



**RESEARCH FELLOWSHIP AWARDED** - Clarkson University senior Sayuri Yapa (left) has received a National Science Foundation Graduate Research

Fellowship. Prof. Suresh Dhaniyala (right) has served as her research mentor for the past four years.

# Clarkson Senior Receives NSF Research Fellowship

POTSDAM - A Clarkson University Honors student from the Mechanical & Aeronautical Engineering Department has received a National Science Foundation Graduate Research Fellowship.

Senior Sayuri Yapa, a mechanical engineering major from Hannawa Falls, was awarded the fellowship.

This is the second consecutive year a Clarkson undergraduate has received an NSF Fellowship. Although the fellowships are awarded to both undergraduate and graduate students, they typically go to students already into their graduate work.

A graduate of Potsdam Central High School, Yapa has been a Presidential Scholar for six of her semesters at Clarkson. Last year, she was named a Goldwater Scholar by the Barry M. Goldwater Scholarship and Excellence in Education Foundation.

"Sayuri has a rare talent for research, a natural gift," says Honors Program Director David M. Craig. "Sayuri's powerful intelligence, wonderful interpersonal skills, and great enjoyment of life enable her to take full advantage of this gift."

Yapa's research is in aerosol sampling technology. Prof. Suresh Dhaniyala has served as

her research mentor for the past four years.

"In my research, I use a technique called Differential Mobility Analysis (DMA) which uses the balance of electric field and particle drag to size-select particles. I am researching a new type of DMA that has been developed in our laboratory. Its improved performance has been demonstrated theoretically, but not yet experimentally." She is also working on advanced inversion algorithms that accurately account for particle and flow non-idealities in the instrument.

In 2007, Yapa was funded by the NSF as a visiting research assistant at Hiroshima University in Japan, where she did research in the characterization of the soft x-ray charger for use in nanoparticle size classification.

The National Science Foundation's Graduate Research Fellowship Program is intended to help ensure the vitality of the human resource base of science and engineering in the United States. It provides three years of support for graduate study leading to research-based master's or doctoral degrees.

Clarkson's Honors Program is an intensive four-year curriculum for exceptionally talented students. The University admits only 30 new students to the Honors Program each year.