

# InCIMa PP1- Salzburg University of Applied Sciences

## Prof. Dr. Gianluca Tondi

InCIMa Kick-off meeting, 16th-17th March 2017, Trieste, Italy





### Salzburg University of Applied Sciences

#### Intelligente Caratterizzazione di Materiali Intelligenti

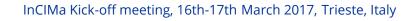


#### Intelligente Charakterisierung von Intelligenten Materialien



Fachhochschule Salzburg University of Applied Sciences



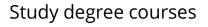






Fachhochschule Salzburg University of Applied Sciences

### **Important facts**



Bachelor = 17

Master = 10

No Doctoral school









https://www.youtube.com/watch?v=cgwviCDAlgM

InCIMa Kick-off meeting, 16th-17th March 2017, Trieste, Italy

Student number = 2.766 (48% female; 52% male)

Employed = 302 Research&Teaching 55%; Services 30%; Organization 15%

External Lecturer= 846

Campus= 2 Urstein (75%) and Kuchl (25%)

Funded in 1996 by= Work chamber and Land Salzburg.



### **Campus Kuchl: The Wood department**

fhs

- Around 500 students (3 Bac, 3 Master):
- Forest product technology & Timber construction
- Design and Product Management
- Smart Building
- Research as support for the companies
- Team Austria was selected as World champion in "Green building" Solar Decathlon 2013.















**Fachhochschule** Salzburg University of Applied Sciences

• Tannin & Lignin foams



- •Tannin-based wood preservatives
- Natural adhesives





- Valorization of natural by-products
- Biosourced composite materials







http://www.tondig.com/en/projects/





Structures:

Fachhochschule Salzburg University of Applied Sciences

Tannin and Lignin-furanic foams can be produced with different:



### **InCIMa Project**

#### Formulations:

With big cells With small cells With "round" cells With formaldehyde With different blowing agents With different catalysts

#### Heating processes:

At room temperature With conduction heat With microwaves and IR be

- 2 Master students will be involved for 19,2 months 20/h week. (Oct 2017-Apr 2019)



- 1 will deal with the production of the foams for 2 purposes: Synthesis of foam for buildings and filters (WP4)

- 1 will deal with the functionalization and optimization of the material (WP5)







Fachhochschule Salzburg University of Applied Sciences







#### Thanks for your attention!





InCIMa Kick-off meeting, 16th-17th March 2017, Trieste, Italy