

**Application for NIST Uncertainty Analysis Student Award**

**Electronic Materials Conference 2021**

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.