



**Rok ukończenia studiów, wydział, specjalność:**

1977 r. - Wydział Chemiczny Politechniki Wrocławskiej, specjalność: *Inżynieria chemiczna*.

**Przebieg pracy zawodowej:**

od 2008 r. – Novartis Pharmaceuticals, East Hanover, NJ – Particle Engineering of Pharmaceutical Compounds;

2006 r.- 2008 r. – Eastman Kodak Company, Rochester, NY – Product Developer/Manager, Colour Paper Design and Testing Operations;

2003 r.- 2006 r. - Eastman Kodak Company, Rochester, NY – Project Manager/ Supervisor, Global Manufacturing & Technology Organization;

2000 r.- 2003 r. - Eastman Kodak Company, Rochester, NY – Research Associate, Image Output Platform.

**Osiągnięcia naukowe:**

Jest wybitnym specjalistą w dziedzinie krystalizacji.

1986 r.-1988 r. – State University of New York, Buffalo, NY – staż podoktorski;

1984 r.- 1986 r.- University College London, London UK – staż podoktorski;

1982 r.- 1984 r. – Politechnika Wrocławska, studia doktoranckie.

Patenty. Dwadzieścia jeden patentów USA, z których najważniejsze to:

US 5, 418,127, Water-soluble Disulfides In Silver Chloride Emulsions.

US 5,451,490, Digital Imaging with Tabular Grain Emulsions.

US 6,248,507, Composite Silver Halide Grains with Improved Reciprocity and Process for their Preparation.

Publikacje. Dwadzieścia sześć publikacji wielokrotnie cytowanych w literaturze światowej i w książkach. Najważniejsze z nich to:

- Budz J., et al., *Agglomeration of Potassium Sulphate Crystals in an SMPR Crystallizer*, AIChE Symp. Series, Vol. 83, No 253, 78-84, 1987.
- Budz J. and G.H.Nancollas, *Analysis of Particle Size Distribution of Hydroxyapatite Crystallites in the Presence of Synthetic and Natural Polymers*, J. Of Dent.Res 69 (10) 1990.
- Budz. J. *Reciprocity Behaviour of High-Aspect Ratio Silver Chloride Tabular Grain Emulsions*, IS&T/SFSTJ's International Symposium on Silver Halide Imaging, p. 67-70, Victoria, CA, 1997.

**Projekty:**

1. Developed new emulsions technologies at production scale.
2. Developed new photographic products at pilot and production coating machines.
3. Developed high performance yellow emulsion for consumer paper.
4. Monitored emulsion R&D resource allocations and budget.
5. Participated in development of novel silver – based antimicrobial products.
6. Developed a number of novel emulsions for new generation of professional papers.
7. Instrumental in major restructuring of R&D organization.
8. Coordinating all aspects of pharmaceutical powders development.



### **Osiągnięcia zawodowe:**

Innovative Fellow Scientist with 25+ years experience in applied research and development while working for Fortune 500 Companies. Technical knowledge encompassing invention process through technology development through design for manufacturing resulted in effective participation in several major new product introductions. Proven creativity record accomplishment demonstrated by numerous US patents. Effective communicator with strong emphasis on teamwork and team leadership.

- Complex project leadership.
- Scientific research and patenting.
- Technology development and scale-up.
- Budget management and resource allocations.
- Planning and organizing R&D projects.
- Developing people and running operations.

#### **Novartis Pharmaceuticals– Particle Engineering of Pharmaceutical Compounds:**

Coordinating all aspects of pharmaceutical powders development.

- Hands-on development of crystallization/filtration/drying processes.
- Scale-up and polymorph control of pharmaceutical compounds.
- Applying LEAN principles in all aspects of technology development.
- Coordinating Particle Engineering team activities.

#### **Eastman Kodak Company– Product Developer/Manager, Colour Paper Design and Testing Operations:**

Coordinate all aspects of color paper emulsion R&D and manage worldwide testing operation.

- Developed new emulsions technologies at production scale.
- Developed new photographic products at pilot and production coating machines.
- Served as laboratory head for emulsion and testing operations.

#### **Eastman Kodak Company– Project Manager/ Supervisor, Global Manufacturing & Technology Organization:**

Manage major development projects for color paper. Technical work included development of several cost-efficient technologies as well as rapid prototyping of the novel color paper products.

- Led development of new set of emulsions for consumer paper (3 M\$ savings).
- Developed high performance yellow emulsion for consumer paper (2,5 M\$ savings).
- Monitored emulsion R&D resource allocations and budget (3,5 M\$).
- Participated in development of novel silver-based antimicrobial products.

#### **Eastman Kodak Company– Research Associate, Image Output Platform:**

Develop new processes and emulsion technologies for photographic paper. Lead team of scientists through difficult organizational transformation.

- Developed a number of novel emulsions for new generation of professional papers.
- Served as team leader the emulsion technology group.
- Instrumental in major restructuring of R&D organization.



State University of New York:

Study of precipitation and aggregation kinetics of biologically important inorganic materials. Optical and laser particle size and charge measurements. Graduate student's supervision.

University College London:

Fundamental and mechanistic study of precipitation in batch and continuous crystallizers. Precipitation/filtration scale-up.

Politechnika Wrocławska:

Fundamental work on kinetics of nucleation and growth of water-soluble inorganic salts. Industry – sponsored projects including precipitation of organic enzymes. Teaching.

**Współpraca z Politechniką Wrocławską po ukończeniu studiów:**

Współpraca z Instytutem Chemii Fizycznej i Teoretycznej Wydziału Chemicznego: z Zakładem Obrazowania (dr hab. inż. Piotr Nowak) oraz z Zakładem Modelowania Molekularnego i Chemii Kwantowej (prof. Szczepan Roszak). Współpraca w zakresie wymiany informacji, wizyt naukowych, wspomaganie innych absolwentów Politechniki Wrocławskiej.