

# **Guideline for M.Sc. IV Semester (Chemistry) Dissertation**

**Department of Chemistry  
School of Sciences, Uttarakhand Open University, Haldwani**

## **Procedure for allotment of supervisors:**

1. Learners can select their supervisors from their study centers/nearby study centers/ faculties of UOU/ faculties nominated by University.
2. For finalizing the allotment of the supervisors a zoom meeting will be held on 18-07-2023 at 11.00AM. ZOOM Link to Join meeting is given below:

<https://us02web.zoom.us/j/88021683408?pwd=dTlycXVHRHozSVIzVDZlaVR2U1lhcz09>

## **Synopsis:**

1. Learners have to submit soft copy of synopsis approved and duly signed by the supervisor in the mail id: [doch@uou.ac.in](mailto:doch@uou.ac.in)

Synopsis contents following sections:

- i. Title of the Dissertation
  - ii. Introduction
  - iii. Plan of work and objectives
  - iv. Material and method
  - v. References
2. Synopsis should be of 2 to 4 pages. The standard font shall be Times New Roman of 12 pts with 1.5 line spacing. Synopsis must signed by Learner and supervisor.
  3. Synopsis must be submitted within one week from the date of dissertation counseling (18/07/2023)

## **Evaluation Procedure:**

1. After finalizing the topic the learners have to submit soft copy of dissertation synopsis approved and duly signed by the supervisor in the mail id: [doch@uou.ac.in](mailto:doch@uou.ac.in)
2. Learners have to give viva/presentation after submission of dissertation, through online mode [Date and time will announce by the University]

3. A hard copy of the final dissertation have to be submitted in , at Department of Chemistry, School of Sciences, Uttarakhand Open University, Haldwani (Nainital) PIN-263139 **[Date will announce by the University]**

### **Format for dissertation is given below:**

The dissertation should be presented chapter wise. Each chapter will have a precise title as given below. A chapter can be subdivided into sections, and sub-section so as to present the content discretely and with due emphasis.

### **Content Page**

#### **Chapter 1: Introduction:**

It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the dissertation. This chapter also include objective of the research work. It may also highlight the significant contributions from the investigation.

#### **Chapter 2: Review of Literature:**

This Chapter presents a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation.

#### **Chapter 3: Material and Methods:**

This chapter deals with a detail methodology/technique/theory by which researcher used to carry out the research work.

#### **Chapter 4: Results and Discussions:**

This chapter includes a thorough evaluation of the investigation carried out and bring out the contributions from the study. The discussion shall logically lead to inferences and conclusions as well as scope for possible further future work.

#### **Chapter 5: Summary and Conclusions**

A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the results and discussions chapter shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly in the last part of this chapter.

#### **Chapter 6: References/Bibliography:**

The candidates shall follow the style of citation and style of listing in one of the standard journals in the subject area consistently throughout his/her dissertation (mentioned below).

For journal:

S. Lakhera, K. Devlal, M. Rana, V. Dhuliya, N. Pandey, Non-Linear Optical Behavior of 2,9-Dimethylquinacridone with Adsorbed Gold and Silver Nanoclusters, *Optik*. 286 (2023) 170983. <https://doi.org/10.1016/j.ijleo.2023.170983>

For book:

C. Kittel, *Introduction to Solid State Physics*, Wiley India (P) Ltd., New Delhi (2013).

### **Chapter 7: Appendix:**

Detailed additional information, lengthy derivations, raw experimental observations etc. are to be presented in the separate appendices.

## **Type -Setting, Text Processing and Printing**

The text shall be printed employing using a standard text processor. The standard font shall be Times New Roman of 12 pts with 1.5 line spacing.

## **Auxiliary**

**1. Binding:** Spiral or hard Binding

**2. Front Covers:** The front covers shall contain the following details:

- Full title of thesis in 6 mm/22 point's size font properly centered and positioned at the top.
- Full name of the candidate in 4.5 mm 15 point's size font properly centered at the middle of the page.
- A 40 mm dia replica of the University emblem followed by the name of department, name of the University and the year of submission, each in a separate line and properly centered and located at the bottom of page.

**3. Blank Sheets:** In addition to the white sheets (binding requirement) two white sheets shall be put at the beginning and the end of the dissertation.

**4. Title Sheet:** This shall be the first printed page of the thesis and shall contain the submission statement: the dissertation submitted in partial fulfillment of the requirements of the Degree e.g. M.Sc., the name and enrollment No. of the candidate, name(s) of the Supervisor and Co-supervisor (s) (if any), Department, University and year of submission.

Sample copy of the 'Title Sheet' is enclosed (Annexure I)

**5. A Declaration of Academic Honesty and Integrity by Candidate:** A declaration of Academic honesty and integrity is required to be included along with every thesis/dissertation after the Supervisor's certificate. The format of this declaration is given in Annexure 'II' attached. (Annexure II)

**6. Certificate from Candidate/Supervisor and Convener (Annexure 'III'):**

**7. Abstract:** The 500 word (maximum) abstract shall highlight the important features of the dissertation. The abstract in the dissertation, however, shall have two more parts, namely, the layout of the dissertation giving a brief chapter- wise description of the work and the key words.

**8. Contents:** The contents shall follow the abstract and shall enlist the titles of the chapters, section and sub-section using decimal notation, as in the text, with corresponding page number against them, flushed to the right. Two separate lists of figure captions and table titles along with their numbers and corresponding page numbers against them shall follow the contents.

**9. Abbreviation Notation and Nomenclature:** A complete and comprehensive list of all abbreviations, notations and nomenclature including Greek alphabets with subscripts and superscripts shall be provided after the list of tables and figures.

Title of dissertation (ex. .... SYSTEMS OF KUMAUN  
HIMALAYA)

**Dissertation**

Submitted for the Award of Degree  
of

**Master of Science**

in

**Chemistry**

By

**ABCD (Name of the learner)**

Under the supervision of

**Prof./Dr./ Mr. ....**

(Supervisor)

Department of **Chemistry**

Uttarakhand Open University, Haldwani

DEPARTMENT OF CHEMISTRY

UTTARAKHAND OPEN UNIVERSITY, HALDWANI- 263139  
(UTTARAKHAND)

2023

**Annexure I: Front page**

..... KUMAUN LESSER  
HIMALAYA, INDIA

16 + Bold &  
Single Space

A Dissertation 12 + Bold

*Submitted in partial fulfilment of the  
requirements for the award of the degree* 12 Italic + Bold &  
Both line Single space

*of* 12 Italic

Master of Science 12+ Bold

*in* 12 Italic

CHEMISTRY 12 + Bold

*by* 12 Italic

Learner's name 12+ Bold

Department of Chemistry  
Uttarakhand Open University, Haldwani  
(Nainital) Uttarakhand

14 + Bold  
and  
Single  
Space

2023

Specimen for cover page

**Specimen 'II'**

**CANDIDATE'S DECLARATION**

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name of the student)

\_\_\_\_\_  
(Enrolment No./Roll No.)

Date: \_\_\_\_\_

KU-SRICC-2018

**Annexure II:** Specimen for declaration certificate

Department of Chemistry  
Uttarakhand Open University, Haldwani

16+ Bold &  
Single Space

CERTIFICATE

14+ Bold  
Underline

I hereby certify that the work which is being presented in the ~~Dissertation~~-entitled  
"....." KUMAUN  
LESSER HIMALAYA, INDIA" in partial fulfillment of the requirements for the award of the  
Degree of Master of Science in ~~chemistry~~ submitted in the Department of ~~chemistry~~  
in Uttarakhand Open University is an authentic record of my own work carried out  
during a period from ..... 2023 to ..... 2023 under the supervision of Dr. ....  
....., Professor and Head, Department of ~~chemistry~~ Uttarakhand Open University, Haldwani

The matter presented in this thesis has not been submitted by me for the award of any  
other degree of this or any other University/Institution.

12+ Bold Name of the learner

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

12+ Unbold  
in single line Name of the supervisor

Annexure III: Specimen of supervisor certificate



## **Proposed themes for M. Sc. Dissertation (Chemistry)**

During the course of study all the learners have to do a compulsory short term research and submit a dissertation for partial fulfillment of the requirement of the M. Sc. degree. University offers number of themes for M. Sc. dissertation from which a learner can select a research topic under the guidance of allotted supervisor. Different tentative themes for M. Sc. research are proposed by the concerned departments which are as follows:

### **Department of Chemistry**

- 1. Natural Products/ Phytochemistry**
- 2. Medicinal Chemistry**
- 3. Soil Chemistry**
- 4. Organometallic Chemistry**
- 5. Water Chemistry**

**Note- Topic for Dissertation may be chosen according to the availability of resources and the topic provided by the supervisor in the field of chemistry.**