

Neri
Franklin

1 Agosto 1974

Dr. M. Cuccorini
ul. Marchlowskiego 18/24
35-035 PZESZCZY (Polonia)

Egregio Dottor Mucharski,

due righe per informarla che il Prof. Natta
si è trasferito Bergamo, Via S. Sebastiano 11. Inoltre desidero infor-
marla che la Signora Natta purtroppo è deceduta già nel 1968.

Unigliori saluti.

Rosanna Lauer (segretaria)

Merci M. Katta
Pologne

Prof. Malinowski
Politechnika Warszawska
Katedra Technologii Chemicznej Organicznej I
10, ul. Koszykowa 75
Warszawa 10

le 12 Janvier 1969

nos réf. 142/eg

Monsieur le Professeur,

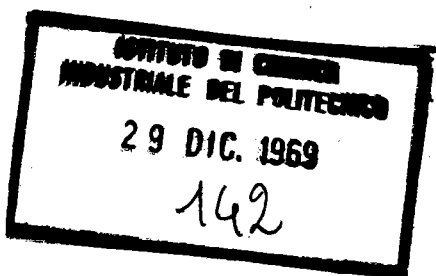
Merci pour votre gentille lettre envoyée à votre retour en Pologne.

Je suis heureux que chez moi vous avez reçu des impressions si agréables et que votre voyage en Italie est résulté particulièrement intéressant.

Moi-aussi je vous envoie mes meilleurs voeux pour la Nouvelle Année et mes meilleures salutations.

G. Katta

L. d. le 16^{me} Decembre
1969



Professor Giulio Natta
Istituto di Chimica Industriale
del Politecnico,
Piazza Leonardo da Vinci 32,
M i l a n o

Monsieur le Professeur,

De retour de l'Italie j'estime de mon agréable devoir de remercier en premier lieu à vous, Monsieur le Professeur, de votre hospitalité et bienveillance que j'ai éprouvé de votre part, ainsi que de la part des Collègues de la Polytechnique de Milan. Particulièrement je vous suis infiniment reconnaissant que vous m'avez bien voulu faciliter de prendre contacts à Milan; mais ce que j'estime surtout, c'est la possibilité de faire la connaissance de votre foyer et d'y passer les moments inoubliables. C'était ma première visite dans la maison pur sang italienne et chez une famille pur sang italienne. J'ai observé beaucoup de traits similaires dans les caractères des Italiens et ceux des Polonais. C'est peut être la cause que du premier coup votre maison m'a parue si proche.

Outre la Polytechnique, j'ai eu les conférences dans la Société Italienne de Chimie et à Montecatini et je crois qu'elles ont intéressé les collègues italiens. Notre conception de l'acidité et basicité de la surface et sa coopération avec la molécule organique est très controversée et elle a provoqué une vive discussion.

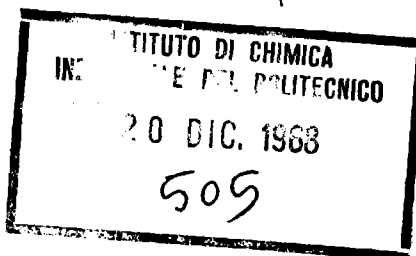
Les fêtes de Noël approchent, permettez moi alors, Monsieur le Professeur, de vous présenter mes meilleurs vœux de bonnes fêtes et de la Nouvelle Année.

Veillez croire, Monsieur le Professeur, à l'expression de ma très haute considération.

*in pressure
for the letter is in part
assigned
M. Malinowski*

*Malinowski
Malinowski*

POLSKA AKADEMIA NAUK
INSTYTUT CHEMII ORGANICZNEJ
Prof. Dr St. Malinowski



WARSZAWA 42, ul. Kasprzaka 44/52
Centrala tel. 32-32-21
Sekretariat Naukowy: tel. 32-05-78 i 32-66-81
Adres telegr.: ICHOPAN WARSZAWA

Wasz znak:

Nasz znak:

Warszawa, dnia December 16th, 1968

Professor Giulio Natta,
Istituto di Chimica Industriale
del Politecnico,
Piazza Leonardo da Vinci 32,
M i l a n o

Dear Professor Natta,

Many thanks for your kind letter of 25, Nov. 1968.
Much to my regret I must inform you that no approval
concerning my arrival to Italy from the Italian part has
reached me till now. This is the reason that my visit is
subject to be delayed.

I suppose the decision in this case depends on the
Italian Academy of Sciences and I kindly ask you to have
a little patience.

As the time of holydays approaches, I avail myself
of this opportunity and take the liberty of wishing you,
Dear Professor Natta, Merry Christmas and happy New Year.

Very respectfully yours,

St. Malinowski

Polonia

Nov. 25, 1968

Prof. dr. ing. S. Malinowski
Katedra Technologii Organicznej I
Politechniki Warszawskiej
Plac Jednosci Robotniczej
Warszawa (Polonia)

our ref. 459/lmv

Dear Professor Malinowski,

This is in reply to your letter of Oct. 29.
As soon as you can, please let me know the date of your
visit to Italy. In any case do not worry about your de-
lay in coming.

I have contacted Montecatini Edison: they
wish to invite you to give a lecture in English on one
of the topics mentioned in your letter. On arriving here,
you may speak with them and decide the exact topic of your
talk.

Looking forward to hearing from you, I send you
kindest regards.

Giulio Natta

ISTITUTO DI CHIMICA
INDUSTRIALE DEL POLITECNICO
- 6 NOV. 1968
459

Wasz znak: 351/lmv

Nasz znak:

Warszawa, dnia October 29th, 1968

Professor Giulio Natta
Istituto di Chimica Industriale
del Politecnico,
Piazza Leonardo da Vinci 32,
M i l a n o

Dear Professor Natta,

Many thanks for your kind letter of September 19th. However, as regards the date of my arrival, I regret, I can not give the exact one, as formalities connected with obtaining the passport and visas usually last very long.

I take the liberty to suggest the following topics of my lecture which I should like to pronounce in the English language. Also I can do it in German or French - and I leave that to your decision:

- 1) On the reaction of organic molecules in presence of solid catalysts with a basic character,
- 2) On the acidic and basic centres of the solid catalysts and their catalytic activity,
- 3) On the aldolic reactions in gaseous phase in presence of solid catalysts,
- 4) On the hydrogen disproportionation between organic molecules in gaseous phase.

As soon as the date of my departure is fixed, I shall not fail to write to you without delay.

Please, believe me, Dear Professor Natta, to be
very respectfully yours,

Mikulinski

*kont. lista
wizyt*

*Ar
Argumento
de Bleider
al mio
am 13*

*Copia a
Dell' Asta*

*con preghiera di dare
elementi per la risposta*

Sept. 19, 1968

Prof.dr.ing.S.Malinowski
Katedra Technologii Organicznej I
Politechniki Warszawskiej
Plac Jedności Robotniczej
Warszawa (Polonia)

our ref.351/lmv

Dear Professor Malinowski,

Accept my apologies for my answering your kind letter of July 3, 1968 with such a delay.

We shall be very glad if you come and visit my Institute in the period from the second fortnight of October to the beginning of November. Remember that Nov.1-4 are holidays in Italy: therefore, the Institute will be closed. As soon as convenient to you, please, let me know the exact date of your arrival, so that we may arrange your visit.

With regard to the lectures you wish to deliver, please let me know the topics you may speak of, and possibly whether you may speak (or read) in English. An answer about this last point is urgently needed.

Looking forward to hearing from you, I send you kindest regards.

Giulio Natta

KATEDRA TECHNOLOGII ORGANICZNEJ I
POLITECHNIKI WARSZAWSKIEJ

PROF. DR INŻ. STANISŁAW MALINOWSKI

ISTITUTO DI CHIMICA INDUSTRIALE DEL POLITECNICO
15 LUG. 1968
351

*depo a fine
a Dall'Asta
la conferenza*

Professor Giulio Natta
Istituto di Chimica Industriale
Politecnico di Milano,
M i l a n o

Dear Professor Natta,

I intend to go to Italy for a 2-3 weeks lasting scientific sojourn in limits of the cultural exchange between two our countries.

The period the most convenient for me is the second half of October or the first days of November, 1968.

Of course, first of all I wish to pay a visit and my respects to you, also I should desire to discuss certain problems concerning catalysis in which I am especially interested.

I take the liberty of asking a favour of you: would you be kind enough as to inform me whether I could stay in your Institute some time /3-5 days/? I would be very glad to meet Professor Dall'Asta and Professor Pasquene.

For my part, I am prepared to make one or two lectures on subjects connected with works we are employed with.

Please believe me, Dear Professor Natta, to be

very respectfully yours,

Prof. Dr. Stanisław Malinowski

*anche
teppunt
inglese*

*M. Malinowski
argomenti*

Warsaw Institute of Technology /Politechnika/
Laboratory of Organic Technology I

Plac Jedności Robotniczej
Warszawa
Poland

Handwritten:
Koch
Koch
Koch

April 5, 1962

Prof. T. I. Babek,
Polytechnical Institute
of Wrocław, Polonia
Dept. of Plastics Technology,
Wrocław ul. Bujwida 36

our ref. 281/lv

Dear Professor Babek:

Thank you for your letter of March 25, 1962.
I wish to inform you that I will be glad to welcome here
Dr. Kucharski, who is already an expert in the field of
macromolecular chemistry.

If he wants to develop a complete work which can
be the object of a publication, a stay of at least ten months
would be most useful. The topics his work can deal with can be:

- a) the kinetics of the polymerization;
- b) the field of polytactic polymers;
- c) the field of the asymmetric synthesis of optically active poly-
mers which do not show centres of optical symmetry.

monomers

I agree with your proposal to start his work here
next Autumn.

dit
9/4/62

With regard to the samples you require, we can send
you a sample of pure very-high-molecular-weight trans-1,4-poly-
butadiene (soluble for about 15% in boiling benzene) and a sam-
ple of cis-1,4 polybutadiene, which is 97-98% pure. At present,
the other polymers you require are not available; when Dr. Kucharski
comes here, he will possibly prepare them for you.

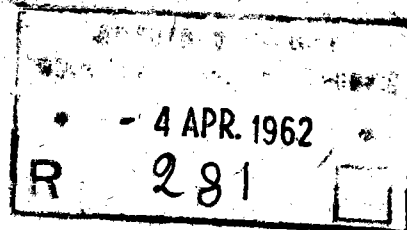
With my kindest regards,

G. Natta

bs

Handwritten:
10 45/11/63

Professor G. Natta
Istituto di Chimica Industriale
del Politecnico, Milano
I t a l i a



Dear Professor Natta

During several symposiums of IUPAC on macromolecular chemistry I had no opportunity of personal contact with you. I met several of your assistants among them Dr Dausse with whom I had the pleasure to discuss on polymer chemistry. During our talk I learnt that there is a possibility of sending one of my assistants to your Institute for few months scientific stage.

I hasten to ask you whether you would be kind enough to take my assistant to your laboratory to do research under your personal supervision.

I would like to send Dr Mieczysław Kucharski for a period of nine to twelve months. He would be able to get acquainted with the methods of research with the problems that are solved in your world famous Institute. It would help him in his further scientific work.

Dr Kucharski obtained Polish Government grant to cover all his expenses during a nine months stay in Italy for research in your laboratory and he would like to do the work under your guidance. Dr Kucharski specialises in unsaturated hydrocarbons and copolymerization products. In your Institute he would be able to widen his knowledge of theory of polymerization, physical chemistry and modern methods of structural investigations. He would also acquire practical knowledge. Dr Kucharski investigated for his Ph.D thesis the chemical reactions with high polymers for obtaining new modified substances. The theme for his further work he would like to discuss first with you. He is a very promising scientist with large knowledge and a few months in your Institute under

your supervision will help him considerably. He knows enough Italian and English languages for practical purposes.

Polish Government authorised me to make inquiries about the possibility of you accepting Dr. Kucharski for the above mentioned period to your Institute.

After receiving an answer from you we shall be able to ask for passport and visa for Dr. Kucharski.

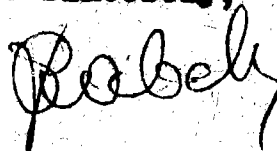
He plans to go to Italy if you will accept him, at the beginning of autumn.

I have another favour to ask you. We started at our laboratory research on sensibilised photopolymerization of diene hydrocarbons polymers which seems to depend on space structure. We have not at our disposal any samples of strictly defined space structure polymers and I would be very much obliged to you if you could send me a few grams of butadiene polymer in 1,4 positions /trans and cis/, also is and syndiotactic polybutadienes 1,2 of known B.P. and average molecular weight of 50 to 100,000. A similar sample of synthetic polyisoprene 1,4 /trans and cis/ would be very helpful in my work.

Hoping to hear from you soon

I remain

Yours sincerely,



T. I. Rabek
Politechnical Institute
of Wrocław, Poland
Department of Plastics Technology
Wrocław ul. Bujwida 36

25-th March 1962

Polonia

le 22 avril 1965

Monsieur le Professeur
J. Groszkowski
Prezes Polskiej Akademii Nauk
Warszawa (Polonia)

Monsieur le Professeur,

Je vous remercie pour votre gentille lettre du 14 avril. Moi-aussi j'ai beaucoup regretté d'avoir pas pu vous rencontrer pendant votre visite à Milan. J'espère toutefois qu'il arrive bientôt une prochaine occasion pour que vous puissiez revenir en Italie. Dans un tel cas, je ferai votre connaissance avec beaucoup de plaisir.

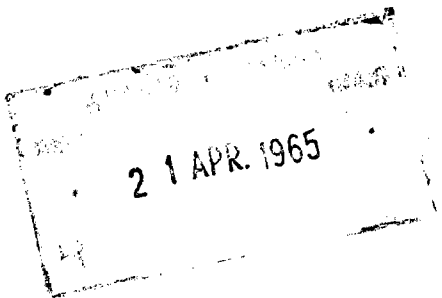
Veillez croire à l'expression de mes sentiments les meilleurs.

G. Natta

PREZES
POLSKIEJ AKADEMII NAUK

Nr. 82-II-70-970/65

Warszawa, dn. 14 IV. 1965 r.



Monsieur le Professeur
Giulio NATTA
Directeur de l'Istituto
di Chimica Industriale
Politecnico di Milano
piazza Leonardo da Vinci 32
M I L A N O

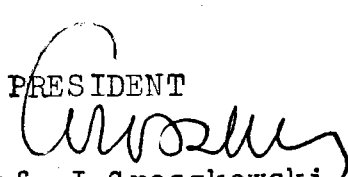
Monsieur le Directeur,

Veillez recevoir mes chaleureux remerciements pour l'accueil très amical qui nous a été réservé pendant notre visite dans votre Institut.

Les recherches scientifiques effectuées sous votre direction m'ont impressionné beaucoup et je conserve un excellent souvenir de ma visite.

En regrettant infiniment de ne pas avoir eu l'occasion de faire votre connaissance, je vous prie de croire, Monsieur le Directeur, à ma haute considération et mes sentiments les meilleurs.

LE PRESIDENT


Prof. J. Groszkowski

Julio Natta

May 27, 1964

Dr. Janusz Lindeman,
Wrocław ul. Boya-Zelenskiego
(Polonia)

Dear Doctor Lindeman,

Thank you very much for the book you kindly sent to me. I mostly regret I do not know the Polish language, but, from figures and literature, I have noticed that you have quoted many of my papers.

Under separate cover, I send you reprints of papers we have recently published on the stereospecific polymerization.

Thanking you very much again, I send you my kindest regards.

Giulio Natta

*inviati esposti
il 16/6/64*

29-614-603-615-206-209-213-230-243-70-505-530-231-544-
545-560-572-589-590

*Wini
Stramen*

10.1.1963

Prof. St. Malinowski
Warsaw Institut of Technology
Depast. of the Organic Technolo
Warszawa,
ul. Koszykowa 75 (POLSKA)

Dear Professor Malinowski:

Thank you for your letter of Dec. 28, 1962. Dr. Dall'Asta has informed me about the kind reception he received in Warszawa: I wish to thank you for this too.

Thank you also for the reprints you kindly sent to me. On my turn, I shall send you reprints, beside those already sent to you by Dall'Asta, of some recent publications of our Institute.

I hope that the opportunity will arise soon to meet you, possibly at some Congress in Italy.

Accept my kindest regards.

*G. Natta
24/1/63*

*# 525 - 530 - 533
537 - 543 - 544
546 - 558 - 559
566 - ~~567~~*

G. Natta

19 giugno 1961

Egr. Dott. Karol Mitoray
Kety, Rynek 27

(Polonia)

Egregio Dottore,

La ringrazio vivamente del bel volume sul Canaletto
che ho gradito e apprezzato molto.

Augurandole le migliori soddisfazioni per il Suo la-
voro, anche in Patria, Le invio i più cordiali saluti.

G. Natta

October 13, 1960

Mr. Karol Mitoraj
Zakłady Chemiczne Oswiecim
Z.N.B.
Oswiecim (Poland)

s.rif.780/eg

Dear Dr. Mitoraj,

I apologize for the delay with which I answer your letter of August 19, due to your request to work in the particular field of properties and structure of polybutadiene or polyisoprene.

You can come and work in a department of my Institute, where studies on relationship between mechanical properties and structure of macromolecular substances are developed.

However I wish to inform you that, in that department, you will work on products available in that period and not exclusively on a determinate type of polymer.

For instance it is very likely that your work shall concern polybutadiene or the C_2C_3 copolymer, but it is ~~not~~ improbable that you shall develop works on polyisoprene, also considering that, at present, our researches are directed towards other types of elastomers.

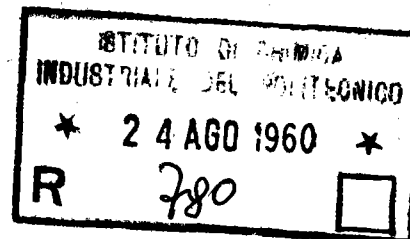
With regard to the period in which you may start working here, I would suggest the beginning of January (about the 10th), since my Institute will be closed for a few days at Christmas.

Hoping to hear from you on the matter in a near future, I send you my best regards.

G. Natta

Prof. Dr Giulio Natta
Istituto di Chimica Industriale
del Politecnico

Milano
Italia



Zakłady Chemiczne Oświęcim
Z.N.B.

Oświęcim

Poland

August 19 th,

Dear Professor,

I thank you very much for the letter of July 28 th, ref. 652/eg. I am very favoured by your kind permission to study in your Institute. I believe that a theme on relationship between mechanical properties and structure e.g. of polybutadiene or polyisoprene would lay in the sphere of my interest. Please then to reserve for me a place in the Department studying this problem.

My scientific studies in Italy should start in autumn this year. There are certain formalities to be complied with and I must know the exact date when you can receive me in the Institute. I beg you to give me the earliest date when I can come to begin the studies.

Yours sincerely

Giulio Natta

/ Karol Mitoraj /
Karol Mitoraj

W.

July 28th. 1960

Mr. Karol Mitoraj
Zakłady Chemiczne Oswiecim
Z.N.B.
Oswiecim (Upper-Silesia)
Poland

our ref.652/eg

Dear Mr.Mitoraj,

Please excuse my delay in answering your kind letter of June 8. The delay is due to the fact that I wanted to examine the possibilities of welcoming you in my Institute, bearing in mind the lack of space and the remarkable number of chemists working in the different Departments.

Our Institute is formed by many Departments: e.g. it would be very difficult to let you work in the polymerization Department, while it would be possible in the Department working in chemical-physical fields, e.g. structural determination of macromolecules by X-Rays or by electron beams. We may accept you also in the chemical-physical Laboratory studying the thermal, dilatometric properties and those of macromolecules solutions, or in the Laboratory studying the relationships between mechanical properties and structure.

If you wish to work in the macromolecular field, I feel that Prof.Pino at the Pisa University, (or eventually Prof.Rossi at the Genova University, or Prof.Nasini at the Torino University) may better receive you as they have more room and may dedicate more time to new coworkers.

With best regards.

Giulio Natta

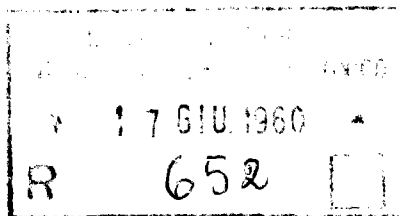
Prof. Dr Giulio Natta
Istituto di Chimica Industriale
del Politecnico

Milano
Italia

Zakłady Chemiczne Oświęcim
Z.N.B.

Oświęcim
Poland

8 th June, 1960.



Dear Professor,

I am a candidate for a scholarship granted to Poland by the Italian Government. Working in the Research Laboratory of chemical works in Oświęcim /Upper-Silesia/, I am studying recently the stereospecific polymerisation of diens, especially of butadiene. The Italian, English and German scientific periodicals acquainted us with the high grade and excellent succeses of your famous school in this field of chemistry. It would be therefore my greatest desire to have a possibility of studying under your direction. The management of our Research Laboratory would be also very much obliged to you, if this letter could be considered as the initiation of scientific contacts with you, Sir.

I allow me to give you some personal informations about me. I graduated in 1949 at the Chemical Department of the University in Cracow. For two years I had the position of teaching assistant in general chemistry at this university. Up to the last two years when I began the study of stereoregulated polymers of butadiene, I worked on the iron catalysts in the Fischer-Tropsch synthesis and on hydrogenation of some organic substances. My present work is carried on in the laboratory scale. I know English and German and at present time I am starting to learn Italian.

It is my intention to continue the investigations in the interesting field of stereospecific catalysis. I would be very grateful if you could pay some attention to the results I obtained, and if you were so kind to help me to define the course of my farther work.

Awaiting your reply.

Yours sincerely,

Karol Mitoraj
/ Karol Mitoraj /

March 4, 1964

*Ward
Kramer
Flourie*

our ref.69/lv

Doc.Dr.Z.Jedlinski,
Comité Executif du Congres,
35th Congres Int.de Chimie Industri-
elle,
Warszawa 86.
Ul.Rydygiera 8

Dear Doctor Jedlinski:

Thank you very much for kindly inviting me to participate in the XXXV International Congress of Industrial Chemistry to be held in Warsaw in Sept.1964.

My delay in answering you is due to the fact that, due to my state of health, I could not take any definitive decision in advance. Now, unfortunately, I can tell you that it will be impossible for me to come, due to the above-mentioned reason. It will not even be possible to send you a communication to be read by someone of my co-workers.

Thanking you very much again and hoping that another opportunity will arise to meet you, I send you my kindest regards.

Giulio Natta

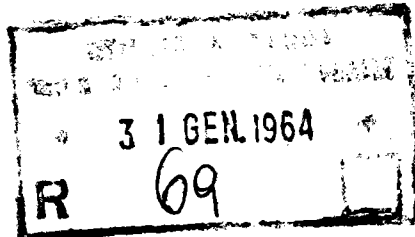


XXXV-e CONGRES INTERNATIONAL DE CHIMIE INDUSTRIELLE

ORGANISATEURS:

ASSOCIATION DES INGENIEURS ET TECHNICIENS DE L'INDUSTRIE CHIMIQUE ET
DE L'INDUSTRIE DES MATERIAUX DE CONSTRUCTION, WARSZAWA, UL. CZACKIEGO 3/5
SOCIETE DE CHIMIE INDUSTRIELLE, PARIS VIIe, 28 RUE SAINT DOMINIQUE

COMITE EXECUTIF DU CONGRES, WARSZAWA 86, UL. RYDYGIERA 8
SKR. POCZT. 26, TELEGRAMME: CHEMKONGRES, TELEPHONE: 33.00.41



*Papier
Dariusz*
V. J. Jedliński

Prof. Dr. Julio Natta
Technical University
Mediolan

Dear Sir,

On behalf of The International Applied Chemistry Congress, which is to take place in September 1964 in Warsaw I have an honour to invite you to take part in its scientific sessions.

All communiques as well as summaries / 1-2 type-script pages / should be sent to The Organization Committee not later than 15.II.1964. Congress Organization communique has been enclosed.

I remain

Yours truly

Scientific secretary

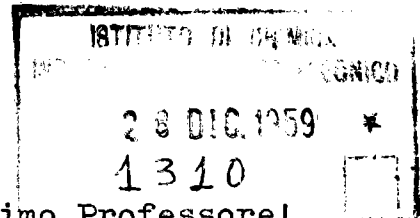
[Signature]
/-/ Doc. M. Knapik

Chairman of the department

[Signature]
/-/ Doc. Dr. Z. Jedliński

Antoni Kucowski
Warszawa 47
ul. Lewartowskiego 6 m.3
telefono 31-48-78

Warszawa 17 Dicembre 1959



Illustrissimo Professore!

Mi interessano i libri e riviste tecniche e scientifiche dal ramo dell'industria della gomma. Io posso qui, a Varsavia ordinare queste riviste, ma devo conoscere il titolo ed indirizzo del redazione.

Vi prego di farmi conoscere quale riviste sulla gomma escono nell'Italia /indirizzo del redazione/.

Mi interessano anche indirizzi delle case editrici italiane, specializzate nell'edizione dei libri sulla gomma ed industria della gomma.

Scusate mi, che disturbo.

Nell'attesa di una V/favorevole risposta distintamente Vi saluto

Antoni Kucowski

*Antoni Kucowski
quarta*

rispondere:

*Non esistono in Italia
riviste specializzate
campo gomma.
Articolo in...*

*Materie plastiche
chimica e industriale*

Doc. Dr. ANDRZEJ ZIABICKI
ZAKŁAD FIZYKI TECHNICZNEJ I. CH. O.
Warszawa - Żoliborz, ul. Rydygiera 8

Polonia

Warszawa, dnia Sept. 22. 1966 r.

Prof.dr. Giulio Natta
Istituto Chimica Industriale, Politecnico

MILANO, Italia

Piazza Leonardo Da Vinci

Dear Professor Natta:

It was a pleasure to visit your Institute and talk with some of your collaborators. I would like to thank you for the opportunity to visit your interesting laboratories.

With kindest regards, I am

Sincerely yours


A. Ziabicki

*Wiel
Znamien
Czeski*

13 Gennaio 1960

Egr. Sig. Antoni KUCOWSKI
ul. Lewartowskiego 6 m. 3
WARSZAWA 47

Prot. N. 1310/rl

Egregio Signor Kucowski,

ho ricevuto la Sua gentile lettera del 17.12.1959, nella quale mi chiede alcune informazioni su riviste italiane sulla gomma. Non esistono in Italia riviste specializzate nel campo della gomma, ma gli articoli su tale argomento vengono pubblicati principalmente sulle seguenti riviste :

Materie Plastiche - Redazione in Via Farneti 8 - Milano

Chimica e Industria - Redazione in Via S. Tomaso 3 - Milano

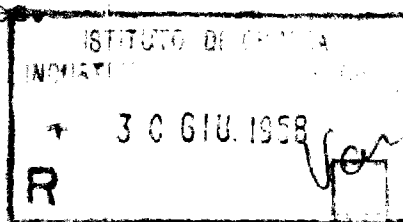
Sperando di esserLe stato utile, La prego di gradire i migliori saluti.

(Prof. G. Natta)

Andrzej Ziabicki
Inst. for Synth. Fibres Re.

25 Walczaka
GORZÓW Wlkp.
P o l s k a

24. 7. 1958



Professor GIULIO NATTA

M I L A N O

Dear Professor Natta,

Thank you for your kind letter of June 16, 1958.
I am very indebted to you for the informations about
the fibre-forming polyisopropylene and other isotac-
tic polymers.

I beg you receive my best regards

faithfully yours

A. Ziabicki
A. Ziabicki

Carri Jhu.

June 16, 1958

ref. No. 547/tl

Mr. Andrzej Ziabicki
Institute for Synthetic Fibres Res
25 Walezaka
G O R ZOW - Wlkp. - Poland

Dear Mr. Ziabicki,

with reference to your letter of April 24,

I am sorry to inform you that I have not at disposal the quantity you requested of polypropylene suitable to be spun. At present, I have only polymers of very high molecular weight, and their viscosities are too high for spinning experiments. The Polymer Co. in Terni and Farbwerke in Hoechst (West Germany) are studying the polypropylene spinning. However, I do not know if these Companies are disposed to send samples. On the other hand, a scientific study would require to be used products of well know distribution of molecular weights, and also stereoisomeric compositions. It is possible, in fact, according to the raw materials employed, to obtain great differences in the properties of the fibres of polypropylene (e.g., tenacity between 1-10 g/den, and elastic elongations between 10-50 %).

With best regards,

Sincerely yours,

G. Natta

B O Z Z A

ZIABICKI

Ricevo la Sua lettera del 24.4.58.

Sono spiacente di non poter disporre del quantitativo da Lei richiesto di polipropilene adatto per essere filato.

In questo momento dispongo soltanto di polimeri ad altissimo peso molecolare, la cui viscosità è troppo alta per essere filati. La Soc. Polymer di Terni e la Soc. Farbwerke di Hoechst (Germ.Occ.) stanno studiando la filatura del polipropilene. Non so però se tali società sono disposte ad inviare dei campioni e, d'altra parte, uno studio scientifico richiederebbe dei prodotti di cui sia bene conosciuta la distribuzione del peso molecolare e la composizione stereoisomerica.

E' infatti possibile ottenere delle fibre di polipropilene, secondo il campione da cui si parte, ~~con~~ aventi tenacità comprese tra 1 e 10 g/den. ed allungamenti elastici compresi tra il 10 e il 50 %.

March 24, 1958

Harro Jm

Ref. No. 429/r1
(Secretariat to
Prof. Natta)

Mgr. Ins. A. ZIABICKI
Physico-Chemical Laboratory
Institute for Synthetic Fibres
Research
25 Walczaka
GORZÓW Wlkp. - Poland

Dear Mr. Ziabicki,

We received your letter of March 3, 1958; Professor Natta, who is leaving Milan today to the United States, charged us with replying to you as follows :

"The polypropylene is not almost suitable to the study in which you are interested, as the entirely amorphous polymer shows a transition point of -35°C ; at room temperature it is a high viscous liquid, like the rubber when the molecular weight is enough high; therefore, it is not suitable to make fibres. The crystalline polypropylene is suitable to make fibres, with a melting point of 175°C .

The polystyrene shows a transition point of 85°C and it can be drawn into fibres, at the crystalline state (isotactic) or at amorphous state (atactic, or isotactic quickly cooled). We have not, however, an isotactic polystyrene having a good spinability and a melt viscosity not higher than $5 \cdot 10^3$ poises. All our polystyrene have a very high molecular weight.

Prof. Natta will come back to Milan at the beginning of May.

With best regards,

Truly yours
(Secretariat)

ZIABICKI

Ricevo la Sua lettera del 10 c.m.

Il Prof. Natta, che parte oggi per gli U.S.A., ci ha incaricati di rispondere quanto segue.

Lo studio che a Voi interessa difficilmente può essere attuato con il polipropilene, poichè il polimero completamente amorfo ha una temperatura di transizione di -85° ed a temperatura ambiente è un liquido ad alta viscosità, simile alla gomma quando il peso molecolare è sufficientemente alto, e non è quindi adatto per fare delle fibre; mentre il polipropilene cristallino è adatto per fibre aventi una temperatura di fusione di 175° .

Il polistirolo presenta una temperatura di transizione di 85° e può dare delle fibre, sia allo stato cristallino (isotattico) sia allo stato amorfo (atattico), oppure isotattico rapidamente raffreddato. Non dispone però di polistirolo isotattico che presenti una : good spinnability and melt viscosity not higher than $5 \cdot 10^3$ poises.

Tutti gli polistiroli, di cui dispone, sono a pesi molecolari molto più alti.

Il Prof. Natta sarà di ritorno verso i primi di maggio.

(Saluti)

mgr inż. A. Ziabicki
Institute for Synthetic Fibres Research

25 Walczaka, GORZÓW Wlkp.

P o l a n d

GORZÓW, 10.3.1958.

Prof. Dr. G. N a t t a

Instituto di Chimica Industriale del Politecni
di Milano

M I L A N O

I t a l i a

Dear Professor Natta,

In my research work on the orientation phenomena by fibre-spinning from melted polymers I have to compare some theoretical concepts with experiments carried out simultaneously on two polymer samples: crystalline and amorphous one. For this purpose it would be especially advantageous to apply the samples of the same chemical constitution differing only in structural aspects.

I suppose the application of some poly-hydrocarbons /e.g. polystyrene or polyisobutylene/ in the random, amorphous, on one hand and the isotactic crystalline form on another, be the best solution of this problem. The requirements for both samples are: good spinnability and melt viscosity not higher than $5 \cdot 10^3$ poises /still below destruction temperature

I am not in position to get such polymers in Poland. I did not also find any information about their spinnability in literature.

I shall be thus very indebted to You, if You let me know your opinion in this matter. I shall be also very thankful for any samples for spinning experiments /amounts of the order 500-1000g/, You could put to my position.

I beg You receive my best regards and compliments

faithfully Yours

Andrzej Ziabicki

Physico-Chemical Laboratory