# Hokkaido University Graduate School of Chemical Sciences and Engineering Doctoral Dissertation Assessment Criteria

### 1. Basic requirements

- (1) Doctoral dissertations must exhibit sufficient academic value and creativity to demonstrate that the student possesses academic abilities, capacity and qualities as stipulated in the Hokkaido University Graduate School Diploma Policy and the Graduate School of Chemical Sciences and Engineering Diploma Policy.
- (2) Doctoral dissertations must be written solely by the student in question with content that does not infringe on the originality or ideas of any third-party research paper or research presentation.
- (3) Doctoral dissertations must not violate the copyright, portrait rights or other rights of any third party.
- (4) Doctoral dissertations must be based on research conducted in line with the Code of Conduct for Scientists at Hokkaido University.

#### 2. Dissertation structure

Doctoral dissertations must be structured with:

- (1) an appropriate title;
- (2) stipulation of the research background and clear research purposes;
- (3) description of research methods in line with research purposes;
- (4) results presented in an appropriate manner using diagrams and other representations;
- (5) discussion based on the results;
- (6) derivation of conclusions in line with the research purposes;
- (7) citation of references as appropriate; and
- (8) arrangement of the above with appropriate chapter formation.

### 3. Dissertation content

Doctoral dissertations will in principle be assessed in consideration of the points outlined below. However, details such as areas for particular focus or addition are left to the review committee.

- (1) Academic value internationally recognized in the student's main field of study (*academic value*: contribution to the development of academic studies in the discipline concerned, such as the discovery of an unknown phenomenon or object, the construction and development of a new analytical method or theory, or the development of a new academic interpretation or concept)
- (2) Selection of a research theme and corresponding research method based on consideration of preceding studies, to be presented with a high degree of creativity
- (3) Collection and processing of data as appropriate in line with the selected research theme and research method
- (4) Explanation of research processes
- (5) Inclusion of data analysis and interpretations of individual diagrams and tables contained
- (6) Inclusion of consistent logical structure and content, and completion to a high level of quality

# Hokkaido University Graduate School of Chemical Sciences and Engineering Master's Dissertation Assessment Criteria

### 1. Basic requirements

- (1) Before master's degrees are conferred, the student in question must demonstrate academic abilities, capacity and qualities as stipulated in the Hokkaido University Graduate School Diploma Policy and the Graduate School of Chemical Sciences and Engineering Diploma Policy. The content of master's theses must indicate in plain and simple terms that the author has acquired these characteristics.
- (2) Master's dissertations must be written solely by the student in question with content that does not infringe on the originality or ideas of any third-party research paper or research presentation.
- (3) Master's dissertations must not violate the copyright, portrait rights or other rights of any third party.
- (4) Master's dissertations must be based on research conducted in line with the Code of Conduct for Scientists at Hokkaido University.

#### 2. Dissertation structure

Master's dissertations must be structured with:

- (1) an appropriate title;
- (2) stipulation of the research background and clear research purposes;
- (3) description of research methods in line with research purposes;
- (4) results presented in an appropriate manner using diagrams and other representations;
- (5) discussion based on the results;
- (6) derivation of conclusions in line with the research purposes;
- (7) citation of references as appropriate; and
- (8) arrangement of the above with appropriate chapter formation.

### 3. Dissertation content

Master's dissertations will in principle be assessed in consideration of the points outlined below. However, details such as areas for particular focus or addition are left to the review committee.

- (1) Academic value in the student's main field of study
- (2) An appropriate research theme and research method
- (3) Implementation of research based on thorough literature review and consideration of preceding studies
- (4) Collection and processing of data as appropriate in line with the selected research theme and research method
- (5) Explanation of research processes
- (6) Inclusion of data analysis and interpretations of individual diagrams and tables contained
- (7) Clear argument and consistent logical structure
- (8) Discourse with appropriate expression and completion to a high level of quality