



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

|   |                                       |
|---|---------------------------------------|
| <b>Name(s)</b><br><b>Jaskeerit K. Purewal</b>   | <b>Project Number</b><br><b>J0613</b> |
| <b>Project Title</b><br><b>What from Space?</b>   |                                       |
| <b>Abstract</b><br><b>Objectives/Goals</b><br>The objective of my experiment is to ascertain which method of collecting extraterrestrial particles called micrometeorites is more effective. In my experiment I concentrated on two methods, roof and bucket method and the tarp method. I believe that using a tarp will be a better method of collecting micrometeorites than the roof and bucket method.<br><b>Methods/Materials</b><br>To begin my experiment I built a raised perimeter around the tarp in order to help prevent the particle from getting blown away, and fastened down the tarp with stakes. I then washed my roof thoroughly and placed a bucket with a magnet in it at the base of the gutter. At the completion of 2 weeks I went outdoors and inspected the tarp carefully and ran a magnet over the surface in order to collect iron filings, and did the same with the bucket beneath the gutter. By inspecting the iron filings under the microscope, and calculating the amount of micrometeorites collected per square foot I was able to draw a conclusion as to the efficacy of each system.<br><b>Results</b><br>Results showed that in both tests the gutter and bucket method accumulated more micrometeorites than the tarp method. When I calculated the micrometeorites collected per square foot I found that the gutter had 0.01301 micrometeorites per sq. ft. and the tarp had 0.00322 micrometeorites per sq. ft.<br><b>Conclusions/Discussion</b><br>My conclusion is that the roof and bucket method of collecting micrometeorites was more effective than the tarp method. These results were derived from conducting two tests. Both in number and in micrometeorites per square foot the roof and bucket method proved to be a more effective and efficient method of collection of these extraterrestrial particles. Further tests and data are being compiled to substantiate the conclusion that I arrived at. |                                       |
| <b>Summary Statement</b><br>My project is about which method of collecting micrometeorites is most effective.   |                                       |
| <b>Help Received</b><br>Father helped wash roof; Mother helped assemble board; Science Advisor for the help and guidance  |                                       |