

Student Research Program Technical Report Guidelines

The Technical Report

A condition of your employment with SOCHE is the preparation of a Technical Report about your research Project. This report is due at the end of your Project and also when you are ending employment with SOCHE. The following guidelines will help you in preparing your report:

The Technical Report will be written in past tense with NO personal pronouns **except** in the section entitled “Acknowledgments.” The focus of the writing is on the research performed, and not the researcher (you).

Incorrect: I have been conducting research on lasers.

Correct: Research is being conducted on lasers.

Your individual reports are inserted into a master document, which is submitted to the government once a year. Whenever possible, do not create or use extra Styles, as those will be stripped for insertion to the master document. The only exception may be equations or figures.

Do not assume the reader has a technical background in your area of research. Do not use abbreviations, unless you have already indicated the source of the abbreviation. For example, “scanning electron microscope (SEM)” may be referred to later in the text as “SEM.”

- Use Microsoft Word
- Times New Roman regular font
- 12 point font size
- Double space
- One inch margin on all sides
- Indent the first word of each paragraph one-half inch from the left margin.
- Three to four pages are sufficient

Format

- * Cover Page
- * Acknowledgments
- * General Description of Project
- * Description of Research
- * Results
- Works Cited
- Related Activities

* These are required sections. The others are optional.

Further elaboration of each section is as follows:

I. *Cover Page

Center the following elements:

- Project Title in **ALL CAPS**, found on the copy of your Project description
- Project Number
- Your Name
- Your College or University
- Ending Date of Project (NOT the date report was written)
- Government Project Leader, followed on the next line with his or her name. Use Mr./Ms./Mrs./Dr.
- Organizational Symbol – ex. AFRL/RXBT
- Southwestern Ohio Council for Higher Education
- Student Research Program
- Agreement Number: FA8650-09-2-5800

II. *Acknowledgments

This section begins on a new page and contains your expressed appreciation for the opportunity provided. You may wish to thank persons with whom you worked, and/or those who helped with your research. Be sure to list any professional personnel associated with the Project.

III. *General Description of Project

Do not start this on a new page, but rather continue after “Acknowledgments.” Describe the work, answering the following questions: What was done? Why? How will the results be applied? Do not use “first person.”

IV. *Description of Research

Describe the methodology, equipment used, and how the data was analyzed.

V. *Results

What was learned or discovered? What is the researcher’s (your) interpretation of the data and what are the researcher’s conclusions?

VI. Figures & Tables

Portrait is the required format, embed in the document whenever possible, and use as little disk space as possible. “Figures” and “Tables” should always be spelled out, not “Fig” or “Tab,” and should be numbered incrementally (1,2,3,4). The title of the figure **follows** the figure (see example provided) and should be labeled “Figure x,” followed by the title of the figure. The title of a table should **precede** the table and should be labeled “Table x,” followed by the title of the table.

VII. Works Cited

Begin this optional section on a new page. Provide this section if you refer to the published work of others, whether in paper or electronic form. Center the title, *Works Cited*, an inch from the top of the page. Double-space between the title and the first entry. Begin each entry flush with the left margin; if an entry runs more than one line, indent the subsequent line or lines one-half inch from the left margin. Double- space the entire list, both between and within entries. Follow current *MLA* guidelines and provide COMPLETE citation. See the samples provided for reference.

VIII. Related Activities

Begin a new page. Provide information about related activities such as any papers presented at meetings, conferences or seminars, journal articles, etc. If you provided consultive or advisory functions to other laboratories, include those as well.

A journal is an excellent way to record your learning experiences to prepare for your final report. You might jot down notes a couple times a week or keep a daily log of activities. If you decide to keep a journal, you probably will find it an asset in preparing the report.

Sample Cover Page
(line spacing provided in “()”)

COMPOSITE MATERIALS SUPPORTABILITY (1.9”)

Project No. 1 (3.1”)

John or Jane Jones
Harvard University (4.1”)

14 May 2004 (5.1”)

Government Project Leader (6.1”)
Mr. Douglas Barker
AFRL/RXSE

Southwestern Ohio Council for Higher Education
Student Research Program (8”)
Agreement Number: FA8650-09-2-5800

Acknowledgments

This section is double - spaced and contains your appreciation for those who contributed to your work. It should not be too long, nor should it contain more information than that which is needed to express professional courtesy to your colleagues. No personal appreciation (mother, father, etc.) should be provided here.

General Description of Project

Use the title EXACTLY as it is provided here. Do not add a space after your acknowledgements section, but continue with double spacing as you see here. Describe your work, assuring that you cover ALL questions previously provided in the guidelines.

Description of Research

Make sure you answer all the questions provided in the guidelines. This should comprise the bulk of your report and should help the reader understand the work you did. No personal pronouns, as previously requested.

If you need to include tables and figures, please try to do so by embedding them into the report (copy them into Word). The sample figure should help you determine how to place and name the figure (Figure 1).

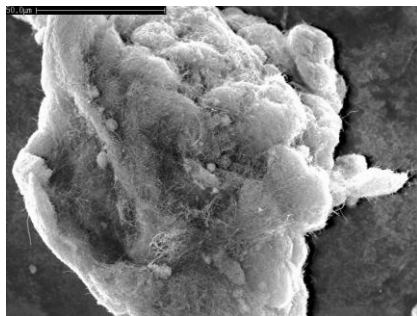


Figure 1. SEM micrograph of PR-19-HT nanofibers as supplied. The material is very tightly nested together in large agglomerates (Hopkins, 2003).

Please notice that the figure title follows the figure and is indented and single-spaced.

You should try to embed tables in much the same way. However, the Title of the table should precede the table, rather than follow it (Table 1).

Table 1. Sample information provided for report purposes

Reporting Year	Reports Provided	Projects completed	Projects Remaining
2003	15	17	2
2004	105	108	3

You should double space before and after the table to provide clarity of information.

Results

Summarize what you learned and your interpretation of the data. Do not use personal pronouns.

Works Cited

Following are basic examples of the type of citations you might be using:

- **Citing Books and Other Non-Periodical Publications:**

Brown, John. Handbook of Chemical Symbols. New York: Scribner's 2003.

McRae, Murdo William, ed. The Literature of Science: Perspectives on Popular Science Writing. Athens: U of Georgia P, 1993.

- **Journal Articles:**

McKenna, Bernard. "How Engineers Write: An Empirical Study of Engineering Report Writing." Applied Linguistics 18 (1997): 189-211.

- **Electronic Publications:**

A citation for an electronic publication, such as a document from an Internet site, may have as many as five divisions: *Author's name. "Title of the document." Information about print publication. Information about electronic publication. Access information.*

The important point is to cite whatever information is available to you. The MLA Handbook for Writers of Research Papers, Sixth Edition, provides several excellent examples.

Related Activities (always on a separate page)

This should be double-spaced and should contain the information called for in the guidelines provided. It must begin on a new page. You may use personal pronouns in this section.