

## **EDUCATION AND TRAINING**

1969 – 1974

MSc. Dept of Plastics and Rubber, Faculty of Chemical Technology, Slovak Technical University, Bratislava

1974 – 1976

Scholarship in Polymer Institute of the Slovak Academy of Sciences, Bratislava

1977 - 1983

Ph.D. in Polymer Institute of SAS, Bratislava (supervisor Dr. A. Romanov)

## **POSITIONS**

1983 – 1991

Polymer Institute of SAS, Bratislava, Dept of Mechanometry, Research Scientist (with Dr. A. Romanov)

1991 - 2009

Polymer Institute of SAS, Dept of Composite Thermoplastics, Principal Research Scientist (with prof. I. Chodák)

Since 2009

Polymer Institute of SAS, Dept of Theoretical and Application Research of Polymer Materials, Principal Research Scientist (with Dr. I. Krupa)

## **SHORT-STAY VISITS**

2008, 2009, 2010

Dokuz Eylul University, Dept of Mechanical Engineering, Izmir, Turkey (Prof. I. Tavman).

2008

Russian Academy of Sciences, Institute of Macromolecular Compounds, Saint Petersburg, Russian Federation (Prof. G. K. Elyashevich).

2008

Univ. of the Free State, Qwaqwa Campus, Phuthaditjhaba, South Africa (Prof. A. S. Luyt).

## **WORK INTERESTS**

Surface (contact angles, surface energy and its components) and adhesive properties of polymers, mainly polyolefin's, modified by various modification methods, i.e. surface treatment by UV, barrier and radio-frequency discharge plasma, corona discharge, laser, chemical oxidizing agents, halogenization, and physical methods, investigation of surface polymeric layers by goniometry, peel, shear, and tackiness tests, ATR-FTIR, XPS, ESR, ToF-SIMS, AFM, SEM, TEM, porosimetry with krypton, luminescence, fluorimetry, antibacterial pre-treatment of polymeric materials by discharge plasma for human medicine applications, modification of textile materials by corona discharge or atmospheric discharge plasma, modification of inorganic and organic/polymer filler particles by radio-frequency discharge plasma, development of the progressive composite/nanocomposite adhesives, e.g. electrically/thermally conductive adhesives, pressure-sensitive adhesives, reactive and hot-melt adhesives, study of adhesive

properties of the polymers for the purpose of the adhesive joining (adhesive joints metal-metal, metal-polymer, polymer-polymer), contract research and cooperation with the industry, preparation of small scale amounts of the progressive thermo stable/ electrically conductive adhesives, and composite materials, preparation of “tailor made” adhesives.

#### **AWARDS**

“Academy of Education Award 2003“ for popularization of scientific knowledges,  
Slovakia,

“Price of Honor 2007” for research and development of special adhesives by Journalist  
Studio, Slovakia,

„Grand Prix“, Industry Expo 2008, Incheba Expo, Slovakia,

„Golden Incheba“, Slovmedica 2009, Incheba Expo, Slovakia.