4. TITLE AND SUBTITLE
Spectroscopy and Dynamics of Vibrationally Excited Molecules

6. AUTHOR(S)
F. Fleming Crim

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
University of Wisconsin
750 University Avenue
Madison, WI 53706-1490

12a. DISTRIBUTION/AVAILABILITY STATEMENT
APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

13. ABSTRACT (Maximum 200 words)
This report describes the progress of students supported by an AASERT award.

14. SUBJECT TERMS

15. NUMBER OF PAGES
1

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT
UNCLASSIFIED

18. SECURITY CLASSIFICATION OF THIS PAGE
UNCLASSIFIED

19. SECURITY CLASSIFICATION OF ABSTRACT
UNCLASSIFIED

20. LIMITATION OF ABSTRACT

UNCLASSIFIED
Final Technical Report - AASERT Award
F49620-92-J-0073
May, 1992 - April, 1995
Spectroscopy and Dynamics of Vibrationally Excited Molecules

Students Supported and Progress

Martin J. Coffey
The AASERT award provide support for Marty during his first summer in graduate school and during a portion of his second year. The AASERT award also provided support for Marty during his third year in graduate school. During this time he completed the design and assembly of our new optical parametric oscillator and began initial characterization and testing. His grades remained good and he made normal progress toward his Ph.D.

Mark D. Fritz
The AASERT award provided partial support for Mark during his fifth year in graduate school. During this time he extended our collisional energy transfer studies, in collaboration with a post-doctoral associate, making measurements on relaxation in C₂H₂ containing four quanta of vibrational excitation. He also performed our first vibrational overtone excitation experiments on formaldehyde, providing excellent spectroscopy data that have already motivated calculations by a post-doctoral associate. He completed his Ph.D., and his work has led to another manuscript on vibrationally excited molecules.

Donald E. Govoni
The AASERT award provided a small amount of support for Don during his final year in graduate school. He helped develop transient grating techniques that we hope to apply to our AFOSR sponsored projects. His participation in the AFOSR sponsored work was a minor component of his graduate study. His grades are good and he is making normal progress toward his Ph.D.
**H. Laine Berghout**
The AASERT award provided a small amount of support during his third year of graduate school. He contributed to computer interfacing and data analysis on the AFOSR sponsored project. His grades are good and he is making normal progress toward his Ph.D.

**Citizenship:** All individuals supported by these funds are US citizens.