Technical Proposal Guidelines

1 EXECUTIVE SUMMARY (OR ABSTRACT)

Provide a brief summary (1 page or less) that gives an overview of the proposed work.

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3 TECHNICAL BACKGROUND

3.1 Identification of the Problem

Give background that identifies the problem and provides motivation for why such an undertaking would be important or beneficial.

3.2 Justification for Proposed Work

Provide technical justification for the proposed work, and include any data obtained by yourselves (or others if cited appropriately) that would support the feasibility of your idea. This section is often the largest and can contain many subsections such as the following (shown as examples only, the format of this section should be considered flexible):

- *3.2.1 Theory*
- 3.2.2 Previous Experimental Results
- 3.2.3 Theoretical Modeling of Experimental Results
- 3.2.4 Implications of Work Completed to Date
- 3.2.5 Identification of Critical Needs

4 TECHNICAL APPROACH

4.1 Objectives

Identify the specific things you plan to accomplish with this project.

4.2 Statement of Work (also called Work Plan)

4.2.1 Project Tasks

List the specific tasks that need to be performed in order to meet the objectives listed above. They should be numbered Task 1, Task 2, etc., with sub-tasks (if any) numbered Task 1.1, Task 1.2, etc. Provide a brief description of each task and/or subtask.

4.2.2 Project Schedule

List schedule for completion of each task and overall project completion. A chart may be used in this section to illustrate the schedule if desired.

4.2.3 Estimated Costs

Determine costs associated with each task and for overall project completion. Include estimates for all labor involved (including benefits - assume 33%), and also any equipment or supply costs. An overall overhead charge (assume 49.5%) will be included on all labor and supply costs, as well as equipment under \$5000.

5 CAPABILITIES

5.1 Project Team and Key Personnel

Identify team management structure and list qualifications and relevant experience of key team members.

5.2 Equipment and Facilities

Identify suitability of the equipment to be used and/or purchased in carrying out this project. Clearly indicate what equipment is an existing capability, and what needs to be constructed or purchased to complete the project.

6 ANTICIPATED BENEFITS OF PROPOSED WORK

Clearly identify in this section the anticipated benefits of undertaking the proposed work. These can include economic, environmental, societal or any other benefits that could have impact at any level (individual up through global impact) that would help justify the time and expense of carrying out this project.

7 ANTICIPATED ENVIRONMENTAL IMPACT OF PROPOSED WORK

Identify any potential adverse environmental impacts arising from the completion of this work. Common items might be use of hazardous chemicals that require subsequent disposal, or emissions of toxic substances due to the operation of a process. If there are no adverse impacts, then a simple statement of that fact will be sufficient for this section.

- 8 NOMENCLATURE
- 9 REFERENCES
- 10 APPENDICES