

Name: Bo Kågström

Address: Department of Computing Science and  
High Performance Computing Center North (HPC2N)  
Umeå University SE-901 87 UMEÅ, Sweden

Email: bokg@cs.umu.se      Homepage: <http://www.cs.umu.se/~bokg>

- Bo Kågström is *Full Professor of Numerical Analysis and Parallel Computing* at Umeå University, Sweden (appointed 1989).
- During 1983–1994 he has been *chair* of the Institute of Information Processing. From July 1, 1994 the Institute was split in two departments and during 1994–1998-12-31 Kågström has been the *head* of the Department of Computing Science. In total, 15 years of experience as Department Head/Chairperson.
- Since 1996 he is the *Director of High Performance Computing Center North (HPC2N)*, a national center for scientific and parallel computing funded by the Swedish Research Council (VR) as part of its Metacenter SNIC. During 1989–1996, he was the Scientific Director of Supercomputer Centre North (SDCN), the predecessor of HPC2N.
- Bo Kågström is appointed member of the *Royal Swedish Academy of Engineering Sciences (IVA)*, Division of Information Technology since November 1992. Vice Chairman of the Division of Information Technology, 2003-2005.
- He has been Vice Chairman and Chairman of the *Research Council of the Faculty of Science and Engineering* at Umeå University (Chair Spring 2008, Vice chairman 1999-2008, member since 1993).
- Kågström is member of the *Strategic Technical Advisory Committee (STAC)* of the national SNIC Metacenter (Vice chairman 2003-2006).
- Appointed *expert in the European Exascale Software Initiative (EESI)*, WG 4.3–Numerical libraries, solvers, and algorithms (FP7 Support Action).
- Appointed *Panel Chair* for an international evaluation of *INRIA Theme: Distributed and High Performance Computing* (Fall 2012).
- Kågström’s experience includes work as a *Visiting Scientist* at MIT (1980) and Stanford University (1983, 1985). Several shorter visits at Cornell University.
- His *research interests* are in the areas of parallel and high-performance computing (algorithm design and development support tools, recursive blocked algorithms and hierarchical matrix storage formats, GEMM-based level 3 BLAS), web and grid computing, numerical linear algebra (subspace problems with applications in control theory, canonical forms, generalized eigenvalue problems, matrix functions, matrix equations), periodic systems, differential-algebraic systems, mathematical and scientific library software, problem solving environments, bioinformatics, and applications of scientific simulation methods in visual and interactive computing.

- Kågström has over 100 *scientific publications* and he has been invited speaker at several international conferences, workshops and universities worldwide.
- He has been *opponent/referee and member of PhD Committees* in Sweden and internationally (TU Eindhoven, Netherlands 2003; TU Berlin, Germany, 2004).
- Over the years he has been *principal investigator and project leader* for several research projects, granted by Swedish Research Councils and Foundations (e.g., VR, TFR, FRN, HPDR, SSF, VINNOVA, Knut and Alice Wallenberg Foundation, Kempe Foundations and NUTEK, EU), including grants for large scale High Performance Computing (HPC) systems. See my homepage for more information about the grants.
- Bo Kågström has been awarded the *Society for Industrial and Applied Mathematics (SIAM) Linear Algebra Prize 2000* for the most outstanding paper published during 1997–99 (together with Alan Edelman, MIT and Erik Elmroth, Umeå Univ.).
- Bo Kågström has been awarded the *Nordbanken Scientific Prize 2000* for his research contributions in parallel and scientific computing.
- Appointed *member of the Prize Committees* of the SIAM/SIAG Linear Algebra Prize 2003 and the SIAM Germund Dahlquist Prize, 2007 and 2009. Member of the organizing committee of the SIAM Applied Linear Algebra Conference in 2006.
- He has been *organizer and co-organizer* of several international conferences (e.g., Matrix Pencils 1982, Workshop on Vector and Parallel Computing 1988, Nordic Workshop on Scientific Visualization 1990, SUP’EUR92 – Supercomputing in Europe 1992, High-performance computing applications in new and traditional areas – today and in the future, 1997, PARA98 – Applied Parallel Computing: Large Scale Scientific and Industrial problems, 1998, Bioinformatics Symposium, 2002 and 2003, and PARA 2006 – State of the Art in Parallel and Scientific Computing, 9th Northern European Bioinformatics Conference, 2007, and INYS 2008 Workshop on High Performance Scientific Computing. He is *editor of four conference proceedings* published by Springer Verlag.
- He is a member of the editorial board (corresponding editor) of *SIAM Journal of Matrix Analysis and Applications* (1991–1997, 2002–2008), and *Numerical Linear Algebra with Applications* (2009–). Associate editor of *Scientific Programming* (1992–2012). Over the years, Kågström has been *refereeing* for several international scientific journals and Research Councils.
- *Professional memberships* (in alphabetical order): ACM, AMS, IEEE, Niconet, SIAM, SIAM-SIAGs: Linear Algebra, Control & Systems Theory, Computational Sciences and Engineering, Supercomputing, Imaging Sciences.
- He has been principal advisor and *supervisor* for 12 PhD Theses, 15 Licentiate Theses and several Master Theses. He is currently supervising three PhD graduate students and co-supervising one. (See my homepage for names.)