



Robert Humphreys, Ph.D.

*Industrial Organic Chemistry Expert*

Bob has over 28 years of experience as a scientist and senior R&D manager in renewable chemicals, industrial adhesives, specialty polymers, and household and personal care products. He has been a member of teams that have commercialized many new molecules and formulated products. He established and managed successful joint research programs with customers, raw material suppliers, and universities (N. America, Asia, and Europe), and has submitted successful proposals for government funding in both the USA and Europe.

Bob is expert in industrial organic chemistry, including development of novel molecules, monomers, polymers, formulated products and processes for preparing them. Some of the R&D programs he has led include:

- Renewable sources for commercial chemicals, surfactants, monomers, polymers and adhesives
- New adhesive chemistries for applications in electronics and structural bonding
- Formulated industrial adhesives (packaging, paper and board, wood and construction, pressure-sensitive)
- Bleaching agents for cleaning products and biodegradable detergent builders
- Chemical applications of liquid/supercritical carbon dioxide

Bob has a Ph.D. in Organic Photochemistry (University of Western Ontario, London, Canada) and postdoctoral research experience in peroxide chemistry and photochemistry of metal alkoxide complexes (University of Utah, Salt Lake City). His industrial career includes senior leadership positions in R&D at Unilever, National Starch and Chemical Company, ICI in the United Kingdom, and Draths Corporation. He is past Chair of the Susquehanna Section of the American Chemical Society and the Industrial Advisory Board for the Department of Chemical Engineering at the University of Akron. Bob holds 24 issued US patents.

We work with two types of clients:

- Companies that design, develop, and manufacture advanced polymers
- Companies that fabricate unique products using advanced polymers, including bioplastics

Our services also include the use of other materials such as metals and ceramics that interact or bond with polymers (adhesives, interfacial stress at fiber interfaces, coupling agents for polymer/fiber adhesion, etc.)

A profitable business strives not only to increase the monetary gains from customer transactions, but realizes that solid customer relationships are the cornerstone of a successful business.

How We Help You

InnoCentrix works with companies that:

- Manufacture or supply advanced polymers and composites
- Use advanced polymers and composites in their products
- Formulate advanced polymer-based adhesives and coatings

Working together, we increase client's revenues and profitability by developing new markets and applications for existing materials, facilitating the product development process for new products, maximizing the impact of the innovation portfolio, managing the intellectual property strategy and process, along with solving complex polymer technical problems.