



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

Die aktuelle Entwicklung der BOKU im europäischen und internationalen Umfeld

BOKU Brüssel-Delegationsreise
15./16. Jänner 2015

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BOKU – woher kommt sie, wohin geht sie?



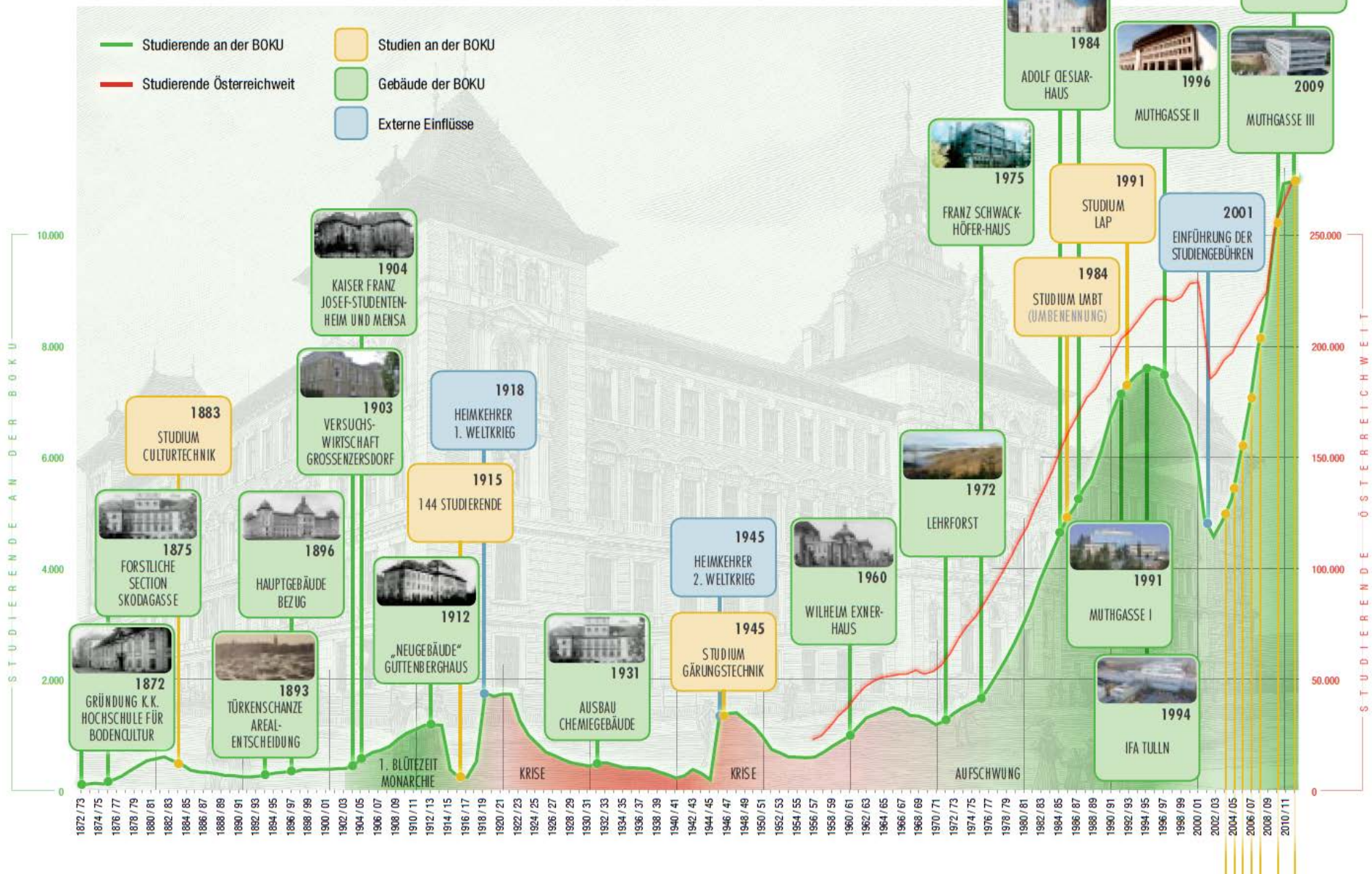
**Rückblick
und
Ausblick**



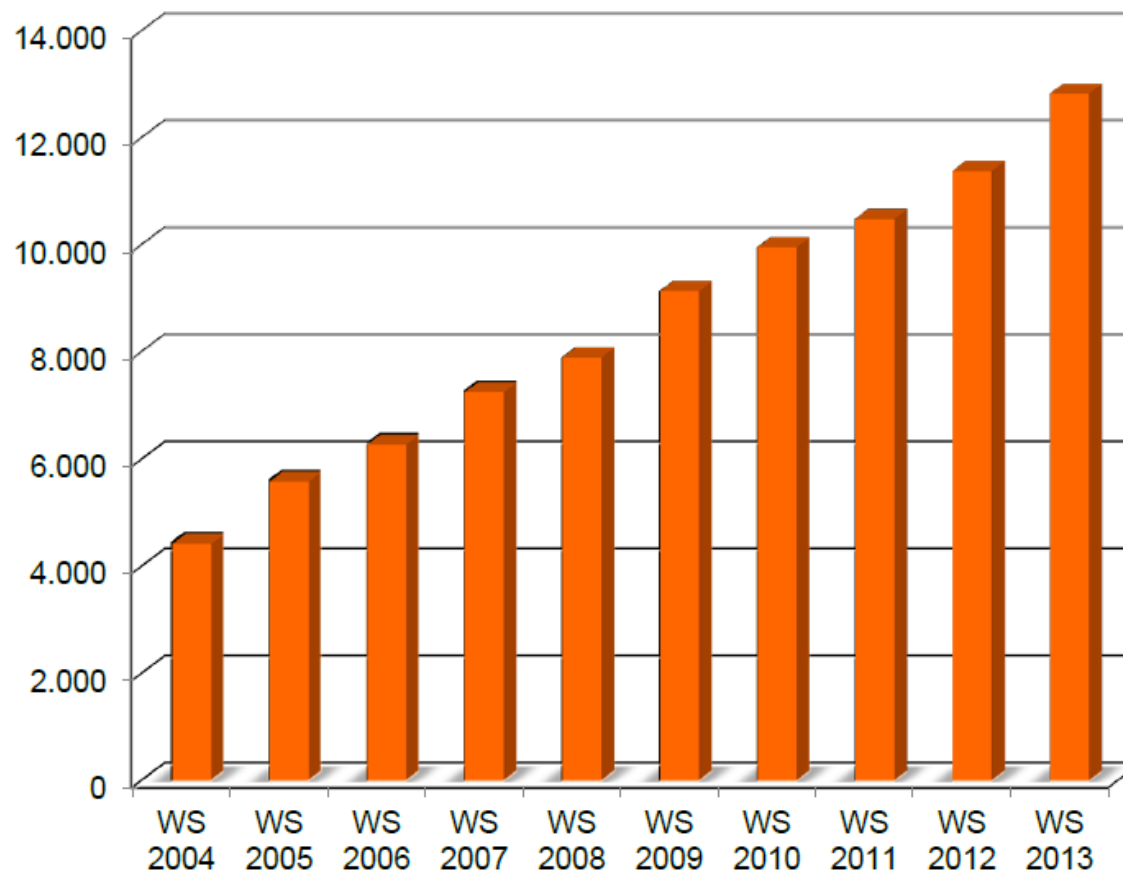
BOKU – Fakten und Zahlen

- Gegründet 1872 (142 Jahre)
- ~ **12.300 StudentInnen** (20% ausländische Studierende)
- ~ 1600 Angestellte (VZÄ), **2550 Köpfe**; ~700 WissenschaftlerInnen beschäftigt auf Projektbasis; ~ 74 ProfessorInnen, ~ 130 Assoc. Profs
- 8 Bachelor, 26 Master (inkl. sieben double degree Programme; 11 Masterprogramme in Englisch) und mehrere Doktoratsprogramme (~ 800 Studierende)
- ~ **1550 AbsolventInnen pro Jahr**
- Studierendenzufriedenheit: Top 2 in Österreich

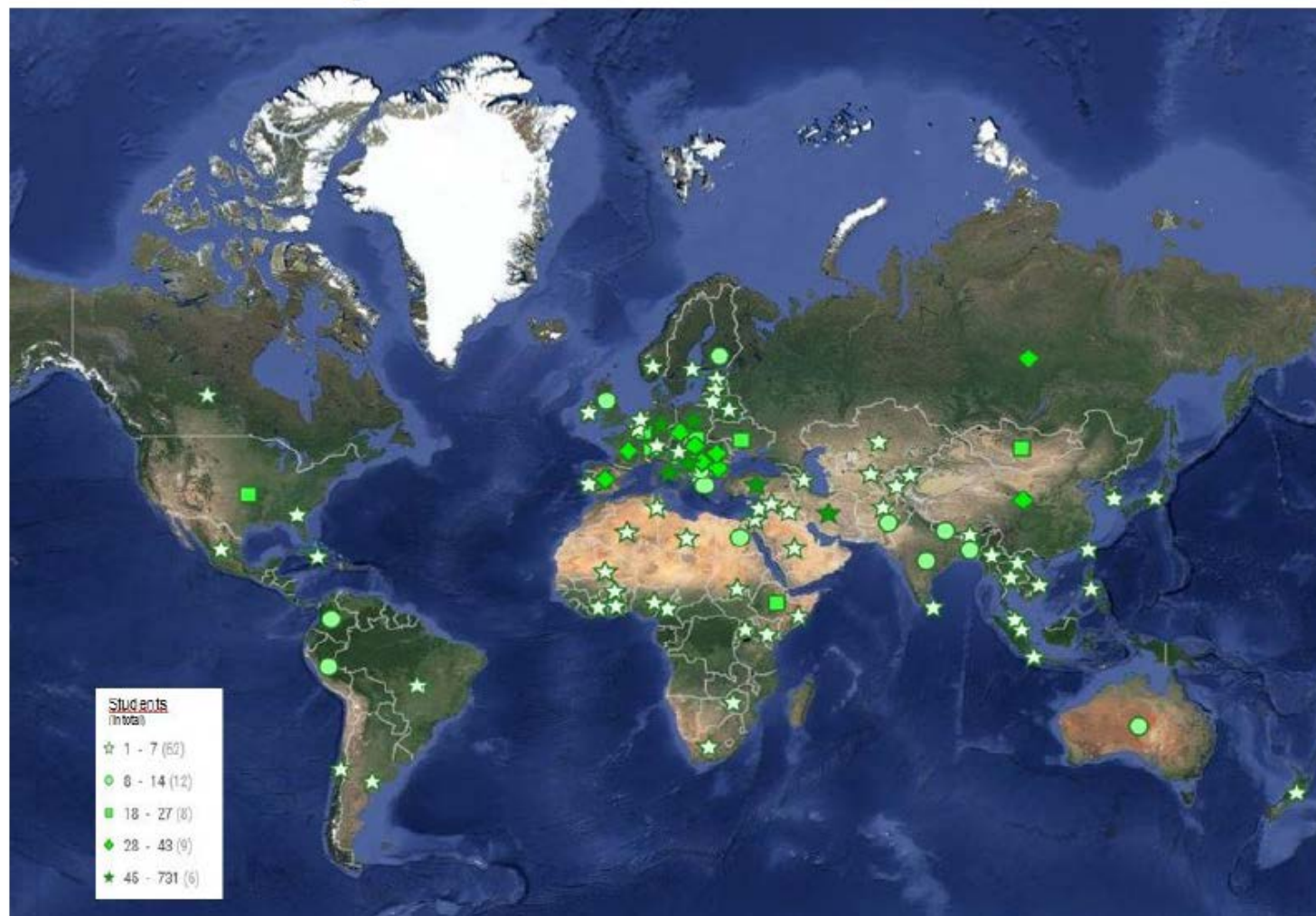
Verlauf der Studierendenzahlen 1872/73 – 2011/12



Registrierte Studien



Internationale Studierende - Incoming



Bachelorstudien

- * Agrarwissenschaften (H255)
- * Forstwirtschaft (H 225)
- * Holz- und Naturfasertechnologie (H 226)
- * Kulturtechnik und Wasserwirtschaft (H 231)
- * Landschaftsplanung und Landschaftsarchitektur (H 219)
- * Lebensmittel und Biotechnologie (H 217)
- * Umwelt- und Bioressourcenmanagement (H 227)
- * In Kooperation mit der Veterinärmedizinischen Universität Wien:
Pferdewissenschaften (H 602)

Masterstudien (Deutsch)

- * Agrar- und Ernährungswirtschaft (H 457)
- * Alpine Naturgefahren/Wildbach- und Lawinenverbauung (H 477)
- * Biotechnologie (H 418)
- * Forstwissenschaft (H 425)
- * Holztechnologie und Management (H 426)
- * Kulturtechnik und Wasserwirtschaft (H 431)
- * Landschaftsplanung- und Landschaftsarchitektur (H 419)
- * Lebensmittelwissenschaft und –technologie (H 417)
- * Nutzpflanzenwissenschaften (H 455)
- * Nutztierwissenschaften (H 456)
- * Organic Agricultural Systems and Agroecology (H 500, Englisch/Deutsch)
- * Phytomedizin (H 422)
- * Umwelt- und Bioressourcenmanagement (H 427)
- * Wildtierökologie und Wildtiermanagement (H 223) (Kooperation mit VUW)

BOKU Masterprogramme - international

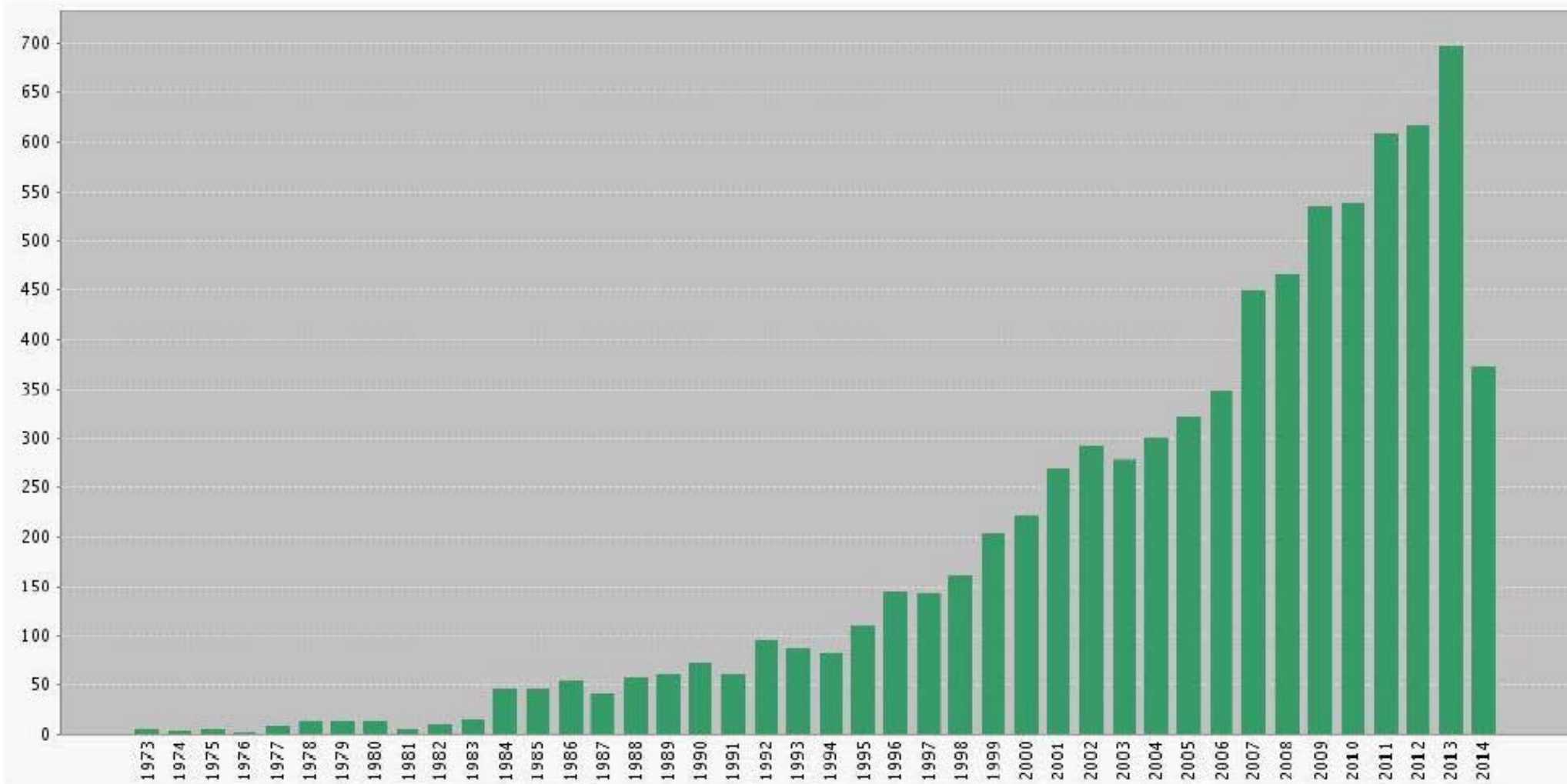
- **Animal Breeding and Genetics**
- **Applied Limnology – Wetland Management**
- **Environmental Sciences – Soil, Water and Biodiversity**
- **European Forestry**
- **Horticultural Sciences**
- **Material and thermal utilization of renewable raw materials**
- **Mountain Forestry**
- **Natural Resources 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 Economy**
- **Water Management and Environmental Engineering**

Further information : www.boku4you.at

BOKU – Fakten und Zahlen

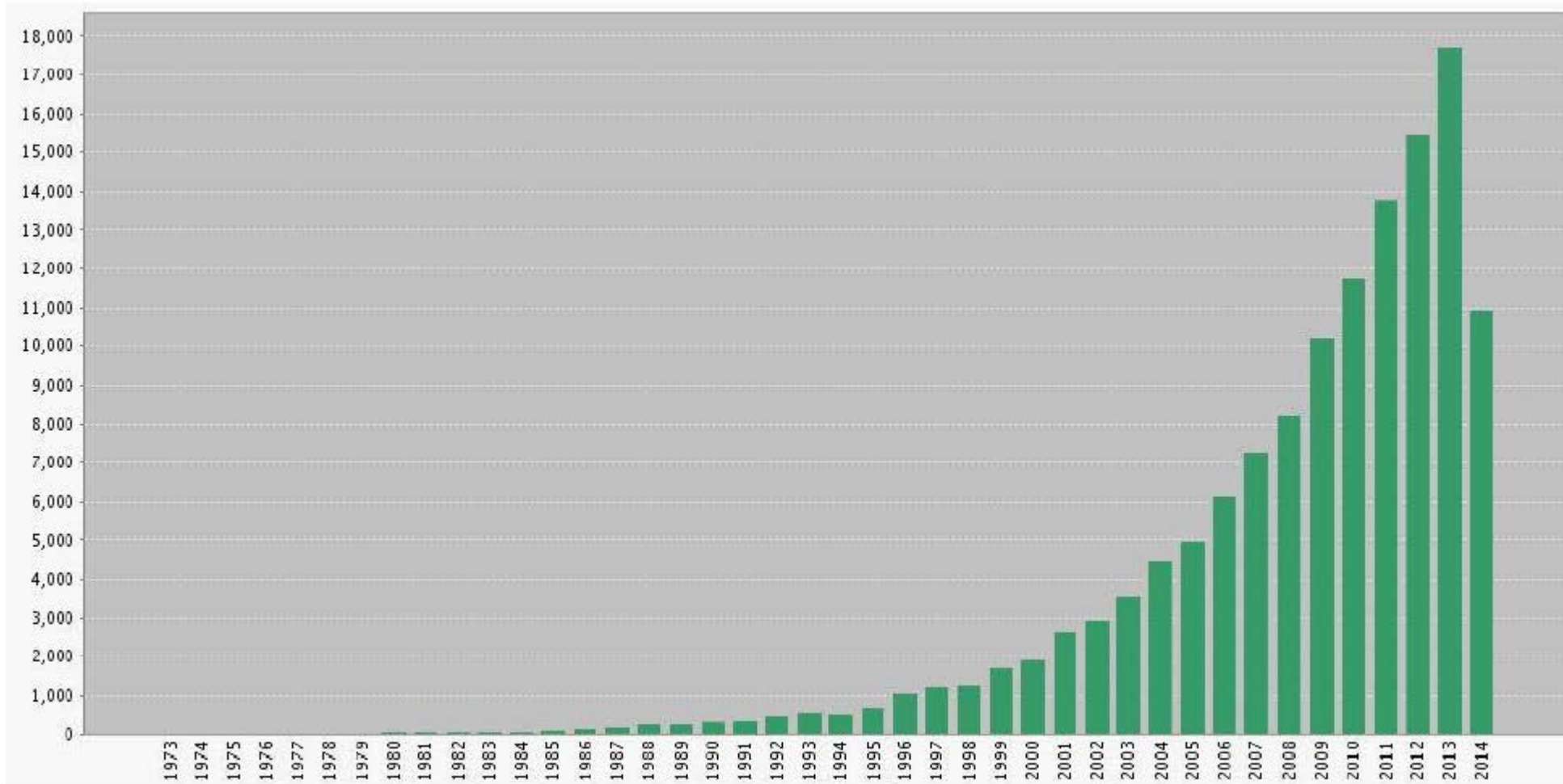
- **Green University Ranking:** 27. Platz weltweit, 11. Platz in Europa, 1. Platz im deutschsprachigen Raum; 2. Platz in der Lehre weltweit
- **QS World Universities Ranking by Subject (Agriculture & Forestry): Rang 33**
- **~ 2500 wissenschaftliche Publikationen pro Jahr (~ 700 SCI), ~ 1400 Präsentationen pro Jahr**
- **Gesamtoutput - SCI:**
 - 7919 Publikationen (Stand August 2014)
 - 132.000 Zitierungen
 - knapp 18.000 Zitierungen 2013
 - Hirschfaktor der Institution: 121

Entwicklung der SCI-Publikationen der BOKU bis August 2014

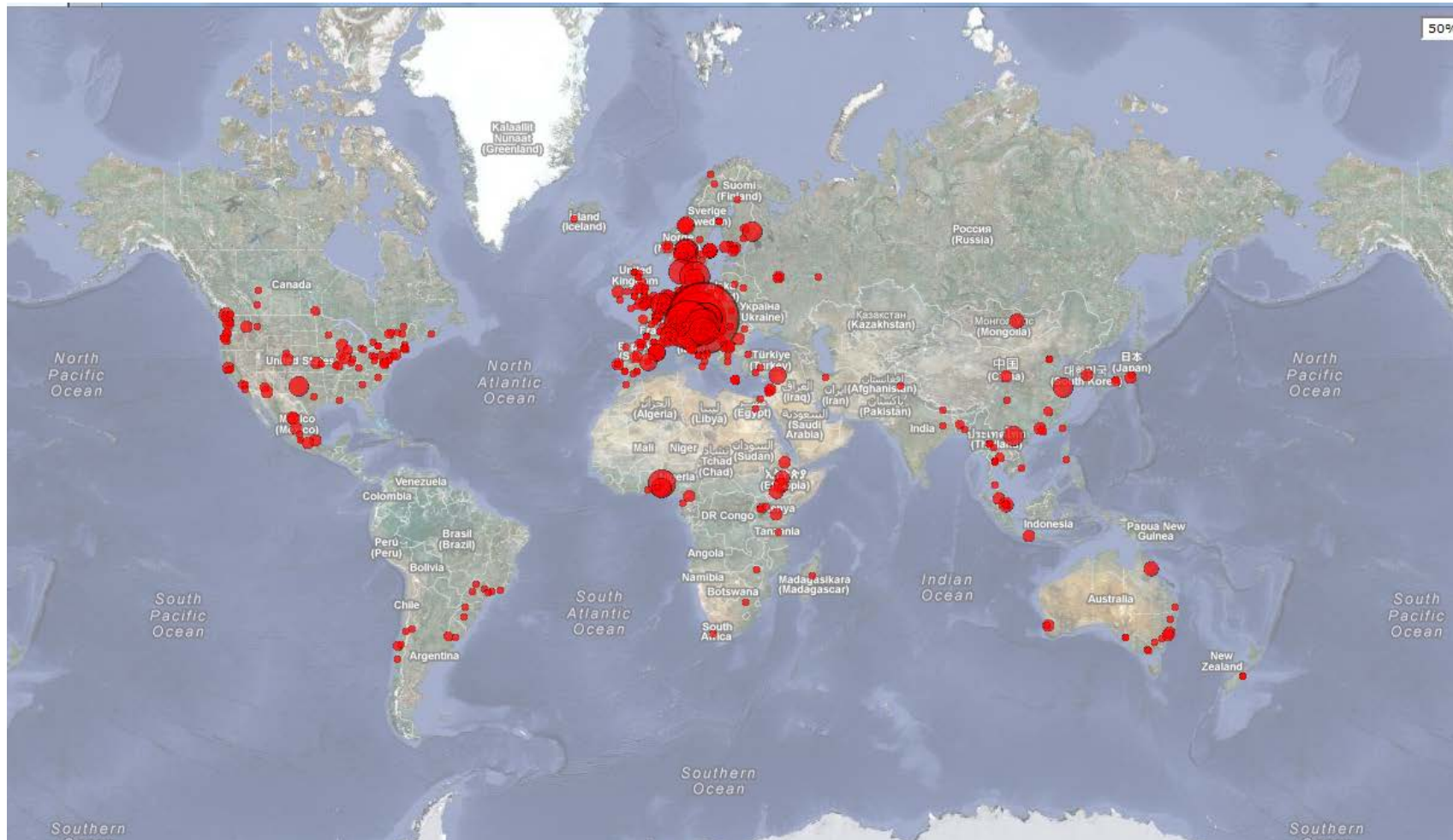


August 2014

Entwicklung der Zitierungen der BOKU bis August 2014 im Web of Knowledge



Wissenslandkarte der BOKU 2012 – Ko-AutorInnenschaften

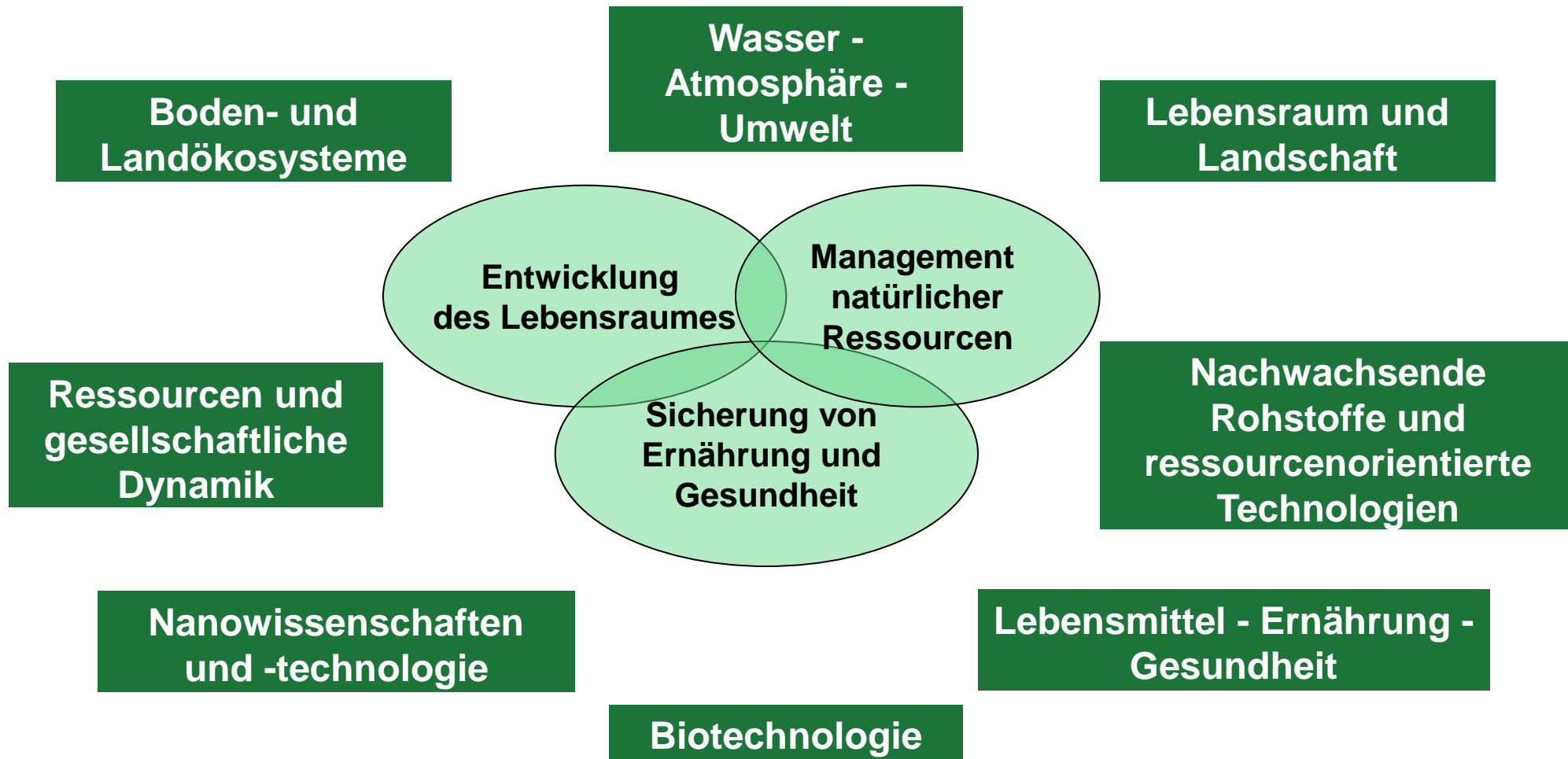


BOKU – Fakten und Zahlen

- ~ 700 laufende Forschungsprojekte
 - ~ 100 EU Projekte
 - ~ 110 FWF Projekte
 - Teilnahme an zahlreichen Exzellenzprogrammen (FWF, COMET, 9 Christian Doppler Labors, Laura Bassi, WWTF,...)
 - 3 ERC Grants
- ~ 105 Mio. € Basisfinanzierung, 42 Mio € externe Ressourcen (Projekte, Basis 2013)

Themen und Kompetenzen der BOKU

3-Säulenprinzip: Naturwissenschaften – Technik – Sozioökonomie



BOKU – woher kommt sie, wohin geht sie?



BOKU International

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

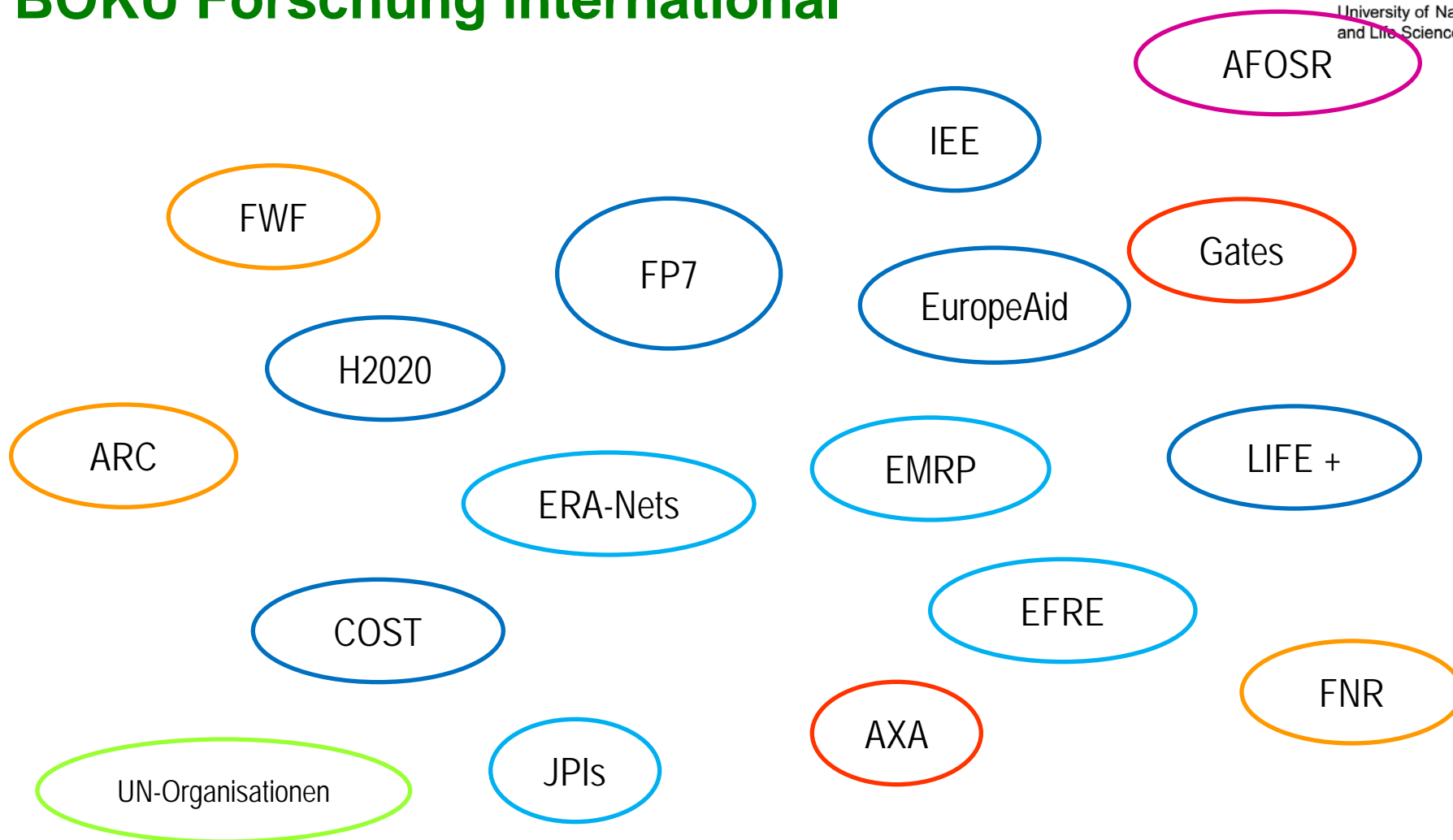
In order to increase co-operations BOKU is actively engaged in international networks, was a founding member of several networks, and has initiated one university network in 2010

BOKU – woher kommt sie, wohin geht sie?



**Forschung
international**

BOKU Forschung international*



BOKU in FP7

- 86 erfolgreiche Beteiligungen, davon
 - 19 KoordinatorInnen
 - 2 ERC Starting Grants
 - 9 Marie Curie ITNs/IAPPs
 - 6 Marie Curie Individual Fellowships
 - 3 Research for the Benefit of SME

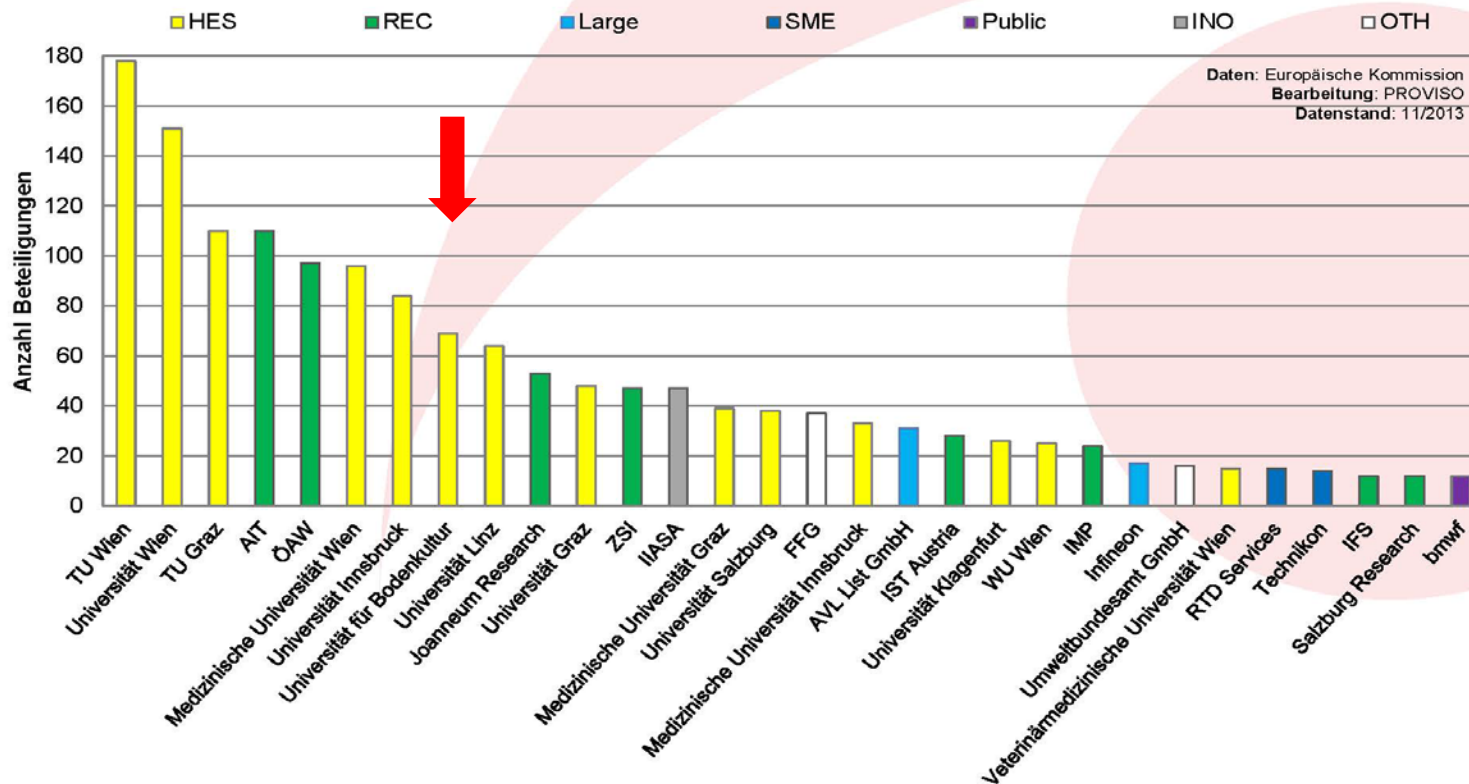
- Bewilligte Projektsumme rd. 31 Mio €
- Bewilligte Fördersumme rd. 25,5 Mio €



→ Die BOKU war in allen 4 spezifischen Programmen des FP7 erfolgreich

7. RP: österreichische Beteiligungen nach Organisation¹

dargestellt sind alle österreichischen Organisationen mit derzeit *mindestens zwölf verhandelten Beteiligungen* im 7. RP



¹ Abkürzungen siehe Anhang

BOKU in H2020



- Mehr als 60 Einreichungen, davon u.a.
 - 2 ERC
 - 14 Marie S. Curie (exkl. ITNs)
 - 5 Industrial Leadership (3 in 2. Stufe)
- Societal Challenges, v.a.
 - 2 - Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy
 - 5 - Climate action, environment, resource efficiency and raw materials
 - 1- Health, demographic change and wellbeing
- Aktueller Erfolgsstatus:
 - 11 Projekte mit BOKU-Beteiligung (davon zwei Koordinationen) im Status „Vertragserrichtung“ bzw. schon laufend
 - Erfolgreiche Einwerbung eines ERC Starting Grants (Dr. Kleine-Vehn)
 - Bewilligte Fördersumme: € 4.049.668,00



BOKU-Strategie Horizon 2020

■ Ziele

- Verbesserung der Erfolgsquote bei BOKU-kooordinierten Einreichungen
- Verbesserung der Erfolgsquote in den BOKU-Themen der Societal Challenges 2, 5
- Halten der Erfolgsquote bei den Marie S. Curie-Programmen
- ERC-Grants

■ Maßnahmen

- Effektive Nutzung der europäischen Netzwerke und Gremien zum Informations- und Wissenstransfer („von und nach Brüssel“)
- Ausbau des internen Supports für BOKU-KoordinatorInnen, Schwerpunkt Antragsstellung
- frühzeitige Einbindung von TechTransfer & Legal Support v.a. für Impact-Teil des Antrags (Innovation, Verwertung, IPR)

Europäische Aktivitäten

- Gremien & Netzwerke, u.a.
 - EIP Agri (Focus Group)
 - PPPs Biobased Industries, Shift2Rail
 - JPIs Climate & FACCE (Agriculture, Food Security and Climate Change)
 - EPSO / ETP Plants for the Future
- Delegationsreise nach Brüssel (jährlich)
- EARMA – European Association of Research Managers & Administrators



BOKU – woher kommt sie, wohin geht sie?



**Netzwerke &
Plattformen
International**



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CDR - Centre for Development Research

- The CDR is a multi-disciplinary scientific unit located at BOKU, founded 2009
- It brings together a multidisciplinary network of over twenty scientists from BOKU
- The CDR engages in national and international networks such as the AGRINATURA (The European Alliance on Agricultural Knowledge for Development) and the Commission for Development Studies (KEF)
- The CDR collaborates with a wide range of partners in Africa, Asia and Latin America
- It conducts applied development research and training in areas related to sustainable natural resource management.
- The CDR works towards poverty reduction, food security, and well-being for the most vulnerable population



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ICA - European Association of Life Science Universities

- Founded as “International Conference of Agricultural Universities” (initiated by Wageningen Univ.)
- aims to develop concerted actions in the field of higher education and research in agricultural and related sciences
- > 60 life science universities from the geographic region of Europe
- cooperation in curriculum development

www.ica-europe.info

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



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www.ica-europe.info/casee

DRC – Danube Rectors Conference

- Established in 1983
- Members: > 65 higher education institutions from 13 countries
- General aims:
 - improvement of higher education in teaching and research in the region
 - advancement of member universities by establishing and facilitating bilateral and multilateral contacts between the universities
- DRC Presidency changes annually
- Annual DRC Conference:
 - Nov. 2011: at BOKU, Vienna
 - Nov. 2012: at CULS, Prague
 - Nov. 2013: Cluj-Napoca
 - Nov. 2014: Belgrade
- Involvement in the Priority Area working groups of the EU Strategy for the Danube Region



ELLS – Euroleague for Life Sciences



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Founded in 2000 (initiated by Univ. Wageningen)

General Aims:

- To develop a quality network of European universities in the fields of Natural Resources Management, Agricultural and Forestry Sciences, Environmental Sciences, Life Sciences, Veterinary Sciences, Food Sciences
- 7 Member Universities:
 - Univ. Copenhagen; Swed. Univ. Agr. Sci.; Czech Univ. Life Sci.; Univ. Hohenheim; Warsaw Univ. Life Sci.; Wageningen Univ. and Res. Ctr.; BOKU Vienna
- This network should strengthen each partner university's position and capability through
 - sharing expertise and costs in the development and delivery of their degree programs, and
 - explore cooperation with other consortia in higher education.
- “Fund for Incentives” for support of activities
 - budget from membership fees



Global Challenges University Alliance



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- Initiated by Swedish University of Agric. Sciences (SLU) in 2012
- Is planned to involve 25 of the world's top "bio-economy" universities at all continents (4-5 selected leading univ. per continent)
- Focus: Agricultural research and education issues in relation to the current Global Challenges
- Build-up will take place through
 - thematic Global Challenges University Workshops, each with 4-10 participating universities, e.g.
 - Aquaculture - Providing Food for the Future (10/2014)
 - The Future of Forests - To Manage Forests for People (6/2014)
 - corresponding thematic Global Challenges Summer Schools for MSc/PhD students. Both research and education components will train young "bioeconomy" leaders of the future:
 - Biofuels and Biorefineries (2013)
 - The Future of Food – safety, quality and security (2014)

Global Challenges University Alliance



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➤ Prospective participating universities:



<http://www.slu.se/en/international/global-challenges-university-alliance/about-gcua/>



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Internationale Praxisbeispiele

Examples of CASEE Activities - 1

CASEE involvement in the EU Strategy for the Danube region



Project selected by Priority Area 7
as a „flagship project“

“Danube River REsearch And Management – DREAM”

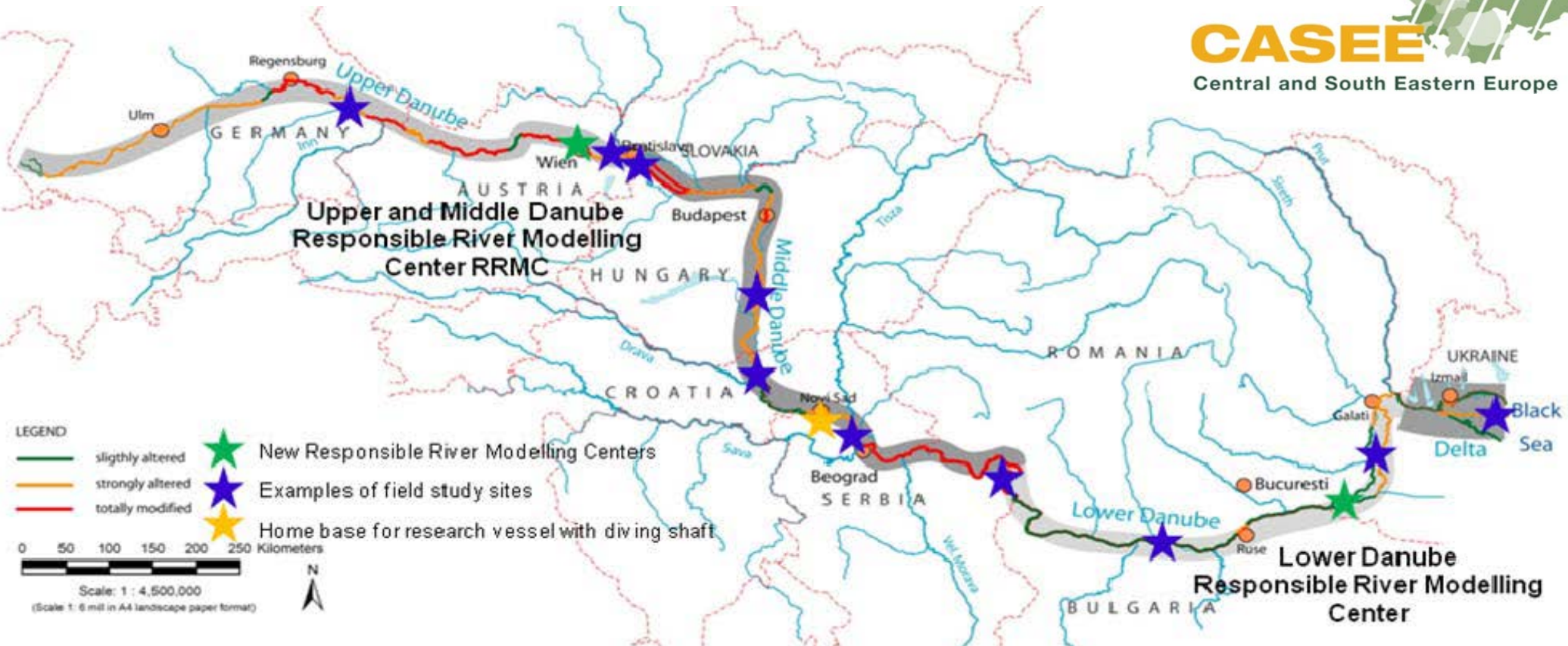
Objectives:

- Building two large **Responsible River Modelling Centers**/hydraulic engineering laboratories (10.000 liter/sec)
- Establishing a **network of field study sites for model calibration and validation**
- construction of a **research vessel** with a diving shaft for the whole Danube
- Establishment of a **network of existing and extended Danube River Research Institutions** throughout **all riparian countries**

DREAM Project: Geographical distribution of research sites



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DREAM/SEDDON: Forschungskanal Wien



Universität für Bodenkultur Wien
University of Applied Sciences
University of Natural Resources
Sciences, Vienna



EUROPEAN UNION
European Regional
Development Fund



DREAM/SEDDON



UNIVERSITÄT FÜR BODENKULTUR WIEN
Universität für Bodenkultur Wien



EUROPEAN UNION
European Regional
Development Fund



DREAM/SEDDON



DREAM/SEDDON



UNIVERSITÄT FÜR BOUENKUNST WIEN
University of Applied Sciences
and Life Sciences, Vienna





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Examples of CASEE Activities - 2

Joint Master

“Sustainability in Agriculture, Food Production and Food Technology in the Danube Region”

Prof. Barbara Hinterstoisser

Vice Rector for Teaching and International Affairs



JOINT MASTER “SUSTAINABILITY IN AGRICULTURE, FOOD PRODUCTION AND FOOD TECHNOLOGY IN THE DANUBE REGION”



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Key points:

- Joint Degree between **BOKU** and **Szent István University (SZIE), Gödöllő**
 - additional impact (courses, MSc thesis supervision, summer schools...) by partner universities (**Corvinus University Budapest (HU)**, **CULS Prague (CZ)**, **WULS Warsaw (PL)**, **University of Zagreb (HR)**, **University of Novi Sad (SR)**, Slovak Agricultural University **Nitra (SK)** **USAMVBT Timisoara (RO)**)
 - final: "Joint Master Degree in Sustainability in Agriculture, Food production and Food technology" (MSc.) of **BOKU and SZIE**
 - duration 4 semester
 - language: English
 - obligatory: start at BOKU or SZIE
 - 2. and 3. semester at one of the other partner universities
 - 4. Semester either at BOKU or SZIE
 - students will attend at least 3 different universities!!
 - additional obligatory: 2 Summer schools (before 1st and before 3rd semester)
-



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www.boku.ac.at

THANKS FOR YOUR ATTENTION!

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