



Portfolio for doctoral students

Information on doctoral student:

- First and last name **Svitlana Burchenko**
- Structural unit (department, institute)
V.N. Karazin Kharkiv National University, Institute of Environmental Sciences, Department of environmental management and protected areas
- Curriculum title
103 “Earth Science”, program 11.00.11 – constructive geography and rational use of nature resources



General information on studies:

- Thesis title in English and in local language
Construction-geographical bases of green infrastructure concept for Kharkiv Region
Конструктивно-географічні основи реалізації концепції зеленої інфраструктури для Харківської області
- Supervisor(s)
Doctor of Science (Geography), professor, head of Department of environmental management and protected areas **Nadiya Maksymenko**
Doctor of Philosophy (Geography), Senior Researcher of Estonian University of Life Sciences **Anton Shkaruba**
- Curriculum, year of matriculation
103 “Earth Sciences”, 4-th year of study
- Academic leaves

INFORMATION ON ACADEMIC YEAR NO. 1 (OCT.2018-SEPT.2019)

Status of research work:

- Overview of performed tests, collected data, field works, content and preliminary results of data processing.

Work on the PhD thesis research was carried out within the approved individual plan of PhD student. An analytical review of the literature on the research topic.

- 10 most important articles, book chapters etc, with short summary

1. Maksymenko N.V., Burchenko S.V. Assessment of the possibility of implementing the concept of green infrastructure for Kharkiv region. *Modern directions of development of information and communication technologies and means of management: theses add. 9th International scientific and technical conference: Baku, Kharkiv, Zhilina*. 2019. P. 82 (11-12.04.2019)

The report considers the main theoretical approaches to the implementation of the strategy of green infrastructure on various scales - from local areas to regions.

2. Burchenko S.V. Analysis of the existing legal framework for the implementation of the concept of green infrastructure for the Kharkiv region. *5th All-Ukrainian Student Forum of students, graduate students and young scientists: abstracts* : Dnipro: DNU, 2019. P. 63-64

An analysis of the legal framework and the possibility of its use for the implementation of green infrastructure

3. Maksymenko N.V., Burchenko S.V. Basis of the green infrastructure strategy: international experience. *Man and the environment. Problems of neocology*. 2019. №31. P.16-25



Conduct an analysis of international research about the green infrastructure strategy, identify the main theoretical and practical approaches to the development of green infrastructure, analyze the ways of integrating the green infrastructure strategy into territorial planning and inclusion in the policy of natural resources management in Europe and in the world.

Meetings with supervisors:

- Date, place
Department of environmental management and protected areas
- Main topics, tasks
According to research plan

Courses completed during academic year:

- Name of subject, Volume ECTS, University
Philosophy of Science & Science Methodology, 5 ECTS, V.N. Karazin Kharkiv National University
Foreign language for PhD students, 10 ECTS, V.N. Karazin Kharkiv National University
Preparation of scientific publications and presentations of research results, 4 ECTS, V.N. Karazin Kharkiv National University
Research assistant practice, 3 ECTS, V.N. Karazin Kharkiv National University
Constructive geography and rational use of nature resources, 8 ECTS, V.N. Karazin Kharkiv National University

In-service training in foreign university/laboratory:

- Period and place
Took part at summer school «WIN! Water Innovations: Policy, Management, Research», Estonian University of Life Science, Tartu, Estonia, 11-23 August.
- Tasks
Study of practical aspects of European water resources management (including river) risk assessment and management; study of ecosystem services management policy
- Results
Successful finished of theoretical and practical works, 3 ECTS.

Performance at conferences:

- Name, time and place of event

Modern directions of development of information and communication technologies and means of management: theses add. 9th International scientific and technical conference. Kharkiv, April 11-12, 2019

- Title and co-authors of presentation

Assessment of the possibility of implementing the concept of green infrastructure for Kharkiv region. Maksymenko N.V.

- Whether oral or poster presentation

- Name, time and place of event

5th All-Ukrainian Student Forum of students, graduate students and young scientists: abstracts : Dnipro: DNU, April 25-26, 2019.

- Title and co-authors of presentation

Analysis of the existing legal framework for the implementation of the concept of green infrastructure for the Kharkiv region.

- Whether oral or poster presentation



Performance at doctoral seminars:

- Name, time and place of event
Science-policy seminar “Instruments of EU environmental policy for Ukraine”, February 19th, 2019, V.N. Karazin Kharkiv National University
- Title of presentation
“Construction geographical bases of the “green infrastructure” concept for Kharkiv region”

https://ecology.karazin.ua/wp-content/uploads/2020/07/inency_2_agenda_feb19_final.pdf

- Name, time and place of event
Scientific seminar on the results of the summer school, November 1st, 2019
- Title of presentation

„WIN! Water Innovations Policy, Management, Research“

<https://ecology.karazin.ua/news/naukovij-seminar-po-rezultatam-litnoi-shkoli/>

Performed teaching:

- Name and code of subject/course
Scientific, educational and recreational activities at the objects of Reserve Nature Fund
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - Regulatory and methodological basis for the provision of recreational services at the objects of Reserve Nature Fund
 - Substantiation of boundaries and recreational load.
 - Allocation of territory for recreational activities in protected areas
 - Varieties of recreational services. Forms of recreational activities.
- Number of classes
1 group of masters students

- Name and code of subject/course
Introduction to the specialization ”Protected area”
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - Protected area as a branch of nature protection.
 - Institutional development of nature reserve business
- Number of classes
2 groups of bachelors students (4 year)

- Name and code of subject/course
Organization of environmental management
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - The concept of public administration functions
 - Organization of environmental services in Ukraine
 - The system of monitoring the state of the natural environment of Ukraine
 - Organization of control over observance of the ecological legislation
- Number of classes
2 groups of bachelors students (3 year)

Supervision or co-supervision

- Name of the student,
- Level (BSc, MSc)



- Name of the curriculum
- Title on the thesis

Participation on research projects:

- Name of the project
 Scientific research work: Landscape-ecological modeling of forest plantations of the green zone of Kharkiv for assessment of ecological risks
 “Assessment of the role of the main limiting factors of natural and anthropogenic origin in the development of forests in the green zone of Kharkiv”
- The funding scheme
 State
- Name of leader of the project
 DSc, Professor Nadiya Maksymenko
- Tasks in the project
 Literature review

Articles published:

- Articles in Web of Science and/or Scopus-indexed journal
- Articles in international publications
- Articles in national publications
 Maksymenko N.V., Burchenko S.V. Basis of the green infrastructure strategy: international experience. Man and the environment. Problems of neocology. 2019. № 31. P.16-25

Public engagement and outreach

- Publications aimed at a non-academic audience (such as popular science texts, newspaper features etc)
- Public lectures
- Media participation (such as interviews or comments)
- Blogs or social media accounts
- Work on advisory panels for social and cultural engagement;
- Industry or government or non-government organisation

Business and community

- Patent
- Membership of public or government advisory or policy group or panels

Activity plan for the next academic year

- Main tasks
 identify the main research methods,
 develop a research algorithm,
 writing articles, abstracts, participation in conferences.

PhD student: **Svitlana Burchenko**
 PhD supervisor: **Nadiya Maksymenko**



INFORMATION ON ACADEMIC YEAR NO. 2 (OCT.2019-SEPT.2020)

Status of research work:

- Overview of performed tests, collected data, field works, content and preliminary results of data processing
Is constructed the research algorithm; are defined the basic research methods.
- 10 most important articles, book chapters etc, with short summary

1. Burchenko S.V. Comparison of criteria for selection of green infrastructure at the regional and city levels. XV All-Ukrainian scientific Taliev readings: Kharkiv: KhNU, 2019. P. 12-13

The paper analyzes the difference between the criteria for assigning a territory or an object to GI at different scales - urban and regional.

2. Burchenko S. Green infrastructure strategy for water management in Kharkiv. *Smart green&smart blue*: open science conference: Lviv, 2019

It is proposed to base research on the definition of ecosystem services as one of the main criteria for the inclusion of territories in green infrastructure for water regulation in city.

3. Burchenko S. The role of language training internships Erasmus +program for postgraduate students. Academic and scientific challenges of diverse fields of knowledge in the 21st century: materials of the 9th All-Ukrainian scientific conference. Kharkiv. P. 48-54

The article deals with the Erasmus + Intense program which provided a postgraduate summer school and how it affected the level of English in the professional field.

4. Burchenko S. Intercultural experience exchange of green and blue infrastructure development. «Modern society and science: current research of young scientists": All-Ukrainian scientific-practical Internet conference of Yaroslav Mudryi National University of Law. The article deals with the modern mobility of researches, scientists and collaboration with universities from different countries allows us to identify cultural differences in the management of the environment, living space including green and blue infrastructure.

Meetings with supervisors:

- Date, place : Department of environmental management and protected areas
- Main topics, tasks : According to research plan

Courses completed during academic year:

- Name of subject, Volume ECTS, University
Constructive geography and rational use of nature resources, 10 ECTS, V.N. Karazin Kharkiv National University

In-service training in foreign university/laboratory:

- Period and place
- Tasks
- Results

Performance at conferences:

- Name, time and place of event
XV All-Ukrainian scientific Taliev readings: Kharkiv, 2019
- Title and co-authors of presentation

Comparison of criteria for selection of green infrastructure at the regional and city levels.

- Whether oral or poster presentation



- Name, time and place of event

Smart green&smart blue: open science conference.:Lviv, 2019

- Title and co-authors of presentation
Green infrastructure strategy for water management in Kharkiv
- Whether oral or poster presentation

- Name, time and place of event

Academic and scientific challenges of diverse fields of knowledge in the 21st century: materials of the 9th All-Ukrainian scientific conference. Kharkiv.

- Title and co-authors of presentation
The role of language training internships Erasmus +program for postgraduate students
- Whether oral or poster presentation

- Name, time and place of event

“Modern society and science: current research of young scientists”: All-Ukrainian scientific-practical Internet conference of Yaroslav Mudryi National University of Law, Kharkiv, 2019

- Title and co-authors of presentation
Intercultural experience exchange of green and blue infrastructure development.
- Whether oral or poster presentation

- Name, time and place of event

International Internet conference "International experience in training environmental specialists". June 17th, 2020

- Title and co-authors of presentation
The Green infrastructure strategy for Kharkiv water management, Nadiya Maksymenko
- Whether oral or poster presentation

Performance at doctoral seminars:

- Name, time and place of event
- Title of presentation

Performed teaching:

- Name and code of subject/course
International cooperation in development of Nature Reserve Fund
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - Standards of Ukraine for the creation of protected areas
 - Classification differences of protected areas
 - Ukraine's participation in international cooperation
 - Environmental policy in international cooperation.
- Number of classes : 1 group of masters students
- Name and code of subject/course
Scientific, educational and recreational activities at the objects of Reserve Nature Fund
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - Regulatory and methodological basis for the provision of recreational services at the objects of Reserve Nature Fund



- Substantiation of boundaries and recreational load.
- Allocation of territory for recreational activities in protected areas
- Varieties of recreational services. Forms of recreational activities.
- Number of classes : 1 group of masters students

Supervision or co-supervision

- Name of the student,
- Level (BSc, MSc)
- Name of the curriculum
- Title on the thesis

Participation on research projects:

- Name of the project
 Scientific research work: Landscape-ecological modeling of forest plantations of the green zone of Kharkiv for assessment of ecological risks
 “Assessment of the role of the main limiting factors of natural and anthropogenic origin in the development of forests in the green zone of Kharkiv. Modeling of forest plantations development in Kharkiv” (finished)
- The funding scheme : State
- Name of leader of the project : DSc, Professor Nadiya Maksymenko
- Tasks in the project: Is the ecological assessment of forest landscapes of green zone of Kharkiv in order to model and predict their development.

Articles published:

- Articles in Web of Science and/or Scopus-indexed journal
- Articles in international publications
- Articles in national publications

Public engagement and outreach

- Publications aimed at a non-academic audience (such as popular science texts, newspaper features etc)
- Public lectures
- Media participation (such as interviews or comments)
- Blogs or social media accounts
- Work on advisory panels for social and cultural engagement;
- Industry or government or non-government organisation

Business and community

- Patent
- Membership of public or government advisory or policy group or panels

Activity plan for the next academic year

- Main tasks
 - Conducting the field stage of the experiment: selection of test sites for green infrastructure, determination of basic environmental characteristics, measurements, laboratory analysis.

PhD student: **Svitlana Burchenko**
 PhD supervisor: **Nadiya Maksymenko**



INFORMATION ON ACADEMIC YEAR NO. 3 (OCT.2020-SEPT.2021)

Status of research work:

- Overview of performed tests, collected data, field works, content and preliminary results of data processing
 - Conducting the field stage of the experiment: selection of test sites for green infrastructure, determination of basic environmental characteristics, measurements, laboratory analysis. Are carried out measurements of noise of green zones, analysis of formation of surface runoff, laboratory analysis of surface runoff from green infrastructure objects
- 10 most important articles, book chapters etc, with short summary

1. Burchenko S.V. Opportunities to expand the green zone of Kharkiv with the use of green infrastructure and nature-based solutions. XVI All-Ukrainian scientific Taliev readings: Kharkiv: KhNU, 2020. P. 21–22.

The green zones at the city is a multifunctional system that provides the ecosystem services for the citizens. Legislative regulation of urban development and requirements for landscaping do not fully ensure the sustainability of the complex of green areas of the city. There is a need for a new inventory of green areas in Kharkiv using the expansion of the list and options for green areas such as areas of green infrastructure and nature based solutions for their general use.

2. Burchenko S.V. Theoretical aspects of urban landscaping in Ukraine (on the example of Kharkiv). Proceedings of the 6th International Youth Congress "Sustainable Development: Environmental Protection. Energy saving. Balanced nature management 09 - 10 February 2021 ". - Lviv: Western Ukrainian Consulting Center Ltd., 2021. P. 276

The city's greenery provides many ecosystem services. The current legislative and the practice of urban planning do not provide the urban population with the necessary green areas. The normative documents do not contain possibilities for expanding green areas for different purposes (green roofs, walls, rain gardens, etc.). Carrying out inventories of green areas is chaotic and is not an open procedure in the cities.

3. Maksymenko N., Burchenko S., Miller K., Cohen L., Krivtsov V. Inventory of green roofs in Kharkiv (Ukraine) and Edinburgh (Scotland): current occurrence, future potential and implications for biodiversity and ecosystem services. Current issues of formal and non-formal education in environmental monitoring and conservation: abstracts of reports of the I International Internet Conference (Kharkiv, February 26, 2021). - Kharkiv, 2021. P. 127–128

Green roofs is common useful a common type of green areas in different countries and in United Kingdom. In Ukraine, using green roofs has not legal regulation and has a chaotic practise of use, mainly by private firms and household. In this article is compared existing situations with green roofs in Edinburgh and Kharkiv and approaches for in vestigations of green roofs.

4. N. Maksymenko, S. Sonko, H. Skryhan, S. Burchenko, A.Gladkiy. Green infrastructure of post-USSR cities for prevention of noise pollution. Society of ambient intelligence 2021 - IV International Scientific Congress, Ukraine – Uzbekistan – Latvia April 12-16, 2021. <https://doi.org/10.1051/shsconf/202110005004>

Territorial organization of the urban landscape in post-USSR cities, is quite complex and has signs of spontaneous formation, without protective function of green infrastructure from noise pollution. Kharkiv is a large industrial city and noise pollution is a considerable factor of influence on the environment. Based on these tasks, we have analyzed noise pollution in Moskovsky district in Kharkiv. Were identified 80 experimental points.

5. S. Burchenko. Green roofs for cities surface runoff regulation. 25th international scientific conference ENVIRO 2021. June 3-4, 2021. P.44



In the research was studied the frequency of use of green roofs in construction and landscaping on the example of Kharkiv. Also, was conducted an inventory of green roofs in Kharkiv. Were taken samples for chemical analysis of surface runoff, samples from flat and sloping roofs, snow samples, chemical analysis of surface runoff water from green roofs for the content of pollutants.

Meetings with supervisors:

- Date, place: Department of environmental management and protected areas
- Main topics, tasks : According to research plan

Courses completed during academic year:

- Name of subject, Volume ECTS, University

In-service training in foreign university/laboratory:

- Period and place
14 – 27 June 2021 took an individual scientific internship at the Institute of Ecology of the Carpathians of the National Academy of Sciences of Ukraine, Lviv
- Tasks : The purpose of the internship was to conduct individual research on topics of PhD thesis
- Results

The study of green infrastructure in Lviv for comparison of approaches to the development and management of green infrastructure in Kharkiv

- Period and place
14 – 27 September 2021 was held a summer school “Green & Blue Infrastructure in a Post-Communist City” in Yaremche (Ukraine)
- Tasks : The task of the summer school set to explore and find solutions to environmental problem of The Carpathians regions.
- Results : Preparing group project and making presentations of research. 6 ECTS

Performance at conferences:

- Name, time and place of event :
XVI All-Ukrainian scientific Taliev readings: Kharkiv, 2020
- Title and co-authors of presentation : Opportunities to expand the green zone of Kharkiv with the use of green infrastructure and nature-based solutions
- Whether oral or poster presentation
- Name, time and place of event
Proceedings of the 6th International Youth Congress "Sustainable Development: Environmental Protection. Energy saving. Balanced nature management 09 - 10 February 2021. Lviv
- Title and co-authors of presentation
Theoretical aspects of urban landscaping in Ukraine (on the example of Kharkiv)
- Whether oral or poster presentation
- Name, time and place of event
Current issues of formal and non-formal education in environmental monitoring and conservation: abstracts of reports of the I International Internet Conference (Kharkiv, February 26, 2021).



- Title and co-authors of presentation
Inventory of green roofs in Kharkiv (Ukraine) and Edinburgh (Scotland): current occurrence, future potential and implications for biodiversity and ecosystem services. Maksymenko N., Burchenko S., Miller K., Cohen L., Krivtsov V.
- Whether oral or poster presentation

- Name, time and place of event

Society of ambient intelligence 2021 - IV International Scientific Congress, Ukraine – Uzbekistan – Latvia April 12-16, 2021.

- Title and co-authors of presentation
Green infrastructure of post-USSR cities for prevention of noise pollution. N. Maksymenko, S. Sonko, H. Skryhan, S. Burchenko, A. Gladkiy.
- Whether oral or poster presentation

- Name, time and place of event

25th international scientific conference ENVIRO 2021. June 3-4, 2021, online

- Title and co-authors of presentation : Green roofs for cities surface runoff regulation
- Whether oral or poster presentation

- Name, time and place of event

Environmental protection: abstract of the XVII All-Ukrainian scientific Taliyiv readings. Kharkiv, 2021

- Title and co-authors of presentation
City gardens in the context of green infrastructure of Ukrainian cities.
- Whether oral or poster presentation

- Name, time and place of event

International research-to-practice conference on «Climate services: science and education» Conference Proceedings (22-24 September 2021). Odesa

- Title and co-authors of presentation
Internship of Erasmus+ “Intense” for Evaluation of Green Infrastructure and Ecosystem Services of Foresty Landscapes in Lviv, Burchenko S.V., V.O. Voronin, N.V. Maksymenko, I.M. Shpakivska
- Whether oral or poster presentation

Performance at doctoral seminars:

- Name, time and place of event
On September 9th, 2021, a seminar was held based on the results of individual research internships for PhD students
- Title of presentation
Internship on the Erasmus + Intens program at the Institute of Ecology of The Carpathians of the National Academy of Sciences of Ukraine
- Name, time and place of event : „My ERASMUS“ October 14th, 2021 p.
- Title of presentation
Internship on the Erasmus + Intens program at the Institute of Ecology of The Carpathians of the National Academy of Sciences of Ukraine

Performed teaching:



- Name and code of subject/course
Assessment and conservation of biodiversity
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - History of the development of the doctrine of biodiversity
 - International and domestic regulations in the field of biodiversity conservation
 - Assessment of biodiversity of forest ecosystems
 - Assessment of biodiversity of water and wetland systems
 - Economic assessment of biodiversity
 - Loss and recovery of species
 - Biodiversity and biological pollution
- Number of classes : 1 group of masters students

- Name and code of subject/course
International and domestic public organizations of environmental protection
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - Terminology, functioning of public organizations
 - History of public ecological organizations of Ukraine and in the world.
 - International aspects of work of international and domestic NGOs
 - Public organizations of nature protection of Ukraine
 - International public organizations
- Number of classes : 1 group of masters students

- Name and code of subject/course
Scientific, educational and recreational activities at the objects of Reserve Nature Fund
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - Regulatory and methodological basis for the provision of recreational services at the objects of Reserve Nature Fund
 - Substantiation of boundaries and recreational load.
 - Allocation of territory for recreational activities in protected areas
 - Varieties of recreational services. Forms of recreational activities.
- Number of classes : 1 group of masters students.

- Name and code of subject/course : Introduction to the specialization "Protected area"
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - Protected area as a branch of nature protection.
 - Institutional development of nature reserve business
- Number of classes : 2 groups of bachelors students (4 year)

- Name and code of subject/course: Organization of environmental management
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - The concept of public administration functions
 - Organization of environmental services in Ukraine
 - The system of monitoring the state of the natural environment of Ukraine



- Organization of control over observance of the ecological legislation

- Number of classes : 2 groups of bachelors students (3 year)

Supervision or co-supervision

- Name of the student,
- Level (BSc, MSc)
- Name of the curriculum
- Title on the thesis

Participation on research projects:

- Name of the project
“Innovative approaches to water and nutrient regime of urban landscapes” 0116U000577
- The funding scheme State
- Name of leader of the project Nadiya Maksymenko
- Tasks in the project Collect data

Articles published:

- Articles in Web of Science and/or Scopus-indexed journal
- Articles in international publications
N. Maksymenko, S. Sonko, H. Skryhan, S. Burchenko, A.Gladkiy. Green infrastructure of post-USSR cities for prevention of noise pollution. Society of ambient intelligence 2021 - IV International Scientific Congress, Ukraine – Uzbekistan – Latvia April 12-16, 2021.
<https://doi.org/10.1051/shsconf/202110005004>
- Articles in national publications

Public engagement and outreach

- Publications aimed at a non-academic audience (such as popular science texts, newspaper features etc)
- Public lectures
- Media participation (such as interviews or comments)
- Blogs or social media accounts
- Work on advisory panels for social and cultural engagement;
- Industry or government or non-government organisation

Business and community

- Patent
- Membership of public or government advisory or policy group or panels

Activity plan for the next academic year

- Main tasks
Finishing PhD program

PhD student: **Svitlana Burchenko**
 PhD supervisor: **Nadiya Maksymenko**
 PhD supervisor: **Anton Shkaruba**



INFORMATION ON ACADEMIC YEAR NO. 4 (OCT.2021-SEPT.2022)

Status of research work:

- Overview of performed tests, collected data, field works, content and preliminary results of data processing
 - writing articles,
 - formation of the PhD thesis text,
 - preparation for the defence of the PhD thesis
 -10 most important articles, book chapters etc, with short summary
1. S. Burchenko. Urban gardens in Ukrainian cities (Lviv, Kharkiv). *Scientific Conference of PhD. Students of FAFR, FBFS and FHLE SUA in Nitra with international participation - Proceedings of abstracts*. Slovak University of Agriculture in Nitra, 2021. P. 51.
 2. N. Maksymenko, S. Burchenko. Research of the green-blue infrastructure of Kharkiv. *Socio-ecological resilience across Eurasia innovation for sustainability transition INTENSE Open Science Conference (Online/Tartu, Estonia, 5-7 October 2021)*. Tartu, 2021. P. 8.
 3. S.V. Burchenko. Use of green infrastructure objects to support biodiversity in cities. Scientific bases of biodiversity conservation: materials of the IV (XV) International scientific conference of young scientists (Lviv, October 28, 2021). Lviv, 2021. P. 45-47.
 4. 6. Burchenko S.V. City gardens in the context of green infrastructure of Ukrainian cities. Environmental protection: abstract of the XVII All-Ukrainian scientific Taliyiv readings. Kharkiv, 2021. P. 99 - 100.
 5. 7. Burchenko S.V., V.O. Voronin, N.V. Maksymenko, I.M. Shpakivska. Internship of Erasmus+ "Intense" for Evaluation of Green Infrastructure and Ecosystem Services of Foresty Landscapes in Lviv *International research-to-practice conference on «Climate services: science and education» Conference Proceedings (22-24 September 2021)*. Odesa, 2021. P. 69-70.

Meetings with supervisors:

- Date, place : Department of environmental management and protected areas
- Main topics, tasks : According to research plan

Courses completed during academic year:

- Name of subject, Volume ECTS, University

In-service training in foreign university/laboratory:

- Period and place
- Tasks
- Results

Performance at conferences:

- Name, time and place of event : Socio-ecological resilience across Eurasia innovation for sustainability transition INTENSE Open Science Conference
- Title and co-authors of presentation :
Research of the green-blue infrastructure of Kharkiv. N. Maksymenko
- Whether oral or poster presentation

- Name, time and place of event
- Title and co-authors of presentation
- Whether oral or poster presentation

Performance at doctoral seminars:



- Name, time and place of event
- Title of presentation

Performed teaching:

- Name and code of subject/course: Landscape design in the arrangement of recreational areas
- Type of work (practical course, lecture, seminar)
- Title of lectures
 - Tasks of landscape design in the arrangement of recreational areas
 - Water bodies in the arrangement of recreational areas
 - Plastic modeling of the relief of open recreational spaces
 - Vegetation as a means of composition and a factor of sustainability
 - Modern approaches to the formation of recreational spaces
- Number of classes : 1 group of masters student

Supervision or co-supervision No

- Name of the student,
- Level (BSc, MSc)
- Name of the curriculum
- Title on the thesis

Participation on research projects:

- Name of the project
- The funding scheme
- Name of leader of the project
- Tasks in the project

Articles published:

- Articles in Web of Science and/or Scopus-indexed journal
- Articles in international publications
- Articles in national publications

Public engagement and outreach

- Publications aimed at a non-academic audience (such as popular science texts, newspaper features etc)
- Public lectures
- Media participation (such as interviews or comments)
- Blogs or social media accounts
- Work on advisory panels for social and cultural engagement;
- Industry or government or non-government organisation

Business and community

- Patent
- Membership of public or government advisory or policy group or panels

Activity plan for the next academic year

- Main tasks
 - writing articles,
 - formation of the PhD thesis text,
 - preparation for the defence of the PhD thesis.

PhD student: **Svitlana Burchenko**
 PhD supervisor: **Nadiya Maksymenko**
 PhD supervisor: **Anton Shkaruba**