**Recommendation Regarding Natural Science Research Competency of Candidates for the MST, BA/MST, and BS/MST Science Education Programs at SUNY Potsdam**

Science Education programs at SUNY Potsdam have been developed in accord with the guidelines and standards of NSTA and NCATE. Those guidelines build upon the premise that competency in the natural science discipline related to certification (Biology, Chemistry, Physics, or Geology/Earth Science) is fundamental. One component of such competency is the ability to construct, conduct, and interpret research. The purpose of this recommendation item is to document that the candidate has that competency.

This recommendation document asks that you, as a science department faculty member familiar with the candidate, certify that the candidate has that competency. The NSTA/NCATE Standard is:

*NSTA Content Standard 1d (standard to be met by candidates for certification to teach science): "Understand research and can successfully design, conduct, report and evaluate investigations in science."*

*An example of evidence that a candidate meets this standard would be a research project by the candidate in which the:

· Stated problem is clear, key variables are identified, and the problem is manageable.
· Literature review is adequate and includes primary peer-reviewed articles.
· Experimental design is clear. Variables are clearly identified and controlled.
· Data are well organized and appropriately displayed using graphs, charts or tables.
· Appropriate techniques, mathematical and otherwise, used in data analysis and interpretation.
· Conclusions are related to the problem and supported by the data.
· Research report is complete, including literature review, procedures, data analysis and conclusions. It is well-written.

*Science department faculty members are not limited to using the above example of evidence; they may use their judgment to determine what constitutes suitable evidence.

Having read the above, I verify that the candidate does "understand research and can successfully design, conduct, report and evaluate investigations in science."

Candidate Name_____ Date _____

Licensure area (circle major) Biology Chemistry Physics Geology/or Earth Science

Science Department Faculty Member Name_____

Science Department Faculty Member Signature_____