

**Project 2.10. New *N*-heterocyclic carbene gold complexes: from catalytic activity to medical applications.**

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**Institute:** Institute of Organic Chemistry Polish Academy of Sciences

**Unit:** Group V

**WWW:** [www.icho.edu.pl](http://www.icho.edu.pl)

**Background:**

The aim of the planned research is focused on the synthesis of new chiral *N*-heterocyclic carbene gold(III) complexes, their characterization by the selected spectroscopic methods (nuclear magnetic resonance, X-ray analysis) and application in selected new enantioselective reactions. In addition, the synthesis of structurally diverse *N*-heterocyclic carbene gold(III) complexes for the evaluation of biological activity is also planned.

**Aim:**

Synthesis of new chiral gold complexes, their use in selected enantioselective reactions and the study of biological properties

**Requirements:**

- have a MSc degree in chemistry
- have experience in experimental synthetic organic chemistry;
- commitment and capacity for team work and critical thinking;
- good oral and written communication skills in English