CHEMICAL HERITAGE FOUNDATION

NYLON: AN EYEWITNESS STORY

JOSEPH LABOVSKY
Laboratory Assistant to Dr. Wallace Carothers, Inventor

Transcript of an Interview
Conducted by

John K. Smith

at

Wilmington, Delaware

on

24 July 1996

(With Subsequent Corrections and Additions)
THE CHEMICAL HERITAGE FOUNDATION
Oral History Program

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Joseph Labovsky

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JOSEPH LABOVSKY

1912 Born in Kiev, Ukraine, on 10 September

Education

1931 Master Electrician, Bliss Electrical College, Takoma Park, Maryland
1934 B. S., Industrial Chemical Engineering, Pratt Institute, Brooklyn, New York
1935-1936 University of Pennsylvania Evening School; chemistry, psychology, German

Professional Experience

E. I. du Pont de Nemours & Co., Inc.

1930 Summer Chemist’s Helper, Experimental Station, Wilmington, Delaware
1934-1937 Laboratory Technical Assistant, Dr. Carothers’s Research Group, Experimental Station, Wilmington, Delaware
1937-1938 Foreman, Nylon Semi-Works, Experimental Station
1938-1939 Shift Supervisor, Nylon Pilot Plant, Experimental Station
1939-1941 Process Control Foreman, Seaford, Delaware, Nylon Plant
1941-1955 Quality Control Supervisor, Spinneret Laboratory Supervisor, and Textile Area Supervisor, Martinsville, Virginia, Nylon Plant
1955-1963 Training Supervisor, Textile Research Laboratory, Tyvek® Development Group, Chestnut Run Laboratory, Wilmington, Delaware
1963-1969 Management Training Specialist, DISA [DuPont International], Geneva, Switzerland
1969-1975 Training and Industrial Relations Supervisor, Chestnut Run Laboratory, Wilmington, Delaware
1975 Retired

1975-1979 Consultant, SNIA Viscosa, Italy
Consultant, SNIA Viscosa, Ireland
Consultant, Montefibre, Italy
Consultant, Montedison, Italy
Consultant, Diamond Shamrock, France

1980-1985 Retired
1985-1995 Consultant, NILIT, Ltd., Israel

1996 Retired
### Honors

<table>
<thead>
<tr>
<th>Year</th>
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<td>1941</td>
<td>War Production Board Commendation</td>
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<td>1997</td>
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ABSTRACT

Joseph Labovsky opens the interview with a discussion of his childhood in Ukraine and family experiences there after his father immigrated to the United States in 1914. Labovsky moved with his mother and siblings to Komarine, a village adjacent to Chernobyl on the Dnieper River, where the family survived the Communist Revolution, civil war, famine, and a pogrom which killed fifteen of twenty Jewish families there. In 1922, Labovsky’s father was able to locate the family and make arrangements for a safe escape through Eastern Europe to the United States. Labovsky describes childhood interactions with the Polish and Red Armies in Komarine; impressions of settling in Wilmington, Delaware, where his father was a successful tailor; resuming his early education; and learning English. Next Labovsky recalls high school graduation and his father’s successful efforts to secure him a job at DuPont, where he began working as lab assistant for Dr. Wallace Carothers’ research group. He reflects upon his experiences and perceptions of early nylon work and relationships with scientists, particularly his mentor Carothers, who directed him towards a DuPont college scholarship. In 1930, Labovsky began training at Bliss Electrical College, but he transferred after one year to Pratt Institute, where he earned a degree in industrial chemical engineering. In 1934, he graduated and, after struggling in the Depression-era job market, happily accepted an offer to return to Carothers’ research group and nylon development work. Labovsky details both the research group’s work testing polymers and discovering polymer 66, and different work environments under Carothers and later George Graves. After discussing work to develop the fiber 66 commercial process, Labovsky shares recollections of Carothers and the circumstances surrounding his untimely death in 1937. Throughout the second half of the interview, he chronicles the commercial development and success of nylon, providing details on spinning, drawing, quality control, and commercial processing. Labovsky describes problems and solutions in the history of nylon, including his War Production Award and three-part “A” bonus for reducing nylon waste through procedures to repair spinnerets during the Korean War. He describes his career path from laboratory technician to process control foreman, to management training specialist for DuPont International—emphasizing the importance of troubleshooting, problem solving, and standard practice procedures throughout. The interview closes with comments on safety in nylon production and DuPont’s overall safety record.

INTERVIEWER

John Kenly Smith, Jr., is Associate Professor of History at Lehigh University, where he has been a faculty member since 1987. He co-authored Science and Corporate Strategy: DuPont R&D, 1902-1980, published in 1988. He served with the DuPont R&D History Project from 1982 to 1986 and was Newcomen Fellow in Business History at Harvard Business School from 1986 to 1987. He received the Newcomen Prize in Business History for Best Book Published in America and is on the editorial board of American Chemical Society Books.
M. S. W.

STAROSTWO RADZYMIESKIE

Data 1 sierpnia 1924
Nr 9088

KARTA POBYTU

Przynależność państwowa: Polski

Narodowość: polska

Wyznanie: rzymskokatolicki

Zawód: 

Miejsce i data urodzenia: Komary, w. Miechow 2 września 1924

Imię ojca: 

Imię matki: 

Stosunki rodzinne: 

Urodzona w wieku dzieci od lat 16 znajdujących się przy nim 

Miejsce zamieszkania (obecne): 

Wydzier na zasadzie deklaracji Nr. 9088

Przedstawionych dokumentów i decyzji z dnia 

Opłatę marek 500,00 - wniósła za kwittem z dnia 26 sierpnia 1924 Nr. 7128 do dnia 26 sierpnia 1925 r.

Podpis własnoręczny: 

(Podpis przełożonego urzędu)

Wyżej wymieniony obowiązujący jest meldowany się w biurze Policji Państwowej w Komarnie w 

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Adnotacja o meldowaniu się:
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podstawie każdorazowego zezwolenia władzy 

która wydała kartę pobytu.

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M. S. W. Niejawianie się w terminie do któ-

rego wskazuje prawo jest równie ważna karta dla prolongacji, 

jak również w terminie wskazanym do ponownej 

opłaty (1 lipca 1920 r.) oraz uchylanie się od 

nieslowania i dogłosu nieprzestrzeganie przepisów 

rozporządzeń o rejestracji politycznej za sobą wy- 

stępowanie.
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A. Photograph of Labovsky family, 1922, from left to right: Solomon, eight years old; Roza, thirteen years old; Pesia; and Josif, ten years old.

B. “Karta Pobytu,” visa permitting Labovsky family to live in Wolomin, Poland.

C. Map of Ukraine, White Russia, and Russia.

1 Childhood in Ukraine and United States

13 Early Career at DuPont and College Education
   Working for DuPont, assisting Dr. Wallace Carothers with laboratory work during The Depression. Setting up equipment for experiments, other responsibilities. Discussions with Carothers about music and literature. Receiving scholarship fund from Lamont duPont, president of DuPont. Enrolling in Bliss Electrical College; studying industrial chemical engineering and graduating from Pratt Institute. Returning to work for Dr. Carother's research group.

19 Development of Nylon

35 Later Career at DuPont
NOTES


2. See “Karta Pobytu,” in Chemical Heritage Foundation Oral History Research File #0148.


12. Wallace Carothers Memorial Archives, Chemical Heritage Foundation, Philadelphia, PA.


14. Photos showing nylon spinning machines from the hypodermic needle to the commercial plant, Seaford, Delaware. Wallace Carothers Memorial Archives, Chemical Heritage Foundation, Philadelphia, PA.


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