**ABSTRACT** 

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Title of Thesis: Preparation of Chiral Quinazoline Derivatives

The aim of this thesis is to synthesize various chiral quinazoline derivatives. A series of substances derived from vasicine-type alkaloids was synthesized. The compounds were prepared using different  $\alpha$ -hydroxy carboxylic acids (L-lactic, L-mandelic and L-malic) and α-amino carboxylic acids (L-phenylglycine, L-alanine, L-proline and L-valine). These derivatives are currently being tested for their organocatalytic activity on a series of reactions such as asymmetric enamine catalyzed aldolisation and conjugate addition of aldehydes to nitroalkenes.