# Module mar620 - Profile Module Marine Chemical Ecology

**Module label**: Profile Module Marine Chemical Ecology  
**Module code**: mar620  
**Credit points**: 6.0 KP  
**Workload**: 180 h  
**Used in course of study**: Master’s Programme Microbiology > Mastermodule

### Contact person
- **Module responsibility**: Peter Schupp  
- **Module counseling**: Sven Rohde

### Entry requirements
Lecture: Organic chemistry

### Skills to be acquired in this module
Students will learn about the chemical properties and major ecological roles of secondary metabolites, how to investigate the secondary metabolites of marine invertebrates and algae, how to analyze secondary metabolite profiles, how to isolate compounds of interest and how to conduct various bioassays to assess potential ecological roles of crude extracts and potentially isolated compounds. Students will also learn how to statistically evaluate their results.

### Module contents
Chemical Ecology: The course consists of lectures, followed by laboratory experiments. Students will research about various topics in marine chemical ecology. Laboratory work will include production of extracts from various invertebrates and algae. Extracts will be tested in various feeding assays to assess the chemical properties of extracts. Extracts will also be tested for antimicrobial activity with environmental strains. This includes the culture of test bacteria and antimicrobial assays. Final evaluation will be a laboratory report about the experiments. This will include statistical analysis of their experiments and discussion of their results in the framework of the lectures and seminars presented during the course.

### Reader’s advisory
Marine Chemical Ecology, McClintock, Baker

### Links
- Language of instruction: English
- Duration (semesters): 1 Semester
- Module frequency: jährlich
- Module capacity: unlimited
- Module level: Abschlussmodul (Abschlussmodul)
- Module type: Wahlpflicht
- Lern-/Lehrform / Type of program: Seminar (2 CP, 1 SPPW), practical course (4 CP, 4 SPPW)
- Compact Course

### Vorkenntnisse / Previous knowledge

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
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<tbody>
<tr>
<td>Final exam of module</td>
<td></td>
<td>One assessment of examination:</td>
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<tr>
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<td></td>
<td>Portfolio (seminar presentation, written protocol)</td>
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</tbody>
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Portfolio (seminar presentation – no mark, written protocol 100%). Active participation (Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice of the course supervisor.)

### Course type

<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
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</thead>
<tbody>
<tr>
<td>Seminar</td>
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<td>14 h</td>
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<td>Practical</td>
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<td>Total time of attendance for the module</td>
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