I-SURF ABSTRACT GUIDELINES

Abstracts must include sufficient information for readers to judge the nature and significance of the topic, the adequacy of the investigative strategy, the nature of the results, and the conclusions. An abstract is not an introduction; it should summarize the substantive results of the work, not merely list topics to be discussed.

Abstracts will be published on the I-SURF Web site, www.urop.uci.edu/i-surf.html, and in the Symposium Program.

Abstract Content

What Is an Abstract?

An abstract is a summary of your paper and your whole project.

It should have an introduction, body and conclusion.

It highlights major points of the content and explains why your work is important, what your purpose was, how you went about the project, what you learned, and what you concluded.

It is a well-developed paragraph and should be exact in wording.

It must be understandable to an interdisciplinary audience.

It does not include any charts, tables, figures, spreadsheets, or other supporting information.

Abstract Format

Many abstracts follow a format similar to this:

1. The problem to be investigated.

   One to two sentences that state why the project was undertaken.

2. The purpose of the study.

   One to two sentences that outline the nature of the project and how it differs from other similar projects.

3. The methods.

   One to two sentences that summarize the important methods used to perform the project.

4. The major results.

   One to two sentences that summarize the major results—not necessarily all the results—of the project.

5. The interpretation.

   One to two sentences that summarize your interpretation of the results.

6. The implications.

   One sentence that summarizes the meaning of your interpretation—what is important about these results.

Abstract Format

Abstracts should be:

In Microsoft Word.

In Times New Roman font, size 12.

No more than 250 words in length.

Single-spaced and a single paragraph.

Include the following in the abstract heading:

Title of the paper.

Full name of the student author.

Name(s) of faculty mentor(s).

Sample Abstract

Title of the Paper

Joe U. Student

Mentor: Mary J. Professor

Several studies have suggested that rampart craters on Mars form in regions with high soil volatile contents—namely water ice. This study is the first to use data from Mars Odyssey's Gamma Ray Spectrometer to correlate the distributions of water ice and rampart impact craters on Mars. We hypothesized that if rampart craters form due to high volatile content in the soil, then regions with more sub-surface water should show a higher percentage of rampart impact craters. We plotted the distribution of rampart impact craters on Mars and the water ice concentrations obtained by the Mars Odyssey's Gamma Ray Spectrometer then used statistical tests to determine if there was a correlation. We found that regions with high sub-surface water ice concentrations had a higher percentage of rampart impact craters than regions with low sub-surface water ice concentrations. For example, 87% of impact craters in Acidalia Planitia, a very water-rich area, were designated rampart craters; however, only 23% of craters in water-poor Syrtis Major were designated rampart. These results lend support to the idea that the fluidized ejecta morphology that characterizes rampart craters is caused by a high water ice concentration in the sub-surface. Understanding the factors that influence crater formation and morphology will allow us to age-date the Martian surface better, and mapping the distribution of ancient rampart craters may help us estimate sub-surface volatile concentrations from the Martian past.