

THE PENNSYLVANIA STATE UNIVERSITY

202 ACADEMIC PROJECTS BUILDING  
UNIVERSITY PARK, PENNSYLVANIA 16802

College of Earth and Mineral Sciences  
Department of Materials Science & Engineering

Fuel Science Program  
Professor Rick E. Smalley  
Department of Chemistry  
Rice University  
Houston, TX 77001

Area Code 814  
865-4392  
November 10, 1987

RECEIVED

NOV 18 1987

Dear Rick:

I am sorry I did not have a chance to say to you "good bye" last Friday -  
- Sherwood Chang wanted to talk to me about Penn State diamond project.

Enclosed is a copy of the last page of the Homann's paper, where I marked what I regard as Homann's conclusions on the formation mechanism of clusters observed in their flame study. I still interpret them as the clusters are secondary to soot particles, *i.e.*, the clusters are formed after (or even from) the soot particles.

I believe you and I will find ways to reconcile our results. For example, it is very possible that the growth of soot particles after they reach a certain size proceeds through shell structures, you and Kroto advocate. This actually may explain the "aging" of soot particles.

In any event, I hope that the differences in our scientific views will not prevent us from possible future interactions on this fascinating subject. I really enjoyed meeting you (I would not say it about Kroto) and am looking forward to other opportunities when our roads will cross.

With best regards,

Sincerely,

Michael

Michael Frenklach

Associate Professor of Fuel Science

P.S. I have also enclosed some of our <sup>soot</sup> modeling papers.