

2020 New Mexico virtual Governor's STEM challenge

Out of the 33 schools that competed statewide, San Jon High school was one of the 18 winning teams of the 2020 Virtual New Mexico Governor's STEM Challenge. Raj Bandla (sponsor), Sharla Rusk (sponsor), Sai Sravya Bandla (Junior), and Jenna Lopez (Junior) formed a team together called R³Al (Reduce, Reuse, and Recycle Aluminum) to accept the challenge posed by NMSU: “How can you combine New Mexico’s natural resources with technology to address regional/global needs?”

After recognizing the lack of immediate recycling opportunities in small communities like San Jon, the team designed Alkan-27, a device that serves the purpose of collecting and distinguishing aluminum cans from waste for an incentive amount determined by the object’s volume. Alkan-27 was mainly designed to benefit the environment in such a way that all the parties involved would benefit from it as well. In a real-world scenario, the manufacturers profit from selling the device, while the buyers generate income through supplying the accumulated aluminum cans to a recycling facility. Furthermore, the users receive a monetary incentive for their deposit. The best part of Alkan-27 is that it is cost-efficient, needing only about \$80 to produce a single unit.

During the competition, team projects from all over the state were judged based on quality, creativity, presentation, and how they match up with the skills that employers needed for future hires in their own industries. As one of the teams that excelled in these categories, R³Al was declared as one of the 18 winning teams by one of the 18 judging companies, Boeing, and the student team will be awarded \$500 each for their efforts and success.

The team would like to thank Creighton Edington, Annie McCauley, Misti Gibson, Franklin Gibson, JaTawn Wright, the administrative staff, and the San Jon community for their extended support in the creation of Alkan-27.

