NJRSF REGISTRATION LIST

for Union County (of residence) March 22, 2006

Matthew Anandanrajah Achariam St. Benedicts Prep grade: 11 age: 16

Elizabeth

advisor: Dr. David Cincotta (973-792-5800)

Changing flash and gel points by mixing various biodiesels \f{R}

Mixing homemade biodiesels made from various oils in varying proportions to achieve a better flash and gel point.

Miriam Rachel Schachter Summit H. S. grade: 11 age: 17

Summit

advisor: Dr. Ben Greene (908-273-1494)

Zone Refining Purification of Organic Solids\fR

We have built a zone refining aparatus and demonstrated its effectiveness on the purification naphthalene. We have intentionally introduced a fluorescent dye impurity and followed its spacial concentration by fluorescence imaging.

Charles Henry Wisoff Summit H. S. grade: 11 age: 17

Summit

advisor: Ben Greene (908-918-2100)

Characterizing the Response Time of a Thermo-optic Mirror\fR

Using a diode laser directed upon a thermo-optic silicon mirror device, we have been able to characterize its deformation as a function of time and current by counting interference fringes.