



## NJ Industry/University Partnership Formed

*Cooperative effort aims to explore increased use of scrap tires in transportation applications*

The Bayshore Recycling Corp. of Woodbridge, New Jersey recently announced an Industry/University Partnership has been formed with Rutgers University to study and implement the use of recycled asphalt in roads and other recycled construction materials for infrastructure and transportation improvements.

This new Industry/University partnership between Bayshore Recycling Corp. and the Center for Advanced Infrastructure and Transportation (CAIT) at Rutgers University will allow for further evaluation and more effective implementation of crumb rubber in New Jersey's pavement system, CAIT Director Dr. Ali Maher said in announcing the research initiative.

The primary objective of the Bayshore/ CAIT team is to collaborate with the New Jersey Department of Transportation (NJDOT) and the New Jersey Department of Environmental Protection (NJDEP) in development of practical guidelines for high volume usage of scrap tires and to develop a processing methodology that is both economical and efficient. The research effort will also expand to incorporate other potential high volume usage of scrap tires in transportation infrastructures such as: structural and non-structural fills and embankments, drainage layer systems, and as material additive to other recycled materials such as glass, dredge and recycled asphalt concrete.

The creation of the joint program entitled "Beneficial Re-Use of Recycled Materials" by Rutgers and Bayshore Corp. is the first step in making New Jersey a leader in recycling research and work force training, Dr. Maher said. Within this program, university researchers and students will get practical exposure to real life planning and engineering challenges associated with recycling. The program will focus on areas where recycling will have immediate economic impact on New Jersey such as shredded tires, contaminated dredge materials, and recycled construction debris, Maher said.

The Bayshore/CAIT team led by Dr. Maher includes Thomas Bennert, a Senior Research Engineer and Joseph Smith, Supervisor of the Rutgers Asphalt Pavement Laboratory. "When civil infrastructure benefits from waste materials, everyone wins," Bennert said. "By further evaluating and effectively implementing crumb rubber in New Jersey's pavement system, our roadways will improve," Smith concurred.

Recycling-oriented courses will be incorporated into the engineering program. An onsite joint research and teaching laboratory is planned which will sustain three to four undergraduates internships per year.

"The value of a hands-on educational experience will fully prepare our students to insure that they excel in their field and maintain a commitment to their environment with regard to their work," Dr. Maher said. Also planned will be a larger scale field testing and demonstration laboratory and a short module for K-12 educators.

Lastly, technology transfer insures that all interested parties utilize the important findings coming from this university/industry partnership. "The technology transfer component of the program will culminate in the effective dissemination of the research results to the scientific community, government agencies and general public, Dr. Maher said.

"We are pleased to partner with CAIT and Rutgers University and hope to help create a strong market for scrap tires in transportation application in New Jersey through this research effort," Valerie Montecalvo, President of Bayshore Recycling Corp. said.