

Material Science & Processes

Universität für Bodenkultur Wien Department für Materialwissenschaften und Prozesstechnik

Forest Products Education and Training in Austria

Alfred Teischinger, Rupert Wimmer Universität für Bodenkultur/BOKU Vienna





The forest-based sector Austria/ Europe



Industrial sectors EU(15) 2001



Europe:

24% of the territory
3rd in employment: 3.5 million persons
12 million forest owners
Production value: ~ € 400 billion
Share of EU-manufacturing: 8%

(comparable to automotive, textile, food, and chemical industries)

Austria:

47% of the territory Employment: 250,000 Production value: €10 billion Contribution to GNP: 4.3% Export rate: 70% Export surplus: €3.31 billion (about same as tourism)



D5, Taipei



- Wood and Natural Fibre Technology, materials and processes, BOKU Vienna
- Pulp and Paper Technology (process engineering), University of Technology, Graz
- Structural Design in Wood (incorporated in Civil Engineering and Architecture at following Universities)

University of Technology, Vienna University of Technology, Graz University Innsbruck/Civil Engineering

• Bioenergy, University of Technology, Vienna



- Wood Technology and Design with Wood, UAS Salzburg
- Civil Engineering courses in structural design in wood, offered by various UASs





Austria: 6 (BA) + 4 (MA) semster model

- Bachelor UAS: berufsausbildend
- Bachelor Univ.: berufsqualifizierend
- Master UAS: vocational, applied
- Master Univ.: research driven lecturing
- Dissertation: scientific work xxxx



Structure BOKU Curricula "Wood & Fibre





A. Teischinger, R. Wimmer 2007



Bridge to industry through the Competence Centre COMET K1

Transdisciplinarity



etc.

Academic Knowledge University

(basic and applied research)



 Natural sciences (chemistry, physics) Interdisciplinarity Material science and **COMET K1** process engineering •Wood composites Knowledge transfer (Wood biology, WST, direct biotechnology etc.) •Wood chemistry Socioeconomics Access to knowledge Indirect knowledge transfer Academic Lecturing **Students** (set up new knowledge based on research) Other fields and branches Lecturers





Recently initiated "post graduate courses":

- Structural Design in Wood (Urban Wood, Modern Wood ("überholz"), Sustainable Wood etc.)
- Renewables Based Technologies (NAWAROS)
- Renewable Energy
- Management in Wood Industries
- Pulp and Paper Technology





- Environmental awarness
- Bio...Bio-based, bio-degradability, biotec..
- Nano..Nanomaterials, nanocoating,..
- Wood and other materials
- Composites on the rise
- Language skills, internationality, soft skills
- Entrepreneurship, (project) management



– More programs than ever



- More places offering education than ever
- More students than ever
- More graduates than ever
- More publications than ever
- More industry cooperation than ever
- More money than ever
- More future than ever

A. Teischinger, R. Wimmer 2007







