

December 2, 1974

Dr. Alfred N. Hertz
P.O. Box 1233
51, Schuetzenstrasse
2057 Reinbek - Hamburg
West Germany

Dear Alfred:

It was indeed a pleasure seeing you and Marianne in Montreux and for receiving of your generous hospitality on a number of occasions.

I see that Basil has "done well" in preparing a draft concerning an award for junior scientists. It appears that he has expressed very well the rationale for such an award with explicit note of advantages to CORESTA and to the recipient. I agree with you that applications should not be limited to individuals who have successfully completed their Ph.D. thesis, and that some careful consideration should be given to the manner applications are handled at the particular University, College, or Institute.

In arriving at some decision regarding academic and research level of an applicant, it might be well to consider several facets of the problem. The "Master of Science" degree is awarded after a student has completed a course of study in a specialized field, has completed a satisfactory thesis and has passed comprehensive examinations in the chosen field of study. At the termination of this M.S. program, the individual may either continue study for the Ph.D. or leave and pursue his particular vocation. The M.S. degree provides the necessary base for continuation towards the Ph.D. It would appear that a number of the "better" applicants for the award might come from those individuals who have completed the M.S. and are continuing their training toward the Ph.D.

By the same token, we should consider the young Ph.D. This individual will likely be "job hunting" prior to actual termination of the degree program. For example, during the last year of work towards the Ph.D., the individual may contact other Universities, industries, etc. and have interviews and may have a firm offering prior to actually receiving the degree. Also during this last year, the Ph.D. candidate is completing his research, writing the dissertation and having the final oral exam. After receiving the degree, the individual may accept a post-doctoral post, a University position, or a position with some outside agency or firm.

Now, it appears that some time will be required to initiate, review and process applications for the award. If the award is restricted to the individual having the Ph.D., there is the good possibility that this individual may already be employed and working outside tobacco at the time he may be considered for the award. This further supports the rationale for permitting applicants having the M.S. degree.

Another question pertains to how applications should be processed at Universities, etc. I discussed this with the Director of Research, School of Agriculture and Life Sciences at N.C. State. It was his view that applications should be handled and perhaps screened at the University level, through his office. I would suggest that this would be appropriate. The faculty are perhaps the best judge of the qualifications of the young researcher, and could serve to "select" the more outstanding ones and invite them to submit applications for the award.

In view of the above thoughts and considerations, I would suggest that the draft be modified. Some specific suggestions might include (for page 2):
(1) The Hertz Research Award for outstanding and meritorious achievement in tobacco research will be presented to a young researcher at each CORESTA Symposium.

(2) For consideration, an applicant must have successfully completed within the last 3 years either the M.S. or Ph.D. degree with thesis research on a tobacco, or closely related, subject.

(3) While there is no country restriction, fluency in French or English would be an advantage.

(4) Application Procedures

- a) Initial screening of potential applicants and processing of applications to be made by institution from which degree is granted.
- b) The Director of Research (or other appropriate University official) will contact graduate faculty researchers in tobacco for their recommendation of potential applicants.
- c) Selected applicants, in conjunction with each of their major professor or department head, will prepare an application for award, to be subsequently submitted to CORESTA. Applications from Universities or other Institutes on behalf of an individual will also be acceptable.

(5) Selection to be made by CORESTA - perhaps a Sub Committee of the Scientific Commission or a special ad hoc group appointed for the purpose - on the merit of the work done and personal appreciation from referees.

(6) No restriction on subject within the general terms of reference, but in the event of sheer work merit differential not being sufficient to make a final selection, then the choice would go to the subject most appropriate to solving current problems.

Dr. Alfred N. Hertz
December 2, 1974
Page 3

Alfred, the above notes incorporate some of our views which will serve to broaden the field of applicants and provide some direct input from Universities in the screening and selection of more promising candidates.

Please let me know if I can provide any further assistance. Would a letter of support to the General Secretary of CORESTA be of any help?

With best regards,

Sincerely yours,

William H. Johnson
Professor

WHJ/t



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ALFRED N. HERTZ, P.O. BOX 1233, 2057 REINBEK - HAMBURG, W. GERMANY

Professor William H. Johnson
North Carolina State University
- School of Agriculture and Life Sciences
Department of Biological and Agricultural Engineering
Box 5906 - Raleigh / N.C. - 27607 - USA

P. O. BOX 1233

51. SCHUETZENSTRASSE

2057 REINBEK - HAMBURG
WEST GERMANY

YOUR REF.

DATED

OUR REF.

ANH/sb

November 13, 1974

Dear Bill,

you certainly remember our conversation in Montreux together with Basil about the award for junior scientists. Basil has just recently sent me his draft which I enclose for you in photocopy. Certainly you as a university scientist will be able to tell me whether in this draft on page 2, point number 1) would or would not have the effect of narrowing the applications of possible applicants. I think that applications from universities or other institutes on somebodys behalf should also be acceptable and applications should not only be limited to individuals who have successfully completed their PhD thesis but also to - what would be the correct university graduation ? - diploma graduates like " master of science ". Your opinion on this would be highly appreciated, dear Bill, as I should very much like to present my idea to Coresta Secretariate as soon as possible and early enough for the next Conference or Symposium.

I hope, Glenda has not been suffering too much while staying alone during your absence in Montreux and I am very much looking forward to seeing you both again in the near foreseeable future.

Kindest personal regards for today

Yours sincerely,

ALFRED N. HERTZ

1 Encl. -

TELEPHONE
HAMBURG 7 22 31 51
TELEX 2 17985

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DRAFT

M. P. Rey,
General Secretary,
CORESTA,
53 Quai d'Orsay,
Paris (7^e)
France.

Dear M. Rey,

I believe all progressive people connected with the Tobacco Industry would agree that constant progress is being made in the beneficial application of science to its problems. It is also clear that this progress is much aided by the Forum which CORESTA presents for scientific communication and informal contacts. However, by the nature of general member representation it is, very correctly, the more senior people who attend Group and Symposium meetings.

With problems increasing and even survival in doubt, it is vital to attract the best possible brains into tobacco research and I have been wondering whether we could expose an occasional actual or potential young recruit to the stimulation of a CORESTA meeting. It is as a result of such thoughts that I now write to you.

I would like to propose, for your consideration, that I (my Company?) sponsor at each Symposium meeting, one young graduate who has recently completed his PhD thesis, to deliver a paper based upon that thesis or a part of it. I would envisage contributing all travel subsistence and Conference expenses to the successful candidate and probably a small cash award and memento of the occasion. There is already the Phillip Morris award for contributions made by mature scientists and my thoughts would seem complimentary to this in fostering the interests of youth.

From CORESTA's point of view, there would be opportunity to listen to the results of some research which might not otherwise come to their notice and certainly not in such complete form. Furthermore, the applied ideas of a

young person could well be helpful in putting matters with which most of us have had close contact for a long time into different and perhaps more profitable, perspective.

From the successful candidate's view point, there would be the benefits of meeting a number of prominent people in the industry and to travel. Neither of these would be obtained in the normal start to a young career and should both encourage a person to join the industry with excellent job opportunity and then help to make him a more valuable part of it.

This letter is obviously only exploratory but to give further indication of my current thinking, some details of the scheme's operation might be:-

- 1) Applications to be made direct by individuals who have successfully completed their PhD thesis on a tobacco or very closely related, subject.
- 2) No country restriction, although fluency in French or English would be an advantage.
- 3) No age restriction within the general consideration for youth.
- 4) Selection to be made by Coresta - perhaps a Sub Committee of the Scientific Commission or a special ad hoc group appointed for the purpose - on the merit of the work done and personal appreciation from referees.
- 5) No restriction on subject within the general terms of reference but in the event of sheer work merit differential not being sufficient to make a final selection, then the choice would go to the subject most appropriate to solving current problems.

I have presented to you some preliminary thinking on a scheme which appears right in tune with CORESTA ideals and which I believe would have much potential benefit for the tobacco industry. I should be grateful in due course for your comments both on the principle and the detailed application.

If you believe the aims expressed could be achieved better in other ways I would be very happy to receive such thoughts and discuss them with you.

Yours sincerely,

August 26, 1974

Mr. Alfred N. Hertz
P.O. Box 1233
2057 Reinbek
Hamburg, W. Germany

Dear Alfred:

Many thanks for your letter of last May 15. Only last week I received confirmation of acceptance of my paper to be presented at Montreux. This summer has been extremely busy with the field research on modular curing, close-grown tobacco, lab studies, etc. I hope to have everything under control however before Montreux in September. I'm still awaiting out-of-country travel request approval.

Glenda and I were very grateful for your kind and thoughtful invitation to her to visit Europe. We had hoped to be able to accept your most gracious offer; however we suspected earlier that we shall be moving into our new home during September. Moving dates are unclear even now and it will be necessary for one of us to remain to take care of all that must be done. Most regretfully, Glenda must decline your offer at this time.

Meanwhile I look forward to visits and talks with you at Montreux. Our best to you and your family.

Sincerely yours,

William H. Johnson
Professor

WHJ/t



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ALFRED N. HERTZ, P. O. BOX 1233, 2057 REINBEK - HAMBURG, W. GERMANY

Professor
William H. Johnson
North Carolina State University
Dept. of Biological and Agricultural Engineering
Box 5906

R a l e i g h / N . C . 27607

YOUR REF.

DATED

OUR REF.

P. O. BOX 1233
51. SCHUTZENSTRASSE
2057 REINBEK-HAMBURG
WEST GERMANY

ANH/sb

May 15, 1974

Dear Bill,

many thanks for your letter of May 7th. My own registration with the Montreux people has been quite late too, but I got confirmation without any problems.

You should tell Glenda, please, that my former invitation to you is as good for her. I hope, this helps her make up her mind to accompany you to Europe. Tell me about her decision as soon as possible, so that I can arrange for a ticket.

I shall greatly appreciate having another discussion with you about flavour introduction into tobacco shreds before or during the vacuum impregnation phase and I assume we shall have time to discuss this in Montreux.

For the last months, I had more trouble with the procurement of raw materials for the manufacture than ever before, so that I have lost track a little what concerned our old experiments made together with Universal.

For today

kindest personal regards

Yours sincerely,

ALFRED N. HERTZ

TELEPHONE
HAMBURG 7 22 31 51
TELEX 2 17865

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May 7, 1974

Dr. Alfred N. Hertz
P.O. Box 1233
2057 Reinbek - Hamburg
N. Germany

Dear Alfred:

Many thanks for your kind letter of February 27 and for the personal invitation for participation in the CORESTA CONGRESS in Montreux. I apologize for my delay in replying. Along with a very hectic Spring schedule, I have awaited further indication as to whether the travel arrangements could be handled from this end. This now appears to be assured so I will plan to handle all the travel arrangements. Dr. G.B. Lucas will likely be the official delegate from N.C. State University; however, I will be able to obtain travel funding through a cooperative research arrangement.

I may confront one problem. Due to the uncertainties here, I have not yet mailed the registration form, which was due on April 30. I will take the chance however that this will still be acceptable if mailed shortly. Assuming everything goes well, I should be able to see you in Montreux. Unfortunately, I have not been able to persuade Glenda to accompany me as of this time.

You may recall that we discussed at our last meeting the possibilities of introducing certain flavoring materials into tobacco shreds during the vacuum impregnation phase prior to freeze drying. We have not been able to undertake work along these lines as yet; however, there is a chance that a project could be started in the fall. Perhaps we could discuss this and other matters at Montreux.

With best personal regards to yourself and Marianne.

Sincerely yours,

William H. Johnson
Professor

WHJ/t



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ALFRED N. HERTZ, P. O. BOX 1233, 2057 REINBEK - HAMBURG, W. GERMANY

Mr. William H. Johnson
3731 Swift Drive

Raleigh NC
USA

P. O. BOX 1233
51. SCHUETZENSTRASSE
2057 REINBEK-HAMBURG
WEST GERMANY

YOUR REF.

DATED

OUR REF.

ANH/sb

February 27, 1974

Dear Bill,

the time is running so fast, that we can hardly cope up with all the experiments which we have to make in our laboratory. It has gone so fast that we must do something pretty soon what concerns our next meeting in Montreux.

As you will probably remember, I have extended to you a personal invitation for participation in the CORESTA CONGRESS in case you will not be delegated officially by either the University of Raleigh or any other official Coresta Institution. The best probably would be to buy an I.T. arrangement from Swiss Air, but hotel accommodation should be reserved via Monsieur Ray of Coresta. Would you kindly let me know rather promptly whether something for your trip has already been arranged from your end, or whether I shall handle this matter with the Swiss Air Office of Hamburg, with whom we have good relations. Furthermore you should probably early enough tell me about your proposed travelling time and eventually other destinations in Europe than Montreux, so that the ticket can be made up accordingly. An I.T. ticket, for little more than the normal fair, usually covers the hotel accommodation and breakfasts, but it must be prepared in advance and is hard to change during the voyage. Therefore we better hurry up to get your trip in line now and I am looking forward to receiving your early news.

Kindest personal regards

Yours sincerely,

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Mr.
William Johnson
3731 Swift Drive

Raleigh N.C. - USA

YOUR REF.

DATED

OUR REF.

P. O. BOX 1233
51. SCHUETZENSTRASSE
2057 REINBEK-HAMBURG
WEST GERMANY

April 13, 1973

Dear Bill,

I have just the day before yesterday received from Universal Leaf Tobacco Co. samples of expanded Burley tobaccos, but I did not yet have had an opportunity to smoke them. After having done so, I'll let you know.

Much to my surprise I in TOBACCO REPORTER Vol. 100 No. 3 - March 1973 find a mention about US Patent 3.704.716 for "Expanding Tobacco". Not knowing whether you are aware of this patent I am sending you a photocopy of this page from the TOBACCO REPORTER.

Hoping that you all are in excellent shape I am sending you Marieanne's and mine

kindest personal regards

Yours sincerely,

P.S.

We definitely hope to see you
in Switzerland next year.

kindest regards to Glenda & the kids

1 Encl.-

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when the end is soft, or by using a fluidics device for detecting the extent to which the cigarette end restricts the out-flow of air.

Molins: Feeding cigarettes

U.S. Patent 3,703,971. Designed by Tom Rowlands, and assigned to *Molins Ltd.*, Deptford, London, England. Cigarettes discharged from successive trays into a hopper, and lowered by a platform which is then withdrawn, are received on a conveyor at the bottom of the hopper which feeds them out of the hopper. To facilitate proper feeding, this conveyor is stopped while the platform is withdrawn, raised, and repositioned to receive further cigarettes. A further conveyor outside the hopper moves continuously, at relatively low speed; while cigarettes are being fed out of the hopper at a relatively high speed, some are stored in a reservoir which expands to receive excess, and when the feed from the hopper is stopped, the continuously moving conveyor is able to maintain a continuous flow of cigarettes by drawing from the reservoir.

FMC: Expanding tobacco

U.S. Patent 3,704,716. Developed by John A. Abbott and Clyde Donald Watson; assigned to *FMC Corp.*, San Jose, Calif. A method for the continuous processing of tobacco to expand the tobacco, thereby reducing the tar and nicotine content of a given size cigarette, is disclosed. In carrying out the process, the tobacco preferably in shredded form, is moistened with water to a point at which its volume is approximately twice the initial volume, conveyed on a continuously moving conveyor into a freeze chamber and then into a freeze drying chamber wherein air at substantially atmospheric pressure and at about 30° F is passed over the tobacco shreds. The drying is carried out to a point at which 90 per cent of the moisture is removed. Further, the final drying may be accomplished in two stages utilizing two drying chambers.

ICI: Tobacco substitute

U.S. Patent 3,705,589. Developed by James Forrester Morman and assigned to *Imperial Chemical Industries Ltd.*, London, England. Smoking mixture for cigarettes, cigars, pipes and the like comprising a solid black condensate (preferably prepared in sheet form by mixing it with a binding agent) of a compound of the formula $R^1COCH_2-CH_2COR^2$ wherein R^1 and R^2 , which may be the same or different, are H, alkyl, hydroxyalkyl or formyl. The condensate is mainly an aldol condensation product resulting from reaction between the carbonyl and methylene groups of the monomer.

Tobacco Reporter / March 1973

Suitable additives such as carbohydrate material, inert porous fillers, flavorants, glow producers and tobacco may be admixed with the condensate to produce the final smoking product.

Cigarette

U.S. Patent 3,702,117. Developed by Theodore H. Borthwick, 2501-D Queen St., Winston-Salem, N. C. 27103. *Unassigned.* A significant portion of a length of a cigarette is preserved, should the cigarette be left unattended by a smoker who is preoccupied with other matters, by the provision of flammability barriers within the length of sections. Due to a particular relationship among the combustion temperatures of the tobacco filling for the cigarette and the flammability barriers, use of the cigarette in a normal manner proceeds uninhibited while an unattended cigarette is extinguished.

Cigarette perforating

U.S. Patent 3,701,353. Designed by Arthur R. Pasquine, Harland J. Snow, both of Richmond; and Edward E. Wagner, Chester, all of Virginia. *Unassigned.* A mechanism for perforating cigarettes in conjunction with the operation of assembling filter sections to the cigarettes including the application of a tipping wrap connecting the filter section to the tobacco rod section, the mechanism embodying a stationary shoe peripherally adjacent a cigarette carrier drum whereby the tipping paper is wrapped around the sections by rolling the rod sections between the drum and shoe, the shoe having in its surface needle points which penetrate the rod assembly as it is rolled, the needle points being provided by a thin strip of sheet metal ground at an edge facing the rod sections to provide an arc-shaped row of needles adapted to result in a peripheral row of venting apertures in the assembled cigarette.

Additives . . .

L&M: Tobacco flavorants

U.S. Patent 3,704,714. Developed by Andrew G. Kallianos, Albert H. Warfield and Melvyn L. Simpson; assigned to *Liggett & Myers Inc.*, New York, N. Y. The base-catalyzed self-condensation of isovaleraldehyde yields a mixture of threo- and erythro-2-isopropyl-5-methyl-3-hydroxyhexanal. The reaction conditions can be so chosen as to favor predominance of one isomer over the other. Upon vacuum distillation of the mixture, one of the isomers preferentially dehydrates yielding 2-isopropyl-5-methyl-2-hexenal as a distillate and unchanged 3-hydroxy-2-isopropyl-5-methylhexanal as the residue. These aldehydes are the

parent members of a class of compounds composed of 2-isopropyl-5-methylhexanal, 3-hydroxy-2-isopropyl-5-methylhexanal, 2-isopropyl-5-methyl-2-hexenal, and the alcohol and carboxylic acid derivatives of these aldehydes, the ester and ether derivatives of the alcohols and acids, as well as certain other alcohol and ketone derivatives. These compounds are useful as tobacco additives to modify the taste of the tobacco, and/or as intermediates for the preparation of tobacco additives.

IFF: Flavoring, fragrance

U.S. Patent 3,705,121. Developed by Alan O. Pittet, Atlantic Highlands, and Ranya Muralidhara, Marawan, N. J.; assigned to *International Flavors & Fragrances, Inc.* Processes for altering the flavor and aromas of consumable products, including foodstuffs and tobaccos, which comprise adding thereto a small but effective amount of at least one tricyclic pyrazine. The patent describes and claims the addition to tobacco of various tricyclic pyrazine formulae to produce such as a fried corn chip odor and flavor, a nut-like aroma, a cocoa flavor, sweet nut flavor and aroma; a method for purifying and/or isolating the final products; combining ingredients; stabilizers, thickeners, conditioners.

IFF: Flavoring tobacco

U.S. Patent 3,705,158. Developed by Alan O. Pittet, Ranya Muralidhara, and Ernst T. Theimer; and assigned to *International Flavors & Fragrances, Inc.*, New York, N. Y. Processes for altering the flavors and/or aromas of products, including foodstuffs and tobaccos, which comprise adding various bicyclic dehydropiperazines. Described and claimed are variations of the basic formula to produce a roasted nut, burnt aroma, a sweet, tobacco-like fragrance, a buttery aroma character.

Filters . . .

L&M: Carbon content meter

U.S. Patent 3,696,299. Designed by James O. Pullman and William R. Weidlich, and assigned to *Liggett & Myers Inc.*, New York, N. Y. An apparatus to measure the relative quantity of carbon present in a smoke filter comprising a parallel plate capacitor between whose parallel plates are disposed rods of filter material. The parallel plate capacitor is attached to a capacitance measuring device which is calibrated to measure capacitive change of the system comprising the parallel plates and the rods and to indicate when the carbon content of the rods deviates from a predetermined standard. The carbon content is measured by electronic means, thus being non-destructive.