

Biography



Vicente Talanquer

Vicente Talanquer received his B. S., M. S., and Ph.D in Chemistry from the National University of Mexico (UNAM) in Mexico City, where he worked as a professor until 2000. He is currently an Associate Professor in the Department of Chemistry and Biochemistry at the University of Arizona (U of A), where he does research in chemical education and teaches general and physical chemistry courses. Vicente is also part of the core faculty in an innovative science teacher preparation program within the College of Science of the U of A. As part of this program, Vicente teaches courses in curriculum and assessment in science education and chemistry teaching methods.

The focal point of Vicente's research is the study and improvement of chemistry education and science teacher preparation. In particular, he has directed their research at trying to characterize the conceptual frameworks and the patterns of reasoning used by chemistry students to answer questions and solve problems that require qualitative reasoning (classification, prediction, comparison). He is also exploring how students' ideas and reasoning strategies evolve as they develop more expertise in the discipline. These studies are of central importance not only to design learning progressions that foster meaningful learning but also to improve the preparation of future chemistry teachers through the development of their pedagogical content knowledge. As a science educator, Vicente Talanquer has published over 50 articles in peer-reviewed journals and 10 textbooks, four of which are the elementary school science textbooks used by all students throughout Mexico. Vicente is currently a member of the Science Academic Advisory Committee for the College Board, serves as an editorial board member for the Journal of Research in Science Teaching, and has participated in the ACS Chemical Education Division Task Force groups on strategic planning and outreach.