

Development of academic collaboration 20 years after the Velvet Revolution – a personal view, retrospect and outlook

Norbert Müller

Institute of Organic Chemistry, Johannes Kepler University, Linz

Johannes Kepler Universität
Linz



Jihočeská Univerzita
České Budějovice



EUROPEAN TERRITORIAL CO-OPERATION
AUSTRIA-CZECH REPUBLIC 2007-2013
Gemeinsam mehr erreichen. Společně dosáhneme více.

Valtice-NMR

Annual Nuclear Magnetic Resonance Meeting



Nove Hradý Institute of Physical Biology



University Partnership

JKU-Linz USB-Budweis



First generation of cross-border students



Cross Border Life Science Education

Biological Chemistry Curricula



**Johannes Kepler
University
Linz
JKU**

Jihočeská Univerzita

**Budweis
SBU**





Life Sciences



- Key competences of the 21st century
(>15% growth rate – not affected by current crisis)
 - Biochemistry
 - Bioinformatics
 - Biomedicine
 - Biophysics
 - Molecular Biology
- Prerequisites for the Biotechnologies
 - White Biotech
(Chemical Production)
 - Red Biotech
(Medicine)
 - Green Biotech
(Engineered Plants)

Life Science Education Situation in 1998: Curricula in Biological Chemistry, Biochemistry and Molecular Biology in the "Green Heart" of Europe



Initial Situation 1998

- [**Education gap in Life Sciences**
- [⇒ Migration of students from the region
- [⇒ Missing personnel resources in our region
- [⇒ Backlog demand in Life Sciences and Biotechnology
- [⇐ **Overcrowded Life Science curricula in other cities**

Actions

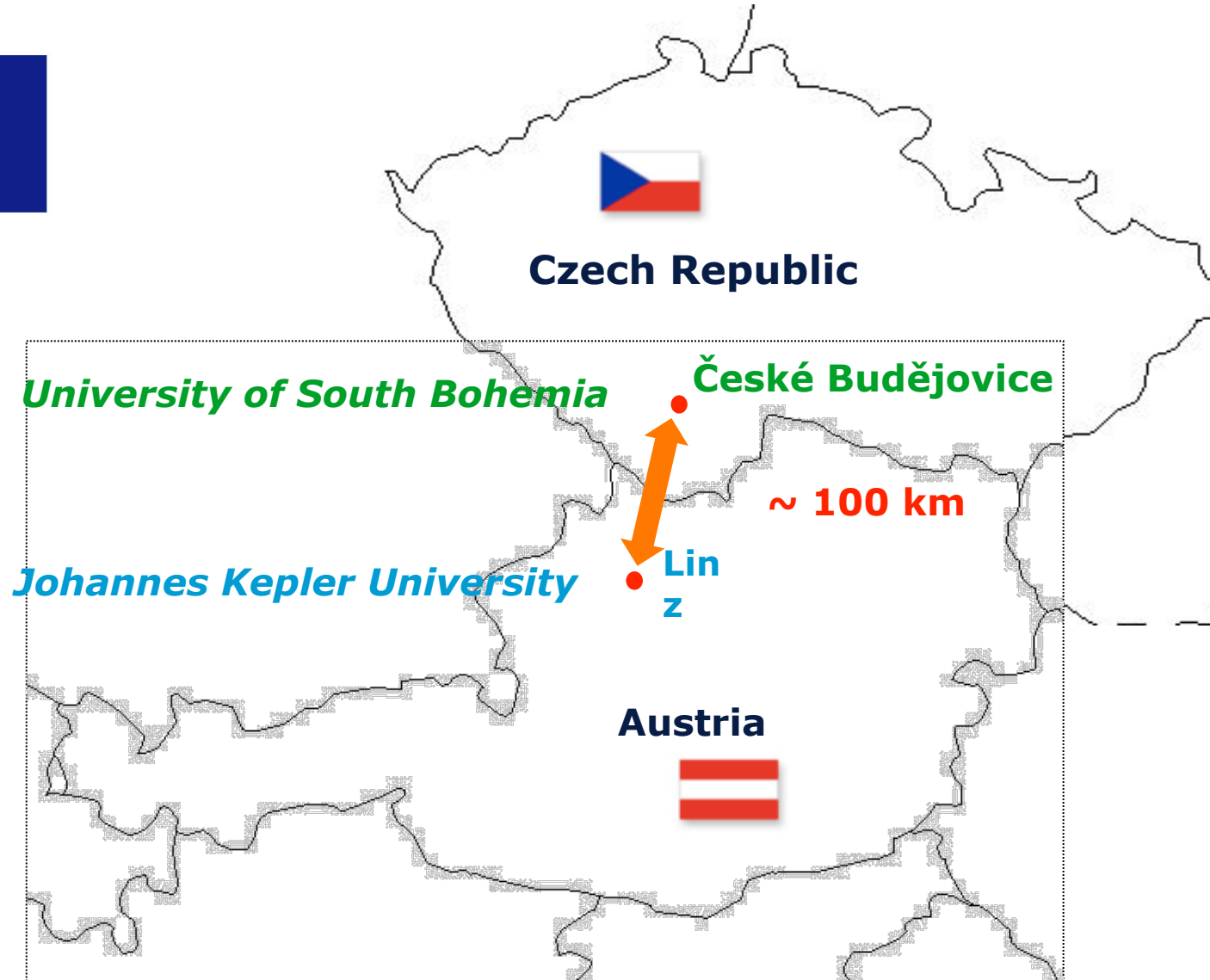
2004: BS + MS Molecular Biology Linz-Salzburg (German)

2007: Biological Chemistry Budweis-Linz (English)



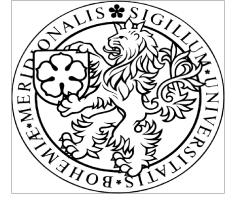


Geographical Situation





Curriculum Biological Chemistry



- First cross-border study program in Life Sciences in the European Union
- Takes advantage of complementary expertise
- Education of **chemists** with comprehensive competence in biology
- Scientists in a European network
- Highest qualification personnel for regional industry
- International competence and experience



Complementary Expertise



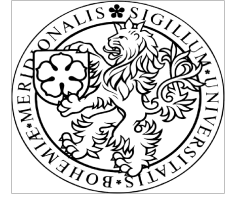
JKU Linz	General & Inorganic Chemistry	Organic Chemistry	Biochemistry	Genetics	SBU Budweis
Biotechnology	Physical Chemistry	Analytical Chemistry	Clinical Chemistry	Cell Biology	Biostatistics
Mathematics	Bioinformatics	Bio-Physics	Microbiology	Molecular Biology	Biology

TNF





The Curricula



- **Bachelor Curriculum**
- 6 Semesters
- Start: 2007/2008

- **Master Curriculum**
- 5 Semesters
- Start: 2010/2011



EUROPEAN TERRITORIAL CO-OPERATION
AUSTRIA-CZECH REPUBLIC 2007-2013
Gemeinsam mehr erreichen. Společně dosáhneme více.

English as language of instruction for all courses

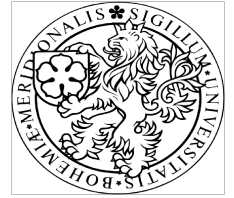
Double degree programs

Emphasis on Chemistry / Biochemistry

Active Learning: > 40% Laboratory practicals, seminars and exercises

Multi-National teamwork experience

Development of problem solving capabilities

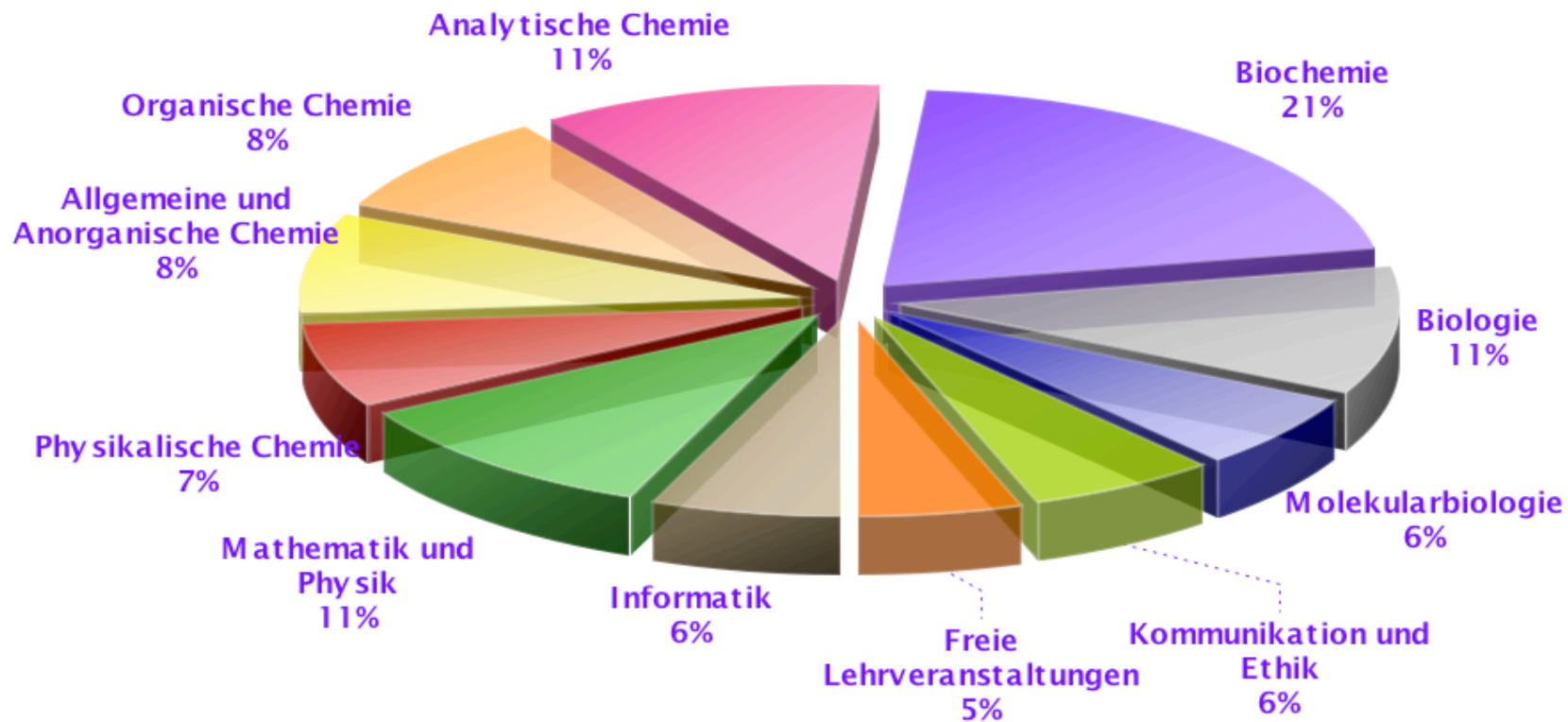


Bachelor Subjects

34% Chemistry

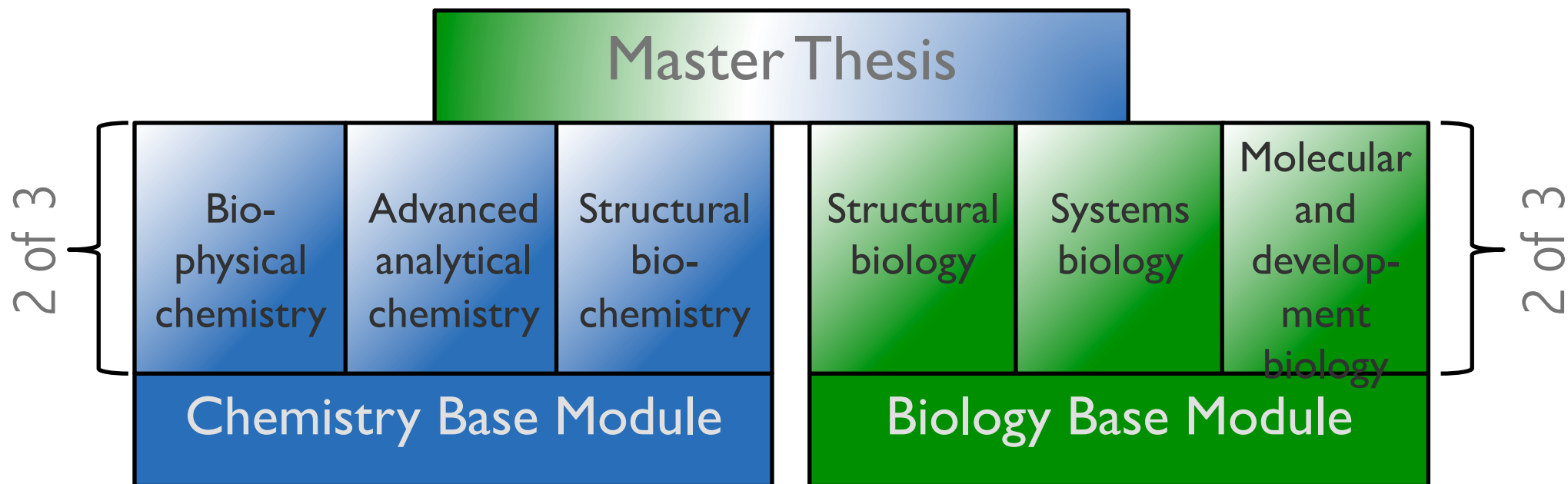
21% Biochemistry

17% Biology





Master Curriculum





**COFINANCED WITH EUROPEAN UNION
FROM EUROPEAN REGIONAL DEVELOPMENT FUND**



EUROPEAN TERRITORIAL CO-OPERATION
AUSTRIA-CZECH REPUBLIC 2007-2013
Gemeinsam mehr erreichen. Společně dosáhneme více.

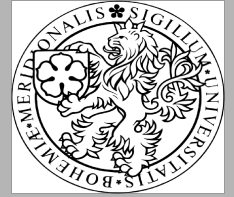
INTERREG IVA Programm:

Cooperative Cross-border Biological Chemistry Curriculum





Cross Border Award 2006 für die TNF der JKU





Dekuji - Thanks



Libor Grubhoffer
Dalibor Stys
Lukas Trantirek
Frantisek Vacha



Wolfgang Buchberger
Andrea Doblender
Michaela Hornicakova
Christoph Romanin



EUROPEAN TERRITORIAL CO-OPERATION
AUSTRIA-CZECH REPUBLIC 2007-2013
Gemeinsam mehr erreichen. Společně dosáhneme více.

Cross Border Life Science Education
BIOLOGICAL CHEMISTRY
Bachelor (BSc) Curriculum

JOHANNES KEPLER
UNIVERSITY LINZ
Research and teaching network

Jihočeská univerzita v Českých Budějovicích

<http://www.biologicalchemistry.jku.at>




Information





• <http://biologicalchemistry.jcu.cz>



• <http://www.biologicalchemistry.jku.at>


Cross Border Life Science Education
BIOLOGICAL CHEMISTRY
Bachelor (BSc) Curriculum

 JOHANNES KEPLER
UNIVERSITY LINZ
Research and teaching network

 Jihočeská univerzita v Českých Budějovicích



The Future?

