

<b>Module title</b>		<b>Abbreviation</b>
Chemical Nanotechnology: Analytics and Applications		o8-FS5-101-m01
<b>Module coordinator</b>		<b>Module offered by</b>
holder of the Chair of Chemical Technology of Material Synthesis		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	graduate	--
<b>Contents</b>		
<p>The module provides an application-oriented introduction to the characterisation methods of nanochemistry and includes practical exercises. It also discusses thermoanalysis, rheological processes and dynamic light scattering. The lecture also offers insights into the applications of nanomaterials in the industrial and technological sectors.</p>		
<b>Intended learning outcomes</b>		
Students have developed an advanced knowledge of sol-gel chemistry and biomineralisation.		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
<p>This module comprises 2 module components. Information on courses will be listed separately for each module component.</p> <ul style="list-style-type: none"> <li>• o8-FS5-1-101: V (no information on SWS (weekly contact hours) and course language available)</li> <li>• o8-FS5-2-101: V (no information on SWS (weekly contact hours) and course language available)</li> </ul>		
<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)		
<p>Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.</p> <p><b>Assessment in module component o8-FS5-1-101: Sol-Gel Chemistry 2</b></p> <ul style="list-style-type: none"> <li>• 2 ECTS, Method of grading: numerical grade</li> <li>• a) oral examination (approx. 15 minutes) or b) written examination (approx. 45 minutes)</li> </ul> <p><b>Assessment in module component o8-FS5-2-101: Application oriented Characterization of colloidal and polymeric systems</b></p> <ul style="list-style-type: none"> <li>• 3 ECTS, Method of grading: numerical grade</li> <li>• a) oral examination (approx. 20 minutes) or b) written examination (approx. 45 minutes)</li> </ul>		
<b>Allocation of places</b>		
<p>Number of places: 20. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in the respective degree subject; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25% of places): allocation by lot. In this procedure, applicants who already have successfully completed at least one module component of the respective module will be given preferential consideration. A waiting list will be maintained and places re-allocated as they become available.</p>		
<b>Additional information</b>		
The course is offered as a block course at the end of the semester.		
<b>Workload</b>		
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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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**Module appears in**

Bachelor' degree (1 major) Nanostructure Technology (2010)

Bachelor' degree (1 major) Nanostructure Technology (2012)

Master's degree (1 major) Technology of Functional Materials (2010)

Master's degree (1 major) Functional Materials (2012)