

# Tribhuvan University Institute of Science & Technology Masters' Dissertation Meet 2024 - IoST, TU First Announcement

## Announcement

Institute of Science & Technology (IoST), Tribhuvan University (TU) decided to organize M.Sc. Dissertation Meet once in a two year. This year, IoST is going to organize M.Sc. Dissertation Meet during 26-27 September 2024 (10-11 Asoj, 2081).



Figure 1: First Announcement poster (<https://iost.tu.edu.np/events/381>)

## Background

M.Sc. program has been introduced in the year 1969 in Tribhuvan University. The first discipline was mathematics, followed by Chemistry, Physics, Zoology and Botany. At present, more than 2100 students are studying M.Sc. in 17 disciplines (Zoology, Mathematics, Chemistry, Botany, Physics, Biotechnology, Statistics, Microbiology, Environmental Science, Hydrology & Meteorology, Geology, Computer Science & Information Technology, Engineering Geology, Biodiversity, Ecology and Management, Environmental Health in Disaster, Mountain and Mountaineering Science) of science & technology under IoST, TU. In addition, we offer masters' program in Food Technology (B.Tech.), Data Science (MDS) and Information Technology (MIT). The semester system has been deployed since 2013. The average pass rate is above 70% and the drop-rate is less than 8%.



Figure 2: Pass Rate of M.Sc. Program at IoST, TU during 2015-2023. The gap indicates the Covid-19 year in which admission and results were halted.

The research achievements of M.Sc. students is fairly good. Every year, about 800 students do research for their masters' dissertation.

The nature of the research work is mostly experimental (Biological Science) and Computational (Physical Science). There are 35 dedicated labs at the Central Departments and Constituent Campuses of TU. Recently, Nepal Government accepted IoST's proposal to establish Central S&T Lab at University Campus.

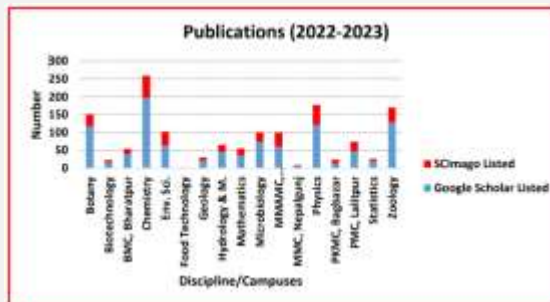


Figure 3: Research Publication at IoST, TU. Masters' students are involved in almost all publications

Recently, number of interdisciplinary research projects are also emerging targeting national priority. It is therefore, **Dean Office, IoST decided to organize 2-days long M.Sc. Dissertation Meet during 26-27 September 2024 (10-11 Asoj, 2081) in order to improve the quality of M.Sc. Dissertations.** The main attraction will be the poster of recently completed M.Sc. Dissertations on the streets of S&T Central Department premises at University Campus, Kirtipur,

## Objectives

1. It offers students an opportunity to showcase their research outcomes to the students and faculties of other disciplines and hence discuss common challenges and opportunities.
2. It provides an opportunity to explore thematic umbrella for carrying out multidisciplinary research in the future so that outcome can be connected to the society.
3. This program aims to introduce our graduate students to Ph.D. students, experts and professionals who will share their experience and career journey.
4. It will highlight the need of Central S&T Lab facility at Tribhuvan University.

## Participants

1. M.Sc. graduate of TU who recently (1 Jan 2023) completed masters' Dissertation
2. Interested M.Sc. students who has almost completed their M.Sc. Dissertation
3. Supervisors / Co-supervisors / Collaborators
4. M.Sc. Students of other universities.
5. Interested IoST Faculties & Alumni

Registration form can be filled here:

<https://forms.office.com/r/DnBnRGvBid>

## Visitors

1. S&T Alumni of IoST
2. M.Sc. students of other institutes of TU
3. Faculties of S&T of TU and other Universities.

4. Industrialists / Entrepreneurs / Incubators / Government Sectors / Innovators / Commerce & Business Sector / NGOs / Publishers / Researchers / NAST
5. Other interested (including B.Sc. students)

## Poster Presentation

The major attraction of the event will be the poster of M.Sc. dissertations. **Recently passed M.Sc. students of IoST are suggested to present their masters' dissertation.** The hypothesis, research gaps, work progress, preliminarily results, problems, limitations, etc should be clearly discussed. A few oral presentation (15 minutes) will also be accepted for those students who almost completed his/her work. CDRC will recommend and organize oral presentation.

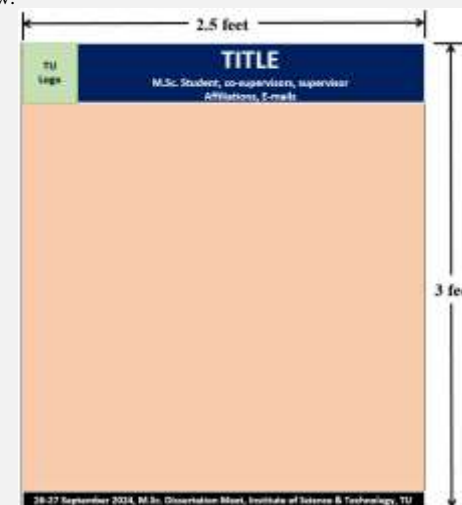
### Abstract should be send *strictly* in this format/template:

File: Microsoft Word 2007 or latest (doc or docx)  
 Font: New Times Roman (for all)  
 Title: Font-12, Bold, First letter of each word capital  
 Authors Name: Font - 9, Bold, Underline Presenter's Name  
 Affiliation: Font - 9, Italic  
 E-mail/Key Words: Font - 9  
 Abstract Text: Font - 10

Abstract should be sent to the e-mail:  
[surendra.gautam@iost.tu.edu.np](mailto:surendra.gautam@iost.tu.edu.np).

## Format of the Poster

Participants are suggested to prepare a poster in the format given below:



Following instructions should be strictly followed while preparing posters:

- a) Recommended size (width 2.5 ft x length 3.0 ft) should be strictly maintained.
- b) Font size should not be smaller than '24' in the poster (except reference). The FONT is suggested to choose in such a way that each & every sentences **should be readable from 6 feet distance** from the poster.

- c) The font size of the Title should be at least 96. It should be readable from 12 feet distance.
- d) TU logo should be used carefully (suggest to take it from the webpage of TU Central Office). Logo of collaborator's institutions can be added in the poster.
- e) Figures, images, tables, flow chart, pictures, plots, diagram, algorithm, etc are preferred in the posters. No theoretical complexity (equations, derivations, etc) are generally expected in the poster.
- f) Posters should contain less sentences. Additional sentences should come from the presenter. Ph.D. candidate should explain it orally.
- g) The background color should be made contrast in such a way that the content and text can be readable from 5 feet distance.
- h) There should a short list of references with font size 12

Prof. Dr. Sailendra Kumar Misra, member IRC  
 Prof. Dr. Megh Raj Pokhrel, member IRC  
 Prof. Dr. Raju Khanal, member IRC  
 Prof. Dr. Bijaya Pant, member IRC  
 Prof. Dr. Gauri Shrestha, member IRC  
 Prof. Dr. Kumar Sapkota, member IRC

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 Assoc. Prof. Nawaraj Poudel, Director, SMS  
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 Mr. Dinesh Ghimire, Admin Chief, IoST  
 Mr. Tanka Prasad Dhungana, Account Chief, IoST

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 Mr. Dinesh Ghimire, Admin Chief, IoST  
 Mr. Tanka Prasad Dhungana, Account Chief, IoST  
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 Mr. Upendra Subedi, IoST

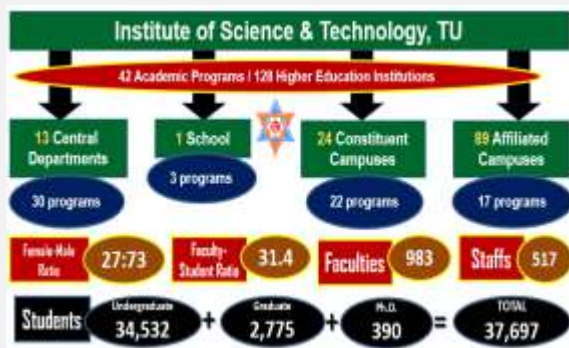
### Important Dates

**First Circular:** 15 Srawan 2081 (30 July, 2024)  
**Registration Call:** 20 Srawan (4 August)  
**Abstract Call:** 22 Srawan (6 August)  
**Second Circular:** 9 Bhadra (25 August)

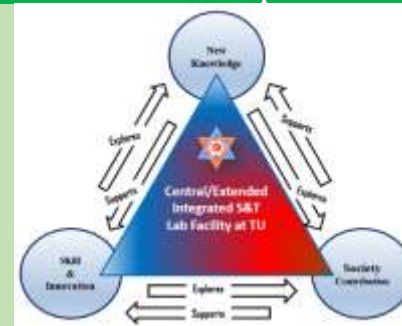
**Date:** 26-27 September 2024 (10-11 Asoj 2081)

**Venue:** (Physical)  
 Central Department premises of University Campus,  
 TU, Kirtipur  
 (Online Presentation)  
 Dean Office, IoST, TU, Kirtipur

### IoST – Academic Programs, Faculties/Students/Staffs



### Central S&T Lab: Conceptual Framework



### Potential User of the Lab



### Equipment

1	Scanning Electron Microscopy (SEM)
2	Transmission Electron Microscopy (TEM)
3	X-Ray Diffractometer with integrated system (XRD)
4	Gas chromatography/Mas spectrophotometry (GC/MS)
5	High Performance Liquid Chromatography (HPLC)
6	Atomic Absorption Spectrophotometer (AAS)
7	Fourier Transform Infrared Spectroscopy (FTIR)
8	Next Generation Sequencer (NGS)
9	Differential Scanning Calorimeter (DSC)
10	Real-Time PCR System with all set-up
11	IGRA (Infrared Gas Analyzer)
12	Soil Test Lab
13	Deep Learning Workstation (ML)
14	DPU + Server System
15	AI Supercomputer Facility
16	Cyber Security and Digital Forensic Lab
17	Software (Mathematica)

UGC and TU authorities signed an agreement on 12 Asar 2081, deciding to provide NRs. 40 crore grant for purchasing equipment for Central S&T lab. This lab will be run & governed by IoST.

### Organizer

**Institute of Science & Technology**  
 Tribhuvan University, Kirtipur, Nepal  
 E-mail/Phone: [info@iost.tu.edu.np](mailto:info@iost.tu.edu.np) / 977-1-4330844

### Participation from Outside Valley

Participants outside the valley are suggested to prepare poster and send its electronic file (pdf) it to the Dean Office. Dean Office will make an arrangement to show these posters electronically to the visitors and allow participants to present orally through online. Call for the abstract for oral presentation will be announced during second circular of the festival.

### Key Note / Plenary / Special Talks

In the central departments, at least 2 key note or plenary or special talks will be organized on 26 and 27 September 2024. The title and abstract of these talks will be made available in the abstract book of the festival. These talk will focus on disciplinary achievements of Tribhuvan University.

### Publications

An abstract book will be published. In addition, a booklet compiling list of masters' dissertation of all disciplines will be published. Detail news about the Meet will be added in the coming IoST Bulletin.

### Registration

The details about the registration will be announced during second announcement. Preliminarily registration will be essential as given above. Participants without having posters will not be registered.

### Best Poster Award

There will be 'Best Poster Award' in four categories: Biological Science, Physical Science & Mathematical Science and Interdisciplinary areas.

### Patron

**Prof. Dr. Keshar Jung Baral, Vice Chancellor, TU, Nepal**

### Advisors

**Prof. Dr. Khadga K.C., Rector, TU, Nepal**  
**Prof. Dr. Kedar Rijal, Registrar, TU, Nepal**

### Convener

**Prof. Dr. Binil Aryal, Dean, IoST, TU**

### Scientific Organizing Committee

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 Prof. Dr. Mahendra Maharjan, Asst Dean  
 Dr. Khageshwar Mandal, Asst Dean