



The chairman of the doctoral committee

INVITATION

I hereby invite you to the public doctoral colloquium of

M.Sc. Enric Sabater Berzal

Allgemeine Anorganische Chemie
(Dr. Diego M. Andrada)

am

Monday, October 19, 2026, 15:00 s.t.

Via videoconference; Link for MS Teams: <https://bit.ly/4hu86xE>

Place for the exam: University of Girona

Building: Facultat de Ciències, Room: Aula Magna

Thesis topic:

Bimetallic Aluminium and Zinc Complexes: Synthesis, Reactivity and Computational Insights

Traditional developments in catalysis have long focused on precious transition metals, due to their indisputable high performance. In recent years, the quest for sustainable approaches has shifted research toward earth-abundant-element-based catalysis. However, the task remains formidable, as many of the corresponding reactants (or precatalysts) are either too reactive or too sensitive, often resulting in uncompetitive performance. This thesis explores a strategy involving the combination of two (or more) elements to achieve cooperative or synergistic behaviour capable of promoting the desired transformation. Representative examples are presented such as alkali-metal and copper aluminates, aluminium-zinc complexes, and heterobimetallic zincate species.

Saarbrücken, October 5, 2026

Prof. Dr.-Ing. Georg Frey