

Judge #

Poster ID #

## 2024 RCSEF Science Project Judging Rubric

The following is a set of criteria to assist in interviewing and in evaluating the student's projects. Please circle a number; you must choose a whole number.

Guidelines	Notes
<b>I. Research Question (10 pts)</b> <input type="checkbox"/> clear and focused purpose <input type="checkbox"/> identifies contribution to field of study <input type="checkbox"/> testable using scientific methods	Lowest 1 2 3 4 5 6 7 8 9 10 Highest
<b>II. Design and Methodology (15 pts)</b> <input type="checkbox"/> well designed plan and data collection methods <input type="checkbox"/> variables and controls defined, appropriate and complete	Lowest 1 2 3 4 5 6 7 8 9 10 Highest
<b>III. Execution: Data Collection, Analysis and Interpretation(20 pts)</b> <input type="checkbox"/> systematic data collection and analysis <input type="checkbox"/> reproducibility of results <input type="checkbox"/> appropriate application of mathematical and statistical methods <input type="checkbox"/> sufficient data collected to support interpretation and conclusions	Lowest 1 2 3 4 5 6 7 8 9 10 Highest
<b>IV. Creativity (20 pts)</b> <input type="checkbox"/> project demonstrates significant creativity in one or more of the above criteria	Lowest 1 2 3 4 5 6 7 8 9 10 Highest
<b>V. Presentation (35 pts)</b> a. Poster (10 pts) <input type="checkbox"/> logical organization of material <input type="checkbox"/> clarity of graphics and legends <input type="checkbox"/> supporting documentation displayed b. Interview (25 pts) <input type="checkbox"/> clear, concise, thoughtful responses to questions <input type="checkbox"/> understanding of basic science relevant to project <input type="checkbox"/> understanding interpretation and limitations of results and conclusions <input type="checkbox"/> degree of independence in conducting project <input type="checkbox"/> recognition of potential impact in science, society and/or economics <input type="checkbox"/> quality of ideas for further research <input type="checkbox"/> for team projects, contributions to and understanding of project by all members	Lowest 1 2 3 4 5 6 7 8 9 10 Highest

Judge #

Poster ID #

## 2024 RCSEF Engineering Project Judging Rubric

The following is a set of criteria to assist you in interviewing and in evaluating the student's projects.

Please circle a number; you must choose a whole number.

Guidelines	Notes
<p><b>I. Research Problem (10 pts)</b></p> <p>___ description of a practical need or problem to be solved</p> <p>___ definition of criteria for proposed solution</p> <p>___ explanation of constraints</p>	<p>Lowest Highest</p> <p>1 2 3 4 5 6 7 8 9 10</p>
<p><b>II. Design and Methodology (15 pts)</b></p> <p>___ exploration of alternatives to answer need or problem</p> <p>___ identification of a solution</p> <p>___ development of a prototype/model</p>	<p>Lowest Highest</p> <p>1 2 3 4 5 6 7 8 9 10</p>
<p><b>III. Execution: Data Collection, Analysis and Interpretation(20 pts)</b></p> <p>___ prototype demonstrates intended design</p> <p>___ prorotype has been tested in multiple conditions/trials</p> <p>___ prototype demonstrates engineering skill and completeness</p>	<p>Lowest Highest</p> <p>1 2 3 4 5 6 7 8 9 10</p>
<p><b>IV. Creativity (20 pts)</b></p> <p>___ project demonstrates significant creativity in one or more of the above criteria</p>	<p>Lowest Highest</p> <p>1 2 3 4 5 6 7 8 9 10</p>
<p><b>V. Presentation (35 pts)</b></p> <p>a. Poster (10 pts)</p> <p>___ logical organization of material</p> <p>___ clarity of graphics and legends</p> <p>___ supporting documentation displayed</p> <p>b. Interview (25 pts)</p> <p>___ clear, concise, thoughtful responses to questions</p> <p>___ understanding of basic science relevant to project</p> <p>___ understanding interpretation and limitations of results and conclusions</p> <p>___ degree of independence in conducting project</p> <p>___ recognition of potential impact in science, society and/or economics</p> <p>___ quality of ideas for further research</p> <p>___ for team projects: contributions to and understanding of project by all members</p>	<p>Lowest Highest</p> <p>1 2 3 4 5 6 7 8 9 10</p>



Judge #

Poster ID #

- \_\_\_ understanding interpretation and limitations of results and conclusions
- \_\_\_ degree of independence in conducting project
- \_\_\_ recognition of potential impact in science, society and/or economics
- \_\_\_ quality of ideas for further research
- \_\_\_ for team projects, contributions to and understanding of project by all members