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|  | <h2>P12: GORNO-ALTAISK STATE UNIVERSITY</h2> <p>Gorno-Altai, Altai Republic, Russia</p> |
| | <p><i>Departments concerned with SUNRAISE-related topics:</i></p> <ul style="list-style-type: none"> - Faculty of Natural Sciences and Geography - Faculty of Economics and Law (Department of Economics, Tourism and Applied Informatics) |
| | <p><i>Contact person:</i> Natalia Iurkova (dipgasu@mail.ru)</p> |

SUNRAISE-RELEVANT RESEARCH TOPICS

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| 1. | Studying, conserving, and reviving tangible and intangible heritage of peoples of Altai and its neighbouring territories |
| 2. | <p>Influence of climate change, manifestation of adverse natural conditions, and human impact on socio-, bio-, and geosystems of Altai, including the study of (among others):</p> <ul style="list-style-type: none"> - The dynamics of climate change and manifestations of adverse natural phenomena - The anthropogenic pressure on geosystems of Altai - The ecological condition in the region - The hydrological regime and water quality of mountain rivers - The response of geotechnical systems to influences of various origin |
| 3. | Sustainable wildlife management and biodiversity conservation |
| 4. | Assisting in the social and economic prosperity of the Greater Altai region through sustainable development of agriculture, alternative energy, and ecological tourism |
| 5. | Assisting in the development of ecological education in the Altai Republic |

KEY PERSONALITIES, POTENTIAL MASTER'S AND DOCTORAL SUPERVISORS

- Prof. Dr. Olga Zhuravleva – *Research interests: Hydrology; Hydrological security; Sustainable development of mountain territories; Ecosystem services; EIA*
- Prof. Dr. Mariia Sukhova – *Research interests: Climatology; Climate change; Sustainable development of mountain territories; Ecosystem services; Environmental management*
- Prof. Dr. Andrei Glotko – *Research interests: Regional economics; Sustainable regional development; Green economy; Development of agro-industrial complexes*

- Prof. Dr. Petr Malkov – *Research interests: Zoogeography; Ecology; Microevolution of butterflies; Ecological monitoring; Biostatistics*

CURRENT AND PAST PROJECTS

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| Project 1: “Assessment of the bioclimatic living conditions of the population of mountain territories taking into account their landscape structure (based on the example of the Altai-Sayan mountain country)” | <p><i>Funded by:</i> Grant of the President of the Russian Federation</p> <p><i>Keywords:</i> Living conditions; Altai-Sayan mountain country; Landscape structure</p> | <p><i>Project type:</i> research</p> |
| Project 2: “Approbation of micropropagation technology and its implementation into the crop production in the Altai Republic” | <p><i>Funded by:</i> Ministry of Agriculture of the Altai Republic, Russia</p> <p><i>Keywords:</i> Micropropagation technology; Crop production</p> | <p><i>Project type:</i> research</p> |
| Project 3: “Cadastre of forage plants of the Altai Republic” | <p><i>Funded by:</i> Ministry of Agriculture of the Altai Republic, Russia</p> <p><i>Keywords:</i> Forage plants; Forage lands</p> | <p><i>Project type:</i> research</p> |
| Project 4: “Agricultural and economic efficiency of resource-saving soil cultivation technologies in the system of forage crop rotations in the mid-mountain zone of the Altai Republic” | <p><i>Funded by:</i> Ministry of Agriculture of the Altai Republic, Russia</p> <p><i>Keywords:</i> Soil cultivation technologies; Crop rotation</p> | <p><i>Project type:</i> research</p> |
| Project 5: “The development of the concept of the tourist and recreational cluster ‘Karakol Lakes all-season ski complex’ in the Altai Republic” | <p><i>Funded by:</i> Ministry of Natural Resources, Ecology and Tourism of the Altai Republic, Russia</p> <p><i>Keywords:</i> Tourism development; Tourist and recreational cluster</p> | <p><i>Project type:</i> research</p> |
| Project 6: “The development of the concept of the development of agro-industrial complex of the Altai Republic for the period till 2028” | <p><i>Funded by:</i> Ministry of Natural Resources, Ecology and Tourism of the Altai Republic, Russia</p> <p><i>Keywords:</i> Agro-industrial complex; Sustainable development</p> | <p><i>Project type:</i> research</p> |

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| Project 7: “The development of the concept of the development of forest industry in the Altai Republic 2018-2027” | <i>Funded by:</i> Ministry of Natural Resources, Ecology and Tourism of the Altai Republic, Russia | <i>Project type:</i> research |
| <i>Keywords:</i> Forest industry; Timber processing | | |
| Project 8: “Analysis and economic assessment of the current state of production and processing of agricultural products in the Altai Republic and their sales market to determine the types and production volume of such products as well as their processing technology potential for implementation” | <i>Funded by:</i> Ministry of Agriculture of the Altai Republic, Russia | <i>Project type:</i> research |
| <i>Keywords:</i> Agricultural products; Processing technology | | |
| Project 9: “The Red Data Book of the Altai Republic (plants and animals)” | <i>Funded by:</i> Ministry of Natural Resources, Ecology and Tourism of the Altai Republic, Russia | <i>Project type:</i> research, education |
| <i>Keywords:</i> Rare and endangered species; Biodiversity conservation; Conservation status | | |
| Project 10: “Biological potential, state and rational use of plants of the <i>Fabaceae</i> family on natural and seeded feeding grounds of Gorny Altai” | <i>Funded by:</i> Russian Foundation for Basic Research | <i>Project type:</i> research |
| <i>Keywords:</i> Biological potential; Feeding grounds; Rational land use | | |
| Project 11: “Development of methodological approaches to a comprehensive assessment of the ecological state of recreational landscapes of the Altai Republic” | <i>Funded by:</i> Russian Foundation for Basic Research | <i>Project type:</i> research |
| <i>Keywords:</i> Recreational landscapes; Ecological indicators | | |
| Project 12: “Assessment of the impact of recreational activities on natural objects of the Altai Republic” | <i>Funded by:</i> Russian Foundation for Basic Research | <i>Project type:</i> research |
| <i>Keywords:</i> Recreational activities; Human impact; Environmental protection | | |
| Project 13: “Assessment of the ecological and biogeochemical status of the drainage basin of Lake Teletskoye under conditions of climate change and increasing anthropogenic impact” | <i>Funded by:</i> Russian Foundation for Basic Research | <i>Project type:</i> research |
| <i>Keywords:</i> Climate change; Human impact; Ecological and biogeochemical status | | |

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| <p>Project 14: “Development of mechanisms for the implementation of the ‘green economy’ model at the regional level”</p> | <p><i>Funded by:</i> Russian Foundation for Basic Research</p> <p><i>Keywords:</i> Green economy; Sustainable development</p> | <p><i>Project type:</i> research</p> |
| <p>Project 15: “Analysis of the ecological, social and economic significance of traditional crafts in the life of the population of the Altai Republic”</p> | <p><i>Funded by:</i> Russian Foundation for Basic Research</p> <p><i>Keywords:</i> Indigenous culture; Traditional crafts</p> | <p><i>Project type:</i> research</p> |
| <p>Project 16: “The concept of ‘altai-kizhi’/ ‘the Altaian’ in the folklore and literature of Gorny Altai in the context of the national identity”</p> | <p><i>Funded by:</i> Russian Foundation for Basic Research</p> <p><i>Keywords:</i> National identity; Indigenous cultures; Intangible heritage</p> | <p><i>Project type:</i> research</p> |
| <p>Project 17: “Hydroecological safety as a tool for sustainable life support of mountain regions under conditions of climate change”</p> | <p><i>Funded by:</i> State Order of the Ministry of Science and Higher Education of the Russian Federation</p> <p><i>Keywords:</i> Sustainable development; Climate change; Hydrological and ecological safety</p> | <p><i>Project type:</i> research</p> |
| <p>Project 18: “Study of the impact of climatic fluctuations on mountain ecosystems and population. Identification of ecosystem services in Altai”</p> | <p><i>Funded by:</i> State Order of the Ministry of Science and Higher Education of the Russian Federation</p> <p><i>Keywords:</i> Climate change; Mountain ecosystems; Ecosystem services</p> | <p><i>Project type:</i> research</p> |
| <p>Project 19: “The use of indicators for the assessment of ecological attractiveness of the tourist zone in the vicinity of the village of Chemal”</p> | <p><i>Funded by:</i> Contract-based research (in Russia)</p> <p><i>Keywords:</i> Ecological attractiveness; Sustainable tourism development</p> | <p><i>Project type:</i> research, capacity building for external stakeholders</p> |
| <p>Project 20: “Assessment of the economic efficiency of the processing of wild-growing plants in the system of consumer cooperation”</p> | <p><i>Funded by:</i> Contract-based research (in Russia)</p> <p><i>Keywords:</i> Economic efficiency; Non-timber products; Processing</p> | <p><i>Project type:</i> research, capacity building for external stakeholders</p> |

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| Project 21: “Study of rare and medicinal plants of the Altai Republic with the aim of their reintroduction in 2019-2021” | <i>Funded by:</i> Contract-based research (in Russia) | <i>Project type:</i> research, capacity building for external stakeholders |
| | <i>Keywords:</i> Rare and medicinal plants; Introduction and reintroduction | |

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| Project 22: “Technology of processing of wild-growing plants” | <i>Funded by:</i> Contract-based research (in Russia) | <i>Project type:</i> research, capacity building for external stakeholders |
| | <i>Keywords:</i> Processing technology; Wild-growing plants | |

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| Project 23: “Ecological forum ‘100 Years of the Reserve System in Russia’” | <i>Funded by:</i> Contract-based event (in Russia) | <i>Project type:</i> education |
| | <i>Keywords:</i> Environmental protection; Protected areas; Biodiversity conservation; Ecological awareness | |

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| Project 24: “Geoecological state of water bodies in mountain countries under the conditions of recreational use of the territory (based on the example of Gorny Altai)” | <i>Funded by:</i> Contract-based research (in Russia) | <i>Project type:</i> research, capacity building for external stakeholders |
| | <i>Keywords:</i> Human impact; Recreation; Geoecological state | |

CURRENT AND RECENT PhD THESES

- Olesia Orlova “Sustainable Regional Economic Development Based on the Transition to the Model of Green Economy (Based on the Example of the Altai Republic)” (2017 – ongoing)
- Svetlana Kazantseva “Spatial and Ecological Structure of Mayfly (Ephemeroptera) Population in Water Bodies of Altai Mountains” (2020 – ongoing)

RESEARCH AMBITIONS IN RELATION TO SUNRAISE

1. Improvement of the university’s system of training specialists in accordance with the demands of local employers and other stakeholders. Among others, this concerns the training in the fields of:

- Environmental management
- Biodiversity conservation
- Preservation and revival of traditional knowledge and cultures
- Sustainable development of mountain areas

ENABLERS AND BARRIERS ENCOUNTERED FOR RESEARCH DEVELOPMENT

| Enablers | Barriers |
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| <ul style="list-style-type: none"> ➤ Only high education institution and leading scientific centre in the Altai Republic ➤ Location of the institution in a multicultural and geographically diverse area ➤ Participation in the SUNRAISE project | <ul style="list-style-type: none"> ➤ Shortage of financial resources ➤ Shortage of human resources ➤ Shortage of interested students ➤ Unforeseen risks, such as a pandemic |

NATIONAL RESEARCH/ POLICY SUPPORTING RESEARCH DEVELOPMENT

1. Decree of the President of the Russian Federation of July 21, 2020 No. 474

CAPABILITY IMPROVEMENT TARGETED TO FULFIL THE ASPIRED RESEARCH GOALS

Improvements are desired in:

- Equipment/ software
- Access to international databases
- Cooperation with Russian and foreign members of the SUNRAISE consortium

ENABLERS AND BARRIERS ENCOUNTERED FOR RESEARCH TRAINING

| Enablers | Barriers |
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| <ul style="list-style-type: none"> ➤ Highly experienced and enthusiastic professionals ➤ Opportunities for interdisciplinary research | <ul style="list-style-type: none"> ➤ Shortage of regular allocation of state-funded places in PhD school ➤ Very low financial support for PhD students |

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| <ul style="list-style-type: none">➤ Advantageous location of the institution➤ Good partnership with local authorities, protected areas, and local communities | <ul style="list-style-type: none">➤ Absence of the Dissertation committee in the institution➤ Absence or very limited funding for field trips |
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