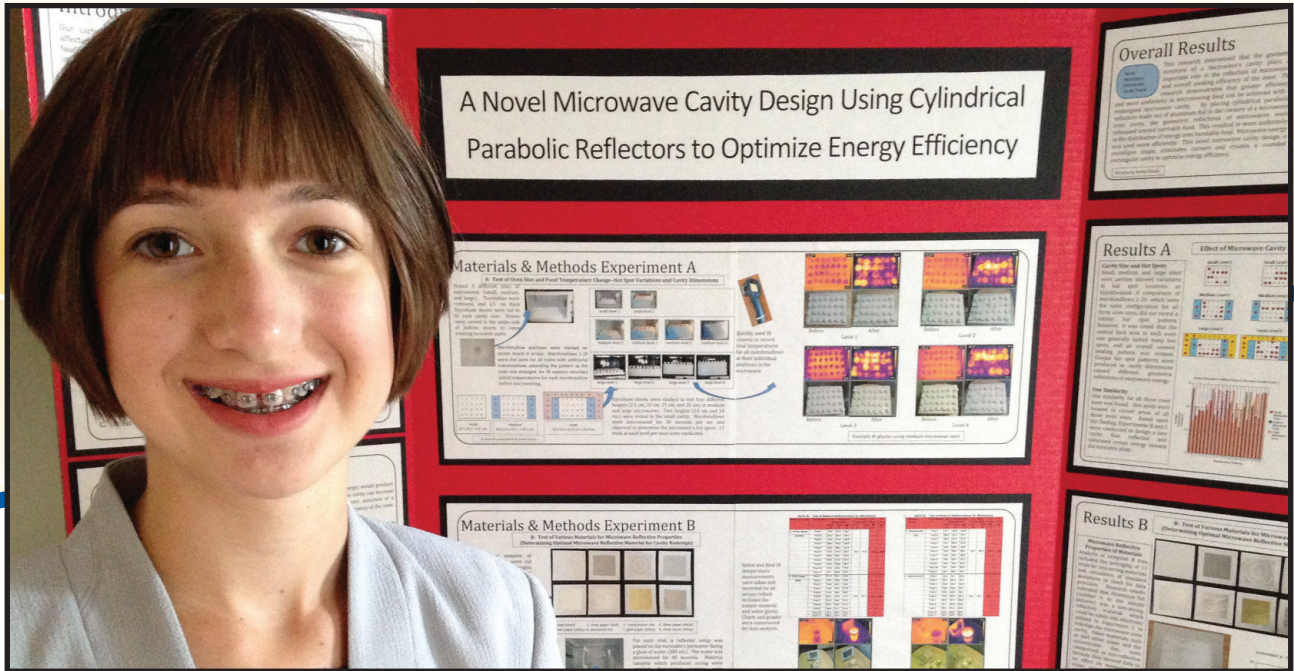


Carolina's Young InnovatorsSM

ANNIE OSTOJIC

Munster, Indiana

Age 13 at the time of innovation



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

Zap! When using a microwave oven, have you noticed how food gets warm in some spots and is still cool in others, causing you to have to use more energy to heat the food all the way through? Annie wanted to correct this.

When Annie was in grade 6, she created a microwaveable container design that allowed the microwave to be more energy efficient than typical microwave dishes. But in testing her design, she noticed energy loss around the interior corners of the microwave. So, in grade 7, she decided to investigate the microwave cavity.

Annie tackled this problem by measuring various microwaves to identify energy-wasting hot spots, testing seven types of reflector materials, and applying what she learned to create three aluminum-foil reflectors. The result was a microwave oven cavity that cooks more evenly and with greater efficiency by refocusing lost corner energy onto the food.

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