



PROGRAMUL DE COOPERARE ELVEȚIANO-ROMÂN  
SWISS-ROMANIAN COOPERATION PROGRAMME

New Anticancer Agents



## Thiazolo-Ruthenium Complexes as New Anticancer Agents

**Starting Date:** 01.01.2013

**Duration:** 36 Months

**Discipline:** Inorganic and Organic Chemistry/Cellular Biology/Pharmacology/Pharmacy

### Main Goals

1. Synthesis of hydrazino-thiazole derivatives.
2. Synthesis of thiazolo-ruthenium complexes.
3. Isolation and purification of the synthesized compounds.
4. Evaluation of the anticancer potential.

### Activities

1. Using a Hantzsch condensation reaction we have synthesized so far twenty-three hydrazino-thiazole derivatives.
2. The purification and physico-chemical characterization of the organic compounds were performed.
3. We have also synthesized the corresponding arene ruthenium thiazolo complexes.
4. The purification and physico-chemical characterization of all complexes were performed.
5. All new compounds were evaluated *in vitro* for their antiproliferative activity.
6. The best candidates will be evaluated *in vivo*.

### Expected Results

To develop a new metal-based drug to treat cancer.

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