

10Th Khwarizmi International Award

Feb 1997

Researcher: Esen Abikenovich Bekturov

Research Title: Solution properties, structure and complex formation of water soluble and water swelling polymers

Rank: First

Field: Chemical Technologies

Country: Kazakhstan



Abstract:

Solution properties, structure and complex formation of water soluble and water swelling polymers: It covers investigation of hydrodynamic, electrochemical properties polymers in solutions and gels, complex interactions of macromolecules with high and low molecular substances as detergents, dyes, drags, metal ions etc.

Project consists of several parts:

- Solution properties of polyelectrolytes, polyampholytes and non-ionic water-soluble polymers.
- Inter polymer complexes
- Polymer-dye and polymer-surfactant systems
- Polymer-metal complexes
- Molecular complexes of hydrophilic polymers
- The displacement reaction and the ternary inter polymer complexes
- The swelling and complex formation of hydrogels
- Polyelectrolyte complexes on a dimeric interface

Esen Abikenovich Bekturov was born 14 December 1931 Tashkent, Uzbekistan.

He graduated from Kazakh state university (1954), Dr. Sci. (1972), professor (1976), corresponding member of Kazakh Academy Science (1983). Author and coauthor of about 70 papers in west journals, 60 in journals of former USSR, above 100 papers in Kazakhstan journals , 17 books , 5 of which were published by west publishers.