RESEARCH WITH UNDERGRADUATES: SPECTROSCOPY IS JUST THE BEGINNING

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Undergraduate research is considered the best pedagogical practice for engaging chemistry students in their curriculum and encouraging independent problem-solving. This presentation will explore many aspects of the undergraduate research experience in chemistry, beginning with the author's efforts in constructing instruments and conducting matrix-isolation FTIR experiments with undergraduate students. To expand the impact to more students and increase their exposure to modern physical chemistry research, journal club sessions have been brought to the classroom. Finally, a faculty-created, comprehensive summer research program and large group trips to national meetings have helped chemistry majors understand how their independent research advances not only the field of chemistry but also their professional development.