

Regulated Research Institutional/Industrial Setting Form (1C)

This form must be completed AFTER experimentation by the adult supervising the student research conducted in a regulated research institution, industrial setting or any work site other than home, school or field.

Student's Name(s) Alex Tang

Title of Project Validation of High Order Theories for Sandwich Beam Bending Behavior Using Direct Image Correlation (DIC) Techniques

To be completed by the Supervising Adult in the Setting (NOT the Student(s)) after experimentation:

(Responses must be on the form as it is required to be displayed at student's project booth; please do not print double-sided.)

The student(s) conducted research at my work site:

1. Did you or your proxy (e.g. graduate student, postdoc, employee) mentor or provide substantial guidance to the student researcher? ☒ Yes ☐ No
- a. If no, describe your and/or your institution's role with the student researcher and his/her project (e.g. supervised use of equipment on site without ongoing mentorship and sign below.

b. If yes, complete questions 2 –5.

2. Is the student's research project a subset of your ongoing research or work? ☐ Yes ☒ No
- Use questions 3, 4 and 5 to detail how the student's project was similar and/or different from ongoing research or work at your site.

3. Describe the independence and creativity with which the student:
- a. developed the hypotheses or engineering goals for the research project

The hypothesis was developed by the student and the research mentor following review of prior publications in which the the theories examined in the investigation were developed and published.

- b. designed the methodology for his/her research project

The student and the research mentor developed the methodology for the research project, adapting procedures to the equipment available in the laboratory and fabricating equipment and parts for the experimental procedure as needed.

- c. analyzed and interpreted data

The student analyzed the data that was gathered in the experimental procedure and formulated conclusions based on the gathered data in his paper.

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Student's Name(s) Alex Tang

4. Detail the student's role in conducting the research (e.g. data collection, specific procedures performed). Differentiate what the student observed and what the student actually did.

Alex assisted throughout all portions of the experimentation process. Alex helped prepare the materials to assemble the composite sandwich structures. Alex observed the materials being assembled, as a strong epoxy was used. When the specimen was assembled the specimen was prepared for experimentation. Alex observed the specimen being placed in the universal testing machine. Alex assisted in the optical arrangement, setting up the fiber optics to allow for the specimen to be well illuminated, and assured that the camera was placed truly perpendicular to the specimen. While the universal testing machine was being operated by myself, Alex used the camera to collect the data. After the test was complete Alex was instructed on the data analysis, the first time the data was being analyzed Alex was taught the software. Alex proceeded to run the software in future trials. The results post data processing were discussed extensively with Alex to ensure that he understood the results, and the purpose of the experimentation. Alex then interrupted the results on his own further, and expanded his knowledge on the topic through reading various publications about sandwich composite structures.

5. Did the student(s) work on the project as part of a group?
If yes, how many individuals were in the group and who were they (e.g. high school students, graduate students, faculty, professional researchers)?

☐ Yes ☒ No

I attest that the student has conducted the work as indicated above and that any required review and approval by institutional regulatory board (IRB/IACUC/IBC) has been obtained. Copies are attached if applicable.
I further acknowledge that the student will be presenting this work publicly in competition and I have communicated with the student research regarding any requirements for my review and/or restrictions of what is publicized.

Austin Giordano

Supervising Adult's Printed Name

Signature

SUNY Stony Brook University

Institution

100 Nichols rd Stony Brook New York

Address

Graduate Researcher

Title

11/13/19

Date Signed (must be after experimentation) (mm/dd/yy)

austin.giordano@stonybrook.edu

Email/Phone