

# Multiconfigurational methods for electronic structure of impurities in solids: MESS-2026

## University of Iowa, July 13-15, 2026

### What is the workshop about?

This three-day (lunch-to-lunch) workshop provides an overview of modern methods for accurate theoretical descriptions of the electronic structure of solids. The focus will be on multiconfigurational methods and embedding cluster techniques applied to challenges in spectroscopy. In addition to lectures, participants will take part in intensive, guided hands-on sessions.

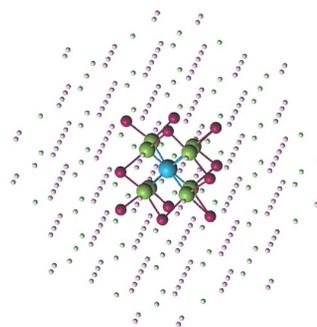
### Who should attend?

The workshop is aimed at Master's and PhD students, as well as postdocs in chemistry, physics, materials science, and related fields - both experimental and theoretical. No prior experience with electronic structure calculations is required. However, participants are expected to have a basic understanding of computational methods such as Hartree-Fock and Density Functional Theory. The workshop will equip participants with practical skills for modeling excited states in solids using state-of-the-art multiconfigurational and embedding approaches.

Participation is free of charge. Registration is required. The workshop is limited to 20 participants.

### The main topics to be covered include:

- Basic crystallography
- Periodic and cluster models of solids
- Basis sets and embedding techniques
- Multiconfigurational theory
- Electronic structure properties



### Dates and Venue:

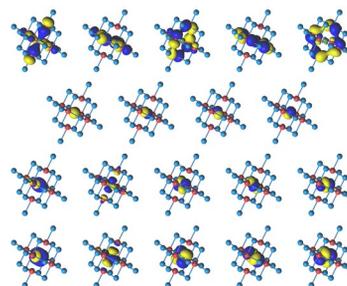
The workshop will take place July 13-15, 2026 at the University of Iowa

### How to register:

Contact Prof. Bess Vlasisavljevich  
bess-vlaisavljevich@uiowa.edu

### Lecturers:

Valera Veryazov (Lund University, Sweden)  
Marek Krośnicki (University of Gdańsk, Poland)



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