

R025-D: Pilot Scale Facility for Biocomposites Development for Industrial and Consumer Products

Submitted by c2renew

Principal Investigator: Chad Ulven

Request for \$500,000; Total Project Costs \$1,250,000

Technical Advisor Comments

- Two reviewers recommended fund, one recommended funding may be considered.
- The 60% match comes from the applicant.
- All 3 reviewers felt that the project was achievable.
 - 1 reviewer commented that they have been successful to date and provide a sober plan of attack for the scale up.
 - 1 reviewer felt that the objectives weren't very challenging.
 - 1 felt that the approach was straight forward and the budget was reasonable and highly leveraged.
- The reviewers felt the methodology was adequate, however:
 - 1 reviewer felt there was a lack of details, and
 - 1 reviewer noted that an estimation and quantification of the expected cost reductions in the biocomposite formulations should have been included and felt that more details regarding the technology should have been included.
 - The applicant responded that they did not focus on describing the technology in great detail because it is the second phase of a project. It was assumed that the committee would already be familiar with it from funding our Phase I project.
- Regarding the scientific contribution, 1 reviewer felt that as the only material compounder in ND, there is significant benefit in establishing the technical/engineering know-how.
- All 3 reviewers felt that the PI's awareness of current research activity appeared to be limited; however 1 reviewer felt that this is more industrial processing than any type of academic breakthrough.
- All 3 reviewers felt that the investigators have a strong background in this area.
- All 3 reviewers felt that the project management plan was sound, that the equipment to be purchased was justified, and that the budget was highly leveraged.
- 1 reviewer commented that "...the team has a good track record of executing their plans. Introducing new materials into consumer and industrial products is no small feat..."

Technical Advisor Recommendations

Fund. This proposal has several strengths. It is a firm step forward in developing a biocomposite industry in the state. It is a North Dakota business with a pathway to large scale commercialization. It utilizes technology developed by NDSU. It ultimately could offer another revenue stream for agricultural producers that experience fluctuating commodity prices.

Suggested Contingencies If Funded

- None.