

# Mobile Carbon Capture - Phase 3

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A mobile carbon capture device to extract CO<sub>2</sub> from car exhaust was designed and built to fit in a normal passenger car, a Toyota Sports Utility Vehicle (SUV). The mobile device was constructed as a fine spray CO<sub>2</sub> scrubber using Potassium Hydroxide (KOH) or Sodium Hydroxide (NaOH) solutions as the CO<sub>2</sub> absorbents. Measurements were conducted using a commercial CO<sub>2</sub> sensor and laptop computer to measure the CO<sub>2</sub> content of the car exhaust inflow and outflow of the scrubber over a test period. Results were calculated and presented to determine the mobile scrubber efficiency and comparison of absorbents.

## **Awards Won:**

American Chemical Society: Second Award of \$3,000

Fourth Award of \$500