SAOT Credit Point System (April 30, 2020)

(The term credit point is abbreviated by CP and the term doctoral candidate by DC.)

Tab 1 summarizes the general structure of the SAOT credit point system. In total each DC has to collect 90 CPs minimum. These 90 CPs can be collected in 3 different sections which are:

- Science (minimum 45 CPs)
- Education (minimum 30 CPs) and
- Additional (no obligation)

<table>
<thead>
<tr>
<th>Sections</th>
<th>Obligation Credit Points</th>
<th>Sub-Sections</th>
<th>Obligation occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>45</td>
<td>Publications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Int. Conference Contributions</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td>Patents --&gt; 5CPs/patent application</td>
<td>no obligation</td>
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<td></td>
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<td>Internships or visits at foreign research institutions --&gt; 2CPs/week</td>
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<td></td>
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<td>German lang. course for foreign DC --&gt; 5CPs</td>
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</tr>
<tr>
<td>Education</td>
<td>30</td>
<td>Entrance Academy --&gt; 5CPs</td>
<td>pass</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Optics Fundamentals --&gt; 5CPs</td>
<td>pass</td>
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<tr>
<td></td>
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<td>int. SAOT Workshops --&gt; 1CP/day</td>
<td>4</td>
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<tr>
<td></td>
<td></td>
<td>Key Qualifications --&gt; 1CP/course</td>
<td>no obligation</td>
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</tr>
<tr>
<td>Additional</td>
<td>no obligation</td>
<td>Teaching --&gt; number SWS*factor</td>
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<td></td>
<td></td>
<td>Supervision of students</td>
<td>no obligation</td>
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<tr>
<td></td>
<td></td>
<td>Funding --&gt; 4CPs/(12months salary)</td>
<td>no obligation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Awards</td>
<td>no obligation</td>
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</tbody>
</table>

Tab 1: General structure of the SAOT credit point system

1 Science

Each DC has to collect 45 CPs minimum in this section. This section is split into 6 sub-sections, which are:

- Publications (3 publications minimum)
- International conference contributions (2 international conference contributions minimum)
- Patents (no obligation, 5 CPs are earned for an accepted patent application irrespectively of the author position, if the content of the patent is not covered by a publication)
- Internships and visits at foreign research institutions (no obligation but the internship is highly recommended, 2 CPs are earned per week)
- German language course for foreign students (successfully passed examination (5 CPs) obligatory)
- Invited talk (no obligation, 2 CP per invitation)

**Publications**

Tab 2 summarizes the general structure of the sub-section “Publications”.

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**Publications**

Tab 2 summarizes the general structure of the sub-section “Publications”.

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In total each DC has to author or co-author three publications (abstracts or expanded abstracts of less than 3 pages are not acceptable here).

The sub-section “publications” is split into:
- Science citation index (SCI) publications (1 SCI publication minimum) and
- Other publications, such as non-SCI journal publications or conference proceedings (no obligation for “other publications”, but in total 3 “publications”)

The procedure, how the number of the credit points is calculated for each publication can be extracted from the last column in Tab 2.

**International Conference Contributions**
Tab 3 summarizes the general structure of the sub-section “International conference contributions”.

In total each DC has to make 2 contributions to international conferences as an oral presentation or a poster presentation (giving the oral presentation or presenting the poster). The number of credit points, which can be earned for an oral presentation or a presented poster can be extracted from the last column of Tab 3.

### 2 Education
Each DC has to collect 30 CPs minimum in this section. This section is split into 6 sub-sections, which are:
- Entrance academy (5 CPs are earned by passing the examination of the entrance academy, not obligatory for MAOT graduates)
- Optics Fundamentals Examination (5 CPs are earned by passing the examination at the end of the course, not obligatory for MAOT graduates)
- Winter and Summer Academies (3 academies have to be attended obligatory, 3 CPs/academy)
- International SAOT Workshops (4 workshops have to be attended obligatory, 1CP/(workshop day) usually a workshop lasts 2 days long)
- Key Qualifications (no obligation); 1 CP / lecture course or seminar
- Lecture course out of MAOT programme (5 CPs are earned by passing the examination at the end of the course)

*(Each DC has to choose one SAOT main Topic (this is the topic his PhD thesis is assigned to) and two SAOT additional topics, to ensure an interdisciplinary education. From now on they are referred to as main topic and first additional and second additional topic.)*

**Entrance Academy/Entrance Examination**

The entrance academy takes place for new SAOT members once a year and lasts 4 days long. Attendance is not obligatory. However, the entrance academy examination, which takes place on the fifth day (directly after the entrance academy) has to be passed by every new member. This is required to become a regular SAOT member. New SAOT members, who hold a Master degree from MAOT, do not have to pass this examination and earn the CPs automatically by having passed the MAOT examinations.

**Optics Fundamentals**

The “Optics Fundamentals” examination takes place twice a year. It is obligatory for each DC to pass this examination. To prepare the DCs for this examination, SAOT offers a related lecture course at least once a year but probably all over the year (2 hours per week for one semester) and a related exercise (1 hour per week for one semester). Attendance of the lecture and the exercise is not obligatory for the DC, however, it is obligatory to pass this examination which should be accomplished during the first educational year. SAOT members, who hold a Master degree from MAOT, do not have to pass this examination but do not earn the CPs automatically.

**Academy**

SAOT academies take place twice a year, one at the end of the winter term and one at the end of the summer term. Each DC has to attend 3 academies minimum. On each academy special courses are offered which are related to the different SAOT topics. The individual DC should attend one course in his main topic and two courses which are related to his additional topics.

**International SAOT Workshops**

International SAOT Workshops take place all over the year within the broad SAOT network with international experts. Each DC has to attend 4 workshops minimum. Each workshop is related to a special SAOT topic. The individual DC should attend one workshop in his main topic and 3 WS in his additional topics.

**Lecture courses**

Lecture course of 2 hours per week for one semester with examination out of the MAOT programme, which is related to one of the DC’s additional topics. MAOT graduates have to choose one lecture course which is different to the courses they have attended during their MAOT education. The attendance in a lecture course is not obligatory, but the examination has to be passed to earn 5CPs. 5CPs can also be earned by passing the examination of optical technologies related lecture courses outside the MAOT programme. In this case it has to be ensured, that the content of the respective lecture course can be assigned to the DC’s first or second additional topic (has to be certified by supervising PI).
Interdisciplinary education

To ensure the interdisciplinary character of the SAOT education of each DC, 10 CPs have to be earned in the first additional topic and 5 CPs have to be earned in the second additional topic from the sub-sections “Academy”, “International SAOT Workshops”, and “Lecture courses”.

Key Qualifications

Key qualification events are organized all over the year. Attendance is not obligatory however strongly recommended.

3 Additional

Each DC may collect some additional CPs in this section for

- Teaching activities
- Supervision of students thesis (Bachelor-, Master-, Studien-, Zulassungs-, Diploma thesis)
- Acquiring funding and
- Earned awards

These activities are not obligatory.

Teaching

To calculate the CPs each DC earns for teaching activities, the teaching load in SWS (hours per week in one semester) has to be multiplied by a factor. This factor is

- 1 for lab classes
- 2 for exercises
- 4 for lectures

Supervision of students (thesis or reports)

For the supervision of Bachelor or Master thesis (also Studien-, Diplom- und Zulassungsarbeiten) one can collect 2CPs for 3 months of supervision. (If the supervision of the thesis lasted 9 months for a master thesis, which should last only 6 months, only 6 month of supervision will be considered. This also holds for the supervision of other thesis.)

Funding

To calculate the CPs each DC earns for the acquisition of funds for research projects, 4 CPs correspond to the 12 months salary for a fully paid scientific assistant (e.g., E13). The PI has to confirm the DC´s major involvement in the preparation of the project proposal and the amount of the granted assistants´ salaries. Acquired funding for apparatuses, devices or materials exceeding the amount of 100 000 € is awarded with 2 CPs (flat).

Awards

There is no general rule about how many CPs can be collected by earned awards. This depends on the award itself. Some examples:

- SAOT Student Award 5 CPs
- Travel grant award less than 2 000 € 1 CP
- Travel grant award more than 2 000 € 2 CPs
- Best paper award 5 CPs
• Best poster award 3 CPs
• Scientific Award prize money less than 5 000 € 5 CPs
• Scientific Award prize money more than 5 000 € 10 CPs
• Highly respected award from a scientific society (OSA, SPIE, EOS, …) 25 CPs
• Non-SAOT Scholarship provided on basis of the DC’s exceptional accomplishments 5 CPs/year