



Hindu College University of Delhi

in collaboration with
Spoken-Tutorial IIT Bombay
presents

Faculty Development Programme

On

E-learning and MOOCS in Chemistry Teaching using Avogadro

Certificate issued in this FDP program is valid under CAS for faculty members of Higher Education and is approved by the Ministry of Education, Govt. of India .

Register Today via Google form Link:

<https://forms.gle/N8hgDoxLJQKYGADe6>

Or Scan QR Code



About Hindu College

Hindu college was founded in 1899 and is one of the pre-independence educational institutions of the Country. The college is NAAC accredited with A++ grade & has been placed at First position in NIRF-2024 ranking. The college has been ranked number one in science & humanities and at number two in commerce stream by India Today ranking for three consecutive years 2022, 2023 & 2024.

About Spoken-Tutorial, IIT Bombay

Spoken-Tutorial, IIT Bombay is an educational content portal managed by IIT, Bombay. There are various free open source software (FOSS) available through these spoken Tutorials and can be found at: <https://spoken-tutorial.org/>

One such open source software is Avogadro. Spoken Tutorial, IIT Bombay is authorized to conduct Faculty Development program by the Ministry of Education, Government of India.

[Hindu College and Spoken-Tutorial.org](https://spoken-tutorial.org/), IIT Bombay

Hindu College has partnered with the Spoken-Tutorial project at IIT Bombay to offer this FDP on Avogadro. Hindu College will serve as an enrollment center for this Faculty Development Program . Participants enrolled at Hindu College are required to watch the tutorials available on [https://spoken-tutorial.org/tutorial-search/?](https://spoken-tutorial.org/tutorial-search/?search_foss=Avogadro&search_language=English)

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and attend live interactive online sessions conducted by the college faculty as resource persons. The Spoken- Tutorial project at IIT Bombay conducts an online proctored exam for all participants and issues certificates to those who successfully pass the exam.

About Avogadro

1. Avogadro is a free, open source molecular editor and visualization tool.
2. Avogadro is a molecule editor and visualizer designed for cross-platform use in computational chemistry, molecular modeling, bioinformatics, materials science, and related areas.
3. It offers flexible high quality rendering and a powerful plugin architecture.

Important Information

Who can Join	Faculty /Research Scholars / Post Doctoral Fellow/ Research Associates/ School Teachers interested in Avogadro Software
Duration	One Week (6 Online Live Sessions)
Duration	28.9.2024-13.10.2024
Fee	1000/- (Non-refundable)
Seats	Limited(On first come first serve basis)
Mode	Online
Date of Exam	13.10.2024 (45MinutesDuration)

Topics to be covered

1. Overview of Avogadro: Introduction and its uses
2. Build and Edit Molecules: Different molecules can be built and edited in different ways.
3. Build Materials: Crystals and unit cell
4. Hydrogen Bonding: H-bond interactions of molecules can be studied.
5. Optimizing Geometry: Introduction to Molecular Mechanics, Finding Conformers of Molecules and Geometry Constraints
6. Preparing DFT input file with Avogadro and analyzing output file

Conduct of the FDP

- Avogadro will be learnt with the help of Spoken Tutorials videos available at https://spoken-tutorial.org/tutorial-search/?search_foss=Avogadro&search_language=English
- Participants must watch all the Spoken Tutorials at their convenience.
- Participants must complete the six audit assignments (one per session) in the MCQ quiz format.

Online Interaction Sessions

- Attendance in all six online live interaction sessions with Hindu College faculty is mandatory. Live
- Interaction Sessions will be held in the evening from 6:00 PM to 7:30 PM, with the first half hour dedicated to a Q &A session.
- Sessions will be conducted via Google Meet or Zoom.

Assessment

- Upon completion of the tutorials, online sessions & submission of audited quiz assignments, the participants will take a 45-minute online exam administered by Spoken-Tutorial.org, IIT Bombay..

Fee Details

- The fee for this FDP is ₹1000.
- Payment should be made online after registration is confirmed. A confirmation email with payment details will be sent once the registration form is processed.
- Enrollment is confirmed only after successful payment. Please note that the fee is non-refundable.

Requisite

- Every participant must have a laptop with standard configuration.
- Participant must have a stable internet connection.

Certification

- Upon successful completion of the course, participants will receive an e-certificate from Spoken-Tutorial, IIT Bombay, in accordance with their guidelines.
- Certificates will be awarded only to participants who score above 40% in the online test conducted by Spoken-Tutorial.org, IIT Bombay.
- This certificate is approved for CAS by the Ministry of Education, Government of India.

Organiser Details

Patron

Prof. Anju Srivastava
Principal, Hindu College

Convener

Prof. Reena Jain
Prof. Neera Sharma

Co-convener

Dr. Devanshi Magoo
Dr. Vinita Narula

Coordinator

Dr. Sushma Yadav

Resource Persons

Dr. Shyam Kishor, Prof. Neera Sharma ,
Dr. Geetika Bhalla & Dr. Sushma Yadav

Spoken Tutorial Training Manager

Ms. Jessie Velusamy

This FDP is highly recommended for those who have the zeal for learning Avogadro.

Email ID fdpchem@gmail.com :
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