

Obituary

GALINA TELYSHEVA (1937-2021)

Professor, Dr. Habil. Chem. Galina Telysheva devoted her whole life to lignin and wood chemistry. On November 12, 2021, Galina Telysheva passed away.

Since 1959 she worked at the Latvian State Institute of Wood Chemistry, from 1993 – as Head of the Lignin Chemistry Laboratory. In 1967, Galina defended her doctoral thesis (PhD), and in 1991 – the habilitation thesis (Dr. Habil. Chem.): “Lignin Modification of Silicium-Containing Compounds”.

Galina Telysheva’s scientific activity:

- She developed new research directions - chemistry of lignin organosilicon derivatives.
Original technologies for modification of natural polymers with silicon-containing monomers and oligomers, for ecologically clean products, with surface, adhesive and biological activity: plant growth activators/immunomodulators; polyfunctional concrete additives; ecologically clean slate; newsprint; thermal insulation cardboard; paints.
- Innovative extraction methods; bark, sea buckthorn, and algae biomass; Optimal purification regimes for obtaining oregonin, with purity degree $\geq 95\%$; Found regularities allowing transformation of natural metabolites, for polyphenols application in medicine. Biorefinery schemes for healthcare, cosmetics and agriculture.
- Transformation of biomass by torrefaction (including microwave) processes.
- In paper industry: adhesives for surface and mass bonding.
- Flotation agents.
- Gelling compositions for petroleum production.
- Her scientific contribution comprised 430 scientific publications, 58 patents, including 31 USSR author's certificates, 15 Latvian, 12 foreign patents.
- For 15 years, Galina was the Scientific Secretary of the USSR Academy of Sciences, direction Wood Chemistry (1976 – 1991).
- Editorial Board Member of “Wood Chemistry” (1974-1983); “Химия растительного сырья” (2004 – 2021); MC Member of COST Action E-38 and LignoCostCA17128.

Galina managed 9 Latvian Scientific Council projects, 9 National Program sections, 4 ERDF, and 17 European projects (5th, 6th, 7th FP, Eureka, WoodWisdom/Era-Net, Horizon 2020), as a Latvian partner.

Galina Telysheva always found new promising directions. Her ability to offer solutions was huge, even fantastic.

Galina was always very thankful to her husband, Professor and inventor, Dr. Eng. in aviation Yuri Kizima, for the great support during her whole life. They lived together 62 years and she passed away just 4 months after him.