Massachusetts Institute of Technology

3.155J/6.152J

Microelectronics Processing Technology

Fall Term 2005

Instructions for the MEMS Lab Report

Your lab report should follow the format of the *IEEE Electron Device Letters*.

Contents: Your Letter should include the following sections:

Title
By-line (Author, affiliation, and submission date)
Abstract (50–200 words)
Introduction
Experiment
Results
Discussion
Conclusion
References

Although Letters do not usually have appendices, you should attach the following two appendices so the professors can better evaluate your work:

Appendix A: Data
Appendix B: Calculations

See the lecture slides "How to Write an IEEE Letter" for details about what should appear in each section and appendix. In addition, the lecture on Monday, October 31st will provide more details.

Length: Follow the guidance from the IC Lab Report on length. Limiting the Letter's length will be challenging. Use the following to focus your writing:

Purpose: The purpose of your Letter is to evaluate the mechanical properties of the low-stress silicon nitride structure you fabricated, and to discuss any differences between those properties and the properties predicted by the literature. The literature includes the paper by Sekimoto (on the course web site), and literature on mechanical properties (Modulus) of silicon nitride to be posted to the web site next week. YOU SHOULD FOLLOW THE GUIDANCE FROM THE OCTOBER 31st LECTURE TO DETERMINE THE TECHNICAL CONTENT TO BE INCLUDED.

Audience: You may assume that your audience is familiar with microelectronics.

Deadline: The lab report must be posted to the course web site by **2PM on Monday, Nov. 14th**, in other words, *before* class.