

<b>Module title</b>		<b>Abbreviation</b>
Chemically and bio-inspired Nanotechnology for Material Synthesis		o8-FU-NT-152-m01
<b>Module coordinator</b>		<b>Module offered by</b>
degree programme coordinator Funktionswerkstoffe (Functional Materials)		Chair of Chemical Technology of Material Synthesis
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	undergraduate	--
<b>Contents</b>		
Synthesis methods and parameters in sol-gel chemistry as well as characterisation and applications of the created materials. Fundamental principles of biomineralisation, the structure of biomaterials, introduction to bio-inspired material synthesis.		
<b>Intended learning outcomes</b>		
Students have developed a sound knowledge of sol-gel chemistry and biomineralisation.		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
V (4)		
<b>Method of assessment</b> (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
150 h		
<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Bachelor' degree (1 major) Nanostructure Technology (2015) Bachelor' degree (1 major) Functional Materials (2015) Master's degree (1 major) Chemistry (2016) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Master's degree (1 major) Chemistry (2018) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020) Bachelor' degree (1 major) Nanostructure Technology (2020) Bachelor' degree (1 major) Quantum Technology (2021)		