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PROFILE: A Highly Skilled Adhesives Technologist with a Masters degree in Chemical Engineering and 38 years of experience in formulating, designing and supporting poly vinyl acetate based resins for sales to the adhesives industry.

Notable Accomplishments include:

Author of the Air Products Adhesives Manual
“ Working with Vinyl Acetate Based Polymers” 3& 4th edition

5 patents on a diverse portfolio of adhesive technologies

Sprayable PSA lattices

RF curable wood emulsions

Epoxy replacement for vinyl lamination

Synthetic bottle labeling adhesives

VAE heat sealing resins

A frequent speaker on technology issues at the Adhesives and Sealants council meetings, I recently taught the concluding segment of ASC Adhesives Additives webinar short course “The Basics of adhesives Formulating”. Other ASC courses I taught span the years from 2004 to present

Articles of mine on closed cycle adhesive production systems, next generation adhesive emulsion developments and adhesives fundamentals have been published in North American and European adhesives industry magazines.

PROFESSIONAL EMPLOYMENT – TIME LINE

February 1, 2008 to 8/31/2011

WACKER POLYMERS, ADHESIVES TECHNICAL SERVICE- supported customer sales and technology for polyvinyl acetate/ethylene copolymer systems.

April 1987 to Feb , 2008

AIR PRODUCTS AND CHEMICALS, POLYMER ADHESIVES GROUP- concentrated on poly vinyl acetate and vinyl-acetate copolymers, polyvinyl alcohol and acrylic water borne adhesive systems.

June 1973 to April , 1987

ADHESIVE FORMULATOR WITH NATIONAL STARCH AND CHEMICAL , CURRENTLY A DIVISION OF HENKEL ADHESIVES
familiar with solvent based, rubber based, acrylics, and vinyl acetate based adhesives formulations.

EDUCATION

1968 - 1972

Received a Bachelor of Science Degree from Newark College of Engineering , Currently New Jersey Institute of Technology-

President Omega Chi Epsilon – Honor Society
Graduated Cum Laude

1972 - 1974

Masters Degree in Chemical Engineering from above- **Thesis Summary:** Developed a mathematical equation for predicting the temperature profile of a hot sphere in a wedge.

PROFESSIONAL ACCOMPLISHMENTS

National Adhesives -

1973 – 1977 Chemist Learned the essentials of solvent based formulations for contact cements, solvented PSA, primers/ barrier coatings and others. Modified existing contact cement formulations. Developed a water borne equivalent to solvent borne contact cements from Neoprene latex. Commercialized an early prototype of a 2 part primer Hypalon/acrylic monomer curing plastics bonding system system. Worked on vinyl laminating epoxy system. Patented a uniquely sprayable, fast grabbing PSA acrylic latex,

1977 – 1982 Worked with commercial development to develop a product line of insulation adhesives. Commercialized a unique UL approved acrylic system to replace a neoprene adhesive for metal building roll goods, sold various vinyl acrylics for spray on insulation and rock wool compositions. Worked with ASTM. Developed an emulsified resin / SBR system for fast tack to adhere fiberglass to metal housings for UL approved furnaces, air conditioners, boilers and other HVAC equipment. Developed a line of EPS to facing adhesives for exterior sheathing

1982 – 1987 Worked in the water borne packaging adhesives area as well as the construction adhesives area. Developed Vinyl lamination adhesives, HPL to Particle board continuous lamination adhesives, Natural rubber envelope adhesives. Developed Polyethylene to paper PSA adhesives working with resin research,

Air Products and Chemicals -

1987 – 1990 I was hired in support of the adhesives emulsions group. Supported existing and future customers and grew their business by helping them develop and commercialize new technology. Developed a two part high solids water borne VAE/isocyanate adhesive system for replacing vinyl lamination. Received a European patent for the technology. Advanced the sales of Airflex 465 for vinyl laminating.

Developed an improved RF curable type 1 self crosslinking wood adhesive and received a patent for it. Commercialized the emulsion along with several formulations to achieve varied levels of performance for windows, doors, plywood and core bonding.

1987 – 1997 Became Adhesives Section Manager, managing a group of 4 chemists and 4 technicians. Commercialized Airflex 323 to compete against PVAc homopolymer and specialty PVAc grades. Provided polyvinyl alcohol support to the industry. Traveled the far East twice to support PVOH sales into asia. Gave a presentation at a Singapore adhesives and coatings conference. Trained and provided technical support for Korean acquisition. Developed the closed cycle wash water concept to promote the use of VAE powder. Wrote an article which was published internationally.

1998 – 2011 Supported the development of Airflex 920, and Airflex 7200 into the raw material market. Supported VAE powder sales. Patented a styrene acrylic based bottle labeling system for beer bottle labeling. Was a co-inventor of the semi crystalline VAE patent. Developed training programs for the ASC. Became interested in mathematically modeling adhesive fundamentals from a computerized structure / property relationship. Developed a computerized virtual laboratory program. This enabled us to develop over 200 formulations per year for customers over the past 5 years averaging 5 MM lbs of new growth per year.

CURRENT SKILLS:

Visual Basic programming, experimental design, strong fundamental understanding of formulation variables.