SCS Symposium on AI 2024 «Critical Use of AI in Chemistry»

On November 25th, 2024, the first symposium in a series of events on 'Critical use of AI in Chemistry' will take place at University of Fribourg. The focus of this first event is on the use of AI in Quantum Chemistry.

The rapid progress of Artificial Intelligence (AI) is transforming nearly every facet of our society and scientific research, with Quantum Chemistry not being an exception. AI transforms this field, rapidly impacting molecular and material simulations at various scales. A critical examination of AI applications in Quantum Chemistry is essential to discern areas where AI can significantly contribute and identify realms where current AI approaches fall short. The conference will explore AI's dual role in advancing Quantum Chemistry by enhancing developments and accelerating quantum chemistry through AI surrogate models replicating its methods.



#aisymposium24

Sponsors and Exhibitors



Interested in an Collaboration?

CHF 2'500 Symposium partner CHF 1'000 Exhibitor booth CHF 500 Logo sponsor

Please contact David Spichiger, info@scg.ch if you are interested in sponsoring or supporting this event.



our Logo



Swiss Chemical Society Haus der Akademien Laupenstrasse 7 3008 Bern *info@scg.ch www.scq.ch*



« Critical use of Artificial Intelligence in Chemistry »

University of Fribourg November 25, 2024, 09.00 - 18.00





UNIVERSITÉ DE FRIBOURG UNIVERSITÄT FREIBURG

> SCS Swiss Chemical Society

ai24.scg.ch

Organizing Committee

Prof. Stefan Vučković, University of Fribourg (Chair) Dr. Miroslava Nedyalkova, University of Fribourg Dr. Attila Cangi, Helmholtz-Zentrum Dresden-Rossendorf

Registration

Participation is free of charge. However, registration is mandatory via the conference website: *https://ai24.scg.ch/registration*

Deadlines

Fri, 04.11.2024Deadline poster application (call for abstracts)Wed, 15.11.2024Notification of acceptance for posters
and the two contributed talksFri, 16.11.2024Deadline for registrationMon, 25.11.2024Start of the event

Location

University of Fribourg Department of Chemistry Chemin du Musée 9 1700 Fribourg



UNIVERSITÉ DE FRIBOURG UNIVERSITÄT FREIBURG



Program

- 09.00 Welcome Coffee and Registration
- 09.30 Welcome Message by *Prof. Stefan Vuckovic*, University of Fribourg
- 09.45 **Prof. Sereina Riniker**, ETH Zurich «Learning physical interactions for molecular dynamics simulations»
- 10.25 Dr. Ruben Laplaza, EPFL Lausanne «Navigating homogeneous catalyst landscapes»
- 11.05 Short break
- 11.25 2 contributed talks à 15min Application deadline is November 11
- 11.55 **Dr. Zoe Cournia**, Biomedical Research Foundation Academy of Athens
- 12.35 Lunchbreak Poster Session
- 14.00 **Prof. Alexandre Tkatchenko**, University of Luxembourg «Towards AI-enabled Fully Quantum (Bio)Molecular Simulations»
- 14.40 **Dr. Elias Polak** University of Fribourg
- 15.20 Short break
- 15.40 **Prof. Jeremy Richardson**, ETH Zurich «Machine-learning acceleration for semiclassical and nonadiabatic dynamics»
- 16.20 **Prof. Markus Meuwly**, University of Basel «Constructing, Validating and Using Machine-Learned Potential Energy Surfaces»
- 17.10 Closing words
- 17.15 Aperitif
- 18.00 End of the Symposium