

## Zosimos provides continuous chemistry learning

- Educators can create, re-use and share new educational material for practicing and assessing knowledge.
- Chemistry and biochemistry teachers can boost their students' skills and confidence with hands-on practice.
- Mastering chemistry is a lifelong challenge for those working in the field of academia and industry. After university, expert knowledge should be further maintained and improved with interactive training.

# Create your own content for online education with Zosimos

Zosimos is an online chemistry education solution for academia and industry

Erika Biró, Ágnes Peragovics, Péter Szakács  
ebiro@chemaxon.com, aperagovics@chemaxon.com, pszakacs@chemaxon.com

## Want to upgrade personal or employee skills?

Utilize chemistry content and enhance teaching methods with easy interactive quizzes.

**Question**  
The fluorenylmethyl carbonyl group (Fmoc) is frequently used as a protecting group for amines. In the reaction below the Fmoc-protected amine is treated with piperidine. Curly arrows give you some hints about the mechanism of this reaction. Please provide the products of this protecting group removal reaction.

**Answer**

Try out

## Teaching chemistry concepts with drawing structures

Drawing chemical structures and reactions is essential for teaching chemistry concepts and for assessing knowledge.

Easy to use, Zosimos helps educators and students quickly evaluate classroom understanding.

Try it out by scanning the QR Code and drawing your answer to this peptide synthesis question!

## Development and sharing of content

With the Zosimos online educational framework, you can create and publish your own content to share with your class – or even the world!

Shared content from other educators can be easily reused, making quiz preparation easy.

**Question**  
Use the wedged-solid-dashed bonds to draw the two enantiomers of alanine (C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>).

**Answer**

Try out

**Question**  
Diisopropyl fluorophosphate (DFP) irreversibly inhibits serine proteases by covalently modifying the enzyme. Draw the inactivated enzyme then re-arrange the bonds.

**Answer**

Try out

Reference: Jones J (1992). Amino Acid and Peptide Synthesis. Oxford, UK: Oxford University Press.

## Do you know who Zosimos was?

Zosimos of Panapolis was an Egyptian alchemist around the 4th century AD. He wrote the oldest known books on alchemy which he called "Cheirometa" using the Greek word for "things made by hand."

Image: An alchemist at his furnace, hunched over bellows. Coloured mezzotint after D. Teniers the younger. Credit: Wellcome Collection. CC BY



## Abstract:

Zosimos is an open cloud-based learning hub, designed to enhance classroom collaboration and allow for interactive learning. It offers a framework where universities and professors can create + share learning sets amongst one another and students. Zosimos supports several disciplines, including general, organic, physical, nuclear, and polymer chemistry, as well as biochemistry and related fields. The dynamic tool contains ChemAxon's professional chemistry search, calculations, drawing and visualization capabilities.

  
<https://zosimos.io>



ChemAxon LLC, Regus La Terraza Corporate Plaza  
500 La Terraza Blvd #150, Escondido, CA 92025