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Renewable Resources Research Laboratory

Dr. Antal inspecting his pressurized catalytic afterburner for the Flash Carbonization? Lab Reactor

Staff[1]| **Equipment**[2]| **Research & Development**[3]| **Publications**[4]

The Hawaii Natural Energy Institute's Renewable Resources Research Laboratory (R3Lab) is a test-bed for the development of innovative technologies and processes for the conversion of biomass into fuels, high-value chemicals, and other products. A consistent theme of the lab's research throughout its history has been the search for new uses for Hawaii's abundant agricultural crops and by-products.

Currently the R3Lab is perfecting the operation of the catalytic afterburner that cleans the effluent of the Flash Carbonization? Demonstration Reactor [5]. Also, we are producing Flash Carbonization? charcoal for use in carbon fuel cell research, terra preta and carbon sequestration studies, and metallurgical process research. Finally, we are fabricating a two-temperature biocarbon fuel cell [6] that we hope to begin testing soon.

Earlier in its life the R3Lab engaged in research on conversion of biomass into gaseous fuels (hydrogen) [7] , and liquid fuels (ethanol) [8]. Reprints of publications are available upon request to Prof. M.J. Antal.

For more information contact **Michael J. Antal, Jr.** [9]

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Tags: Flash Carbonization? technology [10]

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