

Composites

A. Main topics

- Composites: potentials and challenges
- Biobased composites

B. Targeted audience

- 14-19 year old students

C. Key concepts

- Chemistry of plastics
- Testing of EP/ UP/PP (water accumulation/flexural test)
- Why fiber composites?
- Testing (glassfibre reinforced EP/UP/PP)
- New materials -why?
- Potentials and challenges - recycling?
- Biological alternatives for plastics – shellack/ testing
- Shellack and glassfibers/shellack and natural fibers/testing

D. Experimental activity

- Ten different experiments related to the subjects above mentioned can be performed in the classroom/by the students themselves. Accompanying pedagogical material (worksheets for the students) are available.

E. Toolkit material

- Toolkit with all necessary material can be lent and ordered at
Fraunhofer IFAM, Claas Hoffmann, Wiener Str. 12, 28359 Bremen, Germany
- Accompanying pedagogical material (curriculum, workplan, worksheets) can be downloaded in the Virtual Center of the rm@schools website.

F. RM tutors

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