## GENEALOGY DATABASE ENTRY

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1909 - 1968

DEGREE: PhD DATE: 1937 PLACE: Columbia

TEACHER/RESEARCH ADVISOR: McKee

developed theoretical models of fluid transport through chemical reactor systems, specifically studying how to achieve a stable set of reactor conditions in spite of the continued flow of reactants and products through a high temperature environment; studied fluid flow and viscometry and modeling of particle flow through packed and fluidized catalytic beds, esp. for predicting how dispersion processes lead to regions of abnormally high temperature; originator of much of the standard terminology in the field of heat and mass transfer phenomena in systems of turbulent flow; developed the method of parametric pumping, a method of separating liquid mixtures by pumping a solution through a column of fixed solid adsorbent while synchronously varying two of the system's parameters, such as temperature and direction of flow.

- 1. For confirmation of thesis advisor, see *Ind. Eng. Chem.* **1936**, 28, 662-667.
- 2. Dictionary of Scientific Biography; Charles Scribner's Sons: 1970-1990; vol. 18, p990-992.
- 3. McGraw-Hill Modern Men of Science; McGraw-Hill: 1966; vol. 2, p600-601.
- 4. Ind. Eng. Chem. Fund. 1969, 8, 178-179.
- 5. Chem. Eng. Educ. 1983, 17, 10-15 and 38-41.
- 6. National Cyclopaedia of American Biography; James T. White & Co.: 1921-1984; vol. 54, p545.