

# GENEALOGY DATABASE ENTRY

©Vera V. Mainz and Gregory S. Girolami 1998

Sutherland, Gordon Brims Black McIvor

1907 - 1980

DEGREE: PhD (physics)

DATE: 1933

PLACE: Cambridge

TEACHER/RESEARCH ADVISOR: Dennison/Lowry

determined the positions of the atoms in hydrogen peroxide, hydrazine, ozone, and nitrogen tetroxide from combined studies of their electronic structures, vibrational motions, and Raman spectra; during WWII, led the research group at Cambridge and elsewhere which analyzed fuel recovered from destroyed enemy aircraft and identified the main sources using IR techniques; studied crystalline polymers by IR techniques, including the classic paper on the spectrum of crystalline polyethylene; studied the interpretation and vibrational origins of the absorption bands of hydrocarbons and minerals such as gypsum, brucite, portlandite, and barium titanate; investigated the IR spectra of polypeptides, proteins, pyrimidines, diamond, and ice.

1. Personal communication, N. Sheppard, confirmed research advisors (4Aug93).
2. *Biog. Mem. Fell. Roy. Soc.* **1982**, 28, 589-626.
3. *Dictionary of National Biography*; Smith, Elder & Co.: 1908-1986; (1971-1980), p823-824.