

Results of the NCN MAESTRO competition – 17th February 2012

	Project title	Host Institution	Principal Investigator	Grants in PLN
1	Quantum phase transitions in magnetic layers driven by an electric field	Institute of Physics, Polish Academy of Sciences	Prof. Tomasz Dietl	3,000,000.00
2	Inorganometallic catalysis - new strategy for synthesis of organometallic reagents, polymers and nanomaterials	Adam Mickiewicz University	Prof. Bogdan Marciniak	2,400,000.00
3	Background Independent Quantum Gravity	University of Warsaw, Faculty of Physics	Prof. Jerzy Krzysztof Lewandowski	1,794,000.00
4	Length-scale dependent nano-viscosity in soft matter systems and in living cells	Institute of Physical Chemistry, Polish Academy of Sciences	Prof. Robert Holyst	2,930,000.00
5	Focusing and imaging in scattering media by partial coherence interferometry and adaptive optics.	Faculty of Physics, Astronomy and Informatics, Nicolaus Copernicus University in Toruń	Dr. hab. Maciej Daniel Wojtkowski	2,960,700.00
6	Novel approach to the chiral recognition of organic cations and anions - dynamic combinatorial chemistry	Institute of Organic Chemistry, Polish Academy of Sciences	Prof. Janusz Jurczak	2,963,000.00
7	Dynamics of correlations in dense hadronic matter	University of Wrocław, Faculty of Physics and Astronomy	Prof. David Blaschke	1,949,000.00
8	Study of resonant and conventional impurities effect on thermoelectric properties including relativistic effects	AGH University of Science and Technology, Faculty of Physics and Applied Computer Science	Prof. Janusz Stefan Tobała	1,086,800.00
9	Chirped-pulse, Fourier-transform microwave spectroscopy of supersonic expansion	Institute of Physics, Polish Academy of Sciences	Prof. Zbigniew Kisiel	1,272,700.00
10	Semiclassical quantum gravity and quantum gravity phenomenology	University of Wrocław, Faculty of Physics and Astronomy	Prof. Jerzy Kowalski-Glikman	1,363,420.00
11	Oligo-atomic metal/metal-oxide superlattices - novel materials with tunable magnetic and electric properties	AGH University of Science and Technology, Faculty of Physics and Applied Computer Science	Prof. Józef Emanuel Korecki	2,782,400.00
12	Determination of the seismic structure of the lithosphere-asthenosphere system in the marginal zone of the East European craton in northern Poland	University of Warsaw, Faculty of Physics	Prof. Marek AnDrzej Grad	2,364,500.00
13	Quantum correlations: structure, detection and applications	University of Gdańsk, Faculty of Mathematics, Physics and Informatics	Prof. Ryszard Horodecki	1,408,100.00
14	Development of graph-theoretical methods of discrete optimization in technological and biological applications	Gdańsk University of Technology, Faculty of Electronics, Telecommunications and Informatics	Prof. Marek Kubale	1,250,000.00
15	Representation theory of finite dimensional algebras	Nicolaus Copernicus University, Faculty of Mathematics and Computer Science	Prof. Andrzej Skowroński	1,850,000.00
16	Single spin manipulation in semiconductor nanostructures	University of Warsaw, Faculty of Physics	Dr. hab. Piotr Jan Kossacki	2,920,000.00
17	New optical properties and novel applications of semiconductor epitaxial nanostructures	Wrocław University of Technology, Faculty of Fundamental Problems of Technology	Prof. Jan Misiewicz	2,897,600.00
18	The interpretation and modelling of multifrequency properties of rotation-powered pulsars.	Nicolaus Copernicus Astronomical Center, Polish Academy of Sciences	Dr. hab. Jarosław Dyks	1,300,000.00
19	HoloTrue3D: Multi wavefronts holographic imaging and measurements	Warsaw University of Technology, Faculty of Mechatronics	Prof. Małgorzata Kujawińska	2,069,300.00
20	Advanced organic-inorganic hybrid materials with POSS: from nano-sizes to macro-architectures	Cracow University of Technology, Faculty of Chemical Engineering and Technology	Prof. Krzysztof Jerzy Pieliuchowski	2,648,000.00
21	Solvability, chaos and control in quantum systems	Center for Theoretical Physics, Polish Academy of Sciences	Prof. Marek Marcin Kuś	2,363,400.00
22	New tool for designing functional materials for Li-ion batteries	AGH University of Science and Technology, Faculty of Energy and Fuels	Prof. Janina Maria Molenda	1,950,000.00
23	Application of braid groups in physics and in informatics (for 2D Hall systems - explanation of composite fermion structure and geometry of information)	Wrocław University of Technology, Faculty of Fundamental Problems of Technology	Prof. Lucjan Jacak	1,250,000.00

24	New porphyrin isomers: synthesis, spectroscopy, photophysics, tautomerism, and applications	Institute of Physical Chemistry, Polish Academy of Sciences	Prof. Jacek Waluk	2,878,400.00
25	Interdisciplinary applications of random matrix theory	Jagiellonian University, Faculty of Physics, Astronomy and Applied Computer Science	Prof. Maciej AnDr.zej Nowak	1,939,800.00
26	New generation plasmonic materials	Institute of Electronic Materials Technology	Dr. hab. Dorota Anna Pawlak	2,930,000.00
27	Diffusion in solids revisited; the unification of the bi-velocity and phase field methods for designing new materials.	AGH University of Science and Technology, Faculty of Materials Science and Ceramics	Prof. Marek Danielewski	2,080,000.00
28	Binding isotope effects as new, unique tool for studies of receptor - ligand interactions	Technical University of Lodz	Prof. Piotr Paneth	2,968,280.00
29	Application of olefin metathesis in the chemistry of natural products	University of Białystok, Faculty of Biology and Chemistry, Institute of Chemistry	Prof. Jacek Witold Morzycki	1,000,000.00
30	Polish Panel Survey, POLPAN 1988-2013: Social Structure and Mobility	Institute of Philosophy and Sociology, Polish Academy of Sciences	Prof. Kazimierz Maciej Słomczyński	2,401,375.00
31	Manual Skills, Handedness and the Organization of Language in the Brain: Interrelations between the Planning of Tool Use, Gestures and Concepts	Adam Mickiewicz University, Faculty of Social Sciences	Dr. hab. Grzegorz Króliczak	2,999,768.00
32	The Migration Period in the ODr.a and the Vistula Basin	University of Warsaw	Dr. hab. Aleksander Bursche	1,086,000.00
33	International Comparative Research Program in Higher Education	Adam Mickiewicz University, Faculty of Social Sciences	Prof. Marek Kwiek	1,660,056.00
34	Regulatory Social Impact	University of Warsaw, Institute for Social Studies	Prof. Andrzej Krzysztof Nowak	2,835,600.00
35	Logics for qualitative reasoning	University of Warsaw, Faculty of Philosophy and Sociology	Dr. Joanna Golińska-Pilarek	1,013,320.00
36	Motivational, affective and cognitive sources of knowledge formation process: Implication for intrapersonal, interpersonal and intergroup phenomena	Jagiellonian University, Faculty of Philosophy	Prof. Małgorzata Kossowska	2,136,343.00
37	Designer nucleases from a structural and practical point of view	Institute of Biochemistry and Biophysics, Polish Academy of Sciences	Prof. Matthias Bochtler	2,500,000.00
38	Latitudinal pattern in Scots pine traits in Europe: linking plant traits to climatic changes and ecological processes	Institute of DenDr.ology, Polish Academy of Sciences	Prof. Jacek Oleksyn	2,740,210.00
39	Mechanisms of DNA replication regulation in prokaryotic and eukaryotic cells: are there general biological rules of the control of this process?	University of Gdańsk, Faculty of Biology	Prof. Grzegorz Władysław Węgrzyn	2,996,000.00
40	Hypertension and cerebrovascular dysfunction: contribution of neuroanatomical connectivity, sympathetic nervous system and cardiovascular risk factors	Medical University of Gdańsk, Faculty of Medicine with Subfaculty of Dentistry	Prof. Krzysztof Olgierd Narkiewicz	3,000,000.00
41	The significance of bioactive lipids in regulation of stem cells mobilization and homing.	Faculty of Medicine, Pomeranian Medical University	Prof. Mariusz Zdzisław Ratajczak	2,978,900.00
42	Transgenic mice with elevated basal level of calcium ions in neurons as a model of aged-induced neurodegeneration of sporadic Alzheimer's disease	International Institute of Molecular and Cell Biology	Prof. Jacek Marcei Kuźnicki	2,989,800.00
43	The role of cell size in the origin of mass-scaling of metabolism and temperature-dependence of body size - empirical testing of hypotheses and building up a theory of life history evolution integrated with physiology and cell biology	Jagiellonian University, Faculty of Biology and Earth Sciences	Prof. Jan Marcin Kozłowski	2,498,638.00
44	Novel functions of endocytic proteins in transcriptional regulation	International Institute of Molecular and Cell Biology	Dr. hab. Marta Miączyńska	2,875,000.00
45	Determining the significance of a new potential miRNA-based marker in biology and earlier detection of the ovarian carcinoma.	Medical University of Gdańsk, Faculty of Medicine with Subfaculty of Dentistry	Prof. Janusz Limon	3,000,000.00
46	Mechanism of connective tissue deficiencies in hyperhomocysteinemia	University of Life Sciences in Poznań, Faculty of Agriculture and Bioengineering	Prof. Hieronim Jakubowski	1,799,421.00
47	High-resolution map of DNA double-stranded breaks in human genome	University of Warsaw, Interdisciplinary Centre for Mathematical and Computational Modelling	Dr. Krzysztof Flawiusz Ginalski	3,000,000.00
48	Comparative analysis of genetic variations in early onset and adult inflammatory bowel disease in Poland in search for molecular diagnostic application	Medical Training Centre	Prof. Jerzy Zygmunt Ostrowski	2,628,000.00

49	Host immune response to respiratory virus infections associated with asthma exacerbations - role for parainfluenza virus.	Medical Academy of Lodz, Department of Immunology, Rheumatology and Allergy, Department of Clinical Immunology and Microbiology	Prof. Marek Leszek Kowalski	2,710,000.00
50	Cytotoxic conjugates targeting FGFR-related cancers based on FGF1 and FGFR-specific antibodies.	University of Wroclaw, Faculty of Biotechnology	Prof. Jacek Józef Otlewski	2,796,000.00
51	Epidemiological and pathogenetic aspects of Primary Biliary Cirrhosis (PBC)	Faculty of Medicine, Pomeranian Medical University	Prof. Piotr Milkiewicz	1,895,800.00
52	Histamine H3/H4 receptors as the attractive target for the search of biologically active substances	Jagiellonian University, Medical College, Faculty of Pharmacy with the Division of Medical Analytics	Prof. Katarzyna Justyna Kieć-Kononowicz	2,000,000.00
53	Cell wall mechanics, structure, and differential growth - plant morphogenesis from mechanical perspective	University of Silesia, Faculty of Biology and Environmental Protection	Prof. Dorota Monika Kwiatkowska	1,632,000.00
54	Plant endophytes as a new tool in phytoremediation	Jagiellonian University	Prof. Katarzyna Turnau	2,560,830.00
55	Role of the human RNA exosome catalytic subunit DIS3 in multiple myeloma pathogenesis and cell physiology.	University of Warsaw, Faculty of Biology	Dr. hab. Andrzej Stanisław Dziembowski	2,990,000.00
56	Early molecular mechanisms in invasive colon cancer cells induced by Snail controlled genes	Institute for Medical Biology, Polish Academy of Sciences	Prof. Czesław Stanisław Cierniewski	2,460,500.00
57	Inhibitors of serine proteases as regulators of dendritic cell function.	Jagiellonian University, Faculty of Biochemistry, Biophysics and Biotechnology	Dr. hab. Joanna Cichy	2,655,900.00
58	Endometrial fibrosis as a potential reason for the implantation disorders and early pregnancy loss in mares: role of sex steroids, prostaglandins, lisophosphatic acid and their receptors in pathogenesis	Institute of Animal Reproduction and Food Research, Polish Academy of Sciences	Prof. Dariusz Jan Skarżyński	2,926,000.00
59	DHA/EPA and changes of peripheral blood cell epigenetics as well as the level of endothelial and pancreatic beta cell specific miRNA.	Jagiellonian University, Medical College, Faculty of Medicine	Prof. Aldona Magdalena Dembińska-Kieć	2,824,000.00