

# LISEF Judge's Scoring Guidelines and Worksheet

**Finalist Name(s):** \_\_\_\_\_ **Table Number:** \_\_\_\_\_

Following is a set of criteria that can assist you in interviewing the students and in your evaluation of their projects.

<b>Guidelines</b> <b>Science OR Engineering</b>	<b>Notes</b>	<b>Max Points</b>	<b>Points Awarded</b>
<b>I. Research Question</b>			
<ul style="list-style-type: none"> <li>▪ Clear and focused purpose</li> <li>▪ Identifies contribution to field of study</li> <li>▪ Testable using scientific methods</li> </ul>	<ul style="list-style-type: none"> <li>▪ Description of a practical need or problem to be solved</li> <li>▪ Definition of criteria for proposed solution</li> <li>▪ Explanation of constraints</li> </ul>	10	
<b>II. Design and Methodology</b>			
<ul style="list-style-type: none"> <li>▪ Well designed plan and data collection methods</li> <li>▪ Variables and controls defined, appropriate and complete</li> </ul>	<ul style="list-style-type: none"> <li>▪ Exploration of alternatives to answer need or problem</li> <li>▪ Identification of a solution</li> <li>▪ Development of a prototype/model</li> </ul>	15	
<b>III. Execution: Data Collection, Analysis and Interpretation</b>			
<ul style="list-style-type: none"> <li>▪ Systematic data collection and analysis</li> <li>▪ Reproducibility of results</li> <li>▪ Appropriate application of mathematical and statistical methods</li> <li>▪ Sufficient data collected to support interpretation and conclusions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prototype demonstrates intended design</li> <li>▪ Prototype has been tested in multiple conditions/trials</li> <li>▪ Prototype demonstrates engineering skill and completeness</li> </ul>	20	
<b>IV. Creativity</b>			
<ul style="list-style-type: none"> <li>▪ Project demonstrates significant creativity in one or more of the above criteria</li> </ul>		20	
<b>V. Presentation: Poster</b>			
<ul style="list-style-type: none"> <li>▪ Logical organization of material</li> <li>▪ Clarity of graphics and legends</li> <li>▪ Supporting documentation displayed</li> </ul>		10	
<b>VI. Presentation: Interview</b>			
<ul style="list-style-type: none"> <li>▪ Clear, concise, thoughtful responses to questions</li> <li>▪ Understanding of basic science relevant to project</li> <li>▪ Understanding interpretation and limitations of results and conclusions</li> <li>▪ Degree of independence in conducting project</li> <li>▪ Recognition of potential impact in science, society and/or economics</li> <li>▪ Quality of ideas for further research</li> <li>▪ For team projects, contributions to and understanding of project by all members</li> </ul>		25	
<b>TOTAL</b>		100	

“Pick the best...Encourage the rest”

PLEASE KEEP THIS SHEET WITH YOU UNTIL THE JUDGING PROCESS HAS BEEN COMPLETED!  
RETURN IT, ALONG WITH ALL REMAINING PAPERWORK, TO THE SCORING CENTER IN THE JUDGES' ROOM.