

Curriculum Vitae

08.02.1969 Born in Gorlice, Poland

Education:

1976-1983 Primary School in Kryg, Poland
1983-1987 Secondary School V LO in Cracow, Poland
1993 Master degree in nuclear physics, Jagiellonian University, Poland
1998 Doctorate in nuclear physics, Jagiellonian University, Poland
2005 Habilitation in nuclear physics, Jagiellonian University, Poland
2011 Scientific title of professor of physics

Employment:

1992 Diploma scholarship at the Research Center Juelich in Germany
1993 - 1994 Assistant at the Physics Institute of the Jagiellonian University
1994 - 1998 PhD Student at the Jagiellonian University (including 30 months scholarship at the Research Center Juelich in Germany)
1999 - 2000 Assistant-lecturer at the Jagiellonian University
2001 - 2003 Postdoc in the Research Center Juelich in Germany
2004 - 2004 Research visit at the HiEnergy Laboratory, Irvine, USA (1 month)
2004 - 2005 Senior assistant at the Jagiellonian University
2005 - 2007 Associate professor at the Jagiellonian University
since 2007 Extraordinary professor at the Jagiellonian University
04-09.2017 Head of the Nuclear Physics Department at the Jagiellonian University
since 10.2017 Head of the Cluster of Nuclear Physics Departments at the Jagiellonian University
since 10.2017 Head of the Department of Experimental Particle Physics and Applications at JU
since 2019 Full professor at the Jagiellonian University

Other Appointments:

since 2020 Member of the Committee on Medical Physics, Radiobiology and X-Ray Imaging, Polish Academy of Sciences
2015 - 2017 Elected member of the Scientific Committee SPSC at CERN
2011 - 2017 Head of the Introductory Physics Laboratory in the Institute of Physics (JU)
2008 - 2017 Chair of the Committee of the Physics Olympic Competitions in Lesser Poland District
2008 - 2014 Board member of the international KLOE-2 collaboration (~70 scientists)
2002 - 2010 Spokesperson (scientific coordinator) of the international experiment COSY-11 (~30 scientists)
2012 - 2014 Member of the Expert Panel of the Polish National Science Centre
since 2011 Founder and coordinator of the Jagiellonian-PET interdisciplinary research group (40 scientists)
since 2005 Deputy spokesperson of the international experiment WASA-at-COSY (~200 scientists)
since 2002 Chair of the scientific and organizing committees of 19 international conferences and symposia

Awards:

1999 Laureate of the Foundation for Polish Science in the START programme
1999 Prime Minister award for the doctoral dissertation
2000 Laureate of the Henryk Niewodniczanski Prize awarded by Institute of Physics (JU)
2009 Gold Medal for the invention of the novel Positron Emission Tomography at The World Exhibition on Innovation, Research and New Technologies, Brussels Innova 2009
2009 Minister of Science and Higher Education diploma for inventions in Positron Emission Tomography
2010 Laureate of the Foundation for Polish Science in the International PhD (MPD) programme
2016 Award of the Minister of Science and Higher Education for outstanding achievements in educational and scientific supervision
2017 Laureate of the Foundation for Polish Science in the TEAM research programme
2019 Laureate of the Silla Sanford Award at the University of Los Andes, Colombia
2019 Silver Cross of Merit awarded by the president of Poland.
2022 Prime Minister Medal for Merit for Invention
2022 Minister of Education and Science Award for significant achievements in the implementation of inventions

Miscellaneous:

- Supervision of 30 completed Ph.D. theses; 12 Ph.D. theses are in progress



- Inventor or co-inventor of 42 national and international (USA, Europe, Japan, Poland) patents in medical diagnostics and homeland security
- In total over 400 publications listed in Web of Science: citations > 7400; h-index=47, according to <https://scholar.google.pl>: citations > 13300; h-index=64
- Principal investigator of grants with total funding of more than 49 mln PLN (~10.5 mln Euro)
- Over 250 presentations (including over 180 invited) at international conferences and invited seminars
- Research stays and visits in foreign scientific institutions (Colombia, Germany, India, Italy, Japan, Portugal, Sweden, Switzerland, USA) with total duration of about 9 years
- Guest editor of 17 volumes in Acta. Phys. Pol. A, Acta Phys. Pol. B, Bio-Algorithms and Med-Systems, Acta Phys. Slovaca, American Inst. of Phys. Conf. Proc., Schriften des FZ-Juelich Matter and Materials

PAWEL MOSKAL

Succinct CV

Pawel Moskal, Ph.D. is an inventor of cost-effective positron emission tomography based on plastic scintillators and the method of *positronium imaging*. He conceived and headed a medical experiment demonstrating the first positronium images of the human brain in-vivo. He is Professor of physics and the head of the Cluster of Nuclear Physics Departments and the head of the Department of Particle Physics and Applications at the Jagiellonian University in Cracow, Poland. He won the Prime Minister's award for his doctoral dissertation in 1999 and a Gold Medal for the invention of the matrix device for Positron Emission Tomography at The World Exhibition on Innovation, Research and New Technologies at Brussels Innova 2009. Prof. Moskal has co-authored 42 patents in Europe, USA and Japan, and more than 360 scientific articles in the field of nuclear and particle physics and positron emission tomography. In the years 2015-2017 he was a member of the SPSC Scientific Committee at CERN, and since 2020 he is a Member of the Committee on Medical Physics, Radiobiology and X-Ray Imaging, Polish Academy of Sciences. At present he is leading the J-PET collaboration: an international and interdisciplinary research team at the Jagiellonian University conducting research and development of a new imaging device based on plastic scintillators. This research aims at the construction of a cost effective portable and modular total-body PET for experiments with positronium in basic physics, biophysics and medical diagnostics, e.g. for studies of discrete symmetries in the decays of positronium, the development and tests of multi-photon imaging, and the study of properties of positronium atoms in living organisms, opening new perspectives to study the dynamics of metabolism and tissue pathology in-vivo in the whole human body simultaneously. Prof. Pawel Moskal was awarded many prizes including the Prime Minister Medal for Merit for Invention and Minister of Education and Science Award for significant achievements in the implementation of inventions. He received also the Minister of Science and Higher Education Award for outstanding achievements in educational and scientific supervision.

Prof. Moskal was coordinator of the COSY-11 international collaboration conducting experiments on meson production at the Cooler Synchrotron COSY at FZ-Jülich in Germany and deputy-coordinator of the WASA-at-COSY experiment, which comprises about 150 physicists testing fundamental symmetries in nature by means of the decays of mesons. He is also a member of the KLOE-2 and SIDDHARTA-2 collaborations conducting experiments at the electron-positron collider DAFNE in Italy. These experiments include tests of quantum mechanics, exotic mesonic atoms, and searching for phenomena beyond the standard model of particle physics. Prof. Moskal chaired the scientific and organizing committees of nineteen international symposia and workshops devoted to fundamental and applied physics and served as the (co-)editor of the proceedings books.