

Open source and commercial software for Industrial Deployment of Materials Modelling Software

Introduction

This session will address the role of open source and commercially distributed software in the advancement of industrial usage of materials modelling software. The meeting is intended to be inspired by concise impulse talks addressing the following objectives, which are complemented by in-depth discussions on the points below.

Objectives

- What are the current situation for funding the development of open source, commercial and closed software in electronic, atomistic and continuum modelling?
- Who is progressing the development of new methodologies, what is the role of commercial and open source software for progressing the field?
- What is the role of open source and commercial software for the industrial exploration?
- What are the barriers for commercializing open source software?
- New business models for making simulation tools available, for instance cloud based tools.
- What are the trends in industrial usage, which industries are using electronic or atomistic modelling, do we see an expansion in the usage?
- What kind of problems are investigated, do we see new trends, for instance high throughput screening?

Background information and documents

BUSINESS MODELS AND SUSTAINABILITY FOR MATERIALS MODELLING SOFTWARE, White paper for the EMMC, Gerhard Goldbeck, Alexandra Simperler; Goldbeck Consulting Ltd 2018

<https://emmc.info/emmc-csa-white-paper-for-business-models-and-sustainability-for-materials-modelling-software/>

Discussion points and questions

The following questions summarize the issues for this session.

- How can open source software models be sustainable and benefit from industrial usage?
- Can the more immature fields of electronic and atomistic models learn from other fields (for instance continuum models) to progress industrial usage?
- Will we see new business models in the future, for instance cloud based?