



# University of Central Florida

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## Non-Aqueous Amino Acid Production

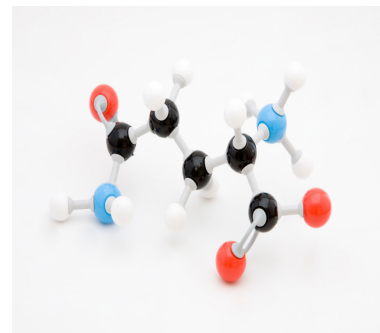
The nutraceuticals, fodder, and laboratory industries require different standards and specifications for the amino acids and small peptide chains used. However, current methodology cannot produce these materials at the same time to meet these different standards and specifications because they are produced by aqueous acid hydrolysis or enzymatic hydrolysis. Additionally, these processes are not optimal because of the need for high temperatures, removal of acid, and the resulting bitter taste.

### Technical Details

Simple amino acids along with small peptide chains are used in nutraceuticals, fodder, and in the laboratory. This invention provides a method for hydrolyzing raw proteinaceous material from any source to amino acids using a non-aqueous and solvent free solid acid hydrolysis. For example, by-products of biofuels production and low value protein containing crops can now be converted into high value amino acids. These processes are economic, safe, and reliable for the production of a variety of grades of amino acids. Unlike current industry practices, this novel approach can be done at room temperature and pressure and without using acid. Additionally, using this methodology, there no longer is a bitter taste associated with the resulting amino acids.

### UCF Inventor

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### Benefits

- No acid by-products
- Solvent free hydrolysis
- Variety of protein sources
- Room temperature

### Applications

- Laboratory: pure amino acids
- Nutraceuticals: single acid and small chains
- Fodder: nutritional supplements

### Tech Field

Therapeutics

### Keywords

amino acids, hydrolysis, nutraceuticals, farming, fodder, laboratory

**If you or your company are interested in this opportunity, Contact:**

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