

RESEARCH LABORATORY FTR.

MONTHLY PROGRESS REPORT, AUGUST 1970

General Notes

00 Personnel.

The following members of the staff have been on vacation during August:

H.P. Stauffer:	2. 8. - 16. 8.
C. Jeanneret:	9. 8. - 23. 8.
F. Moser:	2. 8. - 23. 8.
J. Bourquin:	26. 7. - 9. 8.
N. Lovy:	26. 7. - 16. 8.

01 Training and Education.

C. Jeanneret and J. Bourquin have been registered for an IBM course: Programming mathematical problems with Fortran.

01 Preparations continue for an in wall training session scheduled for october. All laboratory technicians of FTR will be attending this seminar on procedures and general aspects by developing an analytical method.

(H.P. Stauffer)

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- 02 Our plans to gain some more laboratory space in the basement of the "Moulin" building were accepted and orders have been given out to a contractor taking charge of the transformation.

(F. Moser)

- 05 From the part of the research laboratory we submitted a proposition for a more efficient digestion of the scientific periodicals. It has been accepted and details will be worked out with our librarian.

- 07 H. Stauffer attended a symposium on Biopolymers organized by the Swiss Chemical Society in Berne.

Methods.

- 11 A great number of analytical results from Monitor Cigarettes, smoked on the new P.M. 20-port. machine, have been treated by using different statistical models. The data were collected by M. Häusermann for presentation at the forthcoming ISO meeting in Ankara.

(Jl. Bourquin)

- 14 Gas Phase Separations with GC on Capillary Columns.

Work has been taken up again to prepare new columns. The state of the technique is such that we are in a position to perform gas phase fingerprints at any time a special problem arises in relation to a particular cigarette filter.

(F. Moser)

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14. At present we are confronted with the problem of a simultaneous determination of gas phase aldehydes in combination with carbon monoxide and cyanide. Our efforts will be based on the PM completion report by Harvey, Palmer and Will, (April 30, 1970).

(U. Nyffeler, L. Hatt)

15. The newly acquired WILKS MINI-CELLS for Infrared spectrometry have been tested with our spectrometer. The KBr tablet press as well as the liquid cell with AgCl windows performed very nicely.

(J. Locher)

16. Formaldehyde in Cigarette Smoke.

The drawings for the illustrations for a paper, describing our method have been done.

(J. Bourquin)

17. Physical Chemistry of Adsorption.

We started measurements, with our microcalorimeter, on the heat of adsorption of benzene on silica gel.

Values range in general between 14 and 18 kcal/Mol.

By adsorbing very small quantities of organic vapors however, we observed extremely high molar enthalpies.

This phenomenon is known but shall be studied further in relation to some particular systems. Influence of carrier gas velocities and sampling techniques are also subject of further studies.

(C. Jeanneret)

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Tobacco.

21 Determination of Coumarin in Cigarette Filler.

We will need a working method for the quantitation of this additive and are checking at present some of the communicated procedures.

(J. Locher)

Smoke and Biology.

33 Project on Smoking Animals-INBIFO.

For the forthcoming experiment 028 we manufactured cigarettes with different nicotine levels where all steps of the processing have been surveyed by extensive analytical controls.

(U. Nyffeler)

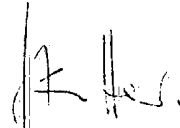
For the experiments of Dr. Bättig in Zürich we prepared a physiological alkaloid solution.

Filters.

52 Filters mounted by our technological development service have been tested with respect to phenol delivery (FF-Filters).

(J. Locher)

Research Laboratory FTR



H.P. Stauffer

Neuchâtel August 8, 1970
HPS/ht

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