

## **RESEARCH CONCEPT WHITE PAPER**

**AFS Technical Division:** Is this research sponsored by an AFS Technical Division or submitted as an open White Paper?

NOTE: Open White Paper Submissions will be reviewed by the AFS Technical Department and the appropriate AFS technical working group. All AFS sponsored research will be monitored by a project steering committee of industry professionals with expertise in the research subject area.

- 1) **Proposal Title**:
- 2) **Objective(s) of proposal**:
- 3) **Issue to be addressed:** (150 Word Abstract maximum):
- 4) **Technical approach used to address issue(s):** (300 Word Abstract)
- 5) **Estimated Duration & Timeline:**
- 6) **Estimated Budget:** (List requesting finding and all sources of in-kind/cost-share from industry sponsors): Sponsor \$K, In-Kind \$K
- 7) **Potential Principal Investigator(s), Institution and qualifications:** (Bulleted list of uniquely qualified *expertise*):
- 8) **Potential Companies and members of a Steering Committee** (Bulleted list of suppliers, metalcasters, users.):

## QUAD CHART

The purpose of the Quad Chart is to provide a concise one-chart overview of the proposed research, with an emphasis on clarity and simplicity. This chart should give a basic project summary of why this research is needed and how researchers propose to address this issue. The chart is divided into 4 quadrants, each addressing the key project components; why the research is needed, technical approach, research team, cost, and timing. The Quad Chart is intended to be brief and concise. It is recommended that researchers limit text and bullet points in each quadrant to fit the chart onto this one page.

## Project Title:

Technical Problem	Proposed Solution
<ul> <li>Why the research is needed?</li> <li>Include a brief description of the technical issue that this research will address.</li> <li>What is the impact of this problem in the metalcasting industry?</li> </ul>	<ul> <li>How will this research help lead to a solution?</li> <li>Describe the technical approach.</li> <li>Potential impact of this research.</li> <li>Measures of success / deliverables.</li> </ul>
Research Team	Proposal Cost & Timeline
Principal investigators.	Total project cost.
Industry support.	In-kind contributions.
Steering committee members.	• Timing.