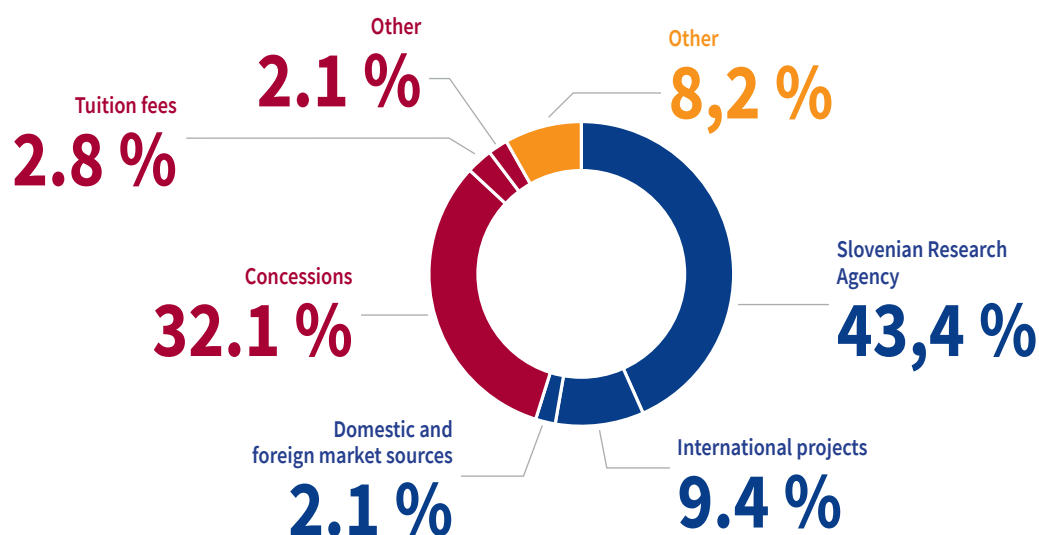
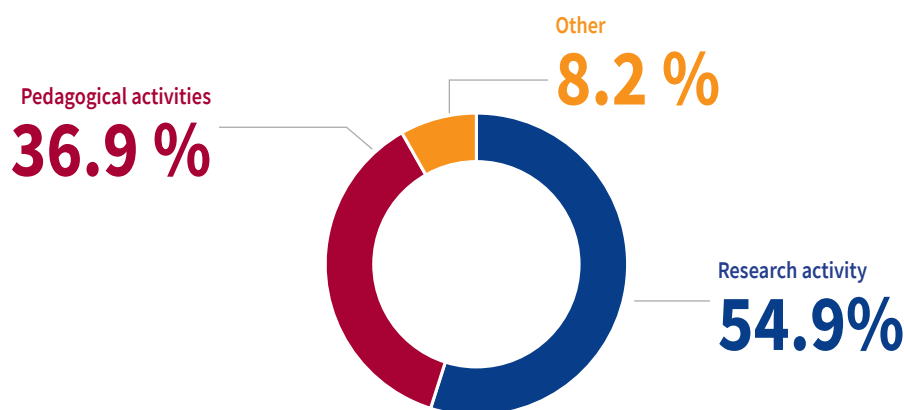
State	Nr. collaborators
Armenia	1
Bosnia and Hercegovina	1
Bulgaria	2
France	1
Croatia	3
India	7
Iran	1
Italy	20
Kazakhstan	1
Hungary	1
Serbia	1
Poland	2
Tunisia	1
Ukraine	2
Great Britain	1
United States of America	1
Total	47

Financial management

The University of Nova Gorica obtains funds for its operation from tuition fees, educational programme and research project funding from the Slovenian Research Agency and the Ministry of Education, Science and Sport, and from international and industrial projects and donors.

In 2022, the University of Nova Gorica acquired approximately EUR 11.592 million in funds (cash flow) for its operations from the sources listed below:

CASH FLOW	EUR 11.592 million	100.0 %
RESEARCH ACTIVITY	EUR 6.361 million	54.9 %
Slovenian Research Agency	EUR 5.030 million	43.4 %
International projects	EUR 1.093 million	9.4 %
Domestic and foreign market sources	EUR 0.238 million	2.1 %
PEDAGOGICAL ACTIVITIES	EUR 4.277 million	36.9 %
Concessions	EUR 3.716 million	32.1 %
Tuition fees	EUR 0.320 million	2.8 %
Other	EUR 0.241 million	2.1 %
OTHER	EUR 0.954 million	8.2 %



Awards, Titles and Recognitions

Employee awards in 2022

Zois Award for exceptional achievements

Prof. Dr. Nada Lavrač

Pregl Award

Prof. Dr. Nataša Zabukovec Logar

Student awards in 2022

Global Teacher Award 2022, AKS

Education Awards

Matilda Bajkova

Special mention for a completed student animation project, Award of the Slovenian Animated Film Association

Miha Reja

Award for a student animation project in progress, Award of the Slovenian Animated Film Association

Domen Sajovic

Audience Choice Award, First Crossings Festival

Miha Reja

Visionary Award for Camera and Directing, Visions Youth Culture Festival

Arta Kroni

Special mention, Visions Youth Culture Festival

Miha Reja

Main prize in the category of TikTok short films, Cannes Film Festival

Matej Rimanić

Awards of the University of Nova Gorica in 2022

Alumnus Primus Student Award

Nino Stanič

Darian Rampih

Katja Belec

Tanja Buh

Adrián González Briones

Kristjan Mesar

Luka Carlevaris

Sagar Gahatraj

Adrián González Briones

Boris Matić

Alumnus Optimus Student Award

Nino Stanič

Irena Subotić

Katja Belec

Tanja Buh

Polona Hadalin Baša

Adrián González Briones

Boris Matić

Important Events

FEBRUARY

Prof. Dr. Boštjan Golob New Rector of the University of Nova Gorica

The inauguration of the new rector, Prof. Dr. Boštjan Golob, of the University of Nova Gorica took place 2 February at the premises of the University of Nova Gorica, in the Lanthieri Mansion in Vipava.

With the symbolic handover of the rector's insignia, the previous rector, Prof. Dr. Danilo Zavrtanik, handed over the rector's honours and duties to Prof. Dr. Boštjan Golob, who was elected as the new rector on 3 June 2021 at the 66th session of the Governing Board. His official 2022–2026 term as University rector began on 1 February 2022.



Prof. Dr. Boštjan Golob New Rector of the University of Nova Gorica.

»With this rector insignia, I accept the honour and commitment that as the rector of the University of Nova Gorica I will promote its reputation and honour and act to the benefit of the academic community. I will responsibly devote my expertise, experience and power to its educational, research, artistic and professional excellence. Let this rector's chain be a symbol of the strong connections between and affiliation of all members of the academic community, including students. I will wear it with a commitment to the values of the university, its autonomy and academic excellence. I will lead the University of Nova Gorica on the foundations of respect for human rights and equal opportunities, nurturing good neighbourly and intercultural relations, comprehensive cooperation and environmental protection«, said Prof. Dr. Boštjan Golob at the inauguration.

»We have come to the point when a couple of new stones are needed in the mosaic of the institution. It is up to us whether the mosaic will continue to grow in a brilliant golden hue of excellence as it has done so far«, said

Prof. Dr. Golob in his address after the official taking up of duties.

He tried to answer three important questions, which are the basic guiding principles in the preparation of speeches: »What?«, »How?« and »Why?«

»Let me start with 'What do we want to accomplish?' Continued development of the university and its efforts to achieve excellence in the pedagogical, scientific and development fields. As before, this development should be balanced, matched with the human resources capacity of the university«, was the answer of the new rector, Prof. Dr. Golob.

In answering the second question, "How to facilitate such development?", Prof. Dr. Golob highlighted cooperation. »This is multi-layered. Cooperation at the level of the institution: I do not refer only to the arrival at the workplace and working together in a laboratory, office or lecture room. It is much more than that. It is a common overcoming of



Inauguration of the new rector of the University of Nova Gorica.



Rector of the University of Nova Gorica Prof. Dr. Boštjan Golob (left) and Prof. Dr. Danilo Zavrtanik (right).

From left to right: Prof. Dr. Penka Stateva, Vice-Rector for Education and Art, Prof. Dr. Boštjan Golob, Rector and Prof. Dr. Matjaž Valant, Vice-Rector for Sustainable Development and Technology.



difficult times and a shared joy over success, it is about joint deliberation and creation in the noblest sense of the word.«

»Each and every one of us working in science or higher education has a deep personal motivation for our actions. This is reflected in our dedicated work in the specific field of our expertise which we know that we are able to do in a highly competent manner. All personal motivation and endeavours can, 'if the stars align', as we often like to say, merge into a higher, broader and uniform vision. I believe that in Slovenia we have the human potential in the field of higher education and research and development which, alongside other geopolitical and geographical features, offers us the opportunity to become a European and widely recognised centre of education and cutting-edge science. Maybe now is a good moment to jointly turn Slovenia into a scientific and educational oasis, where national experts and specialists will receive training, which excellent international students will gladly visit, where top national and international scientists will conduct their research, and all of them would inevitably contribute their share to the progress of society as a whole«, the new rector said in response to the question »Why do we strive for the above?«

On this occasion, the first provost of the University of Nova Gorica, Acad. Prof. Dr. Boštjan Žekš, addressed the audience, emphasising that the inauguration of the rector is always a special occasion for every university, while for the University of Nova Gorica today's event is something exceptional and therefore presents an opportunity to look back and think ahead. It is his belief that the University of Nova Gorica has achieved its main objective. »We got a university, albeit a small one, which ranks in terms of quality and research strength among the best universities, or at least among globally comparable universities. The second part of the plans at the time of setting up the University of Nova Gorica or its predecessors, i.e. to use this development to influence the development of our higher education in general, is far from being realised. Quite the contrary; with a few exceptions, our higher education arena is mainly moving

in the opposite direction, towards mass production and lacking in quality, which is more attractive and comprehensible to our politicians«, said Acad. Prof. Dr. Žekš and thanked Prof. Dr. Danilo Zavrtanik for the substantial part of his life that he had devoted to the University of Nova Gorica and for all that he had done for it. He also thanked the rector, Prof. Dr. Boštjan Golob, for accepting the offered duty and for deciding to embark on this adventure, which will sometimes be difficult but undoubtedly interesting.

In addition to the rector Prof. Dr. Boštjan Golob, the management team currently comprises Prof. Dr. Penka Stateva, Vice-Rector for Education and Arts, and Prof. Dr. Matjaž Valant, Vice-Rector for Sustainable Development and Technology.



○ FEBRUARY

Signing of a cooperation agreement between the University of Nova Gorica and the Vinča Institute of Nuclear Sciences

In February, a delegation from the University of Nova Gorica, led by the Vice-Rector for Sustainable Development and Technology, Prof. Dr. Matjaž Valant, visited the Vinča Institute for Nuclear Sciences in Serbia, in order to deepen cooperation on joint projects, the exchange of staff and students, the organisation of seminars and conferences, etc.

On this occasion, the two institutions signed an agreement of mutual cooperation in the field of research. On behalf of the University of Nova Gorica, it was signed by the rector, Prof. Dr. Boštjan Golob, and on behalf of the Vinča Institute of Nuclear Sciences, by its director, Prof. Dr. Snežana Pajović.

»We are pleased that the cooperation on project research in the field of materials has connected our institutions to such an extent that the agreement can now be formalised and extended to other common fields of research, such as solid state physics, physics and chemistry of surfaces, radiation techniques, etc.« said Prof. Dr. Valant.



MARCH

University of Nova Gorica among signees of European University Convention

The rectors of the universities that are part of the network of European Cross-Border Universities »Across«, signed the European University Convention on 7 March.

In addition to the University of Nova Gorica, the European network consists of nine universities operating in their respective countries' border areas, namely: Bialystok University of Technology (Poland), Chemnitz University of Technology (Germany), Craiova University (Romania), Girona University (Spain), Lleida University (Spain), Perpignan University Via Domitia (France), Rēzekne Technological Academy (Latvia), Ruse University (Bulgaria) and the University of Udine (Italy).

According to the rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, the University of Nova Gorica is proud to have become a member of the network of European Cross-Border Universities »Across«, joining the excellent universities operating in the border

areas. »We are convinced that, despite our small size, we will succeed, with our expertise, in constructively contributing solutions to addressing the problems of today and tomorrow. Especially with our knowledge in the field of environmental science, sustainable approaches to energy and climate, migration and intercultural relations, we address issues that transcend national borders. This is how we are joining the European Higher Education Area of the future and helping to co-create it«, said Prof. Dr. Golob.

Under the coordination of the Chemnitz University of Technology, they are preparing an application for the establishment of a European University, thus co-creating the European Higher Education Area of the future.



From left to right: Prof. Dr. Boštjan Golob, Prof. Dr. Gvido Bratina, Prof. Dr. Danilo Zavrtanik, Prof. Dr. Mladen Franko and Borut Lavrič.



Ceremony for the Award of the Title of Honorary Rector of the University of Nova Gorica.

Honorary Rector of
the University of Nova
Gorica Prof. Dr. Danilo
Zavrtanik.



MAY

Prof. Dr. Danilo Zavrtanik becomes Honorary Rector of the University of Nova Gorica

On 5 May, the University of Nova Gorica conferred to the first rector of the University of Nova Gorica, Prof. Dr. Danilo Zavrtanik, the title of Honorary Rector – Rector ad Honorem – of the University of Nova Gorica for his outstanding merits for the establishment, development and operation of the University of Nova Gorica, and for his significant contribution to the development of scientific, artistic and pedagogical activities at the University.

The ceremony, which took place at the Lanthieri mansion in Vipava, was opened by Prof. Dr. Boštjan Golob, Rector of the University of Nova Gorica. In the justification, which began with an outline of Prof. Dr. Danilo Zavrtanik's long-standing activity at the University of Nova Gorica, he highlighted Prof. Dr. Zavrtanik's integrative management style, through which he was able to attract colleagues from a wide variety of scientific fields and persuade them to collaborate, thus enabling the creation of research units in the field of wildlife and the humanities, from which new teaching programmes emerged, and thus laying the foundations for the establishment of the University of Nova Gorica in 2006, of which Prof. Dr. Zavrtanik became the first rector.

»As rector, he has insisted that the lecturers in the study programmes are first and foremost top scientists, thus consolidating a high level of excellence also in the field of teaching. The period since the University of Nova Gorica was founded has been characterised by growth in the number of staff, the number of study programmes and the number of research fields. The development of research and other infrastructure has also been important. His close links with the local community have enabled the University of Nova Gorica to operate today on nearly 10,000 m² with modern research laboratories and multimedia lecture halls, and to lease the prestigious Lanthieri mansion in Vipava for several decades. Zavrtanik is also the initiator of the establishment of the University of Nova Gorica Foundation and the Primorska Technological Park«, the University of Nova Gorica's Governing Board wrote in its justification.

MAJ

Under the management of Prof. Dr. Danilo Zavrtanik, the University of Nova Gorica has achieved recognition by international university quality assessors. For many years, it has been ranked among the top 150 universities in the world in rankings that take into account the size of the university, and it has always been ranked first in Slovenia. It has become an equal member of the Slovenian Rectors' Conference, as well as a member of all major regional associations of rectors' conferences. Additionally it is a signatory to numerous international bilateral and multilateral agreements with related institutions around the world, and maintains an international character internally as well, with almost 30% of its academic staff being foreigners and almost 50% of its students.

»During his management of the University of Nova Gorica, Prof. Dr. Zavrtanik has established an internally solid, forward-looking, internationally renowned institution of higher education, which is an important characteristic of the Slovenian higher education, research and artistic space«, concluded the Rector of the University of Nova Gorica, Prof. Dr. Golob.

On receiving the honorary title, Prof. Dr. Zavrtanik was thankful, saying, »I would like to thank the Management Board very much for this honour, which I am very proud to receive. It has been a pleasure and a joy to work with dedicated colleagues, students and staff over the years. We have never shied away from challenges and obstacles, and over the past 25 years we have worked together to build a world-class university of which we can be immensely proud.«

»I wish all of you at the University of Nova Gorica the same success in the future. Let's move forward with courage!« concluded the Honorary Rector of the University of Nova Gorica.

On this occasion, two certificates of appreciation were awarded to Prof. Dr. Gvido Bratina and Prof. Dr. Mladen Franko for their many years of outstanding work as vice chancellors of the University of Nova Gorica. Prof. Dr. Bratina served as Vice-rector for Research and Arts from 2010 to 2022, and Prof. Dr. Franko as Vice-Rector for Education during the same period.

The Opening of the Exhibition »G. J. Mendel and the painful story about genes«

On 10 May, the opening of the exhibition »G. J. Mendel and the painful story about genes« took place at the University of Nova Gorica's venue in Vipava, the Lanthieri Mansion.

The exhibition presents Mendel's life – from his birth, his studies in Znojmo and Vienna, Mendel as a monk, and his striving to become a teacher.

The largest part of the exhibition is dedicated to his research activities, which involve the disclosure of the elderly, including the description of Mendel's genius discovery - extensive attempts at the crossing of the graze, a very (un) successful presentation of his research results. It introduces his »successors«: Hugo de Vries, Carl Erich Correns, and Erich von Tschermak, who independently of each other confirmed Mendel's revelations and clues in 1900.

The exhibition also mentions the response of Nazism and Communism to genetics. At the very end, it shows using of genetic knowledge in various fields (e.g. agriculture, criminology, medicine, archaeology, ...). The latter introduced the main Mendel's message to the current company.

The exhibition was opened by the Rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, the Ambassador of the Check Republic, his Excellency Juraj Chmiel and the President of the Czech-Slovenian Society Alena Šamonilová.



From left to right: President of the Czech-Slovenian Society Alena Šamonilová, Rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob and Ambassador of the Check Republic, his Excellency Juraj Chmiel.





Od left to right: Prof. Dr. Gvido Bratina (UNG), Prof. Dr. Mitja Lainščak (ARRS), Acad. Prof. Dr. Igor Emri (ARRS), Prof. Dr. Peter Križan (ARRS), Prof. Dr. Boštjan Golob (UNG) and Prof. Dr. Matjaž Valant (UNG).



○ JUNE

Representatives of the Slovenian Research Agency visit the University of Nova Gorica

Today, the Rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, hosted the Director of the Slovenian Research Agency, Prof. Dr. Mitja Lainščak, the President of the Scientific Council of the Agency, Prof. Dr. Peter Križan, and the President of the Management Board of the Agency, Prof. Dr. Igor Emri.

The meeting was of an introductory nature. The University of Nova Gorica staff presented the University's research activities, which are carried out by its six centres and four laboratories.

The visit also included a tour of the laboratories and centres carrying out research involving quantum optics, materials research, organic semiconductors, astrophysics and cosmology, and wine research.



○ JUNE

Graduation Ceremony for Bachelor's, Master's, and Doctoral Students

On 16 June the graduation ceremony for Bachelor's, Master's, and Doctoral students of the University of Nova Gorica was held at the Lanthieri Mansion in Vipava.

At the School of Engineering and Management two students received their bachelor degrees this year, three students graduated from the School of Humanities and School of Arts and one student graduated from the School of Humanities. There were also eight master's students who finished their studies.

Moreover, the Rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, promoted four new doctors of science who graduated from the Graduate School at the following study programs: Physics, Environmental Sciences, Karstology and Humanities.



From left to right: Dr. Blaž Kogovšek, Dr. Jelena Topić Božič, Dr. Nataša Henig Mišičič and Dr. Katja Bučar Bricman.

○ JUNE

New Doctors of Science

On 26 June the University of Nova Gorica Rector, Prof. Dr. Boštjan Golob, awarded Doctor of Science degrees to the following Graduate School graduates.

Doctoral study programme PHYSICS

• KATJA BUČAR BRICMAN

PhD thesis title: Tidal Disruption Events Seen Through the Eyes of Vera C. Rubin Observatory
Mentor: Prof. Dr. Andreja Gomboc

Doctoral study programme HUMANITIES

• NATAŠA HENIG MIŠIČIČ

PhD thesis title: Carniolan Savings Bank and Economic Development of Carniola
Mentor: Prof. Dr. Žarko Lazarevič

Doctoral study programme KARSTOLOGY

• BLAŽ KOGOVŠEK

PhD thesis title: Characterization of a karst aquifer in the recharge area of Malenščica and Unica springs based on spatial and temporal variations of natural tracers

Mentors: Prof. Dr. Metka Petrič and Prof. Dr. Igor Jemcov

Doctoral study programme ENVIRONMENTAL SCIENCES

• JELENA TOPIČ BOŽIČ

PhD thesis title: Novel analytical approaches in quality and safety control in production of fermented beverages

Mentors: Prof. Dr. Branka Mozetic Vodopivec and Prof. Dr. Dorota Korte

SEPTEMBER

Meeting of alumni of the University of Nova Gorica

On 15 September, a meeting of alumni of the University of Nova Gorica was held in Ajdovščina. Today, the Alumni Club includes 998 bachelor's graduates, 500 master's graduates and 259 doctorate graduates. With his opening remarks, the Rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, emphasised the research excellence of our institution: »Among other things, this is also affirmed by a recently acquired project financed by the European Union and the Ministry of Education, Science and Sports. It is one of the most financially substantial projects in the country so far, and will bring a large number of much-needed postdoctoral researchers to some of Slovenia's leading research institutions.«

He pointed out that the University is in need of some infrastructural renovation, with a concentration of activities in buildings that enable modern teaching and research in higher education. »The university urgently needs its own student accommodation. It needs housing capacities that will offer future students higher standards of living. Even the term »student life« is taking on a new meaning.«

»These days, reflections on the future are somewhat divided. On the one hand, this year, together with other higher education and research institutions, the University entered a renewed system of stable funding for research and innovation. The law includes promising announcements of an increase in funding for these types of activities in the following years. However, daily news and the economic crisis we are facing tell us another story of the coming times, which could prove difficult. Like most other universities in Slovenia, the University of Nova Gorica will not only face the upcoming challenges independently, but also within the framework of the European network of cross-border universities, ACROSS, which we were invited to join this year,« the rector concluded his thoughts.

Later in the meeting, the president of the University of Nova Gorica Foundation, Prof. Dr. Mladen Franko presented the institution's operation. »The University of Nova Gorica is a unique university with a foundation whose mission it is to provide additional support for the operation, further development and achievement of excellence of the University of Nova Gorica, both in the scientific-research and pedagogical fields.«

»Considering the current favourable financial situation of the University of Nova Gorica Foundation, we raised over EUR 16,000 for the purpose of scholarships in the last year alone. I consider it very important that we can currently support and encourage new students to enrol with the support of the Jožek Markič awards, given out by the School of Arts, and with scholarships for student athletes, which are awarded by the »Matija Franko« Scholarship Fund for student athletes. Starting next academic year, two additional scholarships are planned for student athletes and the launch of the »Edvard Rusjan« fund for talented students, which will grant its first scholarships,« the chairman of the board commented on current upcoming activities.

Prof. Dr. Franko concluded the presentation with the hope that even more donors would recognise the important activities the Foundation is currently carrying out for the benefit of students: »That is why, dear alumni, I am once again turning to you with a request to spread the story of the University of Nova Gorica Foundation as much as possible to the general public, as well as in your own networks.«

The meeting, which attracted around 100 former students and their mentors, was concluded with relaxed socialising, networking and reminiscing about the student years. Musical accompaniment was provided by the guitar octet of the Vinko Vodopivec Music School from Ajdovščina and the Huda Golob Duo.

Finally, the rector, Prof. Dr. Golob, answered the question of what can you, dear alumni, do for the University?: »The answer is simple. You can do the most by either starting or continuing your professional careers, doing work for which you were trained, are qualified in, and in which you will achieve success. We wish you as much success as possible, and also offer you any help should you need it. In other words: don't be a stranger, reach out.«



Awardees, Rector of the University of Nova Gorica Prof. Dr. Boštjan Golob and Minister for Education, Science and Sports Dr. Igor Papič.



OCTOBER

Ceremonial opening of the 27th academic year

The central academy for the opening of the 27th academic year of the University of Nova Gorica was held on 13 October at the Lanthieri Mansion in Vipava.

Opening remarks were delivered by the Rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, who said: »As usual for our university, we meet at the beginning of the academic year to celebrate our new honorary doctors and members of the University of Nova Gorica, as well as the most successful students from the previous year. At the beginning of the new yearly cycle of creating new knowledge and passing it on to new generations. And like every year, this year is also special in its own way. It has been characterised as the post-covid period. Today's two guests of honour are accepting the titles that they were awarded in 2020, the students did their work perfectly despite the exceptionally challenging conditions. A period that also allows us to finally, after a long time, socialise in person again. »

Today, the pedagogical activity of the University is being performed by six individual faculties and the Academy of Arts. To date, 261 PhDs, 441 Master's and 998 Bachelor's graduates have completed their studies at the University of Nova Gorica. Research

activity takes place in six centres and four laboratories, equipped with top-quality research equipment. We are involved in both small and large international projects, cooperating with institutions of the highest reputation. Foreign students represent as much as 60% of the student population and come from 54 different countries, both from Europe and other continents.

»Universities and research institutions are about to enter a new era of research activity financing. A system of stable financing, which is the result of a long period of negotiations and compromises by various stakeholders. In a way, this period is also reflected in the two honorary titles being awarded today. They reflect the importance of researchers' joint work between research and higher education policy administrators. Only with a high level of cooperation can efforts be directed

towards development,» Prof. Dr. Golob pointed out.

This year, the University of Nova Gorica, together with its partners, obtained funding from the European research project, COFUND, which is one of the most financially rich projects obtained in the country so far. The project, in which the University of Nova Gorica will act as the leading coordinating institution, will be financed in the amount of 10 million euros, approximately half of which will be contributed by the European Commission and the other half by Slovenia's Ministry of Education, Science and Sport. This undoubtedly affirms our institution's excellence in the field of research.

We were also honoured by the presence of the Minister of Education, Science and Sport, Dr. Igor Papič. In his speech, he



Prof. Dr. Boštjan Golob, Rector of the University of Nova Gorica.



Dr. Igor Papič, Minister for Education, Science and Sports



A Gala Opening at the Start of the New Academic Year.

pointed out that he is extremely happy that the school year in primary and secondary schools started as planned on 1 September, and now, at the beginning of October, at academic level, the academic year with is starting with practically no restrictions. He went on by highlighting the new mode of financing research activity, which represents an extremely important step towards greater autonomy for universities. »I am announcing a strategy of internationalisation; we have prepared an amendment to the law on higher education, and I am also announcing the preparation of new legislation in the field of higher education, as well as the establishment of a technology agency, as soon as possible.« At the end of his speech, he emphasised that the field of higher education and science had not functioned in such good conditions for a long time.

The rector of the University of Nova Gorica concluded his thoughts with the words: »Just as the first image of a distant, never-before-seen astronomical object required the coordinated operation of several observational devices and modern computer methods, the proper functioning of a scientific system also requires functioning institutions, mutual cooperation and organisation, and of course, excellent researchers. Another fundamental element is complementarity in cooperation with excellent international institutions, which, at the University of Nova Gorica, we are cultivating with particular care. And today's honorary guests should bring that to show with their extraordinary opus of work. I am convinced that through agreement and coordination, we can achieve excellent development, namely the development of Slovenia into a European centre of scientific and higher education activity.«

The rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, awarded the title of honorary doctor of the University of Nova Gorica – doctor honoris causa – for outstanding scientific achievements in the field of astrophysics, to the world-renowned astrophysicist who was the first to produce an image of the event horizon of a black hole, Prof. Dr. Heino Falcke. And for his outstanding contribution to the development of scientific excellence at the University of Nova Gorica, and for his achievements in international scientific administration, the title of honorary member of the University of Nova Gorica was awarded to Dr. Salvatore La Rosa.

We also awarded twelve graduates. The alumnus primus award was given to graduates who graduated as the first of their generation of enrolled students, namely Nino Stanič, Darian Rampih, Katja Belec, Tanja Buh, Adrián González Briones, Kristjan Mesar, Luka Carlevaris, Sagar Gahatraj, Carolina Carqueja e Silveira and Boris Matič, with the alumnus optimus award going to the graduates who achieved the highest average study grade in the individual academic year, namely Nino Stanič, Irena Subotič, Katja Belec, Tanja Buh, Polona Hadalin Baša, Adrián González Briones and Boris Matič.



Honorary doctor of the University of Nova Gorica – doctor honoris causa – Prof. Dr. Heino Falcke.



Honorary member of the University of Nova Gorica Dr. Salvatore La Rosa.

Awardees, Management of the University of Nova Gorica Foundation and Rector of the University of Nova Gorica.



OCTOBER

Conferral of commemorative documents, awards and scholarships of the University of Nova Gorica Foundation

On 19 October, the ceremony of awarding the commemorative documents, awards and scholarships of the University of Nova Gorica Foundation (FUNG) took place at the Lanthieri Mansion in Vipava. New donors, as well as the first recipients of FUNG scholarships and awards, show that the Foundation is gaining momentum.

So far, FUNG has already managed to double the value of the donations raised in 2022, compared to 2021. Donations by individuals are crucial in this respect, as they account for 80% of the funds raised. Unfortunately, the share of corporate donations is only 20%. As much as 60% of the donated funds were earmarked for scholarships for students from the University of Nova Gorica (UNG). This is also reflected in the fact that in the 2022/2023 academic year, FUNG plans to offer three additional scholarships for UNG students; one from the Fund for Talented Students and two from the Matija Franko Scholarship Fund for Student Athletes.



Prof. Dr. Mladen Franko, President of the Management Board of the University of Nova Gorica Foundation.

»Even though the new academic year has just started, we already have new donors who will receive their commemorative documents at a similar time next year. At the same time, the FUNG Management Board has received a proposal for the creation of a new Fund for Development and Innovation in Education, which will sensibly complement and balance the areas of activity of the FUNG Funds. In addition to the scholarship funds (Fund for Talented Students, Matija Franko Scholarship Fund for Student Athletes) and the Fund for Development of New Study Programmes, the funds mainly focus on supporting scientific research (Fund for Research Financing, Fund for Infrastructure Development, Zavrtnik Fund for Cancer Research, and Fund for Development of Cognitive Sciences). The latter requires significantly more investments or donated funds than are needed for student scholarships«, said the President of the University of Nova Gorica Foundation, Prof. Dr. Mladen Franko, in his address.

The event continued with the awarding of commemorative documents. The title of Silver Donor was awarded to Jane Robertson Blanch. »It has been a privilege and an honour to be a part of a foundation that not only honours Matija Franko, but also helps young, talented athletes to have a successful future. I hope that in the not so distant future I will meet the winners and follow their success stories,« she told us from abroad. Unfortunately, she was not able to attend the event and Jurij Franko accepted the award on her behalf.

Prof. Dr. Sonja Lojen and Janez Novak became Bronze Donors.

As Prof. Dr. Sonja Lojen, a long-time lecturer at the School of Environmental Sciences at the University of Nova Gorica, said on receiving the title, she gladly contributes to the University of Nova Gorica Foundation, as she wants students and staff at the University of Nova Gorica to have the best possible opportunities to create and learn. »I was especially drawn to the Matija Franko Scholarship Fund for Student Athletes, which I hope and wish to see expand in the future.«

Janez Novak was inspired to donate to the fund for student athletes by Prof. Mladen Franko. »Every year, we go ski touring together. Mladen and I used to compete in alpine skiing in our youth, where Matija Franko, after whom the Scholarship Fund is named, was a coach«, said Janez Novak, a member of the Management Board of the University of Nova Gorica Foundation.

The presentation of commemorative documents was followed by the awarding of scholarships and awards to students from the University of Nova Gorica. For the first time, a scholarship from the Matija Franko Scholarship Fund for Student Athletes was awarded, in the 2022/2023 academic year going to Ivan Devetak, a student of the School of Engineering and Management, and a volleyball player at IL POZZO Pradamano, Udine.

»I am very honoured to be the recipient of the Matija Franko scholarship for student athletes. This gives me a feeling of satisfaction, and rewards the efforts that I put into my studies and sport. I am especially glad that this university is friendly to student athletes, and therefore allows



Conferral of commemorative documents, awards and scholarships of the University of Nova Gorica Foundation.



Jurij Franko - accepted the Silver Donor award on Jane Robertson Blanch behalf (left) and Prof. Dr. Mladen Franko, President of the Management Board of the University of Nova Gorica Foundation.



Prof. Dr. Sonja Lojen, Bronze Donor (left) and Prof. Dr. Mladen Franko, President of the Management Board of the University of Nova Gorica Foundation.



Janez Novak, Bronze Donor (left) and Prof. Dr. Mladen Franko, President of the Management Board of the University of Nova Gorica Foundation.



Ivan Devetak (left) and Jurij Franko (right)

me to balance my studies and sport, as the latter takes up a lot of my time. This year, I actually transferred to the Italian senior B league», said Ivan Devetak upon receiving the award.

For the third year in a row, the Jožko Markič Awards were awarded, and for the 2021/2022 academic year were bestowed on two students from the School of Arts, Ana Logar and Anastasija Kojić.

The award, which is donated by the A-media, d. o. o. company in memory of the company's co-founder, Jožko Markič, means a lot to Ana Logar, as it gives her hope. »My actions



Student Ana Logar (left) and Prof. Boštjan Potokar, dean of the School of Arts (right).

throughout the year, which obviously led to this award, were actions of my own initiative, to do good, to help people and to work with them. It is good to see that my actions have been noticed and have left a good impression on someone.«

»This award is further proof that I am on the right track and that my efforts are paying off. When I think about how to use this award, I am torn between investing in a trip, and starting a new project and buying new equipment. Whatever decision I make, it will undoubtedly benefit not only my master's project, but also my other university assignments and work outside the



Student Anastasija Kojić (left) and Prof. Boštjan Potokar, dean of the School of Arts (right).

school. Finally, I would like to say how grateful I am for this opportunity,« said Anastasija Kojić.

As Prof. Dr Franko concluded, supporting scientific research is an important priority for the long-term development of FUNG. »The latter requires significantly more investments or donated funds than are needed for student scholarships. Therefore, raising funds to support scientific research remains one of main long-term objectives of FUNG. In the short term, the new FUNG Management Board will focus on providing scholarships for UNG students in the next three years.«



30 November.



1 December.



NOVEMBER

Graduation Ceremony for Bachelor's, Master's, and Doctoral Students

30 November and 1 December, the graduation ceremony for Bachelor's, Master's, and Doctoral students of the University of Nova Gorica was held at the Lanthieri Mansion in Vipava.

30 November and 1 December, 2022, the graduation ceremony for Bachelor's, Master's, and Doctoral students of the University of Nova Gorica was held at the Lanthieri Mansion in Vipava.

At the School of Science six students received their bachelor degrees this year, five students graduated from the School of Engineering and Management and School of Environmental Sciences and free students from the School for Viticulture and Enology and School of Arts. There were also ten master's students who finished their studies.

Moreover, the Rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, promoted six new doctors of science who graduated from the Graduate School at the following study programs: Physics, Molecular Genetics and Biotechnology, Environmental Sciences and Karstology.



Dr. Vadym Tkachuk (left) in Dr. Lovel Kukuljan (right).

DECEMBER

New Doctors of Science

On 30 November, the University of Nova Gorica Rector, Prof. Dr. Boštjan Golob, awarded Doctor of Science degrees to the following Graduate School graduates.

Doctoral study programme KARSTOLOGY

• LOVEL KUKULJAN

PhD thesis title: CO₂ dynamics and dissolutional processes in the karst vadose zone

Mentor: Prof. Dr. Franci Gabrovšek

Doctoral study programme PHYSICS

• VADYM TKACHUK

PhD thesis title: Van der Waals heterostructures

Mentor: Prof. Dr. Gvido Bratina

Doctoral study programme MOLECULAR GENETICS AND BIOTECHNOLOGY

• JELENA LAZIĆ

PhD thesis title: Structure optimisation of biopigment prodigiosin from *Serratia marcescens*

ATCC 27117 and antimicrobial and anticancer

Mentor: Dr. Jasmina Nikodinović-Runić



○ DECEMBER

Establishment of the Centre for Green Technologies

On 1 December, following the decisions of the Municipal Council of the City Municipality of Nova Gorica and the Governing board of UNG, the University of Nova Gorica (UNG) and the City Municipality of Nova Gorica have established the Centre for Green Technologies (CEGT).

The purpose of the CEGT is to offer professional, educational, administrative, and above all, infrastructural support to progressive and innovative ideas in the field of green and sustainable innovations in the transition to their widespread use in industry, agriculture, and in urban and natural environments.

The goal of the CEGT is thus to create a support and development centre that will be the central hub in Slovenia and Central and Southern Europe for all activities related to the promotion of sustainable development.

The establishment of the CEGT represents an initial but long-planned step in realising one of the UNG's strategic goals, intensifying its research and development activities and cooperation with the economy on a local and wider level.

DECEMBER

New Doctors of Science

On 1 December, the University of Nova Gorica Rector, Prof. Dr. Boštjan Golob, awarded Doctor of Science degrees to the following Graduate School graduates.

Doctoral study programme ENVIRONMENTAL SCIENCES

- ROWLAND ADETAYO ADESIDA

PhD thesis title: Exploration of yeast biodiversity potential for development of alternative biofungicides in viticulture

Mentors: Doc. dr. Melita Sternad Lemut and Doc. Dr. Lorena Butinar

- HANNA BUDASHEVA

PhD thesis title: Nondestructive thermal, optical, chemical and structural characterization of advanced materials by optothermal techniques

Mentor: Prof. Dr. Dorota Korte

- TAKWA CHOUKI

PhD thesis title: Synthesis and application of transition metal phosphide nanomaterials as electrocatalysts for water splitting and chemical transformations

Mentor: Prof. Dr. Saim Mustafa Emin



From left to right: Dr. Hanna Budasheva, Dr. Rowland Adetayo Adesida and Dr. Takwa Chouki.

DECEMBER

Awarding of the thousandth diploma of the University of Nova Gorica

On 1 December, the graduation ceremony for awarding diplomas, master's degrees and the promotion of Doctors of Science of the University of Nova Gorica took place at the Lanthieri Mansion in Vipava.

This year's award ceremony was special, as we awarded the thousandth diploma on the completion of studies at the undergraduate study programmes of the University of Nova Gorica.

The diploma was awarded to Tereza Valentinčič, who successfully completed her studies at the School for Viticulture and Enology.

David Cej, a School of Engineering and Management graduate, was awarded the first diploma on 22 February 2022.



Tereza Valentinčič.

Director of the Federal Hydro-Meteorological Institute of Bosnia and Herzegovina Almir Bijedić (left) and rector of the University of Nova Gorica Prof. Dr. Boštjan Golob (right).



○ DECEMBER

The University of Nova Gorica and the Federal Hydro-Meteorological Institute of Bosnia and Herzegovina signed a cooperation agreement

On 13 December, the rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob and the director of the Federal Hydro-Meteorological Institute of Bosnia and Herzegovina, Almir Bijedić, signed a cooperation agreement on the SAAERO project.

The SAAERO project (Sarajevo AEROsol Experiment: Composition, Sources and Health Effects of Atmospheric Aerosol, EU H2020 MSCA IF grant #101028909) is carried out by University of Nova Gorica with strong support and in cooperation with Federal Hydro-Meteorological Institute of Bosnia and Herzegovina.

Particulate matter (PM), suspended in the atmosphere have a well documented detrimental effects on air quality, human health and ecosystems. Every winter, the Western Balkan (WB) region is experiencing some of the poorest European and global air quality, due to the extensive use of solid fuels for domestic heating and an old vehicle fleet.

Within the SAAERO project we are setting up a systematic extended measurements of fine aerosol in the city of Sarajevo, to deliver detailed aerosol physico-chemical characterization and quantify their effects. During winter 2022-2023, measurements will be performed with high time resolution, with daily filter samples collected for off-line laboratory analyses. An intensive field campaign in January 2023 will add to these efforts.

A sophisticated source apportionment methodology will be used to deduce PM emission sources. We will link source contributions to air pollution to oxidative potential to assign health effects to specific sources.

The SAAERO project aims for a strong and lasting impact in understanding and resolving current air pollution and health crises in the entire WB region, establishing a solid baseline for the abatement intervention.

The project SAAERO builds on past cooperation within SAFICA and COST COLOSSAL projects.

Organizing of Conferences, Summer Schools and Workshops

NFM Project Event with Lectures and a Press Conference in Macedonia

16 February 2022, Skopje, Macedonia

In the framework of the partnership in the Project of the Norwegian Funding Mechanism (NFM), titled »Uncorking rural heritage: indigenous production of fermented beverages for local cultural and environmental sustainability«, coordinated by the Wine Research Centre of the University of Nova Gorica (CRV/UNG) and funded by Iceland, Liechtenstein and Norway through the EEA and Norway Grants Fund for Regional Cooperation; a project event with lectures and a press conference was held in Skopje, Macedonia, on 16 February 2022. The event was attended by a contribution from CRV member and scientific leader of the NFM project, Prof. Dr. Guillaume Antalick. The conference was held live and online so that all the project partners as well as the interested professional audience could follow the discussions. More information on the activities of the NFM project is available on the wincider.net project platform and on the FB page <https://www.facebook.com/wincider.typicality/>.



2022
Sevnica
Kulturna dvorana ob 9. uri
25. maj / 25th May

Mislim modro
Strokovna konferenca
o modri frankinji

Blue Frank Think Tank
International blaufränkisch
conference

SEVNICA SLOVENIA | I FEEL SLOVENIA | MODRA FRANKINJE

International Expert Conference on Blaufränkisch Grapevine Variety »Blue Frank Think Tank«

25 May 2022, Sevnica Slovenija

The members of the Wine Research Centre and Faculty for Viticulture and Enology of the University of Nova, in collaboration with the partners from KŠTM Sevnica (Public Institute for Culture, Sport, Tourism and Youth Activities Sevnica), have organised an International Expert Conference on Blaufränkisch Grapevine Variety entitled »Blue Frank Think Tank«, which took place in Sevnica on May 25th 2022. Alongside our representative, Prof. Dr. Guillaume Antalick, a number of internationally renowned experts from the ranks of wine journalists, critics and publicists, sommeliers, researchers, producers and restaurant owners/managers presented their lectures and thoughts. The Rector of the University of Nova Gorica, Prof. Dr. Boštjan Golob, also welcomed and addressed the participants. The conference was very well received, with participants expressing great interest in further cooperation to raise the profile and future of the Blaufränkisch Grapevine Variety.

Symposium on »Hypercompositional Algebra – new Developments and Applications (HAnDA)«

1 June – 3 June 2022

In the period 1-3 June 2022 the Centre for Information Technologies and Applied Mathematics hosted the 2nd Symposium on »Hypercompositional Algebra – new Developments and Applications (HAnDA)«. The event was organized in a hybrid way through the MiTeam platform, in collaboration with mathematicians from National and Kapodistrian University of Athens, Greece. HAnDA aims to be the natural progression in the dissemination of research findings on the Algebraic Hypercompositional Structures and their Applications, beyond the formal publications in journals or books and keep ongoing and pleasantly welcoming pure research on the subject, interdisciplinary influences and more applications.



Conference on Photoacoustic and Photothermal Phenomena ICPPP21

19 June – 24 June 2022

From June 19 to 24, 2022, in collaboration with the University of Ljubljana and the Jožef Stefan Institute, we organized the 21st International Conference on Photoacoustic and Photothermal Phenomena ICPPP21 (International conference on photoacoustic and photothermal phenomena) in Bled. The conference was attended by 134 scientists from 24 countries. 10 plenary lectures were presented by leading researchers in the fields of biomedical imaging, thermophysical properties, materials' research and characterization, ultrafast phenomena and spectroscopy, nanostructures and nanoscale phenomena, analytical chemistry and photochemistry, and new methodologies, instrumentation and applications, in addition to 26 keynote lectures, 77 short oral presentations and 69 posters. 7 exhibitors of instrumentation and equipment for the field of optothermal measurements also took part in the conference.

The conference was chaired by Prof. dr. Mladen Franko, and among the colleagues from UNG, the members of the organizing committee made a significant contribution to the successful implementation of the conference: Prof. dr. Dorota Korte (Vice President), Prof. Dr. Griša Močnik, prof. dr. Iain R. White, M.Sc. Petra Makorič, Nadja Lovec Santaniello and Aljaž Čujec.



Intimacy in Women's Reading and Writing; and Language & Linguistics Colloquia

July and August 2022, Nova Gorica, Slovenia

The School of Humanities co-organised an international summer school entitled »Intimacy in women's writing and reading« with the attendance of a great number of researchers from across the wider European area.

22 lectures were delivered within the »Language and Linguistics Colloquia« by domestic and partnering researchers covering diverse topics from the field of linguistics.

The School of Humanities also took part in the round table »Multilingualism and identity in the context of cognitive sciences of language and literature« of the LinGOcultura festival in Nova Gorica.



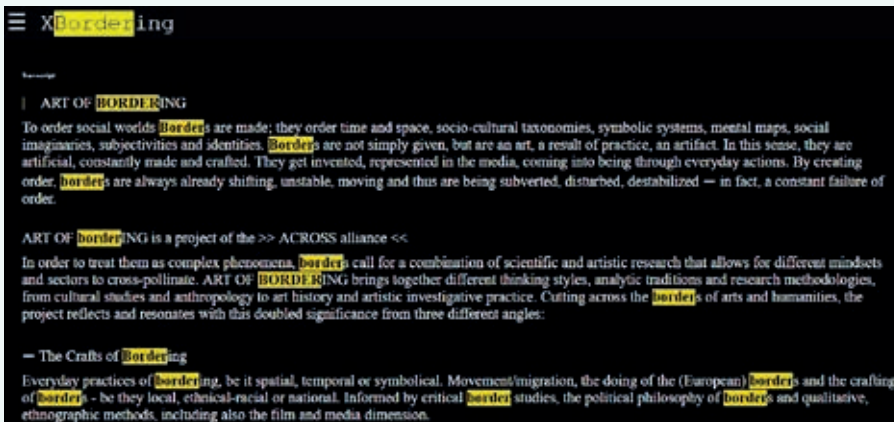
International Summer School on Bilingualism and Multilingualism

12 – 16 September 2022, Chemnitz, Germany

Between September 12th and 16th linguists from the University of Nova Gorica and the University of Udine teamed up in organizing the *International Summer School on Bilingualism and Multilingualism*. The event took place at the Chemnitz University of Technology, financed by the ACROSS alliance and DAAD. The summer school featured 7 instructors from 3 different universities of the ACROSS consortium and was attended by 20 students on-site and an additional 15 online. In addition to attending the seminars on aspects of bilingualism, multilingualism and second language acquisition taught by the instructors, the students were also given the opportunity to present their research topics in an international context. An open-access proceedings volume will be published in the spring of 2023.

International summer school on bilingualism and multilingualism; experimental workshop The Art of Bordering

12 September – 16 September and 8 – 12 December 2022, Chemnitz, Germany



At the TU Chemnitz in Germany and within the European Cross-Border University (ACROSS); we also coorganized »The Art of Bordering« experimental workshop. With the interdisciplinary cooperation of art, humanities and media studies as well as sociology, and based on the services of artificial intelligence, the workshop offered an innovative cross-sectoral curriculum, accessible at the address xbordering.net.



OE4BW Eduscope 2022

20 September – 22 September 2022, Vipava, Slovenia

From September 20 to 22, 2022, in cooperation with the UNESCO Chair from JSI we organized the Eduscope event for the fourth time. The meeting of the participants of the Open Education for a Better World international mentoring program expands knowledge and strengthens the network of experts in the field of open learning through presentations and invited lectures. It took place in the Lanthieri Mansion in Vipava and through the MiTeam online platform. The role of open education in emergency situations, tools, technologies and concrete examples were discussed. The region in focus this time was Japan. There were 50 participants live and 138 online. It was co-financed by the William & Flora Hewlett Foundation. In parallel, there was the BRIDGES symposium with additional 24 contributions from the field of open education.



Cross-border festival of transformative economies and communities ReThinkable; and other conferences

September – November 2022, Nova Gorica (Slovenia), Lisbon (Portugal), Barcelona (Spain) and Ispra (Italy)

The School of Humanities organised the panel »Ecological crisis and criticism« within »ReThinkable« cross-border festival of transformative economies and communities; we also had our contributions at the »Globalising the Avant-Garde« conference, the ISEA electronic art symposium, and the »Resonances IV« event of the European Commission's Joint Research Centre (JRC).



NFM Project Event with Lectures and a Press Conference in Norway

6 October 2022, Oystesee, Norveška

The Wine Research Centre (CRV), in collaboration with its project partners, organized an event with a press conference in Oystesee, Norway, on 6th October 2022. The event was prepared in the framework of the Norwegian Funding Mechanism Project (NFM) titled »Uncorking rural heritage: indigenous production of fermented beverages for local cultural and environmental sustainability«, coordinated by the Wine Research Centre of

the University of Nova Gorica (CRV/UNG). The project is funded by Iceland, Liechtenstein, and Norway through the EEA and Norway Grants Fund for Regional Cooperation. CRV members attended and actively contributed to the event, presenting our project activities and exchanging experiences and plans with the project partners in Norway. More information about the activities of the NFM project is available on the project platform [wincider.net](https://www.wincider.net) and on the FB page <https://www.facebook.com/wincider.typicality/>.



4th Regional Funds Annual Thematic Seminar: Celebrating the European Year of Youth

13 December – 16 December 2022, Brussels, Belgium

The 4th Regional Funds Annual Thematic Seminar: Celebrating the European Year of Youth, held on 13-14th December 2022 in Brussels, we were invited as the Centre of Wine Research at the University of Nova Gorica (CRV/UNG) to present how our project addresses young people in the framework of the Norwegian Funding Mechanism Project (NFM). The NFM Project titled »Discovering rural heritage: indigenous production of fermented beverages for local cultural and environmental sustainability«, is coordinated by the CRV/UNG and funded by Iceland, Liechtenstein and Norway through the EEA and the Norway Grants Fund for Regional Cooperation. Our approaches were presented in Brussels by Dr. Lorena Butinar, NFM Project Manager. More information about the NFM events is available on the project platform [wincider.net](https://www.wincider.net) and on the FB page <https://www.facebook.com/wincider.typicality/>.

Important Achievements

○ MAY

Once again a remarkable achievement of the University of Nova Gorica with the 228th place in the international Round University Ranking (RUR)

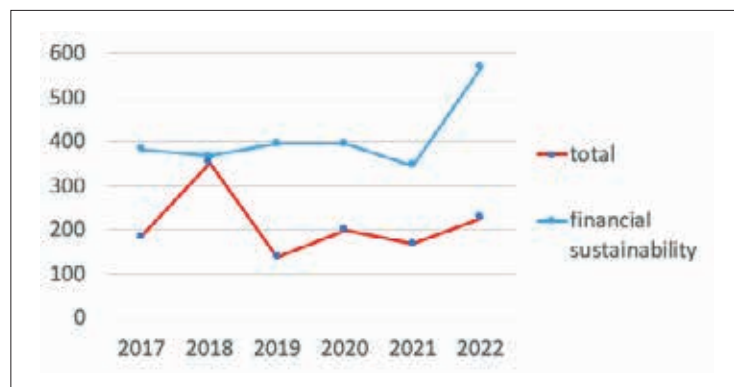
According to the international RUR ranking (Round University Ranking), which evaluates and ranks the world's best universities, the University of Nova Gorica is once again ranked an outstanding 228th in 2022.

It has also achieved very good rankings in previous years, with its best achievement in 2019, with the 140th place. The top spots in this ranking are dominated by the best-known American (e.g. California Institute of Technology, Stanford University, Harvard University, etc.) and English universities (e.g. University of Oxford, University of Cambridge, etc.).

The RUR ranking shows that the University of Nova Gorica is the top-ranked Slovenian university in all quality elements. No other Slovenian university has ever ranked so highly in any of the internationally recognised rankings of world universities. UNG outperforms even the older and larger universities in our neighbourhood. (See the ranking of the world's universities in the RUR rankings by region on the map: The world map of RUR Ranking)

Each year, the RUR rankings assess the world's top universities, ranking them according to their overall performance, and separately by four areas: teaching, research, internationalisation and financial sustainability. A closer look at the results shows that UNG ranks better than 255th in three of the four assessment areas, and only in the area of financial sustainability is it ranked 346th. The latter element is, of course, the one on which the institution has the least influence of all, or is most dependent on societal support for higher education and science. The gap is illustrated even more clearly in the figure below, which shows UNG's overall ranking from 2017 onwards (in red), and specifically its ranking in terms of financial sustainability alone (in blue).

There are different rankings of the world's universities, differentiated by the details of the methodology used. For this reason, the rankings of individual Slovenian universities (at least those that are included in the rankings) also vary between the different rankings. Interestingly, the University



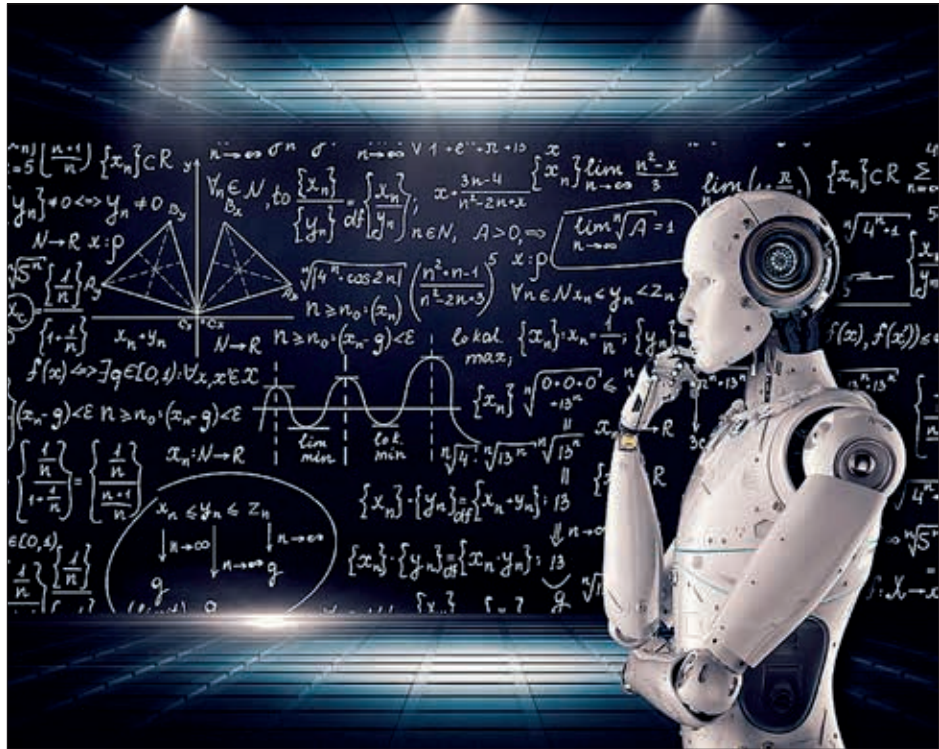
of Ljubljana, reviewing the results of the second evaluation, comes to similar conclusions as above.

The RUR rankings are based on data on the world's universities collected by Clarivate Analytics as part of the global project Global Institutional Profiles Project.

Based on the data collected, an analysis is carried out in the framework of the RUR ranking, which takes into account 20 quality indicators from the four areas. In addition, the research (40%) and teaching (40%) indicators contribute the most to the overall score. The methodology is described on the website. All indicators take into account the size of the institution, so that small and large universities can be compared on an equal footing in terms of the quality of their work.

Such university evaluations are important for prospective students deciding which university to study at, as the quality of studies and the choice of study programmes that ensure high employability are key for them. They are also important for employers, who can find out which universities can provide the best-educated young professionals.

The University of Nova Gorica will continue to strive for the basic guideline of our activities, increasing the quality of educational and scientific research activities. In cooperation with the line ministry, we will try to find ways to improve our rankings, including in terms of financial sustainability. We are confident that our efforts will be reflected in the rankings of world universities.



JULY

University of Nova Gorica with partners obtained funding for the European COFUND research project

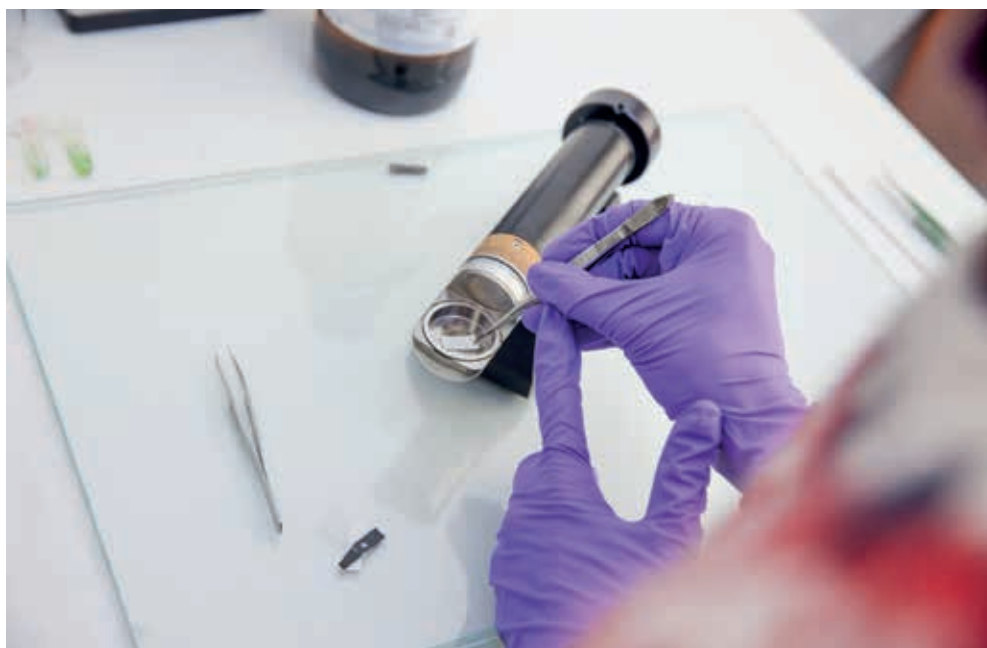
University of Nova Gorica (UNG) with partners obtained funding for the European Marie Skłodowska-Curie Actions COFUND research project SMASH, a study of machine learning in science and humanities.

The project in which UNG is the leading coordinating institution will be funded by 10 million euros, half of which will be contributed by the European Commission and half by the Ministry of Education, Science and Sports of Republic of Slovenia.

As a principal investigator, Prof. Gabrijela Zaharijaš, who is the director of the doctoral study program Physics at UNG and a researcher at the Center of Astrophysics and Cosmology of UNG, convinced demanding international reviewers with the research excellence of her past work and of the proposal. Together with several close coworkers (Prof. Dr. Andreja Gomboc, Prof. Dr. Griša Močnik) she will coordinate the research activities for the next 5 years.

In the framework of the project, 50 postdoc positions will be funded, for studies in diverse fields of climate change, personalised medicine, astrophysics and communication, using the Slovenian supercomputer facility Vega. Postdoctoral researchers will perform their research at five institutions, beside UNG also at University of Ljubljana, Jožef Stefan Institute, Slovenian Environment Agency and Institute of Information Science IZUM.

The project is distinguished by a wide collaboration of Slovenian and international institutions and companies. Among the 32 institutions from all over the world collaborating in the project, beside the above mentioned there are also Cosylab, d. d., Sinergise, d. o. o., SISSA Trieste, CERN Geneva, Queen Mary University London, UC Berkley and University of Washington.



○ NOVEMBER

University of Nova Gorica scientists listed in Stanford's ranking

Stanford University has published its list of the world's top scientists according to citation data.

In terms of the number of citations, Prof. Dr. Matjaž Valant, Vice-Rector for Sustainable Development and Technologies and Head of the Materials Research Laboratory at the University of Nova Gorica, ranked an outstanding 554th out of almost 316,000 assessed scientists in his sub-field of research (Materials).

Other members of the academic staff of the University of Nova Gorica included in the list of the top 2% of the most-cited scientists in their respective fields are also Prof. Dr. Mladen Franko and Prof. Dr. Ario De Marco from the Laboratory for Environmental and Life Science.

○ DECEMBER

A list of ten most prominent articles in 2022

A list of ten articles published by the faculty members of the University of Nova Gorica in journals with the highest Impact factor.

Number	Journal	Authors, University of Nova Gorica members	The Impact Factor
1	Applied catalysis. B, Environmental	Petar Djinović	24.319
2	ACS energy letters	Nejc Hodnik	23.991
3	Nature geoscience	Katja Džepina	21.531
4	Clinical infectious diseases	Iain R. White	20.999
5	Critical care	Iain R. White	19.344
6	Nature communications	Nadiia Pastukhova	17.694
7	Chemical engineering journal	Blaž Likozar, Miha Grilc	16.700
8	Chemical engineering journal	Blaž Likozar, Miha Grilc	16.700
9	Science advances	Fabio Lapenta	14.980
10	Environment international	Griša Močnik	13.352



Research Activity

In 2022, the research work at the University of Nova Gorica was organized at four research laboratories and six research centers: Laboratory for Environmental and Life Sciences, Laboratory of Organic Matter Physics, Materials Research Laboratory, Laboratory of Quantum Optics, Center for Astrophysics and Cosmology, Center for Atmospheric Research, Center for Information Technologies and Applied Mathematics, Research Centre for Humanities, Wine Research Centre, Centre for Cognitive Science of Language.



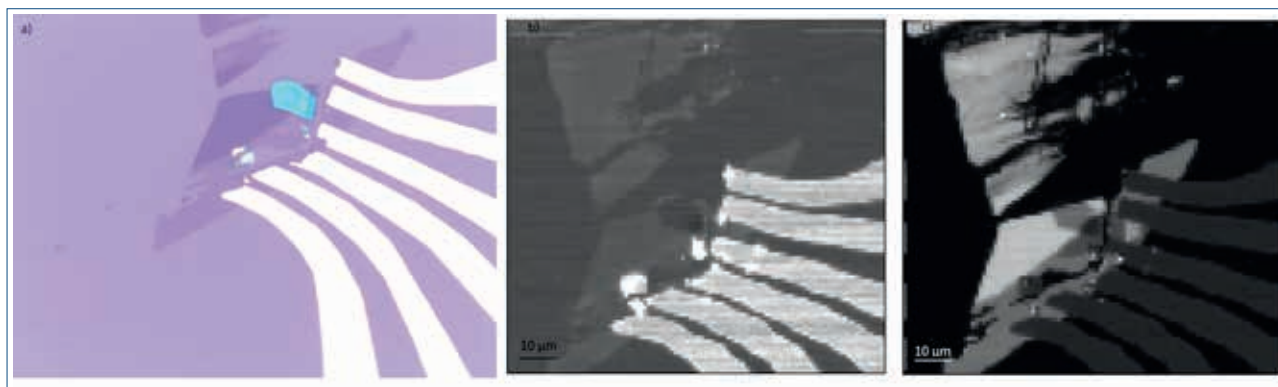
Laboratory of Organic Matter Physics

Head: Prof. Dr. Egon Pavlica

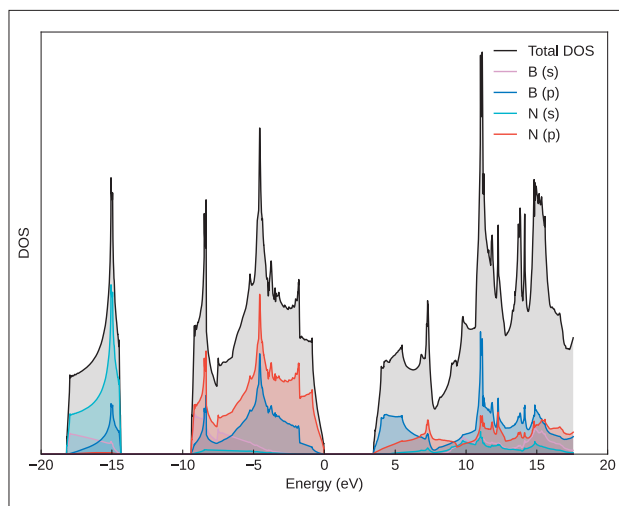
Research activities in 2022 were distributed among different topics: physics of vertical heterostructures of two-dimensional (2D) materials, hybrid heterostructures of 2D and organic semiconductors (OS), charge transport studies through thin films of 2D MXenes, blends of MXenes and OS, charge transport through novel materials of quasi-2D polyacetylenes. We have continued research on nanostructured materials for pressure sensor applications within Flag-era project PROSPECT. In February 2022, the founder of the laboratory, prof. dr. Guido Bratina passed on the management of the laboratory to assoc. prof. dr. Egon Pavlica. The research capabilities of the laboratory were enriched by scanning micro-Raman spectroscopy, which will be used to chemically and structurally characterize nanostructured materials, heterostructures and devices.

During last year, the research of our laboratory was focused into charge transport through a randomly oriented multilayered network of two-dimensional (2D) $Ti_3C_2T_x$ (where T_x is the surface termination and corresponds to O, OH and F) studied using time-of-flight photoconductivity (TOFP) method, which is highly sensitive to the distribution of charge carrier velocities. We prepared samples comprising $Ti_3C_2T_x$ with

thickness of 12 nm or 6-monolayers. MXene flakes of size up to $16\ \mu m$ were randomly deposited on the surface by spin-coating from water solution. Using TOFP, we have measured electron mobility that reached values up to $279\ cm^2/Vs$ and increase with electric-field in a Poole-Frenkel manner. These values are approximately 50 times higher than previously reported field-effect mobility. Interestingly, our zero-electric-field extrapolate approaches electron mobility measured using terahertz absorption method, which represents intra-flake transport. Our data suggest that macroscopic charge transport is governed by two distinct mechanisms. The high mobility values are characteristic for the intra-flake charge transport via the manifold of delocalized states. On the other hand, the observed Poole-Frenkel dependence of charge carrier mobility on the electric field is typical for the disordered materials and suggest the existence of an important contribution of inter-flake hopping to the overall charge transport.



a) Optical image of a graphene/hBN-based heterostructure on SiO_2 with golden electrodes: different color tone of violet shades represent single-layer, two-layer and multilayer graphene, azure color represents hBN. b) Mapping of integrated Raman signal. c) Normalised Raman mapping of the graphene G-peak intensity, which is used to determine the numbers of graphene layers.



Orbital-resolved density of electronic states in primitive cell of hexagonal boron nitride (hBN) calculated within the framework of Density functional theory using Perdew-Burke-Ezernhoff (PBE) pseudopotentials.

Part of laboratory activities were devoted to the preparation and characterization of heterostructures of two or more atomically thin graphene layers and boron nitride (hBN) layers stacked one above the other. Characterization of such in-house-made devices was performed using a recently obtained scanning micro-Raman spectroscopy setup. The result of μ Raman spectroscopy studies combined with optical microscopy allowed us to determine the quality of heterostructures with a micrometer resolution. In addition, we correlated Raman shifts with optically visible features.

In Early Fall 2022 we have embarked on a new activity in the area of numerical modeling of electronic properties of two dimensional (2D) materials with the aim of providing theoretical support for the interpretation the results of the experiments focusing on charge transport in vertical heterojunctions of 2D materials. The adopted framework of this activity is based on the Density Functional Theory. To this end we acquired a perpetual license for Vienna Ab-initio Simulation Package (VASP) and secured access to Slovenian national supercomputing network (SLING). This allows us to perform complex numerical simulations in relatively short time.

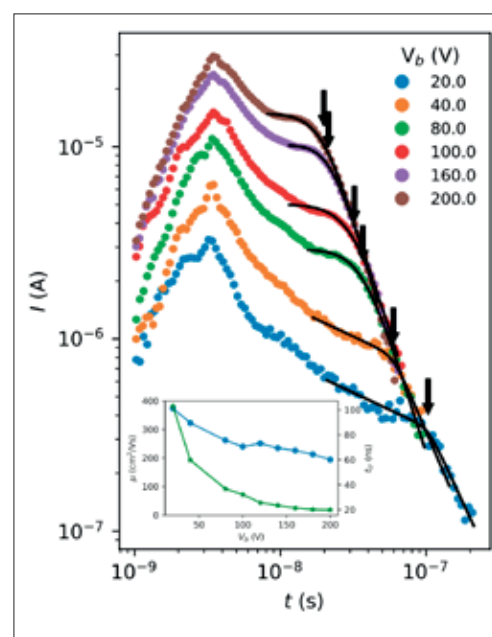
The initial numerical simulations are targeted to reproduce and improve the accuracy of the existing calculations of the graphene and hBN, primitive and 5×5 supercell. All calculations were performed using local density approximation (LDA) pseudopotentials as well as generalized gradient approximation (GGA) pseudopotentials. The results of the calculations include relaxed crystal structures, density of states and electronic energy band structure.

As a part of our activities was a study of quasi-2D polyacetylene (q2DPac) films synthesized at our partners, the Center for Advancing Electronics at Technische Universität Dresden. AFM and SEM were used to study the morphology, which was combined with the UV/Vis absorp-

tion measurements on the films of different thicknesses. The main focus was on the charge transport in q2DPac, studied using TOFP at different excitation wavelengths, laser intensities and film thicknesses. The measured mobility exceeded $150 \text{ cm}^2/\text{Vs}$, which is surprisingly high compared to other polymer materials. The role of ions in q2DPac was investigated by impedance spectroscopy, however, the results indicate that the ions transport is not responsible for the observed mobility.

We continued our work on the international FLAG-ERA project Prospect. The project focuses on multirange pressure sensors composed of layered polymers blended with graphene flakes.

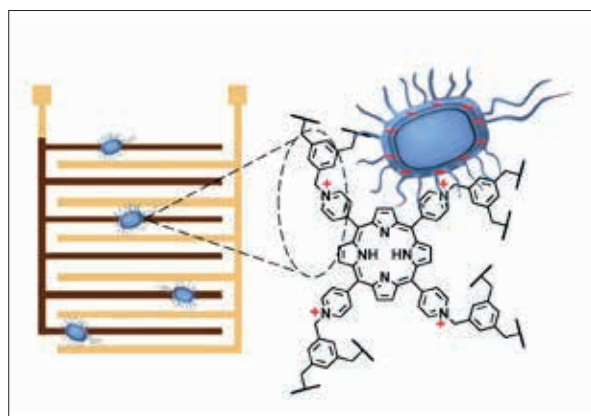
Time-of-flight photoconductivity (TOFP) of the quasi-2D polyacetylene thin film at the excitation wavelength of 325nm and different bias voltage (V_b) between 20V and 200V. Arrows indicate transit times, which were used to calculate mobility. Inset: Mobility and transit time as a function of V_b .



Materials Research Laboratory

Head: Prof. Dr. Matjaž Valant

Material Research Laboratory was established in 2009 and has evolved into a sizeable research unit with state-of-the-art equipment and diverse expertise of the team members ranging from synthetic and crystal chemistry, functional materials, surface science, theoretical and computational chemistry, etc. We have not only maintained the initial research focus on environmental and electronic materials but also developed it towards new exciting and advanced material systems and processes that include topological insulators, energy conversion and storage, nanostructured photo-catalysts, materials for electrochemical devices, and materials in extreme environments. The joint efforts of the team members again resulted in some exciting discoveries and developments.



Schematic representation of bacterial cell electrochemical sensing by a polymer-coated electrode.

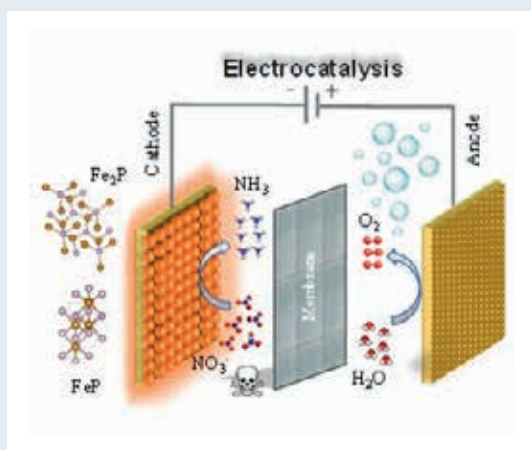
Within the research and development of sensors based on modified metal electrodes with organic thin films we obtained some interesting applied results. A scientific article on the use of a positively-charged covalent organic polymer for the detection of bacterial cells was published in *ACS Sensors*. In this work, gold-interdigitated electrode arrays were coated with the synthesized polymeric network using electrophoresis as a deposition method. Thus-prepared electrodes were used to detect the *E. coli* bacterial cells by electrochemical impedance spectroscopy (EIS). The detection process was based on the formation of electrostatic interactions between the positively-charged polymeric network and the negatively-charged bacterial surface.

The ternary chalcogenide Bi_2MnSe_4 is considered a promising 2D material for spintronics applications. This compound exhibits crystal structures containing layers of fused metal-centered chalcogenide polyhedra separated by weak van der Waals interactions between the layers. Before Bi_2MnSe_4 can be explored as a 2D material, a more detailed investigation of the structural, electronic, and chemical properties of bulk sample surfaces is required. We have prepared high-quality $\text{Bi}_{1.2}\text{Mn}_{0.9}\text{Se}_{4.2}$ single crystals by the Bridgman method and characterized their surface structural, chemical, and electronic properties.

For photo-thermal applications, we coated Bi_2Se_3 nanoparticles with a porous silica layer of varying thickness. Measurements have shown that such nanoparticles exhibit better photo-thermal properties compared to basic nanoparticles. The photo-thermal effect has increased so much that to achieve the desired temperature we used 10 to 100 times fewer photo-thermal particles. Our research field of topological insulators has been extended to the photo-thermal research field. Namely, due to plasmon resonance, which arises due to the presence of topological states, topological insulators also exhibit a photo-thermal effect. For this reason, such materials are also interesting for use in medicine.



Synthesized high-quality $\text{Bi}_{1.2}\text{Mn}_{0.9}\text{Se}_{4.2}$ single crystal prepared by the Bridgman method.



Electrocatalytic reduction of NO_3^- to NH_3 by using an iron phosphide electrode.

The development of high-performance electrocatalysts to selectively reduce NO_3^- wastes into value-added NH_3 will open up a different route of NO_3^- treatment, and impose both environmental and economic impacts on sustainable NH_3 synthesis. Transition metal phosphides represent promising earth-abundant catalysts with impressive electrocatalytic activities. We reported for the first time the electrocatalytic reduction of NO_3^- using different phases of iron phosphide. The Fe_2P catalyst exhibits the highest Faradaic efficiency (96%) for NH_3 generation with a yield ($0.25 \text{ mmol h}^{-1} \text{ cm}^{-2}$ or $2.10 \text{ mg h}^{-1} \text{ cm}^{-2}$) at -0.55 V vs. reversible hydrogen electrode (RHE).

In the last year, we reported a facile one-step chemical method to synthesize reduced titanium dioxide (TiO_2) nanotube arrays (NTAs). Chemical treatment using NaBH_4 was found to introduce oxygen vacancies in the TiO_2 lattice. A cathodoluminescence study of TiO_2 NTAs revealed that oxygen vacancies contribute significantly to the emission bands in the visible range. X-ray photoelectron measurements were used to support the change in surface chemical bonding and electronic valence band position in TiO_2 NTAs. TiO_{2-x} photoelectrodes show enhanced photocurrent for photoelectrochemical water splitting because of enhanced light absorption in the visible region and improved charge separation.

We performed morphology and structure characterization of functional thin films using electron microscopy and X-ray diffraction. We contributed to the understanding of protection layers and hole/electron transport layers prepared by e-beam deposition in perovskite solar cells. We analyzed the texture and stress of RF-sputtered multilayered transition metal nitrides for hard coatings and corrosion-resistant applications. Homogeneous and defect-free amorphous Ga_2O_3 prepared by atomic layer deposition was characterized and applied for the solar-blind photodetector with a fast response time. Sol-gel WO_3 coatings on kitchen-grade aluminum foil were characterized for flexible electrochromic tape devices.

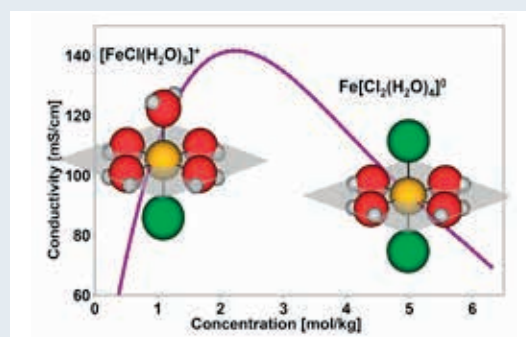
In the field of electrochemical energy storage, we started the development of supercapacitors based on the pseudocapacitive behavior of $\text{Co}(\text{OH})_2$ and WO_3 . We study the relationship between the composition, structure, morphology, and energy density of storage devices.

The upconversion of pollutant CO_2 greenhouse gas to methanol fuel was done with catalytic hydrogenation. High yield and selectivity were achieved employing Cu/ZnO catalyst with AlMg -oxide catalyst support. The catalyst surface is characterized by a low number of acid sites and an increased number of weak basic sites, which is favorable for methanol formation. In addition, the possibility to reduce Cu during the hydrogenation reaction was responsible for long-term stability.

In continuation of our studies of protein conformations in water, we have published a paper in *Frontiers of Nanotechnology*. Using recent advances in the Hamiltonian formulation of the classical Zimm and Bragg model, we explicitly include chain length and solvent effects in the theoretical description. The expression for the helicity degree we suggest successfully fits the experimental data and provides hydrogen bonding energies and nucleation parameter values within the standards in the field.

In July 2022 the Nanoregion project (Interreg ITA-SLO strategic project) finished. MRL has been in charge of the coordination of WP3.3 "Proof-of-Concept", where demonstrative nanotechnology-based experiments proposed by the companies were implemented (25 experiments during the full project duration). Within the same project consortium (which includes 5 high-end laboratories in the ITA-SLO area), MRL also collaborated in the investigation of multilayered Cr- and Mo-nitride-based coatings. This coating technology is used in the fabrication of cutting tools for the wood industry. XRD and TEM analyses were performed to clarify the crystalline structure of the multilayer and to correlate it with the obtained mechanical properties of the coating.

We opened new line of research based on LCA analysis which included wastewater treatment systems and energy production systems based on iron-chlorine technologies. Under the umbrella of circular thinking, Life Cycle Assessment (LCA) is a robust and science-based tool to measure and quantify the environmental and social impacts of products, services, and business models throughout their life cycle.



Structural and population changes, determined by XAS studies of species in iron(II) chloride solutions as a function of concentration, explain the conductivity trend.

We continued our studies in the area of energy storage based on the iron-chloride material cycle. We focus on the thermoelectric chemical cycle, where the majority of energy input is industrial waste heat. XAS studies, of aqueous iron(II) chloride solutions using synchrotron X-ray absorption spectroscopy, have precisely defined the structure and population of ionic species as a function of temperature and concentration, which explain the electrical conductivity trend (Figure 4). We continue our long-standing successful cooperation with the company Seven refractories d.o.o. from Divača. As part of the incoming quality control of their bitumen, we have already carried out approximately 200 sample analyses.

Laboratory for Environmental and Life Sciences

Head: Doc. Dr. Iain Robert White

The Laboratory for Environmental and Life Sciences (LELS) provides the grounds for intensive research collaboration among analytical chemists, environmental chemists and technologists, biochemists, molecular biologists, toxicologists and material scientists. LELS focuses on developing novel and unique ultrasensitive laser-based analytical techniques, the study of the fate and transformations of pollutants in atmosphere, terrestrial and aquatic environments, food quality and safety, characterization of novel materials, biomedical diagnostic tools, as well as identification of recombinant antibodies specific for tumour biomarkers. The laboratory has extensive collaboration with research groups from all over the world.

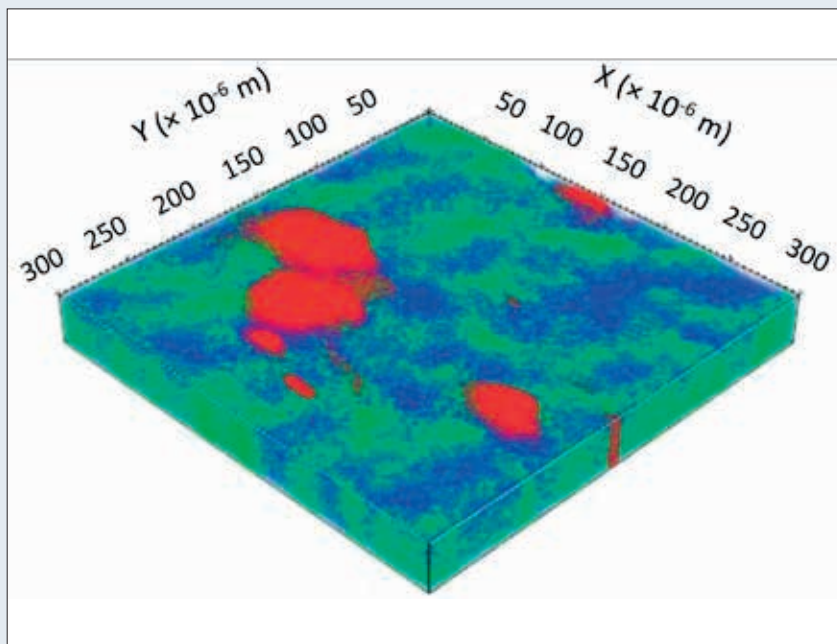
Research activity

We continued to develop new methods of human biomarker detection to study pollution exposure. This includes non-invasive sampling techniques to characterise the components of exhaled breath aerosols and gases indicative of oxidative stress. In parallel, we have expanded the species we can detect in environmental samples to determine the chemical composition of air masses and characterize air pollution.

In the field of laser-based detection techniques, we developed a novel photothermal method based on photopyroelectric (PPE) detection to determine the thermal diffusivity of porous solids. We applied this to several porous building materials and to cellulose:chitosan based biocomposites used for chronic wound healing. The latter were characterized by a relatively low thermal diffusivity which is further decreased on addition of pollen and antibiotics. The obtained results are in good agreement with those obtained by beam deflection spectrometry (BDS). BDS also enabled determination of the porosity of various biocomposite materials based on cellulose or keratin and chitosan (CEL:KER, CEL:SC) with added sporopollenin, which were synthesized using ionic liquids and green chemistry concepts. Our measurements have confirmed that CEL:CS materials exhibit double the porosity (on the order of 0.1%) compared to CEL:KER materials. Furthermore, addition of 15% sporopollenin again doubled



Breath sampling for chemical analyses
(pictured: Claudia D'Ercole).



The distribution of fluoride (a marker for ciprofloxacin; red) determined by SIMS (approx. $300 \times 300 \mu\text{m} \times 0.5 \mu\text{m}$; sample 75:25 CS:CEL, 30% SEC). 3D render overlay of F⁻, Cl⁻ and C₃H₄N₂O₂,

the porosity, making these materials suitable for biocompatible wound dressings with antimicrobial properties either due to CS itself or upon addition of antibiotics incorporated into sporopollenin microcapsules prior to the synthesis of biocomposites.

We also studied the significance of beam shaping in BDS measurements. The role of Gaussian and top-hat beam shapes in generating and analysing BDS signals were analysed in combination with complex geometrical optics models for 1D (top hat excitation) and 2D (Gaussian excitation) configurations. While the fitting accuracy of the 2D model is better, the ease of computation with the 1D model employing top-hat excitation suggests reliable applicability of the top-hat profile in photothermal experiments.

We further investigated the role of APOBEC3 (A3) proteins in HPV oncogenesis. Using the CRISPR/Cas technique, A3A and A3B were silenced in HPV host cells HFK. The contribution of A3A and A3B proteins to HPV-driven cell transformation was investigated in silenced HFK cells, analysing cell proliferation, apoptosis, and cell migration/invasion. Preliminary gene expression analysis of some target genes confirmed our *in silico* analysis of patients with head and neck cancer and cervical cancer from TCGA. In addition, a model system for HPV genome integration in HFK cells was established, allowing us to study the patterns and timing of genetic and epigenetic changes that occur in the process of HPV driven cell transformation. Elsewhere, we advanced the structural characterization of two cancer-related human proteins. With cryoEM, we collected high-resolution structural data of the largest protein particle in mammalian cells, the vault complex. We also described the conformational changes in the intrinsically disordered N-terminal domain of the human copper transporter.

We expanded our expertise in the isolation and characterization of nanobodies. Specifically, we: i) characterized several adhirons to evaluate their target specificity, binding efficiency and stability, ready for further analysis with cryo-EM and NMR; ii) developed reagents for biosensor preparation and superresolution microscopy using alternative strategies for binder functionalization with suitable tags; iii) worked on methods for the production of multivalent and multispecific binders by applying polymerization structures with controlled aggregation into nanoparticles with reproducible structures; iv) developed substrates for monolith chromatography, functionalized with nanobodies, which enabled high quality extracellular vesicle isolation; v) collaborated to identify optimized purification protocols for recombinant proteins and, specifically, single-domain binders.

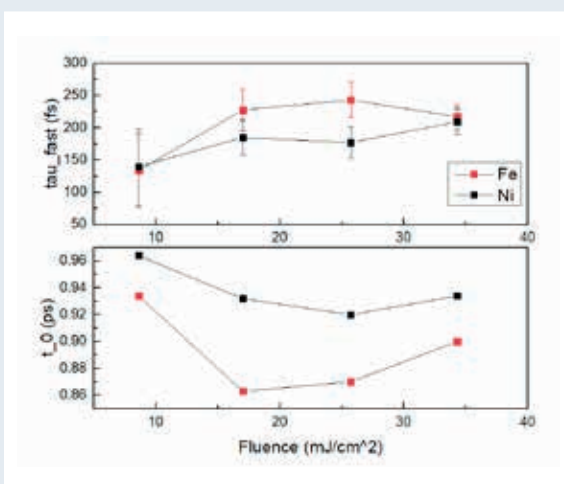
Laboratory of Quantum Optics

Head: Prof. Dr. Giovanni De Ninno

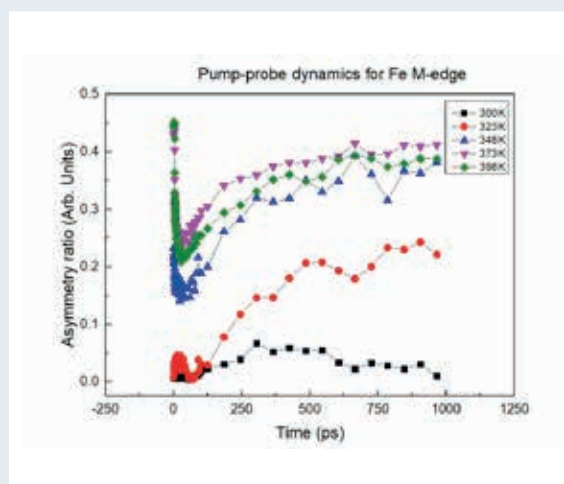
Main aim of the Laboratory of Quantum Optics (LKO) is to study the electronic properties of materials in the so-called “out of equilibrium” condition. The ultrafast laser source CITIUS allows to excite the material under investigation with visible or infrared light and to measure how electrons respond to this external stimulus. A wide variety of magnetic and non-magnetic materials can be studied with this technique, ranging from topological insulators, semiconductors, to metal/organic interfaces. Moreover, at LKO, part of the scientific activity is also devoted to the characterization of atomic and molecular structure of new functional nano-materials. All the members of the laboratory are actively participating in the development of the FERMI free-electron laser, which is one of the most powerful light sources available at the moment worldwide, and is opening new opportunities in the study of non-equilibrium states and the structure of condensed, soft and low-density matter.

In year 2022 the laboratory activities of LKO were mainly focused on the following research topics:

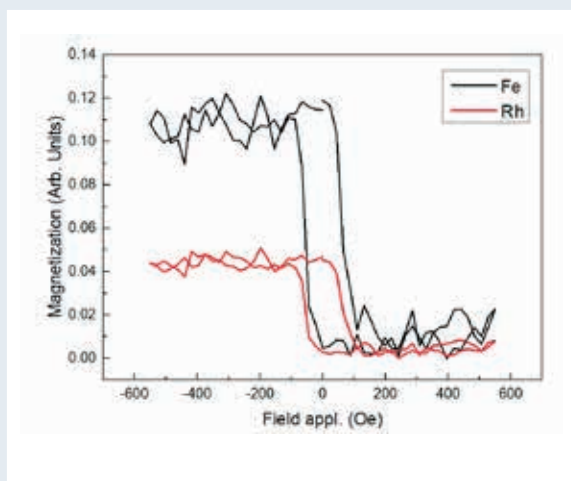
- The MOKE setup was used to measure the magnetization dynamics in few interesting samples. We finished the commissioning of the setup characterizing the magnetization in a sample of an iron-nickel alloy, $\text{Fe}_{20}\text{Ni}_{80}$ (*Permalloy*), in which a clear ferromagnetic dynamic is visible (Figure 1). The quenching of the magnetization as function of the radiation fluence was also confirmed. We also performed experiments on an iron-rhodium alloy (FeRh , % of Fe should be specified), that



The fast decay time (τ_{fast}) and onset of quenching (t_0) extracted from Permalloy sample for different fluences.



The demagnetization dynamics of FeRh for different temperatures set using the external heater. At higher temperatures, the sample has a normal FM phase while at lower temperatures we see the transition to FM from AFM induced by the pump.



Hysteresis measurements for Fe and Rh in FeRh system in the FM state 373K.

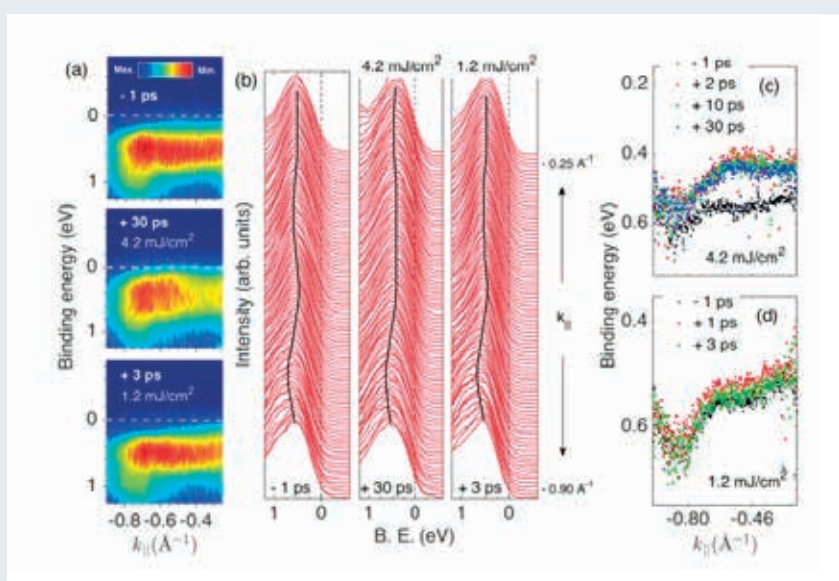
shows an antiferromagnetic (AFM) to ferromagnetic (FM) phase transition at around 350 K. The underlying phenomena for this transition is yet to be understood. The experiments were performed after modifying the MOKE setup with the addition of an external heater. Subsequently we performed temperature-dependent magnetic hysteresis measurements and normal pump-probe demagnetization measurements. We also performed pump-probe measurements on the sample after inducing the transition with the pump beam, and observed a rise of the magnetization due to the transient increase of the electronic temperature. The dynamics of the magnetic signal, at different temperatures, is shown in Figure 2, up to 398 K.

Two different dynamics for the transition were observed, a fast (~ 10 ps) and a subsequent slower (~ 200 – 400 ps) magnetization process. The magnetization and the Ferromagnetic state can be clearly seen in Figure 3, where the sample was analysed at the temperature of 373K, after the transition. More systematic measurements are planned in the near future.

- Angle- and time-resolved photoemission spectroscopy (tr-ARPES) was performed on TaS₂ in its 1T (trigonal) – phase. This sample exhibits a commensurate charge density wave (C-CDW) phase and a Mott insulating state below 180 K (transition temperature). Tr-ARPES was mandatory to study

the metastable state in this material, which can be obtained applying on the sample an optical laser pulse. The material was analysed in its insulating phase as the switching to a relatively long-lived state is evident in the insulating state of the system. Pump-probe experiments were performed at 100 K and for a fixed pump fluence along different high-symmetry directions of the hexagonal Brillouin zone (BZ) of TaS₂, with both low and high pump fluences. At a given sample temperature, the maximum T of the hot electron distribution could be controlled by varying the incident pump fluence on the sample and exiting from the crossover region. For two different sample temperatures, fluence dependent experiments were performed to confirm the observed dependence of time scales on fluence, both inside and outside the crossover region. Polarisation (horizontal) of the pump was fixed and probe beams was chosen such that we could probe the occupied electronic states at the BZ centre (gamma-point). The data obtained from the experiments (Figure 4) confirm the presence of a long-lasting metastable phase under high-fluence conditions (4.2 mJ/cm²). On the contrary the presence of a metastable phase before the full CDW recovery is absent under low-fluence conditions.

- For characterization of atomic structure of different new functional nanomaterials with X-ray absorption spectroscopy (XAS) methods micro-XANES and EXAFS we obtained and realized in 2022 three international research projects at two synchrotron radiation laboratories (Elettra, Trieste; ESRF, Grenoble). As part of a long-term collaboration with the Institute of Chemistry, we performed an operant EXAFS analysis of nano-structured (Ni, Cu, Fe)/CeO₂ photocatalysts for CO₂ reduction, and published the results of XANES and EXAFS analyses of the structure of the bifunctional Ni/ZSM-5 catalysts, and in cooperation with FKKT Uni-Lj, published research on photocatalytic TiO₂ coatings and nanocomposite SnO₂-TiO₂ thin layers, intended for wastewater treatment. In collaboration with researchers from the University Ca' Foscari in Venice, we performed EXAFS analysis of Rh, Pd, Pt and Cu mono and bimetallic catalysts on alumina, intended for selective hydrogenation. The results of the measurements reveal the catalytic mechanisms in these materials. Using a combination of X-ray spectroscopy and submicron X-ray microscopy, we analysed and explained the mechanisms of uptake, accumulation and detoxification of metal cations in various food plants. We have also performed very demanding in-situ X-ray absorption measurements of multi-electron co-excitations in the photoeffect in the inner shells of 5p elements, which reveal the mechanisms of quantum correlations in such complex multi-electron systems. In 2022 we published research results in seven scientific articles in international journals with high impact factor and one contribution in a monographic publication, based on the described research with X-ray synchro-



(a) ARPES snapshots of the Ta 5d sub-band at 0.5 eV below EF, along \bar{B} -M direction, before and after photoexcitation: $\Delta t = -1$ ps (top), $\Delta t = +30$ ps at pump fluence 4.2 mJ/cm² (middle), $\Delta t = +3$ ps at pump fluence 1.2 mJ/cm² (bottom). (b) Corresponding stacked EDCs representing the band dispersions. Smooth curves are guide to the eye and dashed lines denote EF. (c) Peak positions of the EDCs plotted as a function of k_{ij} at various time delays for high fluence, 4.2 mJ/cm². (d) The same for low fluence, 1.2 mJ/cm².

Center for Astrophysics and Cosmology

Head: Prof. Dr. Samo Stanič

Research activities of the center contribute to a unified and clearer view of the Universe, its constituents, their interactions and high-energy processes. Combining the information obtained from different cosmic messengers - photons, charged cosmic particles, neutrinos and gravitational waves - is the key for achieving this objective. Our primary goal is to investigate phenomena related to extreme energies in nature and push forward the knowledge frontier. With our active participation in leading international research collaborations in this field (observatories Pierre Auger, Cherenkov Telescope Array and Vera C. Rubin, Fermi-LAT, Gaia, Liverpool telescope and ENGRAVE collaborations) we contribute to cutting-edge science in searches for extremely energetic astrophysical sources, transient astrophysical phenomena, dark matter and possible mechanisms responsible for the matter - anti-matter asymmetry in the Universe. The research is supported by both national and international research and infrastructure grants, most notably the "Multi-messenger astrophysics" research program, funded by the Slovenian research agency.

Pierre Auger Collaboration

The research related to ultra-high energy cosmic particles is conducted with the world's largest cosmic ray detector, the Pierre Auger Observatory in Argentina. Huge showers of charged particles, created upon collisions of incident primary cosmic particles with nuclei of gases in the Earth's atmosphere are used to identify their properties. The observatory combines data from a grid of 1660 surface water Cherenkov detectors with data from four fluorescence telescope sites, observing excited nitrogen molecules along the shower path. Auger results support the hypothesis that extremely energetic cosmic particles accelerate at extragalactic astrophysical sites and that their flux is suppressed due to interactions with cosmic microwave background. In 2022, our experimental focus was on the implementation of a real-time ultra-high energy photon search with the surface detector of the observatory and the implementation of machine learning algorithms in the identification of primary particles. As shifters, we also contributed to successful operation of the observatory's fluorescent and surface detector.

Cherenkov Telescope Array Consortium

Studies of very high-energy cosmic gamma rays provide crucial information on non-thermal Universe. Contrary to charged cosmic particles, photons are not affected by magnetic fields, so they can point back to their production sites. Our research was coordinated within the Cherenkov Telescope Array (CTA) consortium, which prepares instrumentation, observation strategies and software for the construction of a new generation observatory for the detection of high energy photons with energies between 20 GeV and 100 TeV. In 2022, we participated in



The final upgrade works on Pierre Auger surface detector stations with a plastic scintillator on top, providing composition sensitivity of primary particles, and an additional antenna to enhance composition sensitivity at large zenith angles.

development and extensive testing of the CTAN Raman Lidar Pathfinder system for atmospheric characterization at the northern CTA observatory site in La Palma (with Universidad Autónoma de Barcelona), identification procedures for ultra-high energy cosmic ray sources among active galactic nuclei (with U. of Innsbruck) and sensitivity studies for the search of dark matter in the Galactic center and for galactic and extragalactic astrophysical sources.

Fermi Large Area Telescope Collaboration

Fermi Large Area Telescope (LAT) is the main detector onboard the Fermi Gamma ray Space Telescope, leading space laboratory for the high energy gamma ray research since 2008. In the energy range between 20 MeV and more than 300 GeV, Fermi LAT so far discovered more than 5000 gamma ray sources, which is more than an order of magnitude more than what was previously known. Unexpectedly, it also discovered a large bubble-like structure stemming from the center of the Milky Way above and below the Galactic plane, called the Fermi bubbles, that are almost

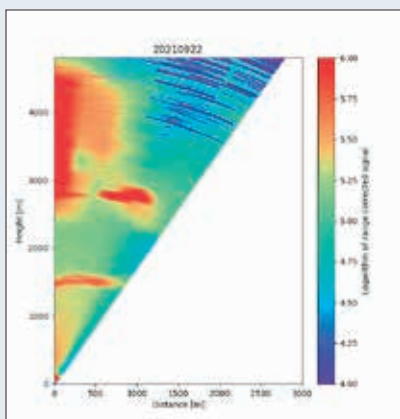


In 2022, CAC students and staff contributed to the commissioning of the CTAN Raman Lidar Pathfinder, a prototype device for atmospheric characterization above Cherenkov Telescope Array at Observatorio del Roque de los Muchachos in La Palma.

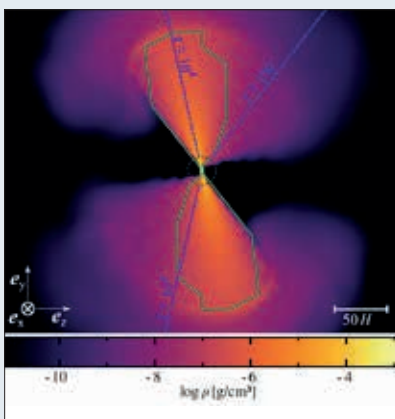
as tall as half of the whole Galactic disk radius. It also provided strong constraints on the nature of dark matter particles by investigating their decay or annihilation signatures in astrophysical objects. Starting from 2019, the results of Fermi LAT experiments provided crucial information for a series of multi-messenger discoveries, in particular related to the origin of ultra-high energy neutrinos and high energy emissions from the gamma ray bursts.

Astrophysical transients

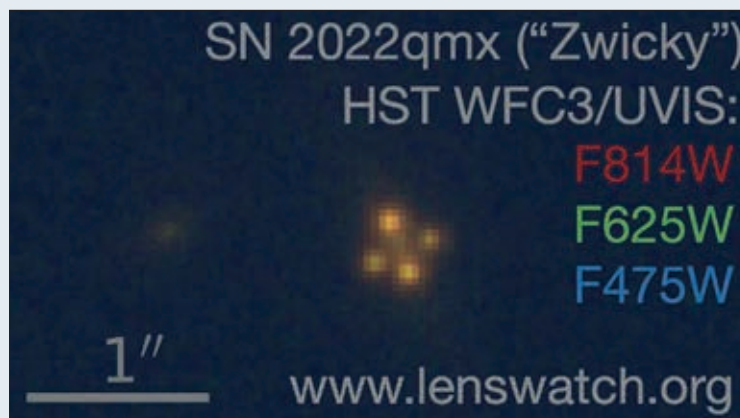
Our team is active in international collaborations studying astrophysical transient sources, which include gamma ray bursts, gravitational wave events, tidal disruption events and supernovae. In 2022, most of our activities were related to the NSF Vera C. Rubin Observatory, which will provide the most extensive sky survey so far and is expected to detect numerous transient events. In particular, we used simulations to predict the discovery potential of the Rubin Observatory for detecting tidal disruption events and strongly lensed supernovae, we participated in the observations of the strongly gravitationally lensed supernova type Ia 2022qmx and the subsequent data analysis, which contributed to the improvement of gravitational lensing models. As part of the activities at the Rubin Observatory we made a six-month visit to the University of Washington in Seattle, supported by the Fulbright Fellowship Program. The exchange was extremely important for our future work in the field of astrophysical transients.



Spatial distribution of clouds and aerosols above the Roque de los Muchachos observatory on 22 Sep. 2022. In addition to clouds at the height of 2300 m there is a thin layer volcanic ash at 1500 m above the ground originating from the Cumbre Vieja – Tajogaite eruption.



Simulation of a tidal disruption event when a star approaches sufficiently close to a super-massive black hole and is pulled apart by the black hole's tidal force. Green line denotes the entrapment area for the gas after the collision.



In 2022, members of the CAC team contributed to the studies of the newly discovered extremely distant supernova 2022qmx. Its multiple images due to strong gravitational lensing were resolved by the Hubble Space Telescope.

Center for atmospheric research

Head: Prof. Dr. Griša Močnik



Sampler and Inlets for air quality measurements in Kanal ob Soči municipality.

The Center for Atmospheric Research (CAR) focuses on the study of physical processes in the atmosphere using remote sensing and in-situ measurements. Modeling of atmospheric phenomena adds to these efforts. Our research activities include the investigation of aerosol sources, their dispersion in the atmosphere and vertical profiles. We investigate atmospheric structures, how aerosols interact with the clouds, and use these data for validation of satellite measurements. The key question is how aerosols influence the atmospheric optical properties through scattering and absorption of solar radiation. Scattering cools the atmosphere, while absorption warms it – aerosol black carbon is the second most important climate forcer.

We also conduct research on the sources of air pollution, identifying and quantifying the contributions of traffic, domestic heating with biomass and industry to the local and regional air pollution. These activities are a mixture of techniques to determine the aerosol chemical composition and their physical properties, and sophisticated statistical methods to obtain the source profiles and their contributions to particulate air pollution. The Center is located at the University of Nova Gorica Ajdovščina site. It runs the atmospheric observatory at Otlica and is involved in the activities of the European Space Agency and field campaigns around the globe.



Field measurements of the aerosol absorption coefficient in Ljubljana.

Airborne research

We have combined our lidar and in-situ measurements during the calibration and validation of the Aeolus satellite mission above Cape Verde islands, continuing the 2021 campaign in September 2022. The Aeolus satellite of the European Space Agency is carrying a UV Doppler lidar ALADIN, which was validated with lidar measurements from the ground and in-situ aerosol measurements. We have developed a new inlet and the instrumentation payload for the light aircraft flown by Matevž Lenarčič in close cooperation with the industrial partners, for measurements of aerosol absorption and scattering, and size distributions. Aerosol absorption in different size fractions will be

used to differentiate between fine and coarse aerosol absorption – soot and Saharan dust (an extension of Drinovec et al., 2020). These data are being analyzed to perform optical closure between remote and in-situ measurements of aerosol optical properties. Our flights were coordinated with NASA DC-8. Preliminary results were presented at ESA Living Planet Symposium 2022 and other international conferences.

Determination of sources of air pollution

The source apportionment activities were in Slovenia (Kanal ob Soči) were brought to a close and reports submitted. The results show that while the majority of particulate matter is due to biomass combustion, the oxidative potential

might have also large industrial sources. We have continued our work on the multilinear approaches to source apportionment (Blanco Alegre et al., 2022) and harmonized source apportionment of organic aerosol in Europe (Chen et al., 2022). Local heterogeneity of air pollution was investigated in rural Slovenia (Glojek et al., 2022).

Aerosol measurement methods

Our work on new measurement techniques of aerosol light absorption was conducted in close cooperation with the commercial and international partners (Drinovec et al., 2022; Kalbermatter et al., 2022). The novel photo-thermal interferometer PTAAM-2, measuring the aerosol absorption coefficient directly at two wavelengths, has been commercialized. This method is being considered as the reference method and our work has been recognized with the national innovation Puh Award 2021.

Applied research

The observatory at Otlica above Ajdovščina (965 m above sea level) is a node in the national grid of meteorological and environmental stations, administered by the Slovenian Environment Agency, and a member of the European Virtual Alpine Observatory, with continuous monitoring of temperature, humidity, wind speed and direction, ozone concentration and solar irradiation, all available on line at the Agency's and Center's web portals. The observatory is involved in numerous dedicated international collaborations.



Airborne measurements with the Matevž Lenarčič plane and cooperation with NASA DC-8 above Cape Verde.

Wine Research Centre

Head: Doc. Dr. Melita Sternad Lemut

Wine Research Centre (CRV) is uniting the researchers and multidisciplinary research activities that are related to the fields of viticulture and enology (plant physiology, biochemistry and pathology; viticulture and winemaking technologies; sustainable agriculture; fruits, grape and wine analytics; microbiology and molecular biology of yeasts, grapes and wine and other fermented drinks; biotechnology). We operate in the modern equipped laboratories in Lanthieri Mansion, Vipava and in the experimental fields, including the University's own vineyard. Our primary studied plant is grapevine (with the processing from grapes to wine) but we also study some fruit plants, olives and apple wine (cider). We deal with both applicative research, addressing current problems in the field, as well as expert, more future-oriented research.



Measurements of grapevine's photosynthetic activity.

In 2022, the research in laboratories of the Wine Research Centre (WRC) and in selected field sites was carried out for several national, bilateral, and international projects, as well as projects with industry.

The ARRS applied research project „Improving the quality of Slovenian white wines through better expression of varietal aromas“ has been completed. During the last activities of the project, out of 40 different yeasts tested, we selected 5 native yeasts that showed the best results and used them as starter cultures for large-scale vinification.

In the framework of another ARRS research project on atypical wine ageing, we continued to investigate the link between some metal ions in wine and the degradation of aromatic compounds important for the quality of aromatic wines. Various samples of white wines were subjected to atypical ageing under simulated conditions that accelerated ageing as occurs spontaneously in wine and the wine samples were then analysed by gas chromatography (GC/MS). The influence of different combinations of metal ions and antioxidants on the atypical ageing of white wines was also investigated. In order to further increase our knowledge and understanding of the aging and aroma of white wines, we also analysed different samples of Croatian and Slovenian white wines and samples of ciders wines from Norwegian and French producers.

A CRV member took part in an experiment on the adaptation of grapevines to drought stress under different day-night temperature regimes in the framework of the Erasmus+ staff mobility programme at BOKU University (Austria). At CRV, part of the samples from the pot vineyard experiment of the bilateral Slovenia-Austria project „Metabolic adaptation of plants to water stress“ (PlasticGrape) were prepared for analysis. We continued with the pot experiments and carried out sampling for further analytical work.



Soil sampling in the vineyard and collecting of the used viticulture strings.

Research activities were also ongoing with the analysis of samples within the ARRS post-doctoral project „Does the presence of microplastic particles change the copper dynamics in contaminated vineyard soils?“. In 2022, the incubation of soils with typical plastic particles found in vineyards was completed. Microbiological analyses of the soil and most of the planned physico-chemical analyses have been carried out. We have started to determine the number of microplastic particles in the vineyard soils of the Vipava Valley.



Cider for the analyses within the project „Sidersmack“.

In the framework of the NFM international project „Uncorking Rural Heritage: Indigenous production of fermented beverages for local cultural and environmental sustainability“, coordinated by the CRV/UNG and funded by Iceland, Liechtenstein and Norway through the EEA and Norway Grants Fund for Regional Cooperation, we continued to set up analytical methods using GC/MS to determine the typical aromatic characteristics of wines and ciders, and set up a sensory panel to which we invited experienced tasters with a variety of backgrounds. We have started targeted training of the panel members, focusing on the identification and typicity of the Zelen and Pinela varieties.

Within the contract project „Cidersmack“ (in cooperation with Norwegian partners), we set up an experiment in Norway (NIBIO) with the processing of different apple varieties and three different levels of available nitrogen concentration for

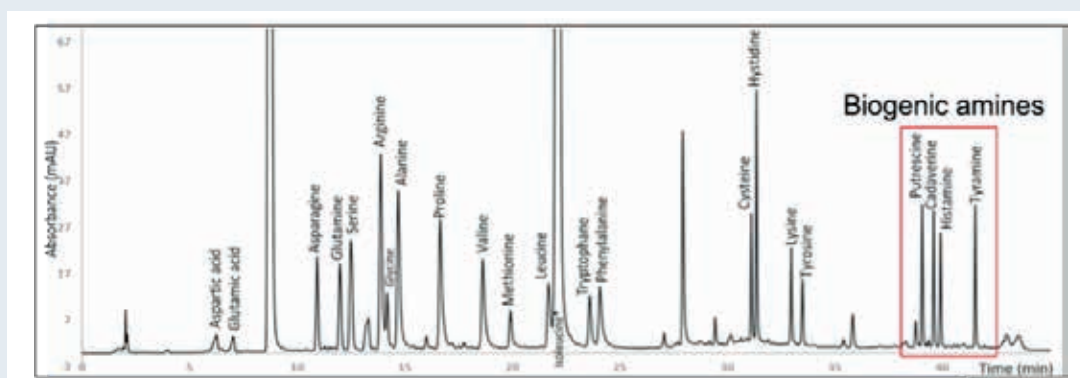
yeasts in cider production. During fermentation, nitrogen metabolism was monitored by analysing amino acids and biogenic amines before and after fermentation. The different varieties responded differently to the addition of diammonium phosphate, also depending on the amount of initially available nitrogen in the apple juice. The samples were analysed partly in Norway, but mostly by liquid and gas chromatography in the CRV laboratories, where we developed and optimised all the



Experimental fermentations of cider.

necessary analytical methods for the determination of phenolics, aromatic compounds, acids, sugars, amino acids and biogenic amines in cider.

The good cooperation with NIBIO over several years is paying off and will continue with new projects; at the end of 2022 we have been awarded a contract to carry out analyses in an experiment to discover the potential of old Norwegian varieties for cider production.



HPLC-UV chromatogram of the separation of 19 amino acids and 4 biogenic amines.

Center for Information Technologies and Applied Mathematics

Head: Prof. Dr. Irina Elena Cristea

The Centre for Information Technologies and Applied Mathematics is an interdisciplinary dynamic research group, developing its activities at the intersection of computer science and informatics, mathematics, systems theory, and control systems technology. It focusses on novel approaches to model and solve a wide range of problems, from industrial engineering practice to education, biomedicine, theoretical and applied mathematics. Methods for intelligent data analysis are being developed and applied to the domains where IT support is required for knowledge discovery aiming at understanding complex diseases, phenomena in the environment, or problem solving in various complex domains, especially in engineering. In the mathematical area, we contribute with new studies in hypercompositional and ordered algebra.

In 2022 the Centre employed seven researchers, working on interdisciplinary fields related to knowledge discovery, open education, discrete mathematics, Gaussian-process models, and renewable energy sources.

We applied knowledge discovery to open education for identification of knowledge gaps and quality assessment. We published a paper on enhancement of cooperative creation of Open Educational Resources (OER) for implementation of Sustainable Development Goals (SDGs) with SDG7 hubs of the OE4BW program being studied in relation with other SDGs. Results were generalized to provide further increase of OER's contribution to the achievement of SDGs. Another focus was to follow, encourage and enhance active learning with data analytics. During the observed learning process, students interacted on a social network Mastodon. Their posts and interactions (see example at Fig. 1) were extracted and analysed to understand student engagement over time, opening up new avenues for dialogue between students and professors.



The SBG graph for modeling global spread of COVID-19.

One main research field developed in the centre is the one of hypercompositional algebra, where we continued our research principally related to hypergroups, hyperfields and hypermodules. We elaborated a procedure to measure the degree of influence of an element on another, with respect to a given dependence relation on

a finite set. Its definition is based on a partial hyperoperation and a directed graph which we associate to any dependence relation (see Fig.2). Krasner hyperfields were originally introduced in connection with some algebraic problems connected with valued fields. After having found the fundamental role of valued Krasner

hyperfields in the model theory of valued fields, we studied and developed valuation theory for Krasner hyperfields. One can associate to a valued field an inverse system of valued hyperfields in a natural way. In a joint article with a colleague from the Catholic University of Leuven, we investigated when, conversely, such a system arises from a valued field. We extended a result of Krasner by showing that the inverse limit of certain systems are stringent valued hyperfields and described a general Hahn-like construction. In a collaboration with researchers from University of Szczecin, we studied the notions of positive cone, characteristic and C-characteristic in Krasner hyperfields, providing also a new criterion for deciding whether certain Krasner hyperfields cannot be obtained via the famous quotient construction. Besides, we proved that any regular local hyperring is a hyperdomain and we provided a new characterization of the injective hypermodules, helping us to characterize the class of divisible hypermodules.

In the framework of ordered algebra and its connection with computer science, we extended several results by studying a code generated by a BCK-algebra and then by a BL-algebra. The associated algebraic structures enabled us to encrypt and decrypt the proposed code faster than the usual one. We started to collaborate with Karadeniz Technical University in Trabzon, Turkey, by mentoring one masters student on this topic. Using a particular relation of algebraic hypercompositional structures in the context of social systems, we introduced the SBG graph (see Fig.3) to model the spread trend of coronavirus disease among societies and individuals.

Research activities on dynamic systems were pursued in the direction of the method for the simulation of approximated autoregressive models and modelling of air pollution above complex terrains using methods of decision trees and Gaussian-process models.

We continued the research and expertision work in the area of circular economy and efficient use of energy and renewable energy resources, by participating in diverse national projects.

The centre has collaborated with colleagues from Germany, Brazil, France, Slovenia, Greece, Montenegro, Poland, Turkey, Iran and India.

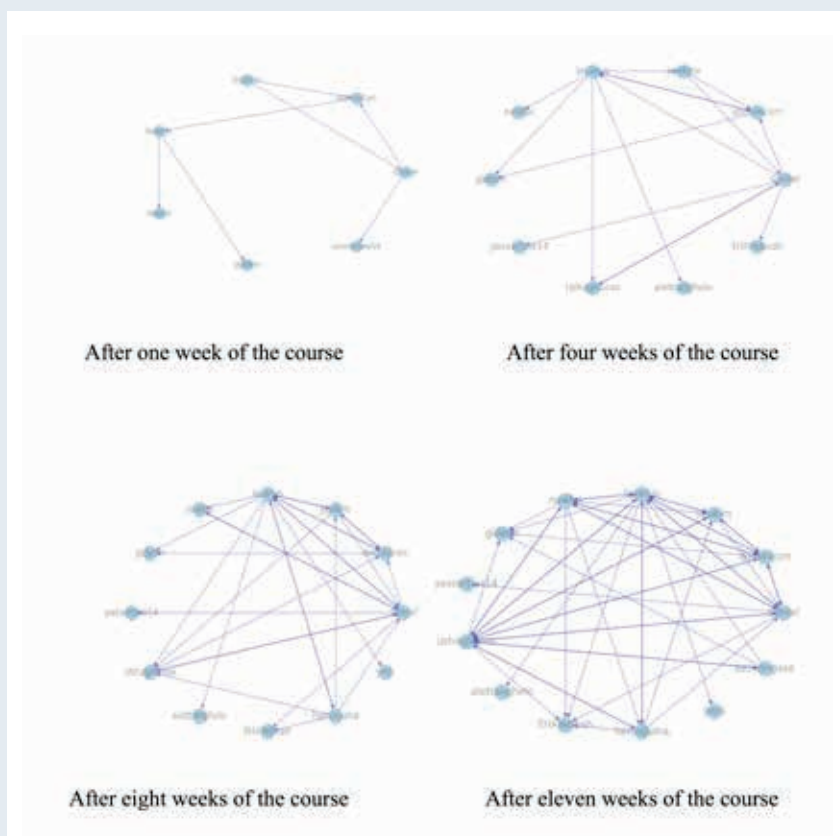


Fig. 1 Interactions between students during the observed study course, extracted from their posts on the Mastodon social network.

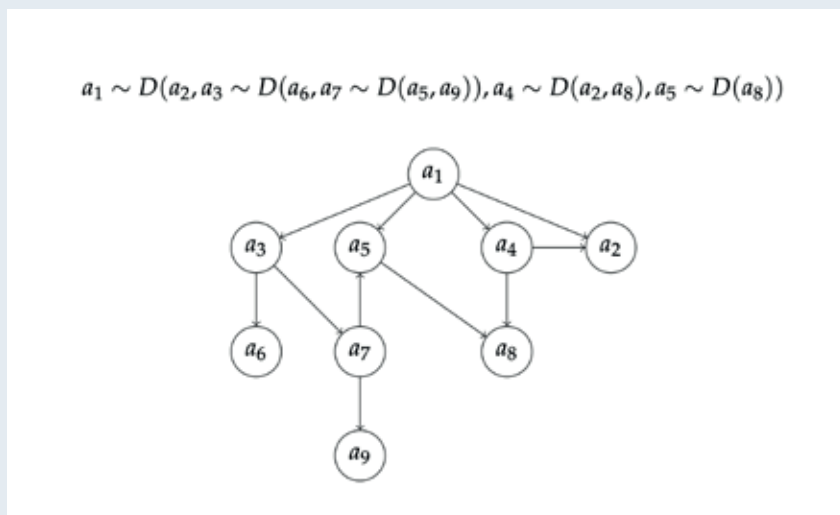


Fig. 2 Representation of a dependence relation by a graph.

Research Centre for Humanities

Head: Prof. Dr. Katja Mihurko Poniž

The Research Center for Humanities works in the fields of literary sciences, cultural history, women studies, visual culture, intercultural studies and digital humanities. The common basis of research areas and their research methodologies is the focus on exploring forms of complex living conditions and human creativity through a historical perspective. Research approaches complement each other - comparative research into literary media, for example, provides reflection on the complexity of interpersonal communication throughout history, while cultural history expands historical research into questions of modern and contemporary cultural practice.

In 2022, the Research Centre for the Humanities hired two new postdoctoral fellows to work in the fields of philosophy (Dr. Alenka Ambrož) and art history (Dr. Martina Caruso). In 2022, researchers from the Research Centre for the Humanities participated in several international conferences, published a number of scientific papers, and were active in various areas of scientific research.

Prof. Dr. Katja Mihurko Poniž, organised an international workshop entitled *Censoring Intimacy in Women's Writing and Reading in the Long 19th Century* as part of the project *Transformations of Intimacy in the Literary Discourse of Slovenian "Moderna"*. As Chair of the Scientific Council of the Women Writers Route, which was awarded the Council of Europe Certificate in 2022, she has participated in a number of promotional activities related to this project. She has also participated in documentaries about Slovenian women writers Zofka Kveder and Marica Nadlišek Bartol.



Associate Prof. Dr. Ana Toroš, gave a plenary lecture at the 2022 Slavic Congress and an invited lecture at the University of Krakow. She was a guest on the radio programme Images of Knowledge, RTV SLO (presentation of her scientific research) and on the programme Cultural Impressions on Radio Ognjišče (topic - Alojz Gradnik). She participated in the round table "Interlingual mediation: beyond the borders of my language and my world" and in the round table "Multilingualism and identity in the context of the cognitive science of language and literature".



Associate Prof. Dr. Peter Purg, gave a presentation at the European Commission's Joint Research Centre (JRC) Resonances IV Summer School on cross-sector collaboration and education in the intermedia arts. He presented a paper on New Media Strategies for Growing Up in the Anthropocene at the ISEA International Symposium on Electronic Arts in Barcelona. He gave a lecture-performance Body Borders in Arts at Chemnitz University as part of the project The Art of Bordering (ACROSS University Alliance).

Assistant Professor Kristina Pranjić, organised a panel on Ecological Crisis and Critique with other RCH researchers as part of the Rethinkable Festival. She presented her paper on New Media Art, Avant-Garde and Ecocriticism at EAM: Globalising the Avant-Garde, an international conference organised by MDRN at the University of Leuven. Her research and art work Taming

the Forest, a collaboration with Prof. Dr. Peter Purg and students of Humanities and Arts, was presented at the European Commission's Joint Research Centre (JRC) Summer School Resonances IV, Rethinkable Festival and Speculum Artium Festival of Intermedia Culture and Arts.

Assistant Prof. Dr. Eszter Polonyi, worked as an external curatorial consultant for the exhibition at the Museum of Modern Art ("Franc Ferjan and Stereophotography, December 2022-January 2023), published an essay in Slovenian and English in the exhibition catalogue, and conducted a filmed public tour at the Modern gallery and an interview about the exhibition for RTV SLO. She also joined the COST Action on the History of the Personal Document and was appointed to its board.

Assistant Dr. Ivana Zajc conducted as part of the virtual mobility of the COST Action Distant Reading for the European Literary History, under the supervision of Dr. Joanna Byszuk of the Institute of Polish Language at the Polish Academy of Sciences in Krakow, research with a computer-assisted stylistic analysis of about one hundred Slovenian novels using the Stylo package in R Studio. In August 2022, as part of the CEEPUS Summer School Women Writers in History, she gave a presentation on gender categories in digital humanities research entitled Intimacy: women writers and digital humanities.

Dr. Primož Mlačnik has presented his scholarly work in the field of cultural studies of literature at two international conferences at the University of Bamberg (*Captivating Criminalities*) and the University Ibn Zohr, Agadir, Morocco (*Immunity and Community*; online), at an international scholarly workshop in Ljubljana (*Censoring Intimacy in Women's Writing and Reading*), and on the scholarly panel at the Rethinkable Festival.



Assist. mag. Nikita Peresin Meden, together with the University of Primorska and the Goriška Museum, successfully developed the content of the "Museum of Freight and Transport in Senožeče: Rationale and Vision for the Restoration of the Toll House and Museum-Tourist Facilities" registered by the Municipality of Divača. Together with SAARC and the University of Udine, it organised the event Common Property as an Opportunity for the Future (October 21, 2022), which was held as part of the Rethinkable Festival.

Center for Cognitive Science of Language

Head: Prof. Dr. Rok Žaucer

Center for Cognitive Science of Language is an interdisciplinary research center of the University of Nova Gorica. Our core expertise is in formal generative linguistics, which we use as a foundation for engaging in other domains of language-related cognitive science – especially language processing, language acquisition, bilingualism and the relation between language and other cognitive abilities.

At the focus of our research are investigations of theoretically relevant syntactic and semantic/pragmatic aspects of different languages. We strengthen the reliability of our data and analysis assessments with the use of corpora, large judgment samples, and various behavioral experimental methods (e.g., sentence completion, reaction times, developmental tasks, eye tracking, ERPs).

The Center for Cognitive Science of Language group specializes in formal generative linguistics, especially syntax and semantics/pragmatics, and uses this as a foundation for engaging in other domains of language-related cognitive science – especially language processing, language acquisition and bilingualism.

Basic research in 2022:

Our main focus in 2022 was on research within six projects financed by the Slovenian Research Agency, two of which concluded and one of which just started in 2022. The first of the closing projects is 'Development of a standardized test of the sentence comprehension ability in Slovenian-speaking adults', in which we measured standard reactions in language comprehension under normal circumstances, on the basis of which we developed a tool to compare and understand language use in special circumstances, specifically, in i) language acquisition in children, ii) multilingualism, iii) ageing, iv) language disorders.

In the parallel project on 'Acquiring minority languages in a multilingual setting', we studied the nature of intergenerational transfer of Slovenian as a minority language in Italy, with the goal of developing a specialized tool for testing competence in Slovenian as a minority language.

In the second closing project of 2022, 'Hyerspacing the Verb: The interplay between prosody, morphology and semantics in the Western South Slavic verbal domain', we compiled and published, in collaboration with the University of Graz, Austria, the first version of a database with a complete morphological landscape of verbs and verbal derivatives in western South-Slavic languages.



In the project 'More than Agreement', which is a collaboration with the University of Geneva, we investigated the psycholinguistic aspects of syntactic feature assignment, whereas in 'Linguistic transfer in the pragmatic domain: Slovenian speakers in a multilingual environment' we studied negative transfer of pragmatic features in language acquisition in multilinguals; one of our approaches to this was through a contrastive investigation of the semantics/pragmatics of the plural number in languages with a singular-plural grammar and in languages with a singular-dual-plural grammar.

2022 also saw us start work on a new 3-year Slovenian Research Agency-funded project, 'The limits of freedom: A permutational approach to word order in South Slavic languages', in which we will be employing the methods of experi-

mental syntax to develop a new approach to the theory of word order.

Outside of research funded by the Slovenian Research Agency, we used brain-imaging to study word structure processing in Slovenian and Serbian within the multipartner 'SAVANT' project coordinated by Queen Mary University, UK, and we ran psycholinguistic experiments to study crosslinguistic patterns of grammatical agreement within the multipartner project 'Agreement Mismatches in Experimental Syntax: from Slavic to Bantu' coordinated by the University College London, UK. And in collaboration with the Technological university of Varna and the Varna Dolphinarium, Bulgaria, we worked on the design of a joint investigation of aspects of dolphin communication.



Applied research and outreach activities in 2022:

We collaborated in the multipartner project 'Development of Slovene in a Digital Environment', whose main goals include meeting the needs for products and services in the field of Slovenian language technologies. We started work on a new applied project whose goal is to set up a public web portal, SlovSTvo (<https://slovstvo.ung.si/>), with which the general public will get a tool for online self-assessment of the level of, and identification of the weaker parts of, one's knowledge of Slovenian, as well as an online Q-&-A service aimed specifically at in-depth, rather than quick-fix, language consulting about the structure and use of Slovenian.



And through our community platform *Večjezičnost velja* (<http://vecjezicnost.ung.si/>) we have reached out to the general public regarding issues surrounding bilingual children upbringing and about an adult life with more than one language.



Pedagogical Work

In 2022, the pedagogical work at the University of Nova Gorica was done within seven schools: School of Environmental Sciences, School of Engineering and Management, School of Science, School of Humanities, School for Viticulture and Enology, School of Arts, and Graduate School.



School of Environmental Sciences

Dean: Prof. Dr. Griša Močnik



Field work - students in Sarajevo, measuring air pollution and checking the online XRF instrument.

Study Programmes:

Bachelor's Study Programme Environment

Master's Study Programme Environment

School for Environmental Sciences educates in the field of research, preservation and management of the environment. The university study program Environment was modernized according to the Bologna Directives and changed into study programs Environment, 1st cycle, and Environment, 2nd cycle. The 1st and 2nd cycle programs received public accreditation with declaration of Directorate for Higher Education of Republic of Slovenia on 12 October 2007 and 15 February 2008, respectively. We are continuously modernizing the contents of both study programs. In 2017/18, we have introduced obligatory practical training for the 1st cycle students and substituted the diploma thesis with a diploma seminar. In 2018/19 we introduced courses on the climate emergency. In addition, we have introduced up-to-date contents among mandatory courses on the 2nd cycle.



Individual project work in the laboratories of the School for Environmental Science.

The study program Environment, 1st cycle is an undergraduate program resulting in a university degree. The program offers all important contents from natural sciences, and technical and social subjects related to environmental issues such as pollution of water, air and soil, environmental monitoring, waste management and environmental protection, management and economics. The basic goal of the program is to educate experts able to conduct work on research, technical and managerial fields related to the environment – this goes for different industrial sectors, regulatory and executive areas on national and local levels.

In 2022/23 school year we enrolled the sixteenth generation of students in the study program Environment, 1st cycle. Beside mandatory and selective courses the students participated in field trips, excursions and group projects to see waste landfills, experimental stations and institutes, industrial facilities, power plants and regional parks, and the students have carried out traffic counting to characterize one of the most important air pollution sources.

A uniqueness of our study program Environment 1st cycle is a course called Group project, which introduces modern approaches to education through project work. The emphasis is on solving practical problems related to environment and working in a multidisciplinary group. During 2022, students took part in several projects, within which they investigated topics from environment remediation, pollution monitoring and waste management. They also studied influence of the biological waste in agriculture. Results suggest that by regulating easily-variable parameters such as e.g. extraction time, pH and temperature, the extraction of specific elements for use in fertilizers with a safe impurity content may be possible through alkaline leaching, the most economically efficient extraction method currently available. Reducing the amount of by-product that needs to be transported to landfills would have a significant societal benefit, both due to the favorable environmental impact of reducing the amount of landfilled waste and reducing the carbon footprint of waste transport.

The study at the Environment, 2nd cycle takes four semesters to complete and is exceptionally interdisciplinary. It offers courses from all important fields of environmental sciences but also enables students to deepen their knowledge in their fields of interest by choosing from a large selection of the selective courses. On the 2nd cycle programme the project work is performed individually within a course Individual project. In 2022 five new students have enrolled in the master program.

School of Engineering and Management

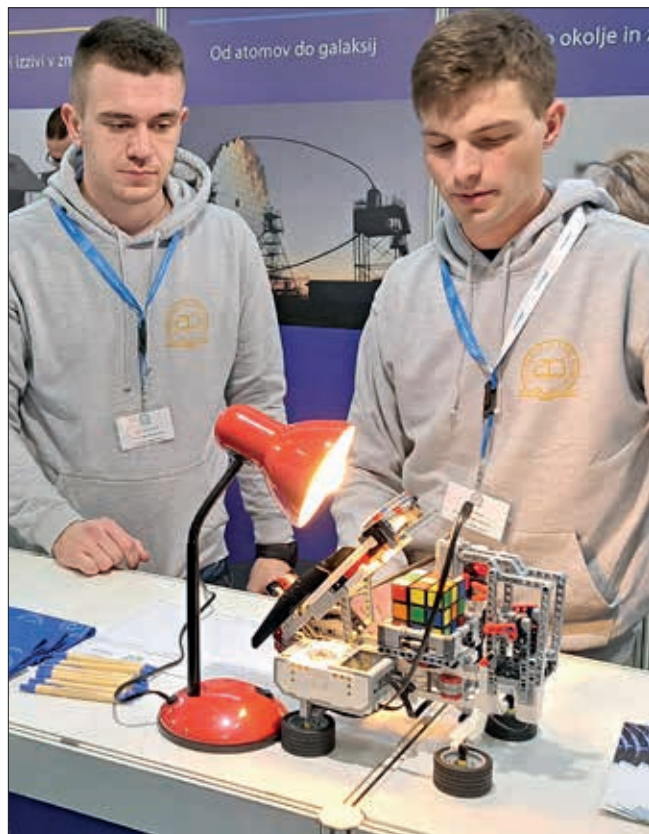
Dean: Prof. Dr. Tanja Urbančič

Study Programmes:

Bachelor's Study Programme Engineering and Management
Master's Study Programme Engineering and Management
Master's Study Programme Master in Leadership in Open Education

Bachelor's and Master's Programme of Engineering and Management are pursued at the School of Engineering and Management. Graduates have interdisciplinary knowledge of technology, economics and organisation. They are educated to identify and solve a broad spectrum of problems when supporting efficient and sustainable business and industry operation. Student projects and theses typically focus on concrete situations in companies, in various organisations or local communities. This is important to maintain good connections between the school and its environment, contributing to the very high employability rate of its graduates. From the year 2020, the school offers also an international Master's study program, entitled Leadership in Open Education.

109 students were enrolled to the School of Engineering and Management in academic year 2021/2022, out of which 65 to the Bachelor's programme and 44 to the Master's programmes. The sixteenth generation was enrolled to the Bachelor's study programme Engineering and Management, the seventeenth generation to the Master's programme Engineering and Management, and the third generation to the Master's program Leadership in Open Education in 2022.

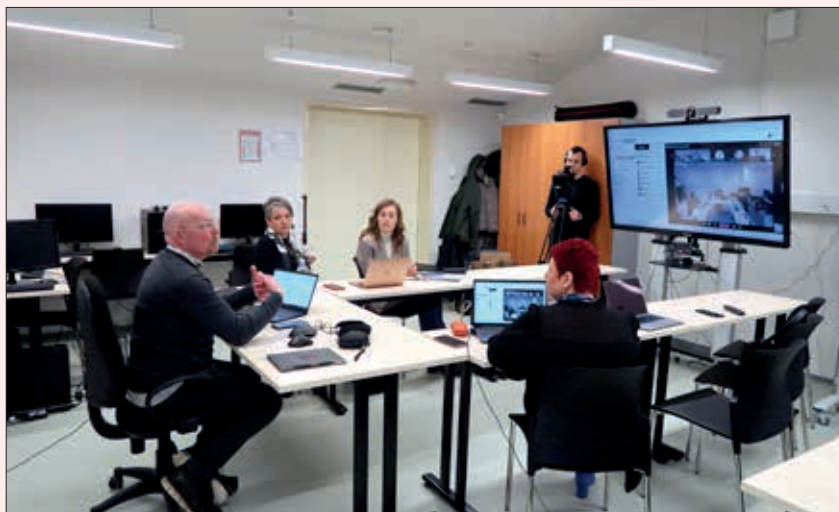


A robot that assembles a Rubik's cube enriches tutorials for students as well as promotional events.

With the end of the measures due to the coronavirus, the study process of both Engineering and Management programmes returned to the lecture halls at the school location in the Lanthieri mansion in Vipava. The programme was implemented in accordance with the specifications. Elective courses are offered in two-year cycles. In 2022, the elective courses at the Bachelor's programme (first semester of the 2022/23 academic year) were the following: *Human Resource Management, Information Security and English*. At the Master's level, elective courses in 2022 (second semester of the 2021/22 academic year) were *Open Source Information Systems, Robotics, Optimization of Resources and Processes, Business English, Internet of Things and Advanced Materials* at the Engineering and Management programme, and *Mobile Technologies and Microlearning, Open Education and Society, Production of Educational Materials and Workshop for Open Educational Practitioners* at the Leadership in Open Education programme

The School of Engineering and Management is very active in the development and introduction of new pedagogical methods and information technology support into the study process, aiming at increased accessibility and quality of studies by introducing elements of digitalization and open education, supporting student-centered approaches and active participation of students in the study process.

19 students successfully finished their studies at the School of Engineering and Management in year 2022. Out of them, 7 graduates come from the Bachelor's programme Engineering and Management, and 12 from the Master's programme Engineering and Management. Cumulative number of the graduates of this school increased to 624 at the end of the year 2022. Their broad profile ensures an excellent employability rate. From all graduates of the School of Engineering and Management that finished their studies between January 2018 and November 2022, 91.89% are employed or continue their studies within 12 months from their graduation. For graduates of the Master's study programme Engineering and Management this share is even higher as 93.10% of graduates of this programme are employed in the year after graduation. Students are involved in project work to acquire additional competences that contribute to a high employability. We spread information among employers with



Also in study processes supported by modern technology, direct communication between students and lecturers comes first.



Students of engineering and management develop also skills that they will need as future leaders and members of work teams.

a round table where graduates presented their professional profile and working experience. High employability is also obtained by maintaining good cooperation with companies, mainly through student internships. In the year 2022, internships were enabled by the companies Mahle Electric Drives Slovenija d.o.o., Kolektor Etra d.o.o., OC IMP Klima d.o.o., Home Systems d.o.o., B.Makovec transport d.o.o., Interenergo d.o.o., Led Luks d.o.o. and Fimago Finančno svetovanje in marketing d.o.o.

International cooperation has started to grow again after the pandemics. We were active in the Erasmus+ programme. With a donation

of the William & Flora Hewlett Foundation we covered the tuition fee for 17 international students of the Leadership in Open Education Master's study programme, 9 of them for the first year and 8 for the second year of their studies, respectively. In the international mentoring program Open Education for a Better World, which we developed and implemented together with the UNESCO chair on open technologies for open educational resources and open learning at the Jožef Stefan Institute, 62 developers of open education participated in 2022. They were guided by 65 experts that decided to contribute to the programme as volunteering mentors.

School of Science

Dean: Prof. Dr. Sandra Gardonio



At the School of Science students are from Slovenia and all around the world.

Study Programmes:

Bachelor's Study Programme Physics and astrophysics

Master's Study Programme Physics and astrophysics

Master's Study Programme Materials Science

The School of Science is a hub of students, researchers, assistants and professors from Slovenia and all around the world. United by common passions, that range from atoms, molecules, materials, devices, to the understanding of our atmosphere, the stars, galaxies and the Universe as a whole. The School of Science offers research-oriented BSc, MSc degrees, supported by our labs and research centers. Furthermore, students have the unique possibility to remotely perform astronomical observations with the GoChile telescope located under the dark sky of Chile. At the UNG Graduate School, there is the possibility to continue to doctoral studies in the field of Astrophysics, Physics or Materials Science.

The aim of the bachelor program "Physics and astrophysics" is to provide general theoretical and experimental knowledge in a broad spectrum of physics fields, required for research work, and to gradually involve the students in actual research in senior years.

Lectures are given in small groups, exploiting the possibility of international exchange through the ERASMUS+ and other programs. Students have the possibility to transfer ECTS credit points between same level programs at the University of Nova Gorica and other universities accredited in the EU.

In their first year students take elementary courses in mathematics and physics as well as a course on experimental methods, which is needed for student laboratories. In the second and third year, the courses increasingly focus on specific core study areas, and are complemented by research work. These lectures are as a rule implemented in concentrated, two months long courses.

As seniors, students have the opportunity to become involved in actual research in state-of-the-art research laboratories and centers of the UNG. They conclude their studies with a diploma seminar.

The aim of master program “Physics and astrophysics” is to provide detailed knowledge in the fields of a) astrophysics or b) solid state physics, which are selectable as modules. An essential aspect of the studies are research activities in the supporting research laboratories and centers of the University of Nova Gorica (Center for Astrophysics and Cosmology, Center for Atmospheric Research, Laboratory of Organic Matter Physics, Materials Research Laboratory and Laboratory for Quantum Optics). Research in state-of-the-art laboratories and centers forms the basis for student’s master theses, which are often related to research within international collaborations and observatories, such as Pierre Auger, Cherenkov Telescope Array, Elettra light source, and published in international scientific journals. We believe that working experience in international environment and with state-of-the-art technologies increases the competitiveness of our graduates in their further careers.

Master program “Materials Science” is based on research excellence of the University of Nova Gorica in the fields of physics and chemistry of materials, materials characterization, as well as materials technologies and development of innovative products and services.

The emphasis of the program is on acquiring practical skills in the synthesis of advanced materials and their characterization (hands-on training). More than a half of student activities within compulsory courses are reserved for laboratory work and seminar exercises, and a range of elective courses will be provided to allow in-depth studies in selected fields of materials science.

Small number of students will allow them to obtain specific hands-on experience on the most advanced instruments for materials characterization available for research. In all courses a strong emphasis will be given to skills such as communication, self-confidence, awareness and team-work abilities. Students will be able to gain practical knowledge and skills in synthesis and characterization of the state-of-the-art materials and will also actively participate in actual ongoing research projects at research laboratories of the University of Nova Gorica and its partner institutions, the National Institute of Chemistry and the Jožef Stefan Institute.



At the School of Science students have the opportunity to become involved in actual research in state-of-the-art research laboratories and centers of the of the University of Nova Gorica and its partner institutions, the National Institute of Chemistry and the Jožef Stefan Institute.



At the School of Science students have the unique possibility to remotely perform astronomical observations with the GoChile telescope located under the dark sky of Chile.

School of Humanities

Dean: Prof. Dr. Peter Purg



Conference gathering.

Study Programmes:

Bachelor's Study Programme Slovene Studies

Bachelor's Study Programme Cultural history

Master's Study Programme Humanities studies

European Master in Migration and Intercultural Relations (Erasmus Mundus)

The School of Humanities of the University of Nova Gorica aims to enrich the Goriška region, the Slovenian and international space with new humanistic knowledge and insights and thus contribute to connecting the academic and social spheres. Our study programmes feature high scientific, professional and pedagogical qualities; we educate our students for their further university education and for research as well as professional work in Slovenia and abroad.

The study programme in Slovene studies (first and second degree programmes) develops contemporary competences within the field of literary studies and linguistics; Cultural history (first degree programme) has an interdisciplinary perspective, while Migrations and intercultural relations (second degree programme) is a study programme which indeed „thinks beyond“ as our motto goes. This is rounded up by the offers of the three masters programmes of the Humanities studies: Linguistics, Literary studies, and *History and culture of cross-border spaces*.

The School of Humanities offers undergraduate and postgraduate study programmes. At the undergraduate level, there are two study programmes in Slovene studies and Cultural history. The study programme in **Slovene studies** at the University of Nova Gorica upgrades the traditional Slovene studies division of linguistic and literary contents by introducing the core and elective subjects in the fields of general linguistics and literary theory as well as performative arts



Humanities Studies.

and cultural history; after the recent study programmes reform, it includes traditional non-Slovene studies contents as well, such as film, visual culture and the new field of digital humanities. The study programme in **Cultural history** offers to students an in-depth knowledge of social-political and cultural processes which shaped the historical image of Europe from antiquity, the Middle Ages, modern and post-modern times. A special emphasis is given to an interdisciplinary connection with the related disciplines (anthropology, ethnology, sociology, cultural studies) and the peculiarities of the cultural-political environment in which the programme was made, that is, the border position of the northern Primorska region and its development within the tides of history. Within the recent study programmes update, an emphasis was given to the study contents in the fields of cultural studies and multiculturalism, memory, heritage, migrations and tourism, as well as the processes and interpretations of the past which are linked to them.

The now expiring masters study programme in **Slovene studies** offers knowledge in the fields of Slovene language and Slovene literature; it also offers the foundations of literary studies, linguistic theories and methodology. In 2020 the study course in Linguistics was upgraded with an agreement between the University of Nova Gorica and Ca' Foscari University in Venice, offering students an opportunity to obtain **a double degree**.

In 2022 we thoroughly reformed the masters study programme which is now named **Humanities studies**; it comprises three study courses: **Literary studies, Linguistics and Histories and cultures of cross-border spaces**. Within the courses, the obligatory subjects offer the foundational theoretical knowledge of the mentioned disciplines, while the joint elective subjects offer the opportunity of interdisciplinary connections and additions. The key aim of the new study course in *Histories and cultures of cross-border spaces* is to educate professionals who will have a

comprehensive insight into the cultural-historical themes of the border regions, with an emphasis on the scientific approach to research, planning, reflection and use of cultural practices based on interdisciplinary connections and multiple understandings of relevant discourses.

The masters study programme in Migrations and intercultural relations is an international programme focused on human rights, democratic values, social state and labour market, and the challenges with which the European Union members and the global world are faced. We carry out the study programme with the support of Erasmus Mundus, an elite programme for international cooperation and exchange of students and professors in the field of higher education; at the end of 2021, the programme was given a renewed financial support from the European Commission for the next five years. The professional title of the graduated student is MA in Migration and intercultural relations. The study programme is carried out at several European universities and is taught in English.

Upon graduation, students have an opportunity to continue their studies at the doctoral programmes of the University of Nova Gorica. Within the Graduate School of the University of Nova Gorica, students can choose between two study programmes in the field of humanities (third degree): **Cognitive sciences of language** and **Humanities with the modules Literary studies, History and Migration and intercultural relations**. At the same time, the School of Humanities offers **lectorates** in a number of languages, foreign and Slovene, the latter being adapted to the students who would like to learn Slovene.

Humanistika
Hangout.



Graduates round
table.



School for Viticulture and Enology

Dean: Prof. Dr. Branka Mozetič Vodopivec

Study Programmes:

**Bachelor's Study Programme
Viticulture and Enology**
**Master's Study Programme
Viticulture and Enology**

The School of Viticulture and Enology offers practically oriented study programs that combine the contents of viticulture, enology and wine marketing. We have been running the 1st Cycle program Viticulture and Oenology (BASC) since 2005/2006 and the 2nd Cycle Master's program (MSc) from 2019/2020. The programs are modeled on similar programs in Italy, France, and Australia and follow the OIV recommendations for the training of oenologists. Lecturers are top experts in the field with a wide range of practical and research experience. Students can enhance their theoretical knowledge with practical knowledge within the University Estate and by working with renowned winemakers in the local and wider area, and are also involved in current research activities at the University Wine research centre.



Fermentation experiment on the laboratory scale.

The School for Viticulture and Enology runs a 1st and 2nd Cycle programs Viticulture and Enology. Since the beginning of the academic year 2021/22, all teaching activities have taken place at the Vipava site, and we have been able to carry out all activities without any problems or delays, despite the ongoing COVID-19 outbreak. Absences of professors and students due to quarantines and isolations were well overcome with the help of the university MiTeam learning platform, which is well integrated into both the administrative and the teaching parts of the School.

We have hosted a number of interesting lecturers live, remotely, and hybrid, sometimes with live wine tastings running concurrently. A Slovenian oenologist working abroad, Mrs. Neza Skrt, gave our students a very interesting live and remote lecture, with a tasting of sparkling wines and fortified Porto and Sherry wines, respectively. At the end of May 2022, we hosted Dr. Sophie Tempere, a professor of wine sensory at ISVV (University of Bordeaux, France) as part of the project Internationalisation of Study Programs. Dr. Anne Pelegrino, a professor of viticulture at Montpellier SupAgro (France) and Mr. Andrea Gori an Italian journalist, publicist, and e-commerce specialist through the Development Pillar of the Ministry for Science and Education.



Wine tasting with students in the covid time.

In the new fermentation laboratory we have started the production of a trial wine which will be the basis for the future University's sparkling wine. We upgraded the laboratory facilities with modern equipment for the determination of alcohol and volatile acids in wines and spirits.

Students at both levels were involved in research projects and organized knowledge transfers at the Wine Research Centre. For example, the Veleučilišče Požega professors presented Graševina wines and Croatian Slavonia as a wine region, and Dr. Ingun Ovsthus presented cider production from Norway. And we involved the 3rd year students in the training of Dr. Rajko Vidrih from the Faculty of Biotechnics (University of Ljubljana) in the field of wine and fruit spirit-making for the producers.

The lecture rooms, laboratories, and sensory classroom capacity are complemented by a 1.2-ha wine-growing training ground on the university estate in Manče and more than 40 practical training partners. Students were regularly involved in real local promotional events, such as the Tastes of Vipava Valley festival, Zelen wine Festival, and Open Kitchen event in Vipava, where they presented our wines, the School and the University while gaining important practical experience and integrating the School with the local environment.



Soil analysis in laboratory exercises with students.

Students of the 1st and 2nd year of the 1st Cycle program prepared a market analysis and a proposal for improvements in the promotion and marketing of wine to Vinag cellar in the course Fundamentals of marketing and presented their results to the company's director as well.

We had a number of foreign and local experts from the industry and research institutions as guests. The students visited various wineries and estates around Slovenia. School colleagues organized various knowledge transfer events (Blau Frankish Conference, Special properties of Zelen wine workshop at the Tastes of Vipava Valley Festival, and a lecture about Terroir and wine at the AGRA 2022 Fair).

The students of the 2020/21 Student Wine Festival (held remotely with the preparation of video promo material), presented the wines of their project assignments to their younger colleagues through school tastings at the beginning of the 2021/22 academic year. At the end of the lectures in May 2022, we were finally able to hold the traditional Student Wine Festival, this year open only to university staff.

In 2022, the final reaccreditation of the faculty took place through the UNG reaccreditation process, in which the evaluators also assessed in more detail the implementation of our 1st Cycle program Viticulture and enology and gave us guidelines for the improvement of the quality assurance system at the faculty, which we have to implement by the next reaccreditation, in less than 3 years.

School of Arts

Dean: Prof. Boštjan Potokar



With the exhibition *Time, Space, Me, Us.*, curated and mentored by prof. Rene Rusjan we were invited to the International Festival of Art, Technology and Society Ars Electronica, which this year was held under the theme *Welcome to Planet B.*

Study Programmes:

Bachelor's Study Programme Digital Arts and Practices

Master's Study Programme Media Arts and Practices

The School of Arts has been educating in the field of arts since 2008 within the University. It began as a BA school and in seven years developed into a fully accredited Academy. This is the first university level academy in Slovenia in 71 years. In English it retains the naming as the *School of Arts*. In 2022 the School received concession (state funding) for implementing the bachelor's professional degree programme in Digital Arts and Practices. Together with the master's degree programme in Media Arts and Practices the studies cover the following fields:

- Animation (*animated film, animation in creative industries*)
- Videofilm (*fiction, documentary, experimental film, art video*)
- Photography (*author, functional*)
- New Media (*creative use of new technologies*) Contemporary Art Practices (*combining different media*)
- Scenographic Spaces (*film, theatre scenography*)
- Art-Science-Technology (*connecting diverse fields*)

After 2008, when we prepared the first study programme in the field of arts, the school saw a gradual but firm development into an art academy:

The Programme structure at the UNG School of Arts enables combining media and fields thereby opening a range of professional pathways, from becoming an author to developing a distinct professional identity. In 2009 we opened the Bachelor's programme in Digital Arts and Practices. Our MA programme was developed within ADRIART, an EU supported project, together with partners from Croatia, Austria and Italy. As leading partner of the ADRIART project at the UNG School of Arts we were in 2012/13 able to offer our BA graduates a continuing of education - the MA programme - Media Arts and Practices, with a pilot run in that year and a full launch the following year. Since several years we are thus able to conduct the whole vertical of education in the field of arts, which is possible in Slovenia.

In the 2022/23 study year 64 students are immatriculated at the UNG School of Arts. The most significant development with the 2022/23 study year marks the beginning of state concession of the first cycle programme Digital Arts and Practices. The MA level is distinctly international as the majority of the students are foreigners. Several are from EU countries while some come from more distant parts of the world. In the premises in Rožna Dolina we have started the renovation of additional spaces, which will be solely dedicated to the specific uses of the academy, i.e. a film/photo studio, a screening room, a technical room. Last year we have been able to acquire some of the much needed equipment for film, animation and photography production and postproduction. Students thus now have a contemporary studio

environment where they can work throughout the day.

In addition to individual careers of mentors and other UNG School of Arts collaborators, all of whom are nationally and internationally renowned artists, a lot of energy is invested in cooperations with various festivals and other ways of presenting student work.

Similarly to previous years we took part with student works in diverse festivals and exhibitions, which happened now again mostly face to face.

- At the **25th edition of the Festival of Slovenian Film** we took part with eleven student films (four in the student competition and seven in the panorama section).
- **Ars Electronica 2022** - Festival for Art, Technology & Society, Linz, Austria. We participated for the second year. This year the festival took place face to face. The title of the whole UNG AU installation was **»Time, Space, Me, Us.«** We presented eight student projects:
 - **»About Time«**, Ivana Kalc, mentor: prof. Jasna Hribernik; **»E«**, Maria Eugenia Cardenal, Tamara Kirina, Vanda Ljumović, Klára Vítková, mentor: Valerie Wolf Gang; **»Tell Me, I'm Listening«**, Anđelina Petrović, Lazar Mihajlović, mentors: prof. Peter Purg, PhD, Lavoslava Benčić; **»Home«**, Vasily Kuzmich, mentor: prof. Rene Rusjan
 - four video works entitled **»When Art Meets Science«**, mentor Jasna Hribernik; **»Pond«**, Tijana Mijušković, Jelena Cambj, Maksimilian Zabukovec, Wadha Amoor; **»The River«**, Klára Vítková, Tamara Kirina, Roman Paxyutkin, Vanda Ljumović, Filip Sluga, Karin Likar, in cooperation with the Faculty of Environment of UNG; **»GoChile«**, Domen Sajovic, Ana Logar, Milena Brkić, Melita Sandrin, Matevž Jelenc, Arta Kroni, Tamara Taskova, in collaboration with the Faculty of Physics and Astrophysics of UNG; **»We Love Light (Sustainability at Intra Lighting)«**, Luka Mavrič, Renee Stanič, Kristian Petrovič, Martin Lozej, Una Savič, Matej Rimanič, in collaboration with Intra Lighting company.
- **DSAF Slove Animated Film Association** awarded students for finished films and projects in development. This year our students received:
 - **Domen Sajovic**, graduation animated



Filming of a short film with actor Jan Kopušar from SNG Nova Gorica, made under the mentorship of doc. Boštjan Vrhovec and doc. Martin Turk.



Student films at the First Flights/ First Crossings festival, organised by Kinoatelje in Nova Gorica and Gorizia.

- film **»Salamander«** - DSAF Award for Animated Student Project in Development 2022
- **Miha Reja**, graduation animated film **»Kurent«** - DSAF Special Mention for completed animated student film 2022
- At the **Isola Cinema Festival** we presented an exhibition of students' works; several student films were also accepted into the Video on the Beach programme section.
- **Tribute to a Vision Festival**, Nova Gorica/ Gorica – exhibitor, presentation of the school and screening of films within the selected programme **First Crossings/Prvi poleti**
 - **Miha Reja**, graduation animated film **»Kurent«** – Best Short of the First Crossings/Prvi poleti programme
- At the **International Festival of New Media Speculum Artium** Festival in Trbovlje our films formed one slot within the DigitalBigScreen programme.
- At the **International Computer Art Festival MFRU** in Maribor, our first degree graduate and now Master's student Vasily Kuzmich had a solo exhibition **»Tvoj dom / Your Home«**, as a result of last year's first prize within the student section.
- At the **Animateka 2022 International Festival of Animated Film** in Ljubljana University of Nova Gorica has, together with University of Ljubljana, sponsored the **»Young Talent Award«** for the best European student film.
 - Two films of our students were selected for the Young Talent European Student Competition Programme and two were shown within the Panorama section.
 - Our student **Miha Reja** was awarded with a Special Mention in this section for his film **»Kurent«**
 - Four of our students' films were selected for the festival programme, two in competition and two in panorama.
- **Animakom International Animation Festival 2022**, Bilbao
 - **Miha Reja**, graduation animation **»Kurent«** - Innovation Award at the First Summer Animakom 2022

We believe our most important showcase are our students and graduates – their products are valued high enough by professionals to represent Slovenia at diverse exhibitions, festivals and selections around the globe.

Graduate School

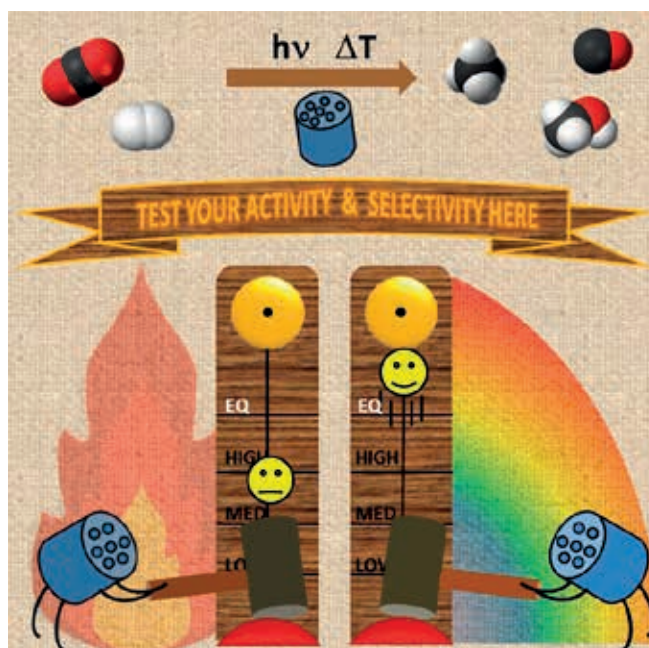
Dean: Prof. Dr. Iztok Arčon

Study Programmes:

Doctoral Study Programme Environmental Sciences
Doctoral Study Programme Karstology
Doctoral Study Programme Physics
Doctoral Study Programme Materials
Doctoral Study Programme Humanities
Doctoral Study Programme Cultural Heritage Studies
Doctoral Study Programme Molecular Genetics and Biotechnology
Doctoral Study Programme Cognitive Science of Language

Graduate School at the University of Nova Gorica (UNG) hosts and carries out all doctoral study programmes (third level), regardless of their scientific discipline. All study programmes are internationally orientated and closely linked to UNG's research laboratories and centres, and to other research institutions in Slovenia and abroad, which enables graduate students to conduct their research work required by their studies and to participate in international research activities and projects.

Graduate School at UNG hosts and carries out all doctoral study programmes, regardless of their scientific discipline. The range is very wide, covering fields from science and technology to the humanities and interdisciplinary sciences. Such a closely connected and homogeneous organization of graduate school proved to be very effective, enabling high effectiveness and interdisciplinarity in designing individual doctoral study programmes.



Research on the use of solar energy for activity of materials as photocatalysts.

In the academic year 2021/2022 there were a total of 52 student enrolled in eight doctoral programs. All study programmes are internationally oriented and closely linked to UNG's research units, and to other research institutions in Slovenia and abroad, where graduate students can conduct their research work and can participate in international research projects. Among many external partners we should point out those with which we have established long term collaborations. The programme *Karstology* is carried out in close association with the Karst Research Institute of the Centre of the Slovenian Academy of Sciences and Arts. The links between the two institutions were further strengthened in 2014 with the establishment of the UNESCO Chair on Karst Education at UNG. Doctoral programme *Cultural heritage Studies* is implemented in close cooperation with Università IUAV di Venezia, and offers a possibility of double doctoral diplo-

Sampling of underground fauna along the Soča river.



ma, and a one-year specialization (second-level Master). Doctoral programme *Molecular Genetics and Biotechnology* is carried out in collaboration with the International Centre for Genetic Engineering and Biotechnology (ICGEB) from Trieste, Italy. The doctoral program Materials was prepared and is carried out in close collaboration with National Institute of Chemistry.

An important strategic orientation of Graduate School is the internationalization of doctoral studies. This is reflected in the high share of enrolled foreign students (multi-year average is over 60%). Number of international student exchanges and number of visiting professors and mentors from foreign universities and research institutions is also very high. The committee for the assessment of doctoral dissertation always includes at least two members from foreign uni-

versities to assure that the quality of doctoral degrees is comparable to international standards.

All programmes are conducted successfully, in a high-quality manner and effectively, which is visible in the success of students in their studies and individual research work. The quality of graduate studies is reflected in successful defences of high-quality doctoral theses, and in numerous publications of student research results in reputable international scientific journals. In the academic year of 2021/2022 students published 56 scientific and professional articles, 126 contributions at international scientific conferences, and 17 other scientific publications. In this year 9 students finished their doctoral studies. The quality of the content, implementation and organization of the doctoral programs was recognized by

the international experts of NAKVIS during the external evaluations of two doctoral programs (Karstology, Environmental Sciences), which took place in May 2022.

We continuously improve and upgrade the content and quality of the execution of all our doctoral programs, to guarantee the quality and topicality of the programs and teaching methods, and to provide doctoral students necessary up-to-date knowledge and skills for solving new challenges in science. In the 2021/2022 academic year, we thus updated the common Study Rules for doctoral study programs at Graduate School and renewed the procedures for monitoring and improving the quality of doctoral study programs and self-evaluation procedures, considering also the suggestions for improvements given by the international experts.

Implementation of doctoral study programmes is financed through tuition fees. Premises and equipment for the implementation of graduate study programmes are adequate. Director with Scientific Board of the programme is the expert head of an individual programme.



Research work in cell laboratory.



MAJLITTA

FAKULTETA ZA ZNANOSTI O DRUGI

FAKULTETA ZA HUMANISTIKO

AKADEMIRA UMETNOSTI

Other Activities

For the researchers, students, and general public, all the professional (research) and study literature is available at the very modern *University Library*, while the *Publisher of UNG* is in charge of the publication of text books, lecture notes, collections of scientific papers and other works. The university also has a *Student Office* that helps both undergraduate and graduate students, as well as all those interested in obtaining information about the study at the UNG. The *International and Project Office* is there for coordinating international projects and gives administrative support for carrying out international projects. Apart from that, the University of Nova Gorica also has a *Career Center* that creates a link between the university, the students and potential employers. Lastly, there the *Alumni Club* that joins alumni from all generations of graduates, of both graduate and undergraduate programs. It basically connects all individuals who have contributed in any way to the development of the University of Nova Gorica.



University Library

Head: Vanesa Valentinčič Murovec



University library of University of Nova Gorica is open to all students and staff, as well as to all other visitors who are interested in the material offered by the library. We collect material from all areas of science, mostly for educational and research activities of UNG.

Library collection includes about 24.370 book titles, 50 titles of periodicals, 680 items of non-book material and e-edition of scientific journals, reachable over services like Science-Direct, Springer-Nature, APS Journals, EIFL Direct-databases EBSCOhost, ACS Publications, JSTOR, CREDO online, ProQuest Dissertation & Theses Global, "Window of Shanghai" e-book service, IOPscience in Taylor & Francis – Science & Technology, Web of Science, MathSciNet, ORP-index.

Library collection is almost completely open access and organized by UDC classification. We offer on-line searches from databases and through interlibrary loan we provide material that is not in our collection. We provide bibliographic service for our researchers and other institutions. The library is full member of the Slovene library co-operative online bibliographic system & service, COBISS. Through our website we offer e-learning of search skills. We also provide information literacy courses. The library is open 48 hours per week. Users can use a reading room with 50 reading places, 5 computers in the computer room and there is option to connect to Wi-Fi their own devices for easier access to electronic material, archives and databases. Students from the dislocated faculties can use library loan by the courier service. Repository of the University of Nova Gorica (RUNG) is one of the Open Science Slovenia portal's "openaccess.si" partners. In 2022 the university as well as library websites were completely renovated. Besides the layout and content renewal we also added the new section "Study literature". An extensive work was made in cooperation with the faculties, which will continue in the future.

We've updated lists of basic study literature for all courses for all study programs. Where possible links to the catalog and e-version of the references were added. As a result of updating study literature lists the purchase of study material in printed form increased significantly in 2022.

According with the legislation we carried out a complete inventory of the material. All monographic publications and non-book material were included in the inventory. The results of the inventory are good, as the shortage amounts to 0.06% of the total stock. After the inventory, we wrote-off missing, outdated and less borrowed material as well as material that was damaged due to moisture.

We established the personal collection of the honorary rector, prof. dr. Danilo Zavrtanik.

An update of the UNG repository was provided this year.

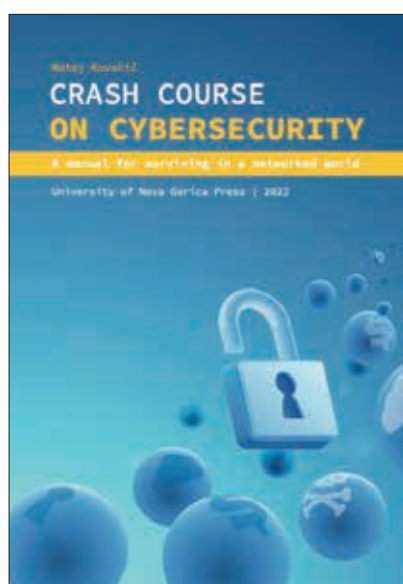
We wrote off all five outdated computers in the computer room and replaced them with three modern ones. We noticed that most users use their own electronic devices in the library premises so there is no need for a larger number of computers.

Due to waterlogging, urgent maintenance work took place in the reading room and the computer room. Although they functioned on a reduced scale, we successfully provided training and information literacy courses for students of several faculties.

Our employees participated in several trainings in the field of librarianship.

Publisher of UNG

Head: Mirjana Frelih

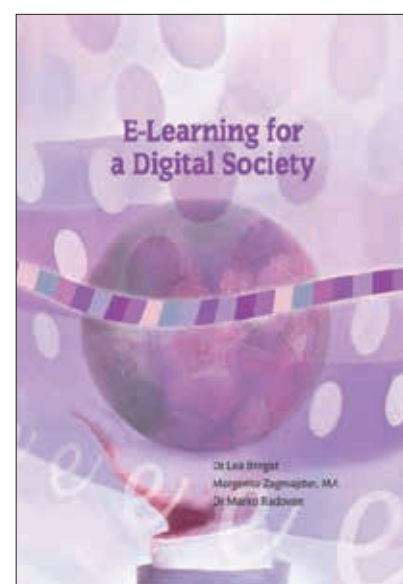


University of Nova Gorica started its publishing activity in 2001. We publish textbooks and study material for the academic courses available at our institution, as well as research and scientific works. Publishing is regulated by the Rules of publishing activities, for quality is responsible Commission for publishing.

So far, we have published 58 publications. Among them there are teaching material with instructions for exercises for undergraduate students of the University of Nova Gorica, university textbooks for students and professors, conference proceedings, scientific and other monographs.



In 2022 we published literary work »Ljubeezen v pismih: dopisovanje med Felicito Koglot in Francem Pericem: Aleksandrija-Bilje, 1921-1931«. The scientific monograph »University of Nova Gorica and the Slovenian academic community« by Željko Oset was also published in an English translation. The print edition of the book was published with the support of the Slovenian Research Agency.



The scientific monograph »Crash course on cybersecurity: a manual for surviving in a networked world« by Matej Kovačič was published in electronic edition under a Creative Commons license. The monograph is also used as a textbook in the Bachelor's degree programme Engineering and Management and in the Master's degree programme Leadership in Open Education. In the same way, we also published the scientific monograph »E-Learning for a Digital Society« by Lea Bregar, Margerita Zgajmajster and Marko Radovan in an English translation.

Student Office

Head: Renata Kop

The Student Office of the University of Nova Gorica was founded in the year 2002 and serves both undergraduate and postgraduate students as well as those interested in information about the studies at our institution. The objective of the Student Office is to support the students and the candidates for study in academic and extracurricular activities. The Student Office has offices available in Nova Gorica and Vipava. Part of the Student Office is also Higher Education Application-Information Service, which was founded in the year 2007.

The tasks of the student office are study counseling (application process and application deadlines); administrative processing of applications (review of applications, informing candidates about missing documents and deadlines for submission, keeping records); managing candidates from application to enrollment (evidence, notification, notification and selection decisions, invitations to enroll, first enrollment of candidates); education recognition process (review of applications, collection of evidence, information, advice, formal and substantive assessment of applications, preparation of decisions, decision-making, record keeping); enrollment of students (organization and management of enrollment: enrollment in the higher year, repetition of the year, data entry, preparation of data for other university services); issuance of certificates (issuance of acceptance, enrollment, evaluation certificates, etc.); entry of grades (exams, diplomas); assistance and advice to Student Committee (if necessary); other counseling (accommodation, transport, food, health insurance, bank, tax number); organization of systematic medical examinations; assistance, guidance and advice in the process of obtaining a residence permit (foreigners); management of student records and archives; cooperation in the preparation of university regulations, preparation of diploma documents (preparation of diploma and diploma supplement, printing of diploma supplement, procurement of diploma documents and folders, assistance in legalization of documents, record keeping); regulating the legalization of diplomas; organization of the preparation of the tender for enrollment and submission of the tender to MIZS; entry of the tender (registration deadlines, vacancies, etc.) into eVŠ; cooperation in the preparation of the schedule and common provisions (concessional undergraduate programs); members of the VPIS Coordination; preparation of analyzes and statistical data on students, graduates, applications, enrollment and study programs for the needs of faculties, universities, ministries and others - as necessary; editing the website in the field of application, tender, enrollment, extracurricular activities, price list; management of the student dormitory (rooms in the Lanthieri Mansion): preparation of the invitation for admission and residence, preparation of contracts, installation, check-in and check-out of the residence and record keeping, control over defects, defects, order and cleaning; coordination of private accommodation offers.

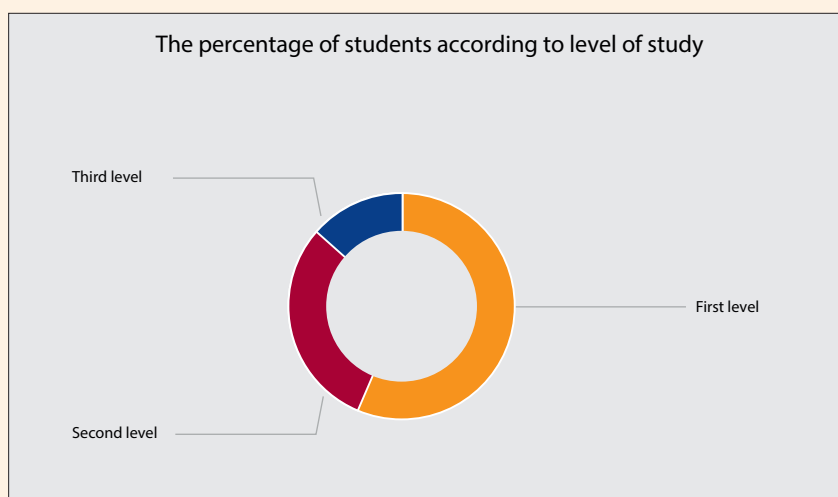
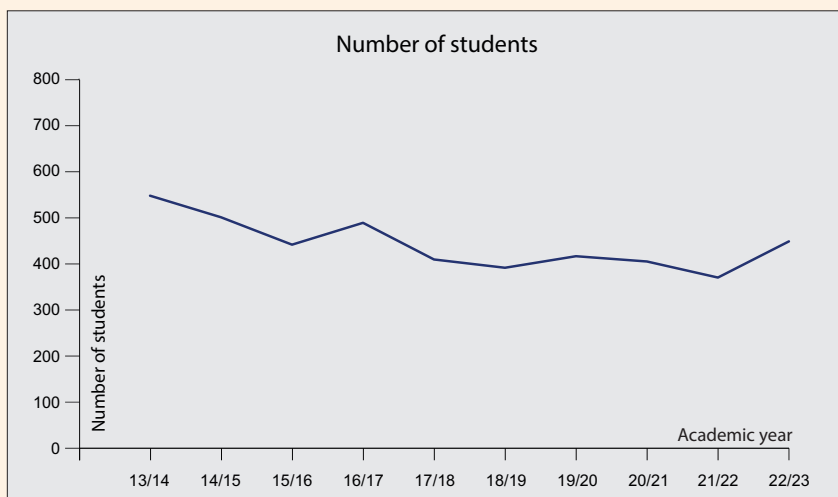
Education and training in 2021 and 2022:

- consultations, seminars, trainings in the field of enrollment services
- legislation and good practices in the field of recognition of education
- legislation in the field of obtaining residence permits for foreigners
- education organized by the Ministry of Education, Science and Sport and ENIC-NARIC
- legislation in the field of higher education
- intercultural competences.

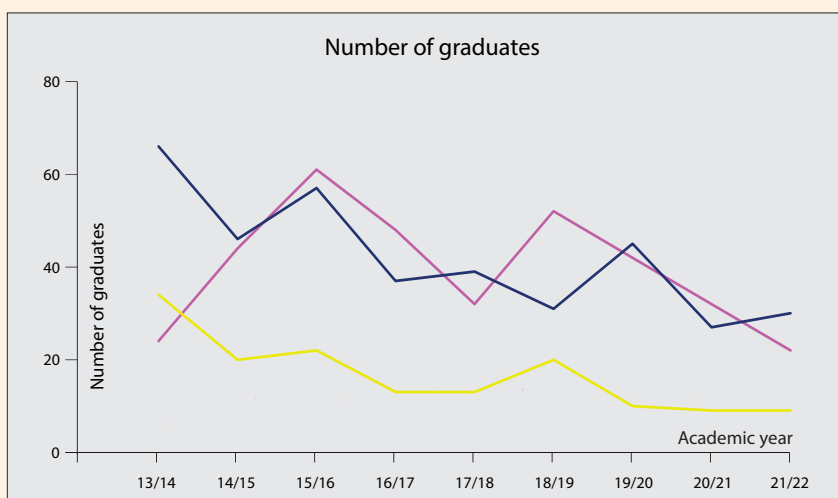
Examples of training courses:

- Working meetings of the VPIS Coordination
- PPT - presentation of the project "Establishment of a system for monitoring the employability of higher education graduates in Slovenia and modernization of eVŠ"
- Professional exam in administrative procedure
- ECCTIS webinar: Education fraud in the digital age
- EUA Webinar: Improving recognition through self-assessment: The 'Spotlight on recognition' tool
- EUA webinar: Ensuring fair and transparent recognition procedures through Bologna Process tools
- Erasmus+ Aims Higher webinar: Procedures for obtaining a visa or residence permits for the purpose of international exchange
- Erasmus+ mobility for the purpose of training (Spain)

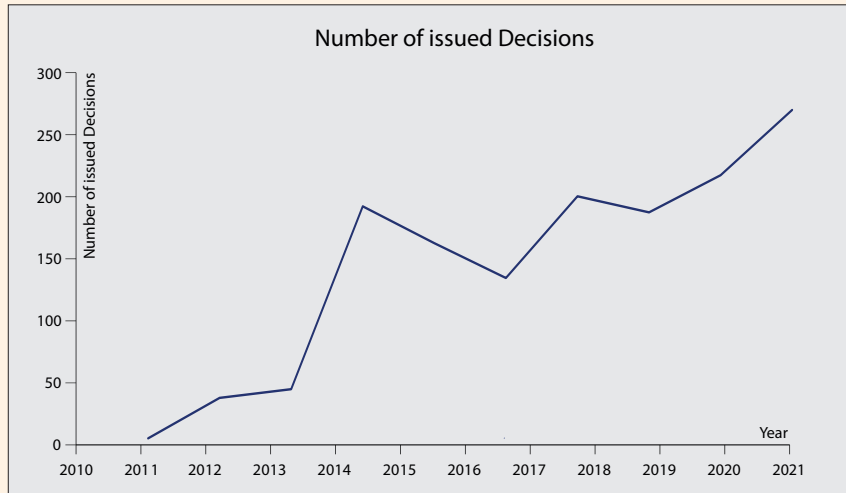
In the academic year 2022/2023 we have 448 students: 253 students of the bachelor`s degree study programmes, 134 students of the master`s degree study programmes and 61 students of the doctoral degree study programmes.



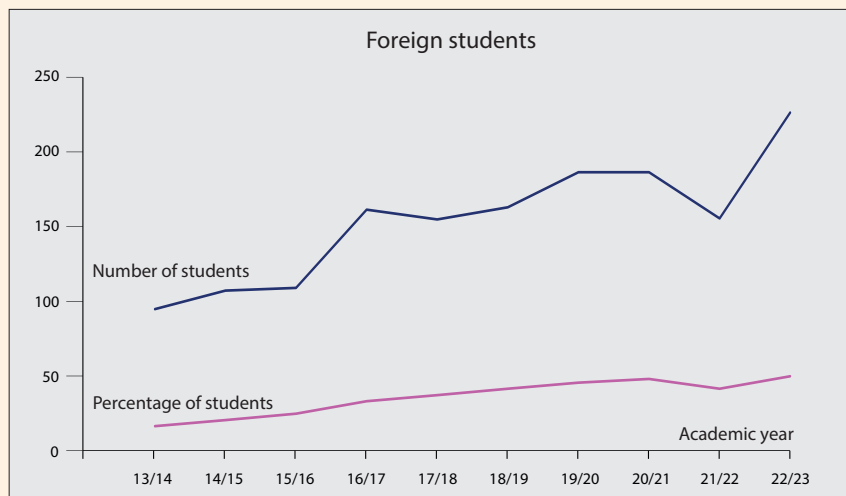
The number of graduates by the level of the programme in academic year 2021/2022:
 - 30 on the bachelor`s study programmes,
 - 22 on the master`s study programmes,
 - 9 on the doctorate study programmes.



The Student Office completed 271 processes of the recognition of foreign education and issued 213 positive decisions in the year 2022.

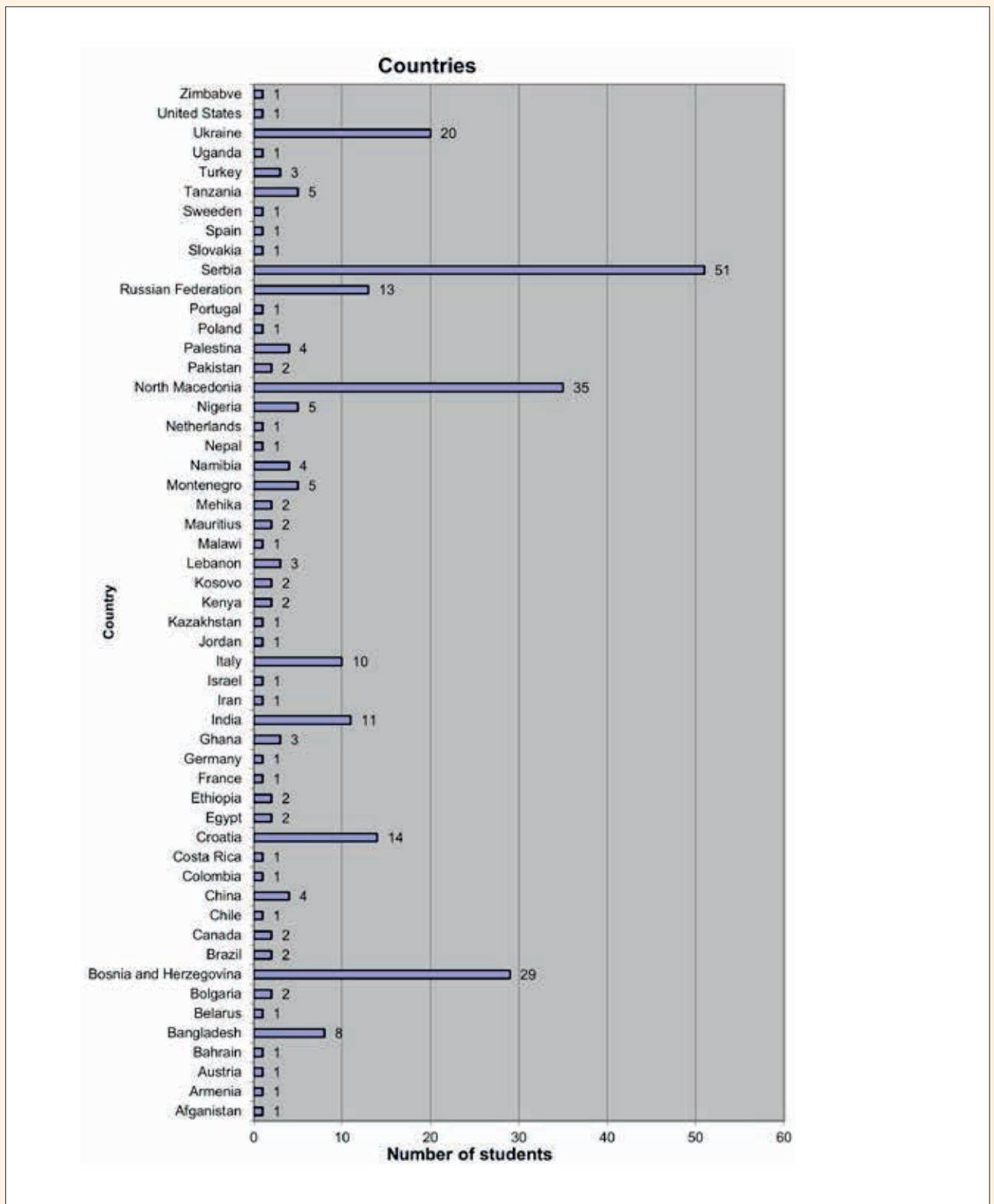


The number of foreign students at the University increased in 2022/2023 compared to 2021/2022, and the percentage of foreign students in relation to the total number of students at the University in the observed period is also higher, i.e. 60.7%.



The majority of the foreign students in academic year 2022/2023 study on the bachelor's study programmes, in particular on the bachelor's study programme Engineering and Management, School of Engineering and Management.

In the academic year 2022/2023 the foreign students come from 53 different countries:



International and Project Office

Head of Office: Aljaž Renar

The activity of the International and Project Office is intended for the management and organization of international activities and the coordination of international (and domestic) UNG projects.

It is intended for students, professors, researchers and other employees who are active in the field of mobility. It takes care for incoming and outgoing mobility under the Erasmus + program, under Ceepus, Bilateral Scholarships and for mobility carried out under various interinstitutional agreements or arrangements. It also provides support in concluding interinstitutional agreements.

The office also provides administrative support for applications for tenders and the implementation of international projects. It is in charge of monitoring published tenders and informing persons within UNG about open tenders. The office provides support to researchers and other employees in preparing applications for tenders, primarily from a financial, administrative and legal-formal point of view. For ongoing projects, the office ensures the preparation of financial reports for international research projects and provides support and advice in the implementation of projects.

The office employs three people (Office Manager, Project Coordinator and Mobility Coordinator).

Mobility projects implemented during the year 2022

- MIZŠ, Tuji strokovnjaki in prožne oblike učenja za boljše znanje, spretnosti in kompetence ter boljšo zaposljivost študentov Univerze v Novi Gorici (2019 - 2022),
- Erasmus+ 2022, Higher education programme between programme countries (2022 – 2024)
- Erasmus+ 2022, Higher education programme between programme and partner countries (2022 – 2025)
- Erasmus+ 2021, Higher education programme between programme countries (2021 – 2023)
- Erasmus+ 2020, Higher education programme between programme countries (2020 – 2023)
- Erasmus+ 2020, Higher education programme between programme and partner countries (2020 – 2023)
- Erasmus+ 2019, Higher education programme between programme countries (2019-2022)
- Erasmus+ 2019, Higher education programme between programme and partner countries (2019-2022)

156 exchanges of students, young graduates and staff were realized in the year 2022.

The Office also informed UNG staff about open calls within the programs for which it is responsible, provided support in concluding inter-institutional agreements and took care of the promotion of programs and projects and their results. Office organized several informative presentations of mobility project for both staff and students. It also participated in promotional campaigns organized by the University.

The work in the office in 2022 in the field of international research projects took place mainly to support the implementation of acquired projects.

In 2022, the International and Project Office provided administrative and financial support in the implementation of the following projects and in the preparation of financial reports:

- DIMAG - Electrically controlled ferromagnetism in 2-dimensional semiconductor (FLAG ERA JTC)
- PROSPECT Patterned Coatings based on 2D materials benzoxazine resin hybrids for broad range Pressure detection (FLAG ERA JTC)
- CLIC - Circular models Leveraging Investments in Cultural heritage adaptive reuse (Horizont 2020)
- URBINAT – Healthy corridors as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS (Horizont 2020)
- NEP - Nanoscience Foundries and Fine Analysis – Europe PILOT (Horizon Europe)
- SAAERO - SARajevo AEROSol Experiment: Composition, Sources and Health Effects of Atmospheric Aerosol (H2020 MSCA IF)
- COFsensor - Novel COF-based sensors for detecting organic agents in water (H2020 MSCA WF)
- SMASH – Machine Learning for Sciences and Humanities (Horizon MSCA COFUND)
- DIVA - Razvoj inovacijskega ekosistema in verig vrednosti: podpiranje čezmejnih inovacij s pomočjo ustvarjalnih industrij (INTERREG V-A Slovenija – Italija)
- NANOREGION - Nano-regija: prosto dostopna mreža za inovacije na osnovi nanotehnologij (INTERREG V-A Slovenija – Italija)
- HERMES-SP - High Energy Rapid Modular Ensemble of Satellites (Horizont 2020)
- KONS – Platform for contemporary research art (call of Ministry RS for Culture)
- Uncorking rural heritage: indigenous production of fermented beverages for local cultural and environmental sustainability (NFM Fund for regional cooperation)

In the second half of the year, an important part of working time of the office was reserved for newly acquired project SMASH Machine learning for Sciences and Humanities that was selected for funding within Horizon Europe MSCA COFUND (10 mio EUR).

Career Center

(Head: Nives Štefančič)



Activities in 2022:

Activities in the context of practical training; coordination and assistance of students in finding companies for practical training and participation in online presentations of interim reports of the practical training of students of School of Engineering and Management in companies MAHLE Electric Drives Slovenija, d. o. o., Fimago, d. o. o., Home Systems, d. o. o., Led Luks, d. o. o., B. Makovec transport, d. o. o., Interenergo, d. o. o., OC IMP Klima, d. o. o. and Kolektor Etra, d. o. o.

Contacts with employers; online meetings with employers from companies Stubelj, d. o. o., Bia Separations, d. o. o., Metal Design, d. o. o., Agro-Medica, d. o. o., Intra lighting, d. o. o., Geodetski zavod Celje, d. o. o., Spar Slovenija, d. o. o., Pipistrel Vertical Solutions, d. o. o., Enoop, d. o. o. and Codognotto transport, d. o. o. where we discussed the possibilities of cooperation with individual faculties in the framework of practical training, student work and other possibilities of cooperation. Publication of vacancies of different companies.

Informing students and graduates of suitable job vacancies, internships, current events, tenders; published around 180 job vacancies, which correspond to profiles of UNG graduates. We released 2 career news.

Periodically checking the employability of graduates six months and one year after graduation; in January 2022, March 2022, May 2022, July 2022, September 2022, November 2022 (graduates from 2018 to 2022).

Organization and/or participation at events with the aim of promoting the University and the Career Center:

- "CV and motivation letter" workshop for students of the School of Engineering and Management;
- participation at the career fair in Maribor (vocational and education fair for high school students);
- participation at intermediate presentations of PTF students on the course of practical training;
- coordination of internships for 4th and 5th

- year students of the Slovenian Lyceum from Gorica in University units;
- participation at the sample evaluation of the doctoral programme Environmental Sciences
- participation at the technical day at Sežana Primary School;
- participation at the trade and entrepreneurship fair »InCastr« in Ajdovščina;
- obtaining written statements from employers about the practical training;
- participation at the international conference ICPPP21;
- participation at the final presentations of PTF students of the course of practical training;
- organization and coordination of round table with graduates of the School of Engineering and Management;
- organization and coordination of round table with graduates of the School of Environmental Sciences and School of Viticulture and Enology;
- organization and coordination of round table with graduates of the School of Humanities and School of Arts;
- organization of round table with graduates of the School of Science;
- member of the working group of the Rectors 'Conference of the Republic of Slovenia for monitoring employability (to support the activities of the EUROGRADUATE project of the Rectors' Conference of the Republic of Slovenia);
- business meeting with organizers of Informativa 2023;
- cooperation in the preparation of the application for the ACROSS project.

Alumni Club

Head: Nives Štefančič



Alumni Club of the University of Nova Gorica in 2022 continued with activities to increase connection between University and Alumni:

- we upgraded informations about Alumni and informed them about activities of Alumni Club;
- we invited them to become promotors within their schools, at variety promotional events;
- we informed Alumni about scholarships, competitions, opportunities for postgraduate studies at home and abroad;
- we informed them about job vacancies and other events suitable for individual profiles of graduates;
- we invited them to different events of the University of Nova Gorica (scientific evenings, information days, semester and annual exhibitions, etc.);
- Alumni participated at round tables at the School of Humanities, School of Arts, School of Science, School of Engineering and Management, School of Environmental Sciences and the School of Viticulture and Enology;
- Alumni participated at the model evaluation of the Ph.D. programmes Karstology and Environmental Sciences;
- in September we organized Alumni meeting of all Schools.

Photo from the awarding of diplomas, master's degrees and the promotion of doctors of science at UNG.



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