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Richard D West* (rwest@fmarion.edu), Department of Mathematics, Francis Marion University, Florence, SC 29501. *Chemical Reactions in Many Levels of Math.*

Three years ago I taught a multivariable calculus course to freshmen at West Point. In this course we used a simulation of real world data to answer an optimization problem from chemistry. Since this initial experience with the problem, I have developed several versions of Interdisciplinary Lively Applications Projects (ILAPs) that I have used in most of the mathematics courses I have taught from College Algebra to Numerical Analysis and Differential Equations. Meanwhile, I have enlisted the help of chemists, engineers, and economists who have reinforced the mathematical modeling of these projects by making the situations real and reinforcing the ideas in their own classes. This talk will provide copies of the projects developed, while I describe my experiences with these projects and how they were developed. Finally, I will explain further extensions that are planned for the future. (Received September 14, 2000)