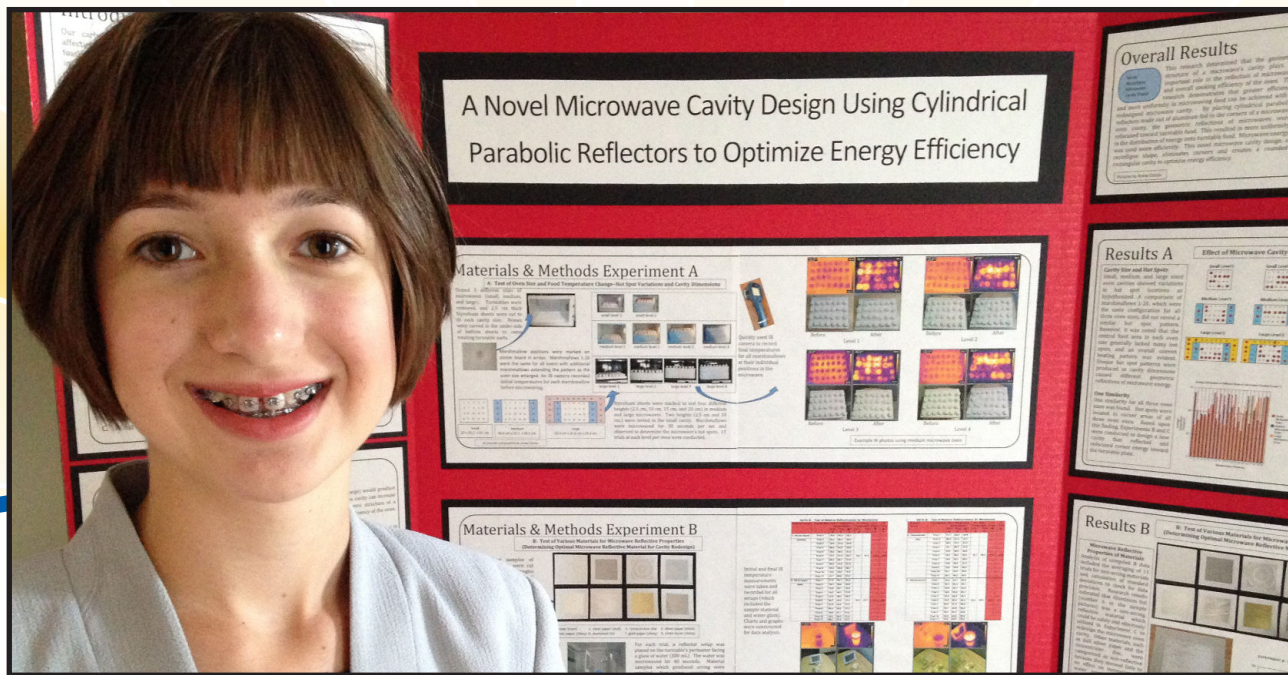


Carolina's Young InnovatorsSM

ANNIE OSTOJIC

Munster, Indiana

Age 13 at the time of innovation



ACHIEVEMENT: REDESIGNED A MICROWAVE OVEN TO COOK FOOD MORE THOROUGHLY WITH LESS ENERGY

Have you used a microwave oven before? Have you noticed how food gets warm in some spots and is still cool in others? This causes you to use more energy to heat the food all the way through. Annie wanted to correct this.

Annie created a new microwaveable container. She was twelve. Her design was more energy efficient than other microwave dishes. But testing her design showed flaws. She noticed energy loss around the inner corners of the microwave.

Annie decided to investigate the microwave cavity. She was now in seventh grade. Annie explored this problem in many ways. She measured different microwaves to find hot spots that wasted energy. She tested seven types of reflector materials. She applied what she learned to create three aluminum-foil reflectors. The result was a new microwave oven cavity. This cavity cooks food more evenly. And it is more efficient. Annie's design refocused lost corner energy onto the food.

Annie has a provisional patent for her innovation. This could improve how your microwave oven works.