

Prof. Dr. Emil MOLNÁR
Curriculum Vitae
May 31, 2016

Personal information

- * Born in 1943 in Kecskemét (Hungary).
- * Father: Ernő MOLNÁR teacher (1912-1994), mother: Mária Klára TARICS (1919-2012), brother: Ferenc, sister: Ágnes.
- * Married (1968) to Márta KOVÁTS, 2 sons: Csaba (1973), Zsolt (1975).

Office address:

Professor ret. at Department of Geometry, Institute of Mathematics, Budapest University of Technology and Economics (BME) H-1521 Budapest.

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Permanent address: Selmecsi u. 20. H-1034 Budapest, Hungary.

Education:

Studied mathematics, physics and descriptive geometry at the Eötvös Loránd University of Budapest (ELUB), Faculty of Natural Sciences from 1961 to 1966. Eminent Diploma of high-school teacher in 1966.

Scientific degrees

- * Doctor of natural sciences (rer. nat.) in geometry at ELUB 1970 with dissertation: *Conic sections of hyperbolic geometry by reflections.*
- * Candidate of mathematical sciences in geometry at the Hungarian Academy of Science, 1976 with dissertation: *The concept of reflection and its applications in the absolute geometry.*
- * Doctoral Dissertation submitted to the Hungarian Academy of Science in 1990 with title: *Polyhedron models of discrete groups and space forms.*
- * Habilitation by the above dissertation at BME in 1995.

Employment:

- * Assistant professor at ELUB at Department of Descriptive and Projective Geometry (1966-78). Teaching geometry and problem solving in mathematics.
- * Associate professor from 1978.
- * Leading teacher of Scientific Circle of Teacher Students Math.-Phys. (1977-89).
- * Author of several scripts and text-books.
- * 1984-90: Associate professor at ELUB at Department of Geometry. Teaching geometry and differential geometry.
- * From 1990 Associate Professor at BME at Department. of Geometry.
- * July 1992 - June 2007: Chief of the Department.
- * From 1996 Professor at BME Institute of Mathematics Department of Geometry.
- * From 11th January 2013 retired.

Languages:

Hungarian mother tongue.

Russian (1972).

German (1974).

English (1978).

Lectures and presentations at study trips and scientific conferences.

RESEARCH

Scientific topics:

- * Geometric transformation groups and their applications.
- * Crystallography, discrete and differential geometry.
- * Algorithms for space tilings.
- * Bolyai-Lobachevskian hyperbolic geometry.
- * Orbifolds and manifolds.
- * Computer modelling and visualization of non-Euclidean geometries

Besides 3 dissertations **he published** ~100 research papers and ~60 other articles.

* List of publications, from 2016 <http://t-geom.math.bme.hu/munkatarsak>

* Selected publications till 2015 <http://www.math.bme.hu/~emolnar>

* Publication list with citations (till October 8, 2013, then see Google Scholar)

Supervised 12 promotions. His doctor students:

- * Sándor Szabó BME Dept. of Math. Fac. of Civil Engineering, Bahrein University, Janus Pannonius University of Pécs,
 - * Bernd Wernicke (Erfurt),
 - * Marica Sarac (Belgrade),
 - * Milica Stojanovic (Belgrade),
 - * Jenő Szirmai (BME),
 - * István Prok (BME),
 - * Attila Bölcskei (BME),
 - * Eleonóra Stettner (Kaposvár Univ., KE),
 - * László Németh (Univ. of West Hungary, Sopron),
 - * Eszter Horváth
 - * Daniel Erdély
- defended their PhD dissertations.

* **1986-90 taking part in 2 Scientific working groups,**

- led by Károly Böröczky OTKA 1238 (86)

- and by János Szente OTKA 424 (86).

* Co-chief (with Marta Szilvási-Nagy) of scientific working group -- OTKA 1615 (1991)

- and OTKA T 20498 (1996) *Complex computer geometric modelling*.

* Chief of OTKA T 7351 (1993) *Algorithms for D-symbols*.

* From 1989 guest researches at University of Bielefeld, collaboration with Andreas Dress, Daniel Huson.

* Guest professor at TU Wien (1995) and at RWTH Aachen (1996).

* Organization of international conferences *Konstruktive Geometrie* 1993, 95, 98, 2001, 2005.

* International projects: *DAAD*, Zagreb, Ljubljana, Wien, Novosibirsk.

- * Reviewer of *Zentralblatt für Mathematik* 1970-2014.
- * Member of the editorial board
 - of *Beiträge zur Algebra und Geometrie (Contributions to Algebra and Geometry)* (1992)
 - of *Journal for Geometry and Graphics* (1997),
 - of *KoG (Zagreb)* (2003).
 - of *Matematicki Vesnik* (2013).
 - *Symmetry: Culture and Science* (2013).
- * Member
 - of János Bolyai Mathematical Society (1966),
 - of Hungarian Society of Design Teacher,
 - of Hungarian Society of Geometry and Graphics (Konstruktív Geometria Egyesület).

Awards:

- * Ministry awards for Excellent Work.
- * Memorial Plaque for Supporting Scientific Student Circles (2003?).
- * János Bolyai Plaque (2010)
- * Palatin József Memorial Plaque (2013).