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Portfolio

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HELSINGIN YLIOPISTO HELSINGFORS UNIVERSITET UNIVERSITY OF HELSINKI

Chemed research

I am a member of a chemistry education research group SECO. SECO is located at the Department of Chemistry of University of Helsinki. SECO has been established in 2001. Our current research director is professor Maija Aksela. We do research on chemistry learning and teaching in all educational levels via following main research areas:

- sustainable chemistry
- context-based chemistry
- technology in chemistry education.

Thechnology in chemistry education is my personal research interest. See my publications from the <u>University of Helsinki Research Portal TUHAT</u>.



MATEMAATTIS-LUONNONTIETEELLINEN TIEDEKUNTA MATEMATISK-NATURVETENSKAPLIGA FAKULTETEN FACULTY OF SCIENCE Item 2 of 8

ChemistryNews

Kemiauutiset – KemiNyheter – ChemistryNews

is a 13 years old trilingual magazine published by the Department of Chemistry. Since 2019, I have been the editor-in-chief.

ChemistryNews is an important media tool for the department. It offers a forum for our researchers where they can distribute knowledge of their latest research findings to society. ChemistryNews is also crucial for our student recruiting.

https://helda.helsinki.fi/handle/10138/309692





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Edumendo



Advanced learning and visualization Ltd.

is a company built around my research in educational cheminformatics. Edumendo offers services for promoting learning through research-based solutions. Our core competencies are educational chemical informatics, training, and design-based research projects. The company was founded in 2010.

www.edumendo.fi



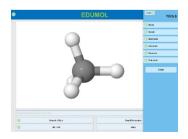
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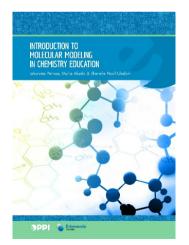
Edumol

Edumol is JSmol-JSme-based molecular modelling site. It's chemistry and educational functions are optimized for all school levels via design-based research approach.

In addition, I wrote a book about molecular modeling in chemistry education. All exercises in the book are designed for Edumol.

https://edumol.fi





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e-Oppi Ltd.

A pioneer in e-learning.

e-Oppi is a Finnish publishing house focused on supporting life-long learning via electronic textbooks. e-Oppi was established in 2011 and since then published over 250 e-books for basic and upper secondary school education. Currently we are working our way to the international publishing market.

My role in the company is to develop the company as an active member of the board.



www.e-oppi.fi

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LUMAT



International Journal on Math, Science and Technology Education

is a peer-reviewed scientific journal published by the University of Helsinki and LUMA Centre Finland. I started as the managing editor of LUMAT in 2018. Editorial work is hard and challenging, but at the same time an opportunity to learn how scientific evaluation works. This knowledge is important for a scientist because the voluntary work in academic publishing is the most important resource of progressing science. In addition, LUMAT helps me to grow my professional network.

https://journals.helsinki.fi/lumat







Tech in Chemed

Technology in chemistry education is an open access collection including the most important research articles on the topic. The aim is to promote open science and support life-long learning.

I am the editor-in-chief of this collection.

https://journals.helsinki.fi/chemedtech







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Textbooks

In addition to journal articles, I consider textbooks and professional books as an important publication type in science. I have participated in over a twenty book projects. My books have been sold over 10 000 copies and translated in English and Swedish.

I like books because they enable taking a more comprehensive perspective on a certain topic than articles. As an extensive monograph their size makes them a bit challenging to finish. It often takes over a year for a team to process an idea to a manuscript and publisher to process it to a beautiful book.

See a complete list of <u>all my book projects</u>.

