

# RNDr. Jiří Rákosník, CSc.

## Curriculum vitae

### Personal Information

- Born on 19 December 1950 in Varnsdorf, Czech Republic
- Married (Zuzana), two children (Marie, Kryštof)

### Affiliation

- Institute of Mathematics  
of the Academy of Sciences of the Czech Republic  
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### Current Position

- Director of the Institute
- Researcher in the Department of Topology and Functional Analysis

### Background and Academic Qualification

- 1980: CSc. degree (PhD. equivalent), Charles University, Praha, mathematical analysis (Thesis: Weak solutions to non-linear partial differential equations in anisotropic Sobolev spaces)
- 1978: RNDr. degree, Charles University, Faculty of Mathematics and Physics, Praha (Thesis: Anisotropic Sobolev spaces)
- 1975: graduated from Charles University, Faculty of Mathematics and Physics, Praha, mathematical analysis

### Professional Experience

- Since 2014: Director of the Institute of Mathematics AS CR
- Since 2010: Supervisory Boards in 3 research institutes of the AS CR, member
- 2010–2014: Supervisory Committee of the Academy Assembly, chair
- 2009–2014: Institute of Mathematics AS CR, Deputy Director
- 2001–2009: Presidium of the Academy Council, AS CR, member responsible for economic matters
- 2001–2009: Council for Economy AS CR, President
- 2007–2009: Supervisory Boards in 7 research institutes of the AS CR, member and chair
- 2003–2005: Advisory body for the Committee for Science, Education, Culture, Youth and Sport of the Parliament of the Czech Republic, Chamber of Deputies, member
- Since 2001: Member of several ad hoc committees and working groups for legislation and conceptual matters in R&D (National R&D Policy, Analysis of the State and Trends of R&D in the Czech Republic, Act on Public Research Institutions etc.)
- 1999–2001: Supervisory Committee of the Academy Assembly AS CR, Vice-President
- 1993–2001: Council for Economy AS CR, member
- Since 1998: Academy Assembly AS CR, member
- 1990–1996: Institute of Mathematics AS CR, Deputy Director
- Since 1980: Institute of Mathematics AS CR, researcher
- 1979–1980: Czech Agriculture University, Prague, lecturer

### Research Activities

- Mathematical analysis: theory of function spaces, weighted estimates for integral and differential operators, applications for partial differential equations
- Digitization of mathematics and digital mathematics libraries
- Author of more than 30 research papers, editor of 7 conference proceedings
- Participant and coordinator in 6 national and international research projects
- Research visits and lectures: Bulgarian Academy of Sciences in Sofia, University of Helsinki, University of Oulu, Georgian Academy of Sciences in Tbilisi, Freie Universität Berlin, Universität Erlangen-Nürnberg,

Friedrich-Schiller-Universität Jena, Humboldt Universität Berlin, Baptist University Hong Kong, Chinese University Hong Kong, Polytechnic University Hong Kong, Banach Center in Warsaw, Russian Academy of Sciences in Moscow, University of Sussex, University of Wales

### Other Activities

- Since 2013: Committee for Electronic Publishing, European Mathematical Society, chair
- Since 2013: Board for Strategy and Development of the National Library of Technology
- 2010–2012: European Science Foundation, Finance & Audit Committee, member
- 2009–2012: Committee for Electronic Publishing, European Mathematical Society, member
- Since 2000: European Mathematical Society, member
- Since 1996: Czech Mathematical Society, Vice-President
- 1991–1998: Council of the European Mathematical Society, member
- Since 1997: Czech Editorial Unit of the Zentralblatt-MATH, head
- 1993–1996: Union of Czech Mathematicians and Physicists, Vice-President
- 1993–1996: Czech Mathematical Society, President
- 1990–1993: Czech Mathematical Society, Vice-President

### Selected Publications

- Bouche T., Rákosník J.: Report on the EuDML external cooperation model. In K. Kaiser, S. G. Krantz, B. Wegner (eds.): Topics and Issues in Electronic Publishing, Proceedings of the Joint Mathematics Meeting of the American Mathematical Society and Mathematical Association of America, Special Session, San Diego, 9.–10.1.2013, EMIS Collections and Conference Proceedings, FIZ Karlsruhe, Karlsruhe, 2013, 99–108.
- Bartošek, M., Rákosník, J.: DML-CZ: The experience of a medium-sized digital mathematics library. Notices Amer. Math. Soc. 60, 8 (2013), 1028–1036.
- Rákosník, J., Pavlov, R.: European Digital Mathematics Library. In R. Pavlov, P. Stanchev (eds.): Proceedings of the Digital Presentation and Preservation of Cultural and Scientific Heritage – DiPP 2013, Veliko Tarnovo, 18.–20.9.2013, Digital Presentation and Preservation of Cultural and Scientific Heritage, Vol. 3, Institute of Mathematics and Informatics BAS, Sofia, 2013, 25–34.
- Rákosník, J.: Recent development of the DML-CZ and its current state. In P. Sojka, T. Bouche (eds.): Towards a Digital Mathematics Library. Proceedings of the DML 2011, Bertinoro, Italy, 20.–21.7.2011. Masaryk University Press, Brno, 2011, 9–14.
- Opic, B., Rákosník, J.: Weighted estimates for the averaging integral operator. Collect. Math. 61, 3 (2010), 253–262.
- Sojka, P., Rákosník, J.: From pixels and minds to the mathematical knowledge in a digital library. In Proceedings of DML 2008: Towards Digital Mathematics Library. Birmingham, United Kingdom, July 27th, 2008, pp. 17–27.
- Bartošek, M., Lhoták, M., Rákosník, J., Sojka, P., Šárky, M.: DML-CZ: The objectives and the first steps. In Borwein, J., Rocha, E. M., Rodrigues, J. F., eds.: CMDE 2006: Communicating Mathematics in the Digital Era. A K Peters, Wellesley, MA, 2008, pp. 69–79.
- Edmunds, D. E., Rákosník, J.: Sobolev embeddings with variable exponent. I, II. Studia Math. 143 (2000), 267–293; Math. Nachr. 246–247 (2002), 53–67.
- Edmunds, D. E., Opic, B., Rákosník, J.: Poincaré and Friedrichs inequalities in abstract Sobolev spaces II. Proc. Cambridge Phil. Soc. 115 (1994), 159–173.
- Edmunds, D. E., Rákosník, J.: Density of smooth functions in  $W^{k,p(x)}(\Omega)$ . Proc. Royal Soc. London A 437 (1992), 229–236.
- Kováčik, O., Rákosník, J.: On spaces  $L^{p(x)}(\Omega)$  and  $W^{k,p(x)}(\Omega)$ . Czechoslovak Math. J. 41(116) (1991), 592–618.
- Opic, B., Rákosník, J.: Estimates for mixed derivatives of functions from anisotropic Sobolev-Slobodeckij spaces with weights. Quart. J. Math. Oxford Ser. 42 (1991), 347–363.
- Evans, W. D., Rákosník, J.: Anisotropic Sobolev spaces and a quasisdistance function. Bull. London Math. Soc. 23 (1991), 59–66.
- Rákosník, J.: On embeddings and traces in Sobolev spaces with weights of power type. Approximation and function spaces. Banach Center Publications 22. PWN – Polish Scientific Publishers, Warsaw, 1989, 331–339.

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