



Universität für Bodenkultur Wien
University of Natural Resources
and Life Sciences, Vienna

Profile of the University of Natural Resources and Life Sciences, Vienna (BOKU)

www.boku.ac.at

Prof. Josef GLÖSSL

Vice Rector for Research and International Research Collaboration





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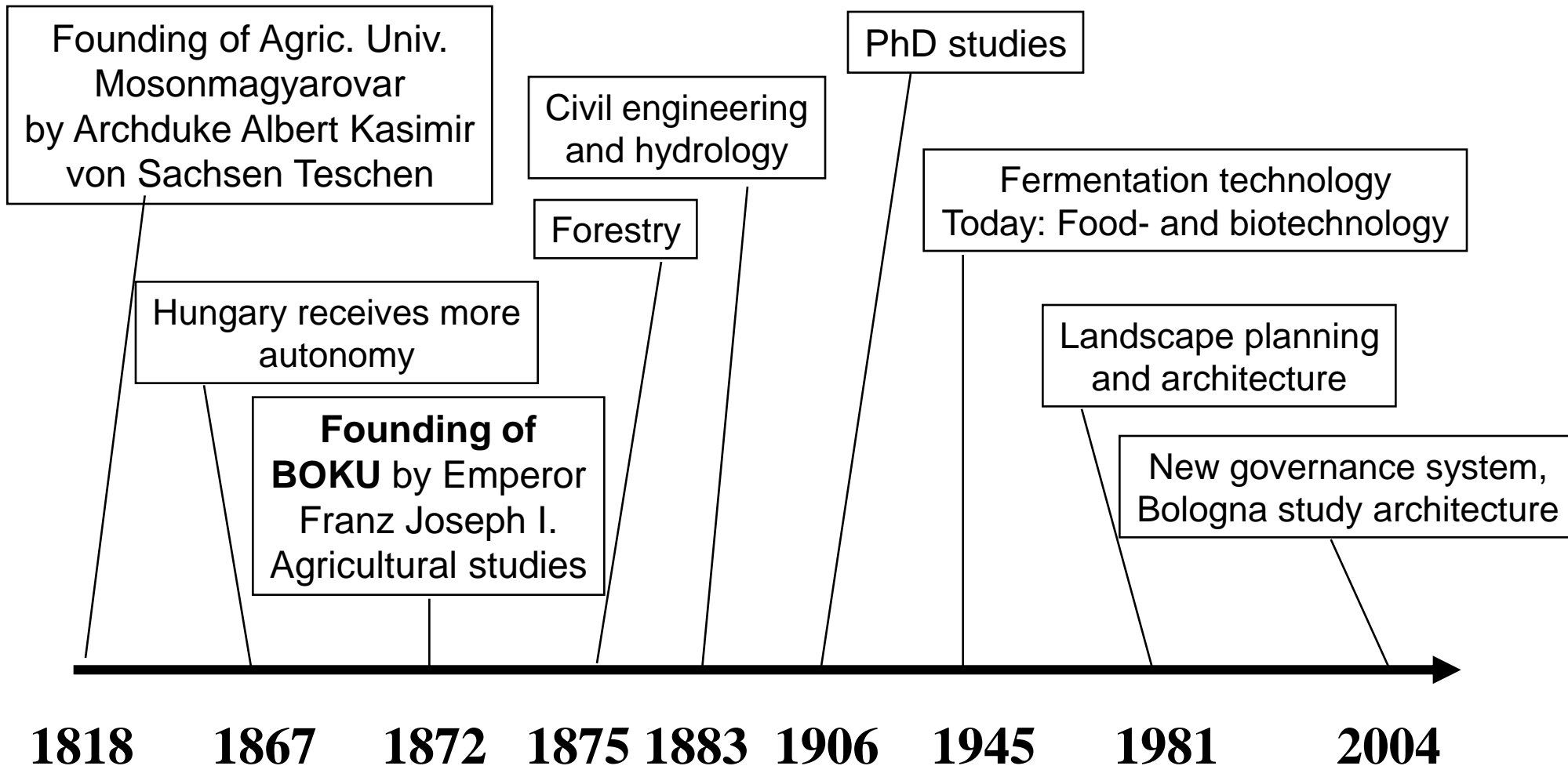
Mission Statement BOKU

The University of Natural Resources and Life Sciences, Vienna, the *Alma Mater Viridis*, sees itself as an **education and research centre for renewable resources**, which are a necessity for human life.

With its wide range of areas of expertise it is the task of BOKU to contribute significantly to the **protection of life resources for future generations**.

With a connection between **natural sciences, engineering and economics**, BOKU is trying to deepen the knowledge of an **ecologically and economically sustainable use of natural resources in a cultivated landscape**.

Historical Development of BOKU



BOKU – University of Natural Resources and Life Sciences Vienna – Facts and Figures I

- Founded in 1872
- ~ **12.700 students** in 8 Bachelor, 26 Master (+ several double degree programmes; 11 Master programs in English) and several PhD programs (~ 800 students)
- ~**1600 graduates** per year; students satisfaction: top ranked in Austria; >20% international students
- **GreenMetric World University Ranking:** no. 6 world wide, no. 2 in continental Europe; no.5 in education worldwide
- **QS World University Ranking by Subject:** in agriculture and forestry ranked no. 35 worldwide (in 2017)
- ~ 1640 employees (full time equivalent), ~ **2650 employees** (head count); ~850 scientists employed on a project basis; ~ **76 full professors** (1/3 non Austrians), ~ **130 Assoc. Profs**

BOKU – University of Natural Resources and Life Sciences Vienna – Facts and Figures II



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- ~ **660 ongoing research projects**: ~ 70 EU projects, ~ 90 FWF projects; successful participation in several excellence programs;
- **7 ERC Grants**
- Budget 2016: ~ 115 Mio € GUF, **50,9 Mio € external resources** (research projects)
- ~ **2500 scientific publications** per year (~ **850 SCI**), > 1500 presentations per year
- More than 100 **patent families** since 2004
- Organized in 15 departments

BOKU University – Themes & Competences



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„Three-Pillar System“: Interlinking Natural Sciences,
Technology & Socio-Economics

Soil and
terrestrial
ecosystems

Water –
Atmosphere -
Environment

Living space and
landscape

Development of
the Living Space

Management
of Natural
Resources

Resources and
societal
dynamics

Renewable raw
materials, resources
oriented technologies

Securing Nutrition
and Health

Nanosciences &
- technology

Food – nutrition -
health

Biotechnology



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	Department für Materialwissenschaften und Prozesstechnik (Department of Material Sciences and Process Engineering)
	Department für Biotechnologie (Department of Biotechnology)
	Department Wasser-Atmosphäre-Umwelt (WAU) (Department of Water, Atmosphere and Environment)
	Department für Nanobiotechnologie (DNBT) (Department of Nanobiotechnology)
	Department für Chemie (Department of Chemistry)
	Department für Integrative Biologie und Biodiversitätsforschung (Department of Integrative Biology and Biodiversity Research)
	Department für Lebensmittelwissenschaften und Lebensmitteltechnologie (Department of Food Sciences and Technology)
	Department für Raum, Landschaft und Infrastruktur (Department of Landscape, Spatial and Infrastructural Sciences)
	Department für Wirtschafts- und Sozialwissenschaften (Department of Economics and Social Sciences)
	Department für Nachhaltige Agrarsysteme (Department of Sustainable Agricultural Systems)
	Department für Bautechnik und Naturgefahren (Department of Civil Engineering and Natural Hazards)
	Department für Wald- und Bodenwissenschaften (Department of Forest- and Soil Services)
	Department für Angewandte Pflanzenwissenschaften und Pflanzenbiotechnologie (Department of Applied Plant Sciences and Plant Biotechnology)
	Interuniversitäres Department für Agrarbiotechnologie, IFA-Tulln (Department of Agrobiotechnology / IFA Tulln)
	Department für Angewandte Genetik und Zellbiologie (DAGZ) (Department of Applied Genetics and Cell Biology)

BOKU Departments

BOKU Bachelor Programs

- **Agricultural Sciences**
- **Forestry**
- **Food Sciences and Biotechnology**
- **Civil Engineering and Water Management**
- **Wood and Fibre Technology**
- **Landscape Architecture and Planning**
- **Environment and Bio-Resources Management**
- **Equine Sciences**

Further information: www.boku4you.at



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BOKU Master Programs (German language)

- **Agricultural and Food Economy**
- **Alpine Natural Dangers/Watershed Regulation**
- **Biotechnology**
- **Crop Sciences**
- **Environment and Bio-Resources Management**
- **Civil Engineering and Water Management**
- **Food Science and Technology**
- **Forest Sciences**
- **Landscape Architecture and Planning**
- **Livestock Sciences**
- **Organic Agricultural Systems and Agroecology**
- **Phytomedicine**
- **Wildlife Ecology and Wildlife Management**
- **Wood Technology and Management**

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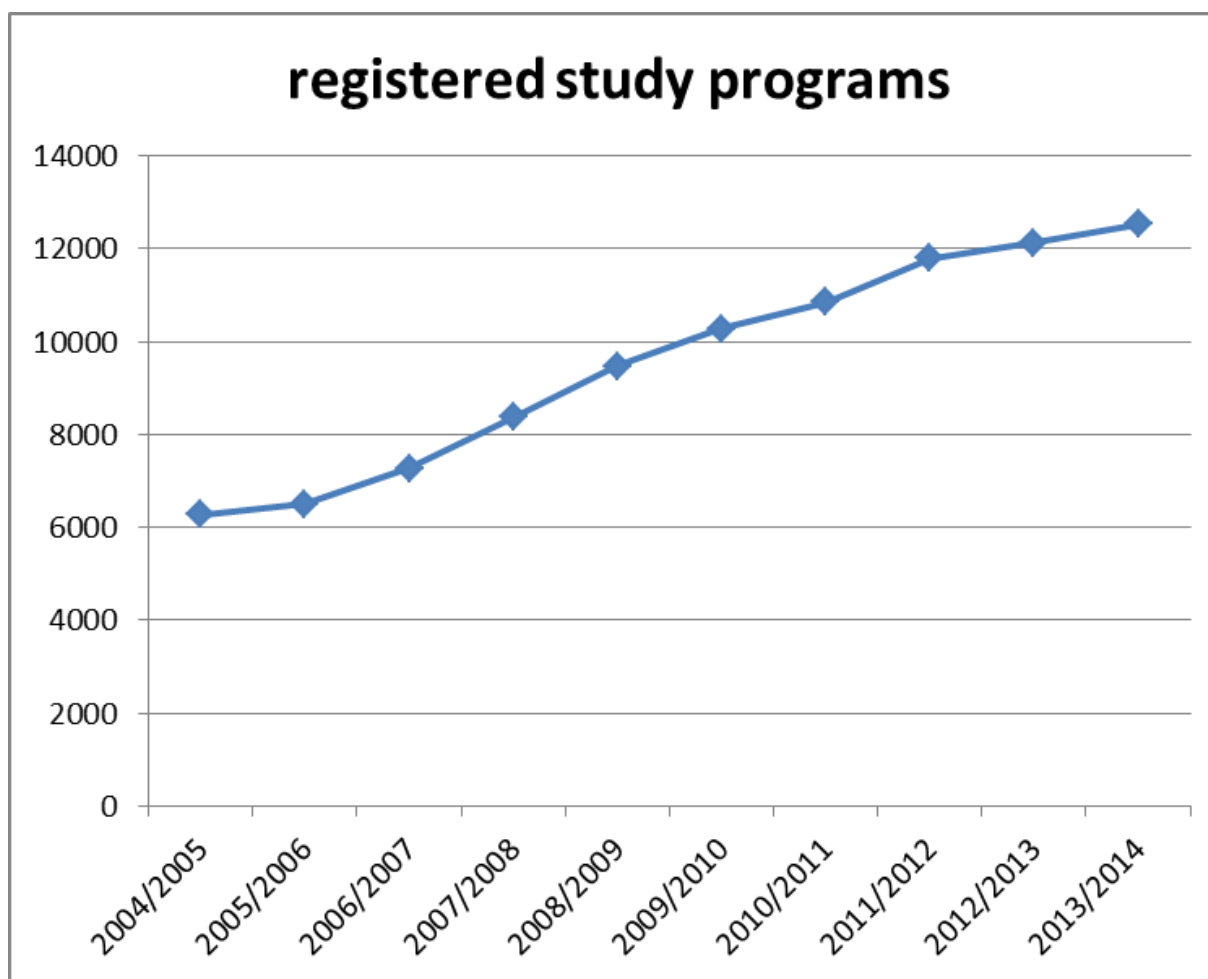
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BOKU Master Programs - international

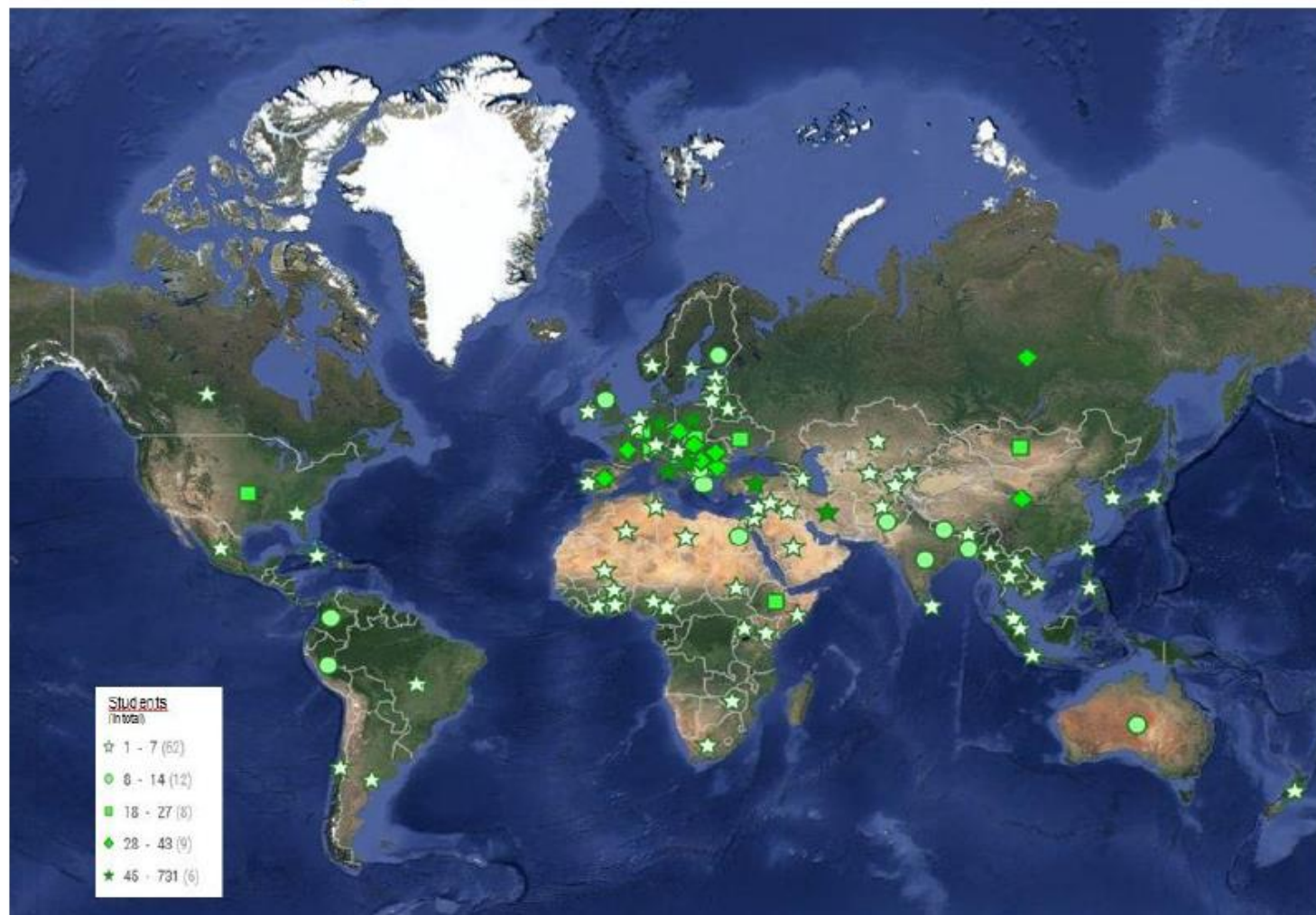
- **Animal Breeding and Genetics**
- **Limnology & Wetland Management**
- **Environmental Sciences – Soil, Water and Biodiversity**
- **European Forestry**
- **Horticultural Sciences**
- **Material and Energetic Exploitation of Renewable Raw Materials (in German)**
- **Mountain Forestry**
- **Natural Resources Management and Ecological Engineering**
- **Organic Agricultural Systems and Agroecology**
- **Safety in the Food Chain**
- **Sustainability in Agriculture, Food Production and Food Technology in the Danube Region**
- **Viticulture, Oenology and Wine Economics**
- **Water Management and Environmental Engineering**

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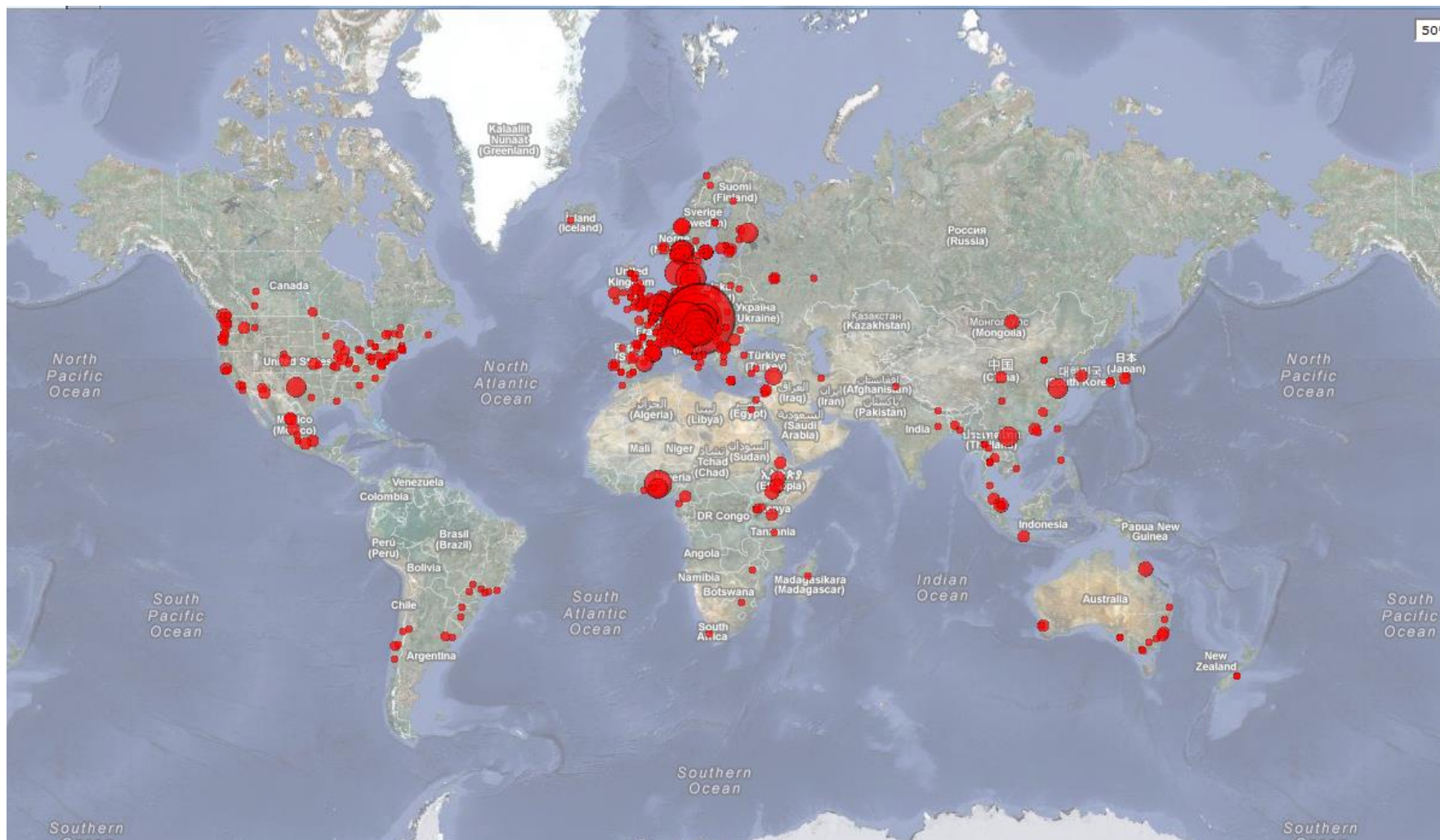
Registered Study Programs



Incoming Students



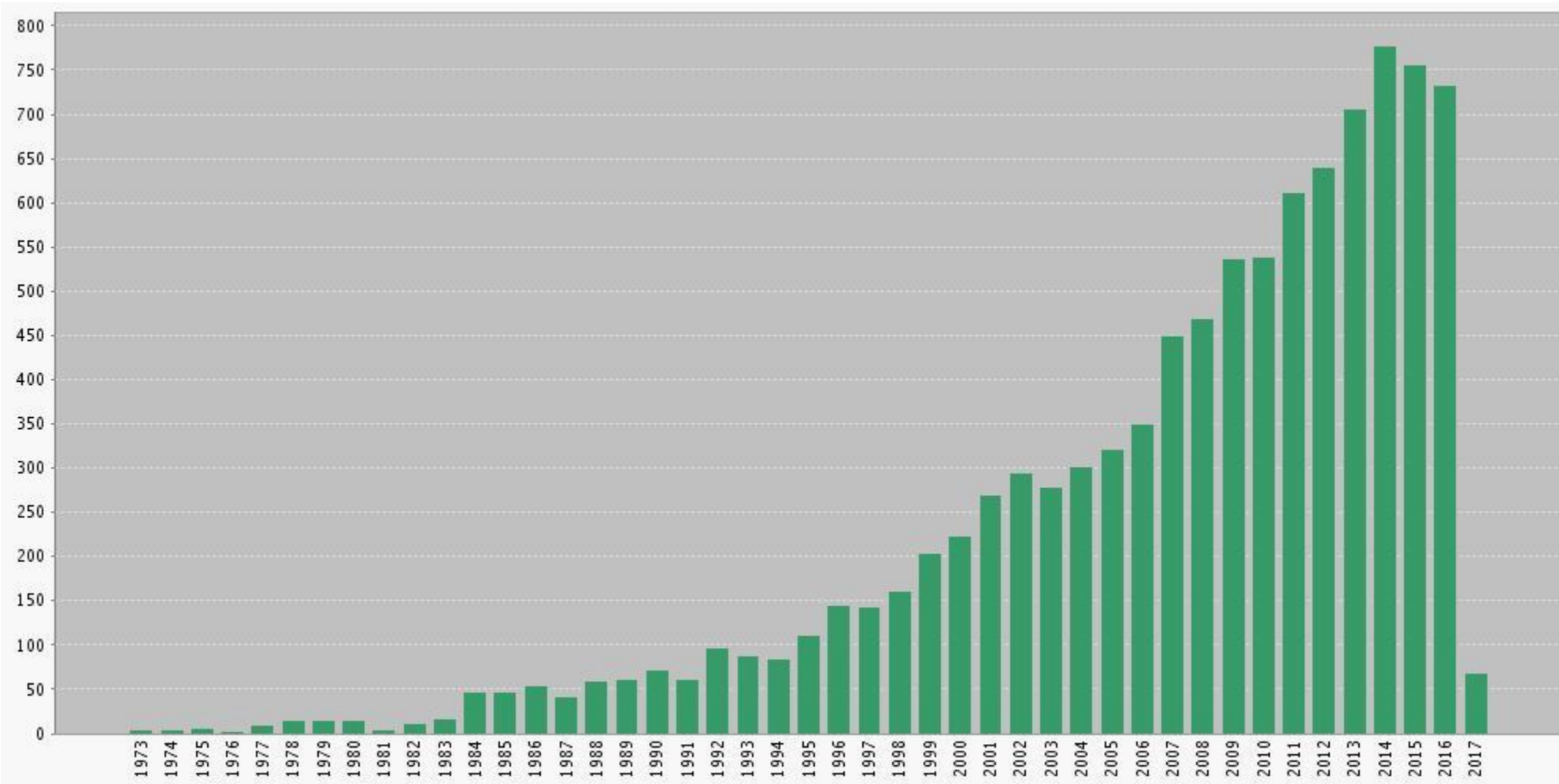
Map of Co-authorships of BOKU Publications





Development of SCI Publications of BOKU until March 2017: > 10.300 (without SSCI)

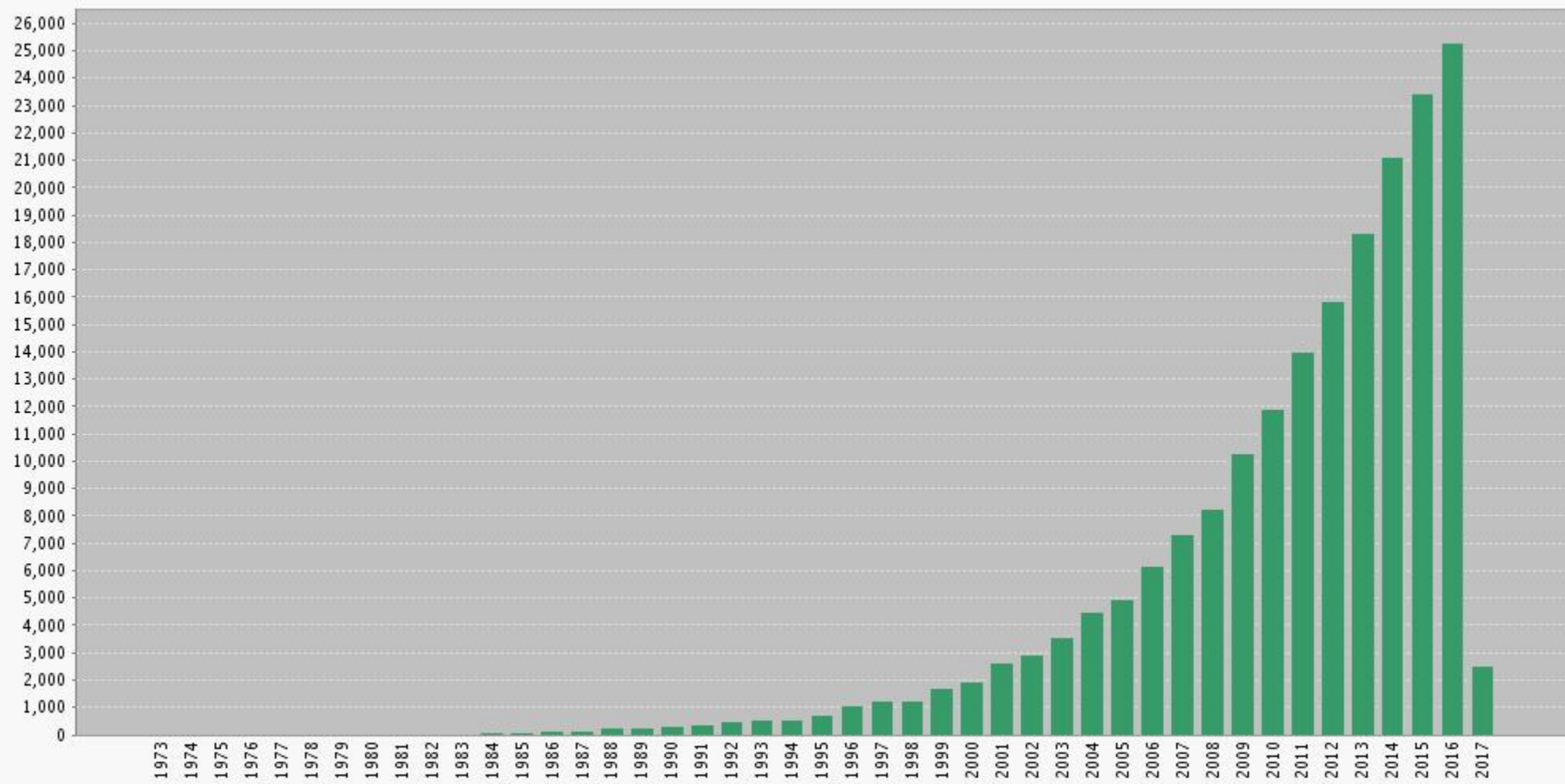
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Development of Citations of BOKU Publications until March 2017 in the Web of Knowledge: > 196.000, h-Index: 147; mean citation frequency per article: 20,54



BOKU University's Mission Statement for Internationalisation

BOKU is committed to engagement in education, research, innovation and development beyond its national boundaries, in its region and globally

BOKU will fulfil this Mission by focusing on the following goals:

- Increase in both incoming and outgoing student mobility
- "Internationalization at Home"
- Strengthening the development of international cooperative networks with both European and non-European countries (especially in the field of development assistance)
- Cooperations with international organisations with offices in Vienna (e.g. IIASA, UN)
- Development of an international, cross-disciplinary alumni network of international alumni and alumni in international organisations

Strategy for Internationalisation: BOKU's primary focus regions

- East and South Eastern Europe
- South East Asia
- Central Asia
- Himalaya Region
- Eastern Africa
- Central / South America

In order to increase co-operations BOKU is actively engaged in international networks, was a founding member of several networks, and has initiated one university network in 2010

Memberships in International Networks and Organisations (selection)

Euroleague for Life Sciences (ELLS) - <http://www.euroleague-study.org/>

ICA Association for European Life Science Universities - <http://www.ica-europe.info>

CASEE – ICA - <http://www.ica-casee.eu>

Danube Rectors' Conference - <http://www.d-r-c.org>

AGRINATURA - Network of European Agricultural [Tropically and Subtropically Oriented] Universities and Scientific Complexes Related with Agricultural Development - <http://www.agrinatura.eu/>

Global Challenges University Alliance (GCUA) – <http://www.slu.se/en/collaboration/international/global-challenges-university-alliance/about-gcua/>

EUA European University Association - <http://www.eua.be>

IROICA –European Network of International Relations Officers at Higher Education Institutes for Agricultural and Related Sciences - <http://www.ica-europe.info/iroica/>

EPSO – European Plant Science Organisation - <http://www.epsoweb.org/>

SILVA - European Forest Science Academic Network - <http://www.silva-network.eu/>

IUFRO International Union of Forest Research Organisations - <http://iufro.boku.ac.at/>

ISEKI-Food Association (IFA) - https://www.iseki-food.net/ifa_members

Oenoviti International - <http://www.oenoviti.univ-bordeauxsegalen.fr/>

ICA Regional Network for Central and South Eastern Europe (“ICA-CASEE”)

- Is a network of Central and South Eastern European Higher Education Institutions relating to the Life Science disciplines (agriculture, food, biotechnology, natural resources, rural development and the environment)
- Was founded by the University of Natural Resources and Life Sciences, Vienna, (BOKU) in 2010
- Is still open for further Life Sciences Univ. members
- The **objectives** of network are:
 - to support the development and implementation of the EU Strategy for the Danube Region (EUSDR)
 - to strengthen research, education and University Development in this region
 - to develop joint research, educational and other projects



www.ica-europe.info/casee

ICA-CASEE involvement in the EUSDR

1. CASEE is one of the few academic networks mentioned in the EU Strategy for the Danube region (EUSDR)
2. BOKU / CASEE is actively involved in the Austrian working groups for the EUSDR)
3. PA 7 flagship project:
“Danube River REsearch And Management – DREAM”
4. Danube INCONet Project on a bioeconomy RTI strategy for the Danube Region – Position papers available at: <https://danube-inco.net/object/document/18543>
5. 2nd Austrian EUSDR Dialogue Forum,
9.9.2016, at BOKU TULLN Campus

3. CASEE Fund for Incentives (Ffi)

1/5

- For 2015 – Final reports of the following projects were received:
 - „**Biotechnology and Food Sciences (winter school)**“, SAU Nitra
 - „**Machinery induced compaction of agricultural soil and mitigation strategies in the Danube Regions**“, BOKU
- For 2016 – no applications were received
- In 2017 – the following two projects were funded:
 - **Summer School “Ethics, Quantity and Quality Assurance in Agriculture, Food Production and Food Technology”** in Novi Sad in July 2017 (project coordinator: Dragana Savic/UNS)
 - **Determining the influence of cover crops on soybean production and environmental life cycle assessment** (project coordinator: Pia Euteneuer/BOKU)

International Joint Degree Programme Danube AgriFood Master

Sustainability in Agriculture
Food Production and Food Technology
in the Danube Region





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BOKU Centre for Agricultural Sciences (CAS)

Goals:

- to connect BOKU departments, institutes, initiatives, sites and external stakeholders related to agricultural sciences
- to give agricultural sciences a "voice"
- to support and develop agricultural teaching at BOKU
- to foster agricultural research at BOKU

www.boku.ac.at/wissenschaftliche-initiativen/zentrum-fuer-agrarwissenschaften/



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BOKU Centre for Agricultural Sciences (CAS)

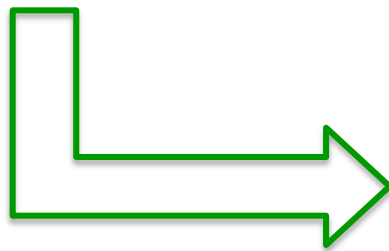
Voice-giving initiatives:

- Organisation of an annual scientific conference
 - Organisation of a semester touchdown for students
 - Organisation of lecture series (partly in co-operation with partners)
 - CAS newsletter
 - ...
-

Strategic focus of BOKU: Sustainable Bioeconomy

"Bioeconomy is the knowledge-based production and use of organic resources in order to provide products, procedures and services for all economic sectors in the framework of a sustainable economic system...."

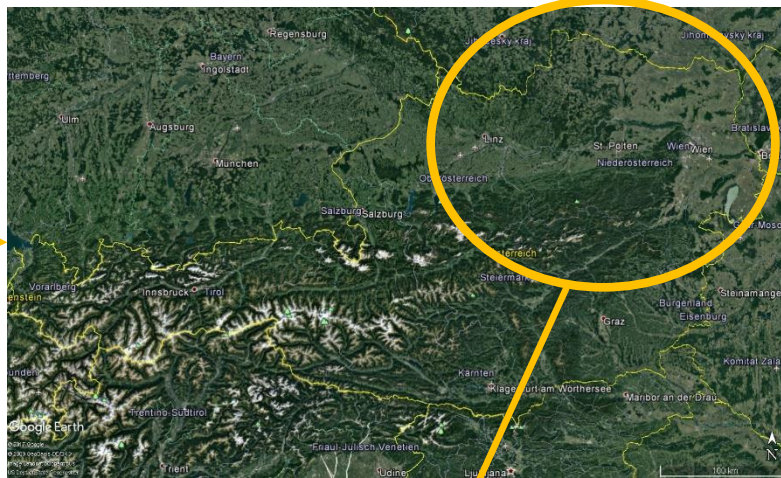
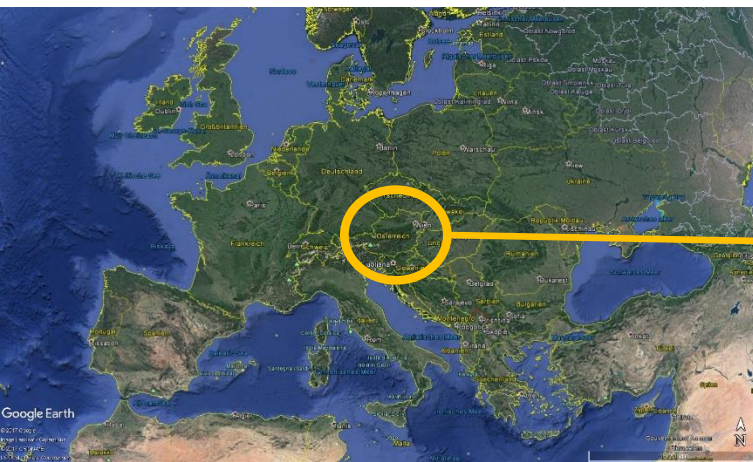
Among the most important sectors of the bioeconomy are those of primary production (agriculture, forestry and fisheries), the food and feeding stuff industry, the wood-processing businesses, the pulp and paper industry, as well as parts of the chemical and biotechnological industry, and of renewable power industry....." (Source: Policy Paper on Bioeconomy by „BIOS Science Austria“)



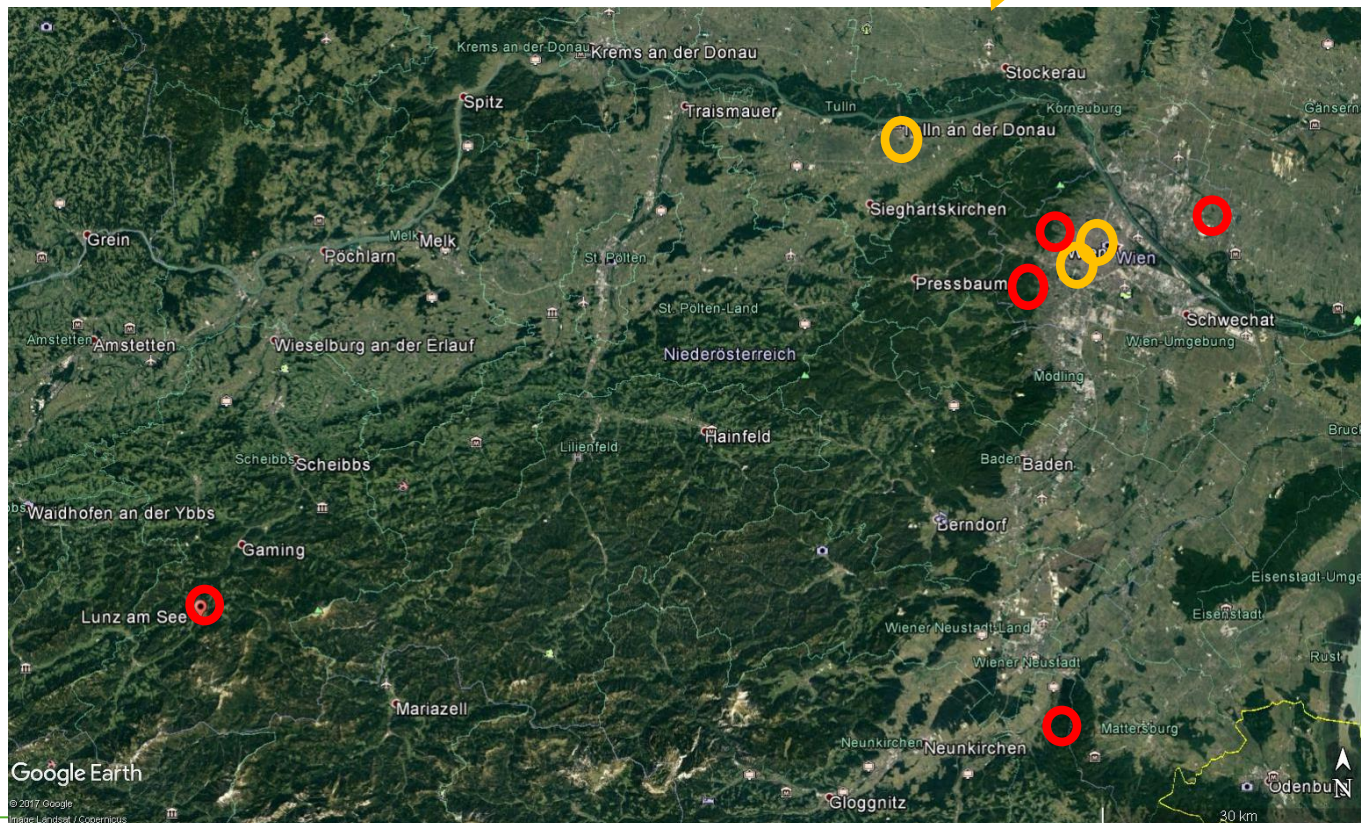
**How to prepare our students to
contribute to a
sustainable Bioeconomy?**

Sites of BOKU

- Türkenschanze / Gregor Mendel Straße
- BOKU Site Muthgasse
- BOKU Site Tulln
- „Fourth Site“ – Research farms and forests
 - Research Farm Groß-Enzersdorf
 - Landscape planning research Essling
 - Horticulture Research Jedlersdorf
 - Research forest garden Knödelhütte
 - Research Forest Heuberg
 - Water Cluster Lunz



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Site Türkenschanze



BOKU Site Muthgasse



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Research farms and forests



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**BOKU in
winter**



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THANKS FOR YOUR ATTENTION!

Prof. Josef GLÖSSL

Vice Rector for Research and International Research Collaboration

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