

Application for NIST Uncertainty Analysis Student Award

Electronic Materials Conference 2022

Student Name: _____

Student Mailing Address: _____

(school address preferred) _____

Student email address: _____

Advisor Name: _____

Advisor Email Address: _____

Advisor Signature: _____

Advisor signature certifies that the advisor has reviewed the uncertainty analysis and finds no gross errors or misrepresentations of the data, and that the work appears to be original and performed by the student.

Title of EMC Abstract: _____

(1) Brief description of numerical result(s) for which uncertainty analysis has been performed:

[Example: Mobility of InAs transistor channel $\mu = 1020 \pm 50 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$]

(2) Describe the type of raw data collected and analyzed in this experiment.

(3) Describe the method used to determine the uncertainty in the raw data.

(4) Provide the formulas used to determine the final numerical result from the raw data, and show your propagation of error analysis.

(5) Provide a table of uncertainty analysis that summarizes the above steps.

(6) If applicable, attach a paper or thesis chapter that provides further information.