

## **Synthesis of Gallic Acid Based Dendrimers: Selective Approach to Acylation of Amides**

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### **Abstract:**

This winter 2014, a group of six enthusiastic organic chemistry students conducted exciting research on the synthesis of biologically promising molecules that carry antioxidant moieties on peripheral positions. These molecules display properties of dendrimers: polymers that have defined architectural and chemical components in a globular periphery. The students will share the outcomes of their research and their experiences outside of the regular teaching classroom environment.

### **Bio:**

**Asmik Oganesyian (professor, mentor):** Oganesyian teaches Organic Chemistry at Glendale Community College. She came to GCC from CSULA where she managed a research lab and conducted organic synthesis. Research was a big part of her career, and upon becoming a full-time professor at GCC, she was determined to establish a research facility on campus, where students could have an exceptional opportunity to participate in hands on challenging research projects outside the scope of regular class. Ever since, Oganesyian has trained over fifty students who have successfully transferred to four-year universities and advanced in their educational goals. Oganesyian obtained funding to equip the organic chemistry lab at GCC with the best equipment, providing students exceptional and invaluable training on modern synthetic techniques. Her group will be presenting their work at the National American Chemical Society (ACS) Meeting in San Francisco in August 2014.

**Leah Andriasian:** From a young age, Leah knew that passion lay in the sciences. This passion was further instilled in her as she ventured to GCC and took various chemistry and biology courses, more specifically organic chemistry. Her perception was altered as she entered a new realm of science unlike any other. By fall 2014, Leah hopes to transfer to UCLA to pursue a B.S. in Microbiology Immunology and Molecular Genetics. Her long-term goals include attending dental school at UCSF and becoming a Prosthodontist. In her free time, Leah enjoys basketball and coaching younger boys and girls.

**Marina Sargsyan:** Marina is an extremely dedicated and hardworking person. She has a love for science and hopes to become a physician assistant, once she gets into Western University. She discovered she wanted to go into the medical field three years ago at GCC, and has since been working towards that goal. Her hobbies include reading, traveling, and volunteering at Cedars-Sinai, where she gets to interact with patients and doctors. In addition, she finds organic chemistry to be an incredibly interesting subject and will continue studying it.

**Raymond Sarksian:** Chemistry was the first subject that grasped Raymond's attention as he quickly fell in love with the reasoning behind the science. He is most intrigued by the reaction mechanisms within organic chemistry, as it offers an explanation for what's occurring on the molecular level. His short term goal is to transfer to UC Berkeley and obtain a Bachelor's degree in Chemistry. He will conclude his educational goals with a PhD in Organic Chemistry. His

ultimate dream is to become a research chemist, studying reaction mechanisms, as well as coming up with his own.

**Colton Ku:** Colton first enrolled at GCC in fall 2012. His passion for the physical sciences is responsible for his intended career choice, which is to become a medicinal chemist. In the fall 2014, he hopes to transfer to UC Berkeley to pursue a B.S. in Biochemistry. When he is not studying or working in the lab, Colton spends what little free time he has teaching high school students at a private institute, in the topics of calculus, chemistry, physics, and biology.

**Gaspar Macalutas:** Gaspar's motivation towards his education first began during his second year at GCC. He approached organic chemistry like it was hobby, rather than a heavy responsibility. His interest truly took off when he learned about the theories behind how lab methods functioned. Gaspar prefers to be in the lab environment instead of the lecture hall because he enjoys the hands on experience. In summer 2014, he will continue his research, in the lab, at CSULA. His future plans are to obtain a B.S. in Chemistry and proceed to a PhD in Organic Chemistry.

**Mary Abramyan:** Growing up, Mary always knew she would have a career in the sciences. However, it was not until her first semester at GCC that she finally decided that she would major in Biochemistry. From all the classes she has taken so far, organic chemistry has been the most enjoyable; she currently works as a Supplemental Instruction Leader in the course. In fall 2014, she will be transferring to a 4-year university, where she will continue working towards a B.S. in Biochemistry and hopes to pursue a career in Pharmacology.