

ETS DIVISION WEEKLY HIGHLIGHTS

ETS Division Data for Library Database - Status: Sheila Cash under the direction of Patricia Martin and Roger Jennings began to compile information on sidestream smoke for incorporation into a spreadsheet. Significance: The information from this spreadsheet will later be put into a R&D Library Database System. Next Steps: To continue to input data into the spreadsheet from the information obtained through the Library and co-workers.

N-Nitrosamine Analysis of LSS Horizon Product - Status: Mike Conner and Sheila Cash completed the collection and analysis of mainstream and sidestream smoke from two LSS Horizon products plus a Control for N-nitrosamine analysis. The results have been detailed in an R&DM. Significance: The N-nitrosamine analysis was a part of a battery of chemistry tests for the LSS product. Next Step: The R&DM is being submitted to appropriate personnel for their approval.

ETS Literature Database - Status: Ms. Susan Kelly met with Ms. Mary Ward, Mr. Jeff Furr and Dr. Randy Ralph to discuss the steps being taken to update the ETS Literature Database. Significance: Various groups are in the process of developing ETS Literature Databases. The information exchanged in this meeting will help to coordinate the efforts and eliminate duplication within the different groups. Next Steps: Ms. Ward and Mr. Furr will be provided with updates on the development progress of the ETS Literature Database.

LSS Horizon - Status: Chemical characterization is proceeding for sidestream smoke on the LSS Horizon product. All analyses completed have been reported. Significance: All SS smoke collections and analyses are on schedule. Completion of the chemical characterization is necessary in order to obtain approval by the HRRC for the LSS Horizon product. Next Steps: Completion of analytes not received by the 4/1/91 deadline.

BAT System - Status: All of the sidestream flow controllers are now operational. Defective valves were replaced by Ms. Kim Landreth. Significance: The BAT System is now completely operational for 6 ports. Full operation of the system will insure timely throughput of samples for the upcoming work on project XA. Next Steps: Continued maintenance as necessary.

Project XA - Status: Due to the April 8th deadline for Project XA, scheduling for sample collection and analyses of sidestream smoke for selected prototypes has begun. Significance: Scheduling SS sample collection and analyses as early as possible allows for the most efficient use of the personnel involved to complete the project. Also, a one month time frame was given to Mr. Alan Norman for completion of the SS smoke analyses. Next Steps: Start actual collections and analyses of SS smoke for project XA.

NMR Paper - Status: A meeting was held with Ms. Joan Spencer (Audiovisual) to request several hand drawn graphs to complete the paper being written on the Nicotine/Levulinic Acid NMR work. Significance: The graphs will display C-13 shifts. The hand drawn graphs are necessary in that a software package was not available which could display NMR shifts in ppm, which occur decreasing in value from left to right. Also it is necessary to "break" the scale in order to expand certain regions of the scale. Next Steps: The first two graphs will be available 4/12 for evaluation. If the graphs are satisfactory, all remaining data will be supplied to Ms. Spencer for completion in the same format.

Project XB: Levulinic Acid - Status: The TAGA is being used to evaluate the ability of an olfactometer to deliver a constant concentration of vapor phase levulinic acid. Initial results revealed that at a flow of 10 liters per minute, it could take as long as 10 minutes for a steady-state concentration to be attained at 10^{-2} times vapor saturation. Significance: These experiments are being carried out at the request of Dr. Walker

(Biobehavioral) in order to test the delivery of levulinic acid from an olfactometer. Next Steps: Dr. Walker and Mr. Jennings hope that equilibrium will be reached more rapidly in the olfactometer at higher flow rates. Mr. Jennings is redesigning the system to operate at a higher flow rate. The modified system will be retested during the week of April 8th.

Human Mimic Smoking Machine Data Analysis -

Status: Stephen Sears, David Griffith and Don Edwards have programmed a compensation algorithm which results in an approximately 75-80% improvement in puff reproduction on the new HMSM. Refinements of the code are underway. Significance: The purpose of the HMSM signal-response software is to correct for signal lag errors in the machine simulation of human puffs. Next Steps: The compensation routine is complete until machine performance deteriorates or unexpected errors arise in uncommon puff profiles.

Kepner-Tregoe Short Course -

Status: Stephen Sears presented a Kepner-Tregoe Problem-Solving and Decision-Making short course to Packaging Technology R&D personnel during the week of March 22-25. Significance: The particular course presented is a modified version of the traditional K-T format designed specifically for R&D personnel. Next Steps: The course is complete.

Japanese Spousal Smoking Study - Status: A proposal has been received from Dr. C. J. Proctor on behalf of Professor Eiji Yano, Department of Public Health, Teikyo University and Professor Jun Kagawa, Department of Hygiene and Public Health, Tokyo Women's Medical College. The primary objective of this research would be to quantify the amount of ETS to which non-smoking Japanese women are exposed during the course of a typical week by measuring airborne nicotine and salivary cotinine. Significance: Results from this study compared to those from U.S. and European studies could answer questions concerning differences in ETS epidemiologic outcomes between Asian and Western populations. Next Steps: Attempts are in progress to find funding for the proposed Japanese study.

XC: Mary Ward
John Reynolds
Bob Suber
Chris Coggins
Arnold Mosberg
Dave Doolittle