



## In Memoriam

BROOK, Adrian Gibbs (1924 - 2013) Age: 89

UNTD YORK 1943



Adrian Gibbs Brook, loving husband of Peg (nee Margaret Dunn), father of Michael (Tina), Katherine (Morgan) and David (Lisa), Grandpa to seven delightful grandchildren, and brother of Rupert (Marian), died on July 10, 2013 in Toronto of complications from cancer. Born in 1924 and educated in Toronto, he obtained a Ph.D. degree in Organic Chemistry from the University of Toronto in 1950. After 3 years of teaching and post-doctoral studies abroad, he returned to the U of T to lecture, and to carry out research in the area of Organosilicon Chemistry. This work became known from numerous research papers and review articles, and particularly by his discovery of a chemical reaction which became known as the Brook Rearrangement, and from his synthesis of the first stable

compounds to contain silicon-carbon double bonds. This new chemistry was recognized and honoured by Fellowship in the Chemical Institute of Canada (CIC), the Royal Society of Canada, the Kipping Award in 1973, the CIC medal in 1985, the Killam Memoria<sup>1</sup> Prize in 1994, and being named as University Professor (1987) by the U of T together with its award of an Honorary Doctor of Science degree in 2006. In the same year he completed, with W.A.E .McBryde, a history of the Department of Chemistry since its beginning entitled, "Historical Distillates - Chemistry at the University of Toronto since 1843". Apart from his first loves of teaching and research, Brook was an enthusiastic and creative problem solver and family fixer. In 1965 he built a cottage, with help from family and friends, on a small lake in Muskoka, where he and the family spent almost every summer (and in earlier days parts of fall, winter and spring), swimming, sailing, waterskiing and windsurfing and doing the thousand and one things demanded of a DIY'er. Friends may call at the Morley Bedford Funeral Home 159 Eglinton Ave. West, (2 stoplights west of Yonge Street), Toronto, on Friday July 12, from 5-7 p.m. A service and committal will be held in Eglinton St. George's United Church, 35 Lytton Blvd. (at Duplex) on Saturday July 13, 11:30 a.m. Cremation. The Brook family is grateful for the help and encouragement of Dr. William Santo, Dr. Robert Mustard, Dr. Christine Brezden-Masley, Nurse Deborah Forestelle, Nurse Margaret Jackson and the staff of the Medical Daycare Clinic of St. Michael's Hospital over several years, and to the staff of Belmont House and particularly Physiotherapist Gordana Stanokovic and her happy team of therapists for relief from various pains. Donations made to the Belmont House Foundation, 55 Belmont Street, Toronto, ON M5R 1R1 [www.belmonthouse.com](http://www.belmonthouse.com), would be appreciated by the family.

A more detailed biography is linked below;

<http://www.nrcresearchpress.com/doi/pdf/10.1139/cjc7811brook>

He entered the UNTD at U of T in October, 1943 and would have had at least 2 summers of training. There is no indication of any NavRes involvement post-war.

For a Chemist to have a Reaction named for him, is a high honour indeed. The "Brook Rearrangement" was so named in the 70s and in case the subject ever comes up at a Weepers or Mess Dinner, a Brook Rearrangement is defined as;

"in organic chemistry, a rearrangement reaction in which an organosilyl group switches position with a hydroxyl proton over a carbon to oxygen covalent bond under the influence of a base. The reaction product is a silyl ether. The silyl substituents can be aliphatic (methyl) or aromatic (phenyl) and the alcohol is secondary or tertiary with aliphatic or aryl groups. The base is an amine, sodium hydroxide, an

organolithium reagent or an alkali metal alloy such as sodium/potassium. When the reactant is a silylmethanol the reaction is a 1,2-brook rearrangement but rearrangements over larger carbon skeletons are also possible."

WAC  
December 12, 2017