

## THE KAMLET LABORATORIES COLLECTION AT THE UNIVERSITY OF SOUTH FLORIDA

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Dean F. Martin and Karina Bidani, Department of Chemistry, University of South Florida,  
dfmartin@usf.edu

### Introduction

Jonas Kamlet (1914-1960) and his wife Edna (1915-2011) founded the Kamlet Laboratory (as it was then called) in 1941 (1). It was in many ways a pioneering consulting laboratory that was unique for its approach and creativity. In 2006, the collected papers of the Kamlet Laboratories that were housed in two storage units in Sarasota, Florida, were donated to the University of South Florida (USF) Library, Tampa Campus, as noted elsewhere (1). This paper describes the background of the laboratory and indicates the potential value of the material in the Kamlet Chemical Laboratories Collection. The collection came to USF associated with a donation from Mrs. Edna Yadven Kamlet Rogers to establish the Jonas Kamlet Memorial Fund, which will help support preservation of the Collection (2). An online guide is available to provide a general view of collection (3).

We have given a few examples of the information available in the Collection, including some detail on one question, namely what was the financial picture in the early years? This paper describes the results of our examination of an account book that lists the income and expenses of the consulting laboratory for most of the first decade of its operation.

### The Kamlets

The background of the Kamlets was considered previously (1), and some pertinent aspects are reviewed

here. They had known each other for most of their lives, they came from similar backgrounds and their training complimented each other's. Jonas and Edna met when they went to their parents' summer cottages when they were nine years old. He came over to her, and said, "My name is Jonas Kamlet and I'm going to be a chemist." His family had come from Poland, hers from Russia (4).

Both were educated in New York City. He attended City College of New York, where he majored in chemistry and minored in biology and was graduated at the age of 16 during the early stage of the Great Depression. Edna Yadven majored in biology and minored in chemistry and was graduated from City University of New York (1,4). After college, he was employed in the laboratories of Israel Zion Hospital. Here he prepared derivatives of sulfa drugs (recently developed antibiotics) that he reported were 70 to 200 times more active than the parent compounds (5).

After starting the laboratory and becoming successful, Jonas Kamlet would be embarrassed when visitors would address him as "Doctor Kamlet," presumably impressed by his abilities. His wife told him to enroll in graduate school, promising that she would "mind the shop" (4). Subsequently, he entered graduate school and received his Ph.D. from New York University in 1944 (6).

Dr. Kamlet died in the prime of life at about 10:30 a.m. on Friday, December 16, 1960. He was returning

from a visit to Chicago as a passenger aboard a United Air Lines DC-8 jet that collided with a Trans World Airlines piston-engine Super Constellation over Staten Island. All 128 persons on the two planes and six on the ground died. Details and general background information are available elsewhere (7,8).

Dr. Kamlet's widow sued United Airlines (6), and her judgment was upheld by the New York Supreme Court. She received an award of \$600,000 plus \$45,000 interest. Though United Airlines was the defendant, "the Government agreed to pay \$144,000 of the settlement because the Federal Aviation Agency had been issuing instructions to the planes at the time of the crash." At the time, the amount was "the largest settlement ever made as a result of an individual death," according to a newspaper account (9).

Mrs. Edna Yadven Kamlet (1915-2011) remarried in 1968 (Mr. Emil Rogers) and changed her name to Edna Rogers. After her second husband died, she moved to Sarasota in the late 1980s. There she became well known as a philanthropist. A library and the Opera House are named in Dr. Kamlet's honor (10). She was an enthusiastic supporter of the Sarasota opera and would buy tickets for the opening performance, as well as for a performance toward the end of the run because she noted differences between the two (4).

### The Laboratories

The Kamlet Laboratory was founded in 1940 when the couple was married. The laboratory personnel consisted of Jonas and Edna Yadven Kamlet (4) with additional assistance hired on a consulting basis. The original laboratory was located at 250 East 43<sup>rd</sup> Street, New York, NY (1). At the time of Dr. Kamlet's death, the facility was called "the Kamlet Laboratories" and was located at 300 Fourth Avenue (surely a more impressive neighborhood). A second laboratory was created at 52 Sheridan Street, Stratford, Connecticut, near their home in Easton (4, 10). The specific addresses were copied from the Kamlet Papers (Figure 1).

The Kamlets' specialty was two-fold: consulting and/or developing inventions and selling the patent rights to interested companies. Mrs. Rogers spoke of having other employees to do analyses or development work, but dividing that work so that only she and her husband were aware of how the components would fit until the desired product was completed and patented (4). In any given year, the Laboratory would serve as a consultant to over

18 firms, based on a sampling of assigned patents (3).

Jonas Kamlet was ahead of his time, and highly creative, and Edna was certainly helpful (4). For example, among his many patents and inventions was a tablet that could be used to measure glucose in urine (1). He had commented to her that he needed a means of stirring, and she, thinking of Alka-Seltzer, suggested he should contact Miles Laboratories (Elkhart, Indiana) for persons experienced in providing agitation in water by chemical means. He presented the idea to Walter Compton, M.D., Medical Director at Miles Laboratories, who (Mrs. Rogers said) didn't know what to do with the idea/potential product (4). Ultimately, a patent was obtained by Miles Laboratories using attorneys in Chicago. The Kamlets earned \$45,000 from the patent in five years; they had expected to earn \$17 million (4).

Two additional points need to be made about this anecdote. First, Jonas Kamlet was able to make contact with a decision maker at a major firm; now such a person would probably be insulated by two layers of administrators. Second, he continued to consult for Miles Laboratories in a mutually beneficial way. As noted elsewhere (1) he helped to develop a process for recovering from paper-mill wastes what until then had been a costly substance used in the manufacture of Vitamin B<sub>2</sub>. Working for Miles Laboratories, he ultimately obtained ten patents, all assigned to Miles, according to SciFinder Scholar.

Without question, Mrs. Kamlet's loss was a severe one, but she continued the activities of the firm for about twenty years until her retirement in her mid-sixties (10). We believe that the premature death of Dr. Kamlet was also a severe loss to the profession. It is difficult to assess what further inventions he and his wife might have formulated. Judging from the successful inventions up to the time of his death—a diabetes analysis pill, a pregnancy strip test, use of newsprint for animal feed, a fodder supplement, and many more, it is safe to conclude that many more impressive inventions might have been produced in the next two decades (1).

### Representative Data from the Collection

The Collection is organized into eight finding aids (3). Those possibly of most interest to chemists include 1, personal materials of the Kamlet family; 2, personal materials of Jonas and Edna Kamlet; 3, copies of correspondence from the Laboratories to clients; 7, folders that focus on the patenting process for Jonas

Kamlet and his clients; and 8, scrapbooks of the Kamlets (Edna, Jonas, and his brother Mortimer).

Two examples may give a hint of the interesting material available to those engaged in historical chemistry.

First, the correspondence with Miles Laboratories from 1940-1945 shows the background of ten patents developed and assigned to Miles. Dr. Kamlet developed an effervescent tablet that could be used by physicians and others to measure the concentration of glucose in blood and urine, which led to a popular product called "Clinitest." The correspondence gives revealing insight into how he helped promote Clinitest by suggesting and offering assistance with an article to be written by a third-party author for a pertinent journal, through visits to firms he consulted for, through details given to Miles employees detailing the preparation of Clinitest, and by serving as a go-between with possible firms seeking a licensed use.

Second, pertinent data on the Kamlets' income and expenses are found in an account book (Figure 1) maintained at the Laboratory (11) and listed under the heading of "Personal Income." Entries began for May 1941 and continued through March 1945. The even (left-hand) pages have column headings of Months, Total Income, Household, and Laboratory. The adjacent odd pages have headings of Total Expense, Deficit, Surplus, and To Date. A curious entry on odd pages was Girls

with a single entry of \$75.00 for September 1941, and the heading was no longer used after September 1945. Another interesting entry, labeled Pa, started in May 1941 with a last entry in January 1944. The amounts listed for Pa started with \$200 for the first four months with the last five months listed as \$44.00, and a range of values in between, with a low of \$19.26 (September 1941) to a high of \$224.18 (January 1942). The item was an expense item.

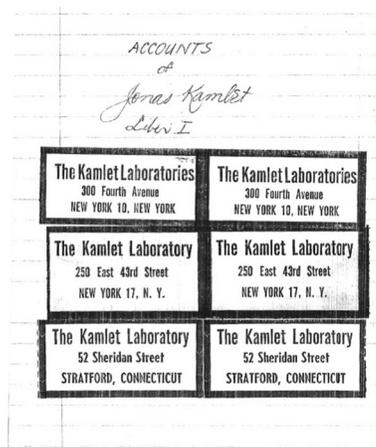


Figure 1. Picture of cover of the Liber I account book with laboratory return address labels.

For May 1941 (the first entry), the following data are available: Total income, \$750.00; Household, \$430.00; Pa, \$200.00; Laboratory, \$233.44. The sum of the last three values subtracted from the first gave a deficit of

Table 1. Financial development of Kamlet Laboratories, Year One (11)

Year	Month	Income, Total	Expense Laboratory	Total Expenses*	Deficit	Surplus	Value to date**
1941	May	\$750.00	\$233.44	\$863.44	\$113.44	---	\$(113.44)
	Jun	750.00	218.61	861.46	111.46	---	(224.90)
	Jul	"	118.58	728.08	---	\$21.92	(202.98)
	Aug	"	206.04	776.04	26.04	---	(229.02)
	Sep	818.75	278.32	768.28	---	50.47	(178.55)
	Oct	750.00	262.99	738.04	---	11.96	(166.59)
	Nov	"	224.03	792.27	42.27	---	(208.86)
	Dec	"	218.65	731.30	---	18.70	(190.16)
1942	Jan	743.39	268.37	833.30	89.91	---	(280.07)
	Feb	816.00	263.67	1085.60	269.60	---	(549.67)
	Mar	992.40	256.15	584.06	---	408.34	(141.33)
	Apr	1118.41	382.21	1082.99	---	35.42	(105.91)

\* Total expenses include Household expenses (not listed separately here).

\*\*() denotes a deficit.

*Table 2.* Financial development of Kamlet Laboratories, 1941-1955 (11)

Year	Month	Income, Total	Expenses, Laboratory	Total Expenses*	Deficit	Surplus	Value to date**
1941	May	\$750.00	\$233.44	\$863.44	\$113.44	---	\$(113.44)
1942	Jan	743.39	268.37	833.30	89.91	---	(280.07)
	May	742.50	83.96	751.58	9.08	---	(114.99)
1943	Jan	707.60	20.82	513.05	---	\$194.55	728.21
	May	715.10	84.88	771.21	56.11	---	1340.92
1944	Jan	1120.50	103.93	594.78	---	525.72	2339.04
	May	1250.00	387.22	936.29	---	313.71	2550.14
1945	Jan	2383.33	687.36	1473.01	---	910.32	7773.61
	May	2083.33	466.68	1103.68	---	979.65	11,592.06
1946	Jan	2083.34	707.49	2735.83	652.49	---	17,852.80
	May	2333.33	791.50	1611.00	---	722.33	20,709.22
1947	Jan	4083.37	799.66	5210.87	1127.50	---	32,546.13
	May	4083.33	1014.31	2219.31	---	1864.02	38,474.37
1948	Jan	3250.00	677.87	5733.06	2483.06	---	51,902.28
	May	4500.00	1066.48	2182.98	---	2317.02	56,792.97
1949	Jan	4250.00	773.32	2097.32	---	2152.68	72,615.00
	May	5361.84	1474.10	2334.45	---	3027.39	78,694.75
1950	Jan	5350.00	862.20	1924.90	---	3425.10	96,376.08
	May	5850.00	1786.31	2596.31	---	3253.69	103,571.07
1951	Jan	5850.00	1758.65	16,219.65	10,369.65	---	105,961.03
	May	5850.00	1495.52	2874.12	---	2975.88	113,002.36
1952	Jan	7350.00	2271.21	3641.80	---	3708.20	127,455.98
	May	6850.00	1677.71	2862.71	---	3987.29	138,230.30
1953	Jan	8500.00	4545.77	5723.16	---	2776.84	160,427.07
	May	7000.00	2200.17	3671.40	---	3328.60	164,628.43
1954	Jan	7000.00	2927.73	3960.34	---	4269.70	178,170.10
	May	7000.00	2498.17	3493.45	---	3506.55	201,476.93
1955	Jan	4500.00	1721.98	2646.98	---	1853.02	221,634.56

\* Total expenses include Household expenses (not listed separately here).

\*\*() denotes a deficit.

\$113.44 for the first month of operation. Then in the first year of operation six months were deficits, six were labeled "Surplus" and the monthly results were calculated on an ongoing cumulative basis. As may be noted (Table 1), the cumulative deficit for the first year of operation was \$105.91. (Note, however, that these figures reflect the Kamlets' overall finances, not just their business.)

The Kamlets became profitable fairly rapidly. (See Table 2 and Figure 2.) After the first year, up to January

1946 only four months out of 48 had a deficit. Generally, it seems that the months with a deficit were also months when there was an unusual increase in the Household entry, and sometimes this could be notable.

How successful was the laboratory? There seem to be two answers: On an absolute basis the results do not seem impressive, e.g., as of May 1949 (after seven years of operations) the cumulative surplus was \$78,694.75. But bear in mind that \$63 in 1949 would correspond to

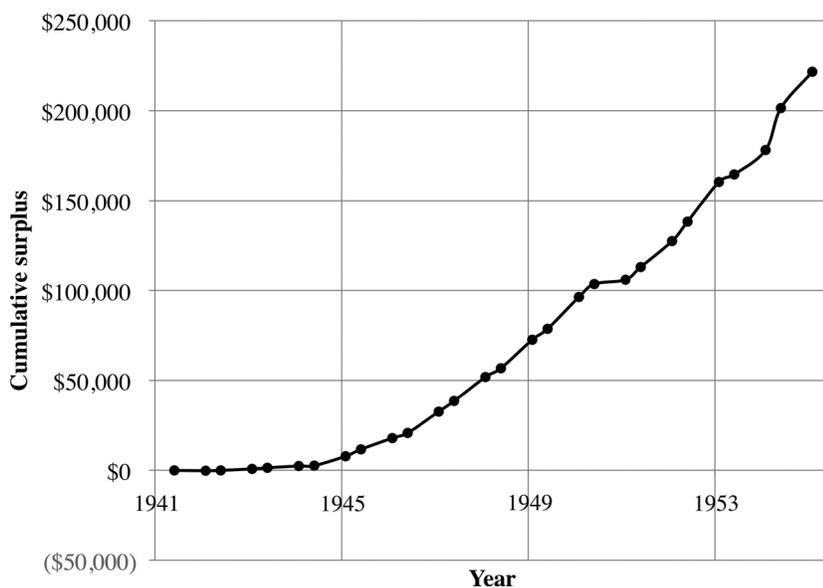


Figure 2. Net accumulated value in dollars over time, May 1941 (start) to January 1955.

\$600 in 2011 dollars, according to a recent estimate, which would translate to a cumulative value of \$747,000. In addition, the Kamlets were investing in Treasury bonds, stocks, and had a good bank account. In 1952 they earned stock dividends of \$7,865.00 (equivalent to about \$75,000). And in 1954, they sold their Connecticut home and netted \$18,115.26 (i.e., about \$172,000).

Finally, the papers could shed light on a range of other areas. One is how patent applications were developed, applied for, and defended; all are important topics. For example, the National Academy of Inventors,<sup>TM</sup> founded at USF in 2010, is concerned with showing the importance of patents in considering criteria for pay, promotion, and tenure in academe. Dr. Kamlet was a capable synthetic chemist, and may have been an early developer of one-pot sequential syntheses of organic compounds; his letters are informative. Correspondence for 1943, for example, with a single firm, was concerned with coumarin as an anticoagulant, recovering chemical value from the mycelial mat of *A. niger*, cation-exchange resin to remove iron from molasses in citric acid fermentation, effervescent colloidal aluminum hydroxide tablets for persons with ulcers, and a citric acid substitute (when there was a controlled supply for the war effort). In addition, correspondence covered *p*-thiocyananiline for its possible sulfanilamide-like activity, effervescent halazone tablets (for mouthwash, antiseptic, general germicide), an alternate synthesis of citric acid, pH Clinitest tablets, licensing arrangements for a Brazilian firm for “our tartaric acid process,” and

a nasal vasoconstrictor (with information about patent application). The range of chemical products developed by the small firm in the mid-twentieth century was remarkable—from the clinical products already mentioned to fertilizer (in part from old newspapers). More personal matters might deal with sociological data about immigrants from eastern Europe, or the sacrifice Edna Kamlet made in giving up her artistic endeavors as a sculptor.

We can only imagine what the dual partnership of Jonas and Edna Kamlet might have achieved had it not been cut short.

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### About the Authors

Dean F. Martin, Distinguished University Professor of Chemistry Emeritus, continues to be an active researcher. Karina Bidani, a high school senior, served as research intern in 2011.



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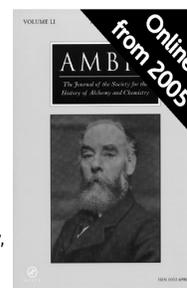
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