



Rostislav Kaishev was an internationally recognized Bulgarian scientist who contributed significantly to the foundation and development of the contemporary nucleation and crystal growth theory. Together with Ivan Stranski, Kaishev developed the theory of mean works of separation, demonstrating for the first time and in unambiguous way the interrelation between the thermodynamic and the kinetic approach to the equilibrium state of small phases. He generalized the Gibbs–Curie–Wulff's rule for crystals formed on a foreign substrate and carried out a thorough molecular kinetic treatment of the nucleation and growth phenomena in homogeneous and heterogeneous systems. Kaishev had initiated many experimental studies of nucleation and crystal growth, which culminated in the verification of the two-dimensional nucleation and growth mechanism in the case of

electrocrystallization on identical substrates. His ideas of the electrochemical phase formation had led to a number of important technological applications in this field. Kaishev founded the Institute of Physical Chemistry at the Bulgarian Academy of Sciences and directed this Institute for more than 30 years. He was Vice-President of the Bulgarian Academy of Sciences, Vice-President of the International Union for Pure and Applied Physics, member of several foreign Academies of Sciences and member of the Editorial Boards of many scientific journals. For his scientific achievements Rostislav Kaishev was distinguished with numerous national and international awards, among them the Honorary Insignia “Marin Drinov” of the Bulgarian Academy of Sciences, the Honorary Insignia of the Sofia University “Sv. Kliment Ohridski”, the golden “Cotenus” medal of the German “Leopoldina” Academy of Natural Sciences and the Great Honorary Insignia of Republic of Austria.



Heinz Bethge and Kayschev



Zeldovich and Kayschev



Kayschev and Stranski