

SPRING 2012 SEMINAR SERIES: DEPARTMENT OF ENVIRONMENTAL SCIENCES

SPEAKER: DR. SERPIL GURAN
RUTGERS ECOCOMPLEX – BORDENTOWN, NEW JERSEY

TITLE OF TALK: “*SUSTAINABLE ENERGY SYSTEMS* ”

DATE/TIME/LOCATION:

FRIDAY, FEBRUARY 24, 2012 – 2:30PM – ROOM 223

Environmental & Natural Resource Sciences Bldg.

14 College Farm Road, New Brunswick, NJ

(Light refreshments served at 2:15PM)

HOST : Dr. Uta Krogmann, 732-932-9800 X6207, krogmann@envsci.rutgers.edu

Seminar Website: <http://www.envsci.rutgers.edu/info/seminar/seminar.shtml>

ABSTRACT:

To meet the increasing demand for energy, to catalyze associated economic growth and to avoid further increases in harmful emissions including greenhouse gases, aggressive energy planning at the international, national, state and local government levels is needed with reasonably achievable targets. Solutions will require complex strategies for both energy demand and supply that simultaneously reduce emissions and other environmental concerns while promoting a green economy. Demand strategies could include more aggressive programs at all levels for energy conservation and efficiency from home heating and lighting to manufacturing and transportation. On the supply side, increases in the use of renewable power and fuel will be critical, and will include biomass (e.g. wood, plant derived sustainable fuels and organic waste) options, among other renewables.

Since biomass is comprised of various types, conversion into bioenergy and bio-based products involves a variety of existing and emerging technologies. By producing multiple products from multiple feedstocks via multiple conversion technologies, a biorefinery can take advantage of the differences in biomass components and intermediates and maximize the value derived from biomass feedstocks.