

The 19-th Marian Smoluchowski Symposium

on Statistical Physics took place on May 14-17, 2006, in Kraków, Poland. The conference has been organized with a financial support from the **European Science Foundation** (via STOCHDYN programme), EC Marie Curie Host Grant for Transfer of Knowledge **COCOS**; Jagellonian University and Polish Academy of Arts and Sciences.

It was an exceptional meeting, organized to celebrate 100-year anniversary of the famous work

XXX. ZUR KINETISCHEN THEORIE DER BROWNSCHEN MOLEKULARBEWEGUNG UND DER SUSPENSIONEN.

Annalen der Physik, Band 21, 1906; pp. 756-780.

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by Marian Smoluchowski, a well known Polish physicist of worldwide recognition, where he described Brownian motion at roughly the same time as Albert Einstein. He explained this phenomenon, by referring solely to the assumptions of the kinetic theory of matter, according to which irregular motions of the *grains* are caused by subsequent collisions with medium particles. Later he presented the equation bearing now his name, which became the basis of the theory of stochastic processes.

As a tribute to the memory of Marian Smoluchowski the conference presentations were focused on contemporary trends in science exploring and making use of the theory of stochastic processes and diffusion. The first, partly historical day of the Symposium, was held at Collegium Novum of Jagellonian University, where Smoluchowski was appointed to the chair of Experimental Physics Department in 1913, and elected a Rector in 1917 (he was never able to take up his duties because of sudden death on dysentery at the age of 45). The remaining three days of the Meeting took place at the Polish Academy of Arts and Sciences of which Smoluchowski was elected a Corresponding member in 1908 to become a Full member in 1917. During four full days with a scientific programme running literally from dawn till dusk, lectures were delivered by distinguished scientists attending by a special invitation. Excellent atmosphere provoked lively discussions at seminars and poster sessions continuing, in small groups, late into the night. Drinking in good science (and good wine) in the ambience of magic environment of the Old Town, and in the company of good friends, was a great experience.



A special event took place during the opening session of the Symposium: two eminent scientists of worldwide reputation and regular participants of Smoluchowski Symposia, **Professor Andrzej Fuliński** and **Professor Peter Hänggi**, were awarded Medal of Honour from the Jagellonian University in recognition "for their most outstanding scientific achievements and continued dissemination of statistical physics works which relate in spirit to the pioneering contributions by Marian Smoluchowski" and for their services to Jagellonian University.



Professor Andrzej Fuliński, who is now Jagellonian University Professor Emeritus, was the founder and a long-time head of Statistical Physics Division at the University. He also served as a Dean of the Faculty of Mathematics, Physics and Chemistry (now replaced by three separate Faculties) and a Director of the Institute of Physics. He is widely recognized for his contributions in the theory of master equations, stochastic resonance and kinetics of molecular ion channels. **Professor Peter Hänggi**, Doctor Honoris Causa Universita di Camerino, Universitat de Barcelona, Ukrainian National Academy of Science, University of Silesia in Katowice and a member of the German Academy of Natural Sciences Leopoldina, a great friend of Jagellonian University, now heads the Department of Theoretical Physics in the University of Augsubrg. His scientific contributions include theory of the chemical kinetics, nonlinear noise phenomena, stochastic resonance, noise-induced transport and molecular motors.

The text of laudatio inscripted on the medal reads:

Andreae Fulinski, Universitatis Jagellonicae professori, qui studia a Mariano Smoluchowski incepta magna cum laude secutus est, scholae Cracoviensi physicae statisticae maxime merito, gratias agit maximas

Rector Universitatis Jagellonicae

Petro Hänggi, amico Universitatis Jagellonicae, qui notiones a Mariano Smoluchowski inceptas summa cum industria propagare studebat, disciplinis physicae statisticae maxime merito, gratias agit maximas

Rector Universitatis Jagellonicae

The medal designed by the Polish artist and sculptor, Józef Sękowski, was handed by the Rector of Jagellonian University, **Professor Karol Musioł**.



The selection of

available presentations delivered during the Symposium has been put together into the issue of *Acta Physica Polonica B (Vol38, no5)* and comprises something of the good science and perspectives of the meeting.