

Table of Contents

Contributors	iii
Principal Investigators	iv
Partners for Terrific Science Advisory Board	iv
Acknowledgments	vi
Foreword	vii
Partnership Network	viii
An Invitation to Industrial Chemists	ix
How to Use This Teacher Resource Module	1
Employing Appropriate Safety Procedures	3
Background for Teachers	6
Overview of the Oleochemical Industry	6
The Emery Group of Henkel Corporation	6
Content Review	7
Using the Activities in the Classroom	15
Pedagogical Strategies	15
Annotated List of Activities and Demonstrations	16
Curriculum Placement Guide	17
Activities and Demonstrations	19
1. Esters	21
2. Making Candles	27
3. Candle Investigations	33
4. Making Cleansing Cream	41
5. Preparation and Comparison of Four Soaps	47
6. Surface Tension	57
7. Blowing Bubbles	65
8. Food Colors in Milk	71
9. Emulsifying Peanut or Vegetable Oil	77
10. Properties of Lubricants	83
11. Make-It-Yourself Slime	91
Addressing the National Standards	97
Chemical Supply Companies	108