MARTIN GRÖTSCHEL

detailed information at http://www.zib.de/groetschel

Date / Place of birth: Sept. 10, 1948, Schwelm, Germany **Family:** Married since 1976, 3 daughters

Affiliation:

Full Professor at Vice President of

Technische Universität Berlin (TU)

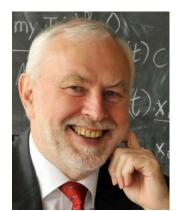
Zuse Institute Berlin (ZIB)

Institut für Mathematik Takustr. 7

 Str. des 17. Juni 136
 D-14195 Berlin, Germany

 D-10623 Berlin, Germany
 Phone: +49 30 84185 210

 Phone: +49 30 314 23266
 E-mail: groetschel@zib.de



Scientific vita:

1969 – 1973 Mathematics and economics studies (Diplom/master), U Bochum

1977 PhD, U Bonn

1981 Habilitation, U Bonn

1973 - 1982 Research Assistant, U Bonn

1982 – 1991 Full Professor, U Augsburg (Chair for Applied Mathematics)

since 1991 Full Professor at TU Berlin, Inst. of Mathematics, and Vice President of ZIB

2002 - 2008 Chair of the DFG Research Center MATHEON "Mathematics for key technologies"

Selected awards:

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Fulkerson Prize of the American Math. Society and Math. Programming Soc. (MPS)

Membership in scientific academies:

1995	Member of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW)
1999	Foreign Associate of the National Academy of Engineering, USA
2003	Member of acatech – German Academy of Science and Engineering
2005	Member of Leopoldina – German National Academy of Sciences

Selected invited and plenary lectures since 2000:

2000 17th International Symposium on Mathematical Programming, Atlanta, USA

2000 20th Conference on the Foundations of Theoretical Computer Science, New Delhi, India

2002 Mekler Lecture, Simon Fraser University, Burnaby, BC, Canada

2002 SIAM 50th Anniversary Meeting, Philadelphia, USA

2002 Gödel Lecture, Austrian Academy of Sciences, Vienna, Austria

2004 20th European Conference on Operational Research, Rhodes, Greece

2005 Landau Center Anniversary Symposium, Jerusalem, Israel

2006 International Congress of Mathematicians 2006, Madrid, Spain

2006 IFORS Distinguished Lecturer at XIII CLAIO, Montevideo, Uruguay

2007 Tata Institute of Fundamental Research, Mumbai, India

2008 Annual acatech meeting – German Academy of Science and Engineering, Berlin, Germany

2009 4th International Conference on High Performance Scientific Computing, Hanoi, Vietnam

2009 Annual Meeting of the Chinese Mathematical Society, Xiamen City, China

Editorship: Member of the editorial board of 16 scientific journals, currently active in 8

(e.g., Mathematical Programming, Mathematical Methods of Operations Research)

Selected functions in scientific organizations, scientific service:

1984 – 1986 Dean of the Faculty of Science, U Augsburg
1985 – 1988 Member of the Executive Committee of the MPS
1989 – 1996 Member of the Executive Committee of the DMV, President 1992-1993
1998 President of the Organizing Committee of the ICM 1998 in Berlin
1999 Member of the Executive Board of BBAW
1999 Member of the Executive Committee of the International Mathematical Union (IMU)
1980 Secretary of IMU

Fields of research:

For detailed information see http://www.zib.de/groetschel/research/projects.html.

- Main research areas: optimization, discrete mathematics, and operations research
- Current special interest: design and implementation of practically efficient algorithms for the solution of hard real-world optimization problems
- More than twenty application projects with industry partners in areas such as gas pipeline optimization, infrastructure planning, telecommunication, manufacturing and production, logistics, public transportation, VLSI design, electronic information and communication
- 30 PhD students and over 150 master students supervised

Selected publications:

For detailed information see http://www.zib.de/groetschel/research/Musterbiblio.html. I have authored and edited 14 books and written more than 100 articles.

- Andreas Eisenblätter, Hans-Florian Geerdes, Martin Grötschel: Planning UMTS Radio Networks, OR/MS Today, 35:6 (2008) 40-46
- Hartwig Bosse, Martin Grötschel, Martin Henk: Polynomial inequalities representing polyhedra, Math. Programming, Series A,103:1 (2005) 35-44
- Martin Grötschel, Olaf Holland: Solution of large-scale symmetric travelling salesman problems, Math. Programming, Series A, 51:2 (1991) 141-202
- Martin Grötschel, Klaus Truemper: Decomposition and Optimization over Cycles in Binary Matroids, Journal of Combinatorial Theory, Series B, 46:3 (1989) 306-337
- Martin Grötschel, László Lovász, Alexander Schrijver: The ellipsoid method and its consequences in combinatorial optimization, Combinatorica, 1:2 (1981) 169-197

Statement and description of activities

I have begun to serve the IMU in 1994 when I became President of the ICM 1998 Organizing Committee. I have been a member of the IMU Executive Committee since 1999, of the Committee on Electronic Information and Communication 1998-2006, and I have been serving IMU as Secretary since 2007. Although the Secretary's work load is much higher than I expected I do enjoy spending time and energy for IMU activities.

The progress achieved in promoting and fostering mathematics in the last years the world over is remarkable, in particular considering the humble financial IMU means and the fact that all IMU representatives are working in honorary capacity. It is a pleasure to cooperate with so many committed colleagues from all regions of the world and all branches of mathematics. I am ready and willing to serve the IMU as Secretary for another term. The main task in the next four years will be to establish the stable office (if the GA agrees), to hire dedicated persons, and to build up the capacity IMU needs to continue and extend its wide range of activities. Important aspects will be the creation of an institutional memory in order to run all recurring IMU activities (preparation of EC meetings, organization of the ICM and the GA, handling travel support, etc.) more smoothly and the definition of all organizational processes to relieve the IMU officers and representatives from many of the bureaucratic tasks they still have to execute. The IMU archive has to be reestablished and secretarial support for IMU's committees and commissions has to be set up. Profiting from my experience in these areas in the last years I feel I have a chance to achieve these goals – at least to some extent.