

Amrit Venkatesh, M.S.

Ph.D. Candidate – Chemistry

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Interviewed by: Lindsay Bell

Nuclear magnetic resonance (NMR) is an important technique that is routinely applied to study the structure and dynamics of small molecules, inorganic materials and biomolecules. An improved understanding of local molecular structure helps chemists synthesize more energy efficient materials. In the summer of 2016, Amrit joined Dr. Aaron Rossini's research group at Iowa State University (ISU) to work on the development of improved solid-state NMR methods and their application to exotic elements in the periodic table.



Amrit earned a M.S. and bachelor's in chemistry at Sri Sathya Sai University in India. He taught high school and worked as a research fellow at the Maharaja Sayajirao University of Baroda for two

years before his passion for chemistry prompted him to pursue a Ph.D. in chemistry. The opportunity to work on a team with Dr. Rossini was one of the factors that prompted Amrit to apply to Iowa State's graduate program. He has enjoyed the extremely collaborative environment at ISU that he feels minimizes the mental and emotional stress of graduate school.

Amrit will sometimes unwind on the weekends at Old Chicago. On Saturdays, he and his wife, Malvika Rajagopal, a graduate student in Apparel, Merchandising and Design, volunteer time in West Des Moines helping to teach moral values to children and spread peace and joy with music. Amrit plays the piano and Indian classical violin, and he loves all types of science fiction. The multi-talented chemist appreciates having skills that transcend the lab, but if he had an opportunity to give advice to a twenty-year-old Amrit, he would say, "Keep doing what you're doing, but focus a little more."

Iowa State's state-of-the-art infrastructure and the university's strong relationship with the United States Department of Energy were factors that convinced Amrit to come to Ames, Iowa. He believes ISU offers him the opportunity to turn his love for chemistry into a means to help improve people's lives. Amrit wants to make the world a better place, and he works everyday to turn that wish into reality.

"Chemistry is everywhere around us, and it can provide answers and solutions to problems that humanity faces." – Amrit, on the value of studying chemistry

Lindsay John Bell, Ph.D. Candidate in History. I study the expansion of the state during the First World War and how it influenced the construction of baseball's hero ethos. Twitter - @LindsayJohnBell