

Chromatography has Lost Two of its Pioneers

John Henderson Knox FRS

On the 15th October 2018 we lost one of the father-figures of chromatography. At the age of 90 John Knox sadly passed away.

John was a great man, one who managed to walk the very difficult line of being quite brilliant, but also humble enough not to covet the recognition and attention that comes along with such reputation. He was quietly respected by so many people who knew him to be 'the man'. His legacy continues in the work of many of the current leaders in their field. Barely a lecture is delivered at a chromatography meeting, where some early and important reference is made to him and his co-workers. For many John is recognised through the Knox equation:

$$h=av^{1/3}+b/v+cv$$

This, with the van Deemter equation, is widely accepted and used to describe the dependence on plate height on linear velocity of the mobile phase.

John was a dedicated academic and an innovator in chromatography. He led many new areas, building one of the first gas chromatographs with Howard Purnell whilst a student at Cambridge in the early 1950s.



In the 60s he worked on liquid chromatography with J. C. Giddings in Utah and in the 70s produced new column chromatography materials, which are now known as Hypersil and Hypercarb.

In 2010 the Separation Science Group of the Royal Society of Chemistry awarded its first Knox Medal, to honour individuals deserving special recognition of their innovation or influential work in the field of separation science.

Below are a few quotes from Knox Medal winners:

"...the doyen of chromatography will be greatly missed" - Keith Bartle

"...John lived life to the full, and will leave his imprint on all of us who were lucky enough to meet such a great scientist and modest gentleman" - Ian Wilson

"...John was so very kind to me when I was just starting my career" - Jim Jorgenson

John Knox will be remembered to be a great scientist, a leader in the field, a kind and decent man, with a good sense of humour whose work has and will continue to make an impact on scientific research.

Professor John Langley and Dr Bob Boughtflower, Separation Science Group of the Royal Society of Chemistry



1927 - 2018

Lloyd Robert Snyder

On the 19th September 2018 we lost another of the father-figures of chromatography. At the age of 87 Lloyd Snyder sadly passed away.

Lloyd decided to become a chemist at age 9 after receiving a chemistry set as a gift and he had a long career as a research analytical chemist, first in industry for Shell Oil in Houston, Union Oil in Brea, CA, and Technicon Corporation in Tarrytown, NY.

As one of the 7 'pioneers' in the field of chromatography, he made significant contributions to chromatographic theory and the transfer of that information into practice. He served on several editorial boards and as an Editor of the Journal of Chromatography for 13 years. He taught many courses for the American Chemical Society and, after starting his own consulting business in 1983 as a consultant for pharmaceutical and chemical companies and he mentored and collaborated with graduate students doing research at University of Pennsylvania, University of Delaware and Villanova University in the USA.

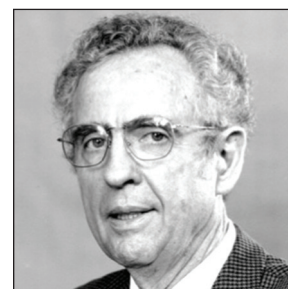
In 1984 LC Resources, Inc. was founded by Lloyd and John Dolan and they were later joined in a Walnut Creek office by Tom Jupille. Here they developed a Chromatography Modeling software product (DryLab) using High Performance Liquid Chromatography (HPLC) and computer simulation to predict analysis conditions and providing related training, consulting, and laboratory work through 2002.

Lloyd was involved with the development of many concepts and techniques that are taken for granted today:

- the Solvent Selectivity Triangle (1974)
- the Linear Solvent Strength model (1980)
- DryLab Chromatography Modeling software (1986)
- the Hydrophobic Subtraction model of reversed-phase column selectivity (2000)

Lloyd received many national and international awards in Chromatography, including the American Chemical Society awards in Petroleum Chemistry and in Chromatography. He authored or co-authored 9 books and hundreds of research publications. He was a humble man, always giving full acknowledgement to his collaborators and offering encouragement to them and others. Even during his last months of illness, his brain never slowed down.

Trevor R. Hopkins, Editor, Chromatography Today



1931 - 2018