

Division of Mathematical, Physical, and Chemical Sciences

Head of the division Leonas Valkūnas



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The Division of Mathematical, Physical, and Chemical Sciences was established in 1990.

The division has 27 full members, twelve members emeriti, and fourteen foreign members, with Prof. Gérard Mourou, a recipient of the 2018 Nobel Prize in physics among them. Activities of the division are organised in **three sections: mathematics** (chaired by Raimondas Čiegis), **physics** (Gintautas Tamulaitis), and **chemistry** (Ričardas Makuška).

Mathematics section

The first mathematician to be elected a full member of the Lithuanian Academy of Sciences in 1962 was Jonas Kubilius, who was later followed by Vytautas Statulevičius and Bronius Grigelionis. These outstanding scientists raised a large group of disciples and formed the Lithuanian school of the probability theory. Its main areas of development are limit theorems, the random process theory, probability theory in infinite-dimensional spaces, probabilistic and analytic number theories. The members of the division develop other branches of mathematics as well. Significant results have been achieved in the fields of differential equations and computational mathematics.

Physics section

The main scientific directions of the physics section were developed by its first academicians, professors Adolfas Jucys and Povilas Brazdžiūnas. Later, Paulius Slavėnas, Juras Požela, Jurgis Viščakas, Zenonas Rokus Rudzikas, and Algis Petras Piskarskas developed research on physics problems covering almost all relevant branches of physics. The results obtained in the development of atomic and molecular theory, semiconductor physics, stellar photometry, nonlinear optics and spectroscopy, laser physics, as well as in the development of new technologies based on these results earned global fame to the Lithuanian school of physics.

Chemistry section

Juozas Matulis and Jonas Janickis formulated first fundamental trends of research in the section of chemical sciences. Later the thematic field expanded to include all main branches of chemistry. Significant results have been achieved in electrochemical and chemical precipitation of metals, organic synthesis, inorganic and analytical chemistry, polymer synthesis and analysis, and biochemistry.

Members of the division provide expert advice and take part in the commissions and expert groups of the Research Council of Lithuania and the Ministry of Education, Science, and Sport. They are members and experts on the councils, committees, and commissions of the EU and other international organisations, as well as reviewers of projects and reports of state research programmes, and of works and projects submitted for various competitions. They also participate in the work of the commission of Lithuanian Science Prizes.