

# Curriculum vitae Dr. Claes Wohlin (summary)

## General

Dr. Claes Wohlin is a full professor of software engineering at Blekinge Institute of Technology (since 2000).

Dr. Wohlin has previously been the holder of professor chairs in software engineering at Linköping University (appointed 1997) and at Lund University (appointed 1998). The chair at Linköping University was the first chair in Sweden directed towards large-scale software development, and the chair in Lund was the second chair in Sweden. He has been a visiting professor at Chalmers University of Technology from 2005 to 2008, a professorial visiting fellow at the School of Information Systems, Technology and Management within the Australian School of Business at University of New South Wales in Sydney, Australia between 2009 and 2011, and he was a guest professor at Shandong University at Weihai in China between 2013 and 2016.

Dr. Wohlin received his Master of Science in Electrical Engineering from Lund University in 1983. In 1986, he received a Licentiate of Engineering degree and his Ph.D. degree in the area of software reliability and performance modelling in 1991. Dr. Wohlin was appointed to docent (associate professor) in 1995.

In 2011, he was elected as member 1618 of the Royal Swedish Academy of Engineering Sciences since the inception of the academy in 1919. He is a senior member of IEEE since 2009.

## International position

Dr. Wohlin received the Telenor Nordic Research Award in 2004 based on his achievements in software engineering and improvement of reliability in telecommunication systems. The prize was on 250 000 Norwegian crowns (approximately USD 45 000).

Based on his publication record, Claes Wohlin is listed as one of the top ten authors with the highest contributions to the software engineering literature in the time period 1971-2012 in an article published in *Scientometrics* in October 2014.

The *Journal of Systems and Software* ranked in 2010 Dr. Wohlin as number 9 among the top scholars in systems and software engineering worldwide based on journal publications in 2003-2007. Furthermore, Blekinge Institute of Technology was ranked as number 6 in the world among the top institutions based on publication for the time period 2004-2008, and number 1 within the European Community.

The *Journal of Systems and Software* has ranked Dr. Wohlin in total four times based on his publication record. His previous rankings have been as follows: 1998-2002 number 14; 1999-2003 number 10 and 2002-2006 number 8. Blekinge Institute of Technology has been ranked three times in total and the two previous rankings were as follows: 2002-2006 number 11 and 2003-2007 number 5.

In addition, the research group started by Dr. Wohlin in 1993 and led by him until the latter part of 2000 at Lund University made it onto the top ranking of research institutions in the ranking published in 2004. Lund University was ranked as number 12 in 2004 on the list (15 in 2003) and Lund University made it into this position in 10 years. The ranking of Lund University was highly dependent on the contributions of Dr. Wohlin during his period at the university.

In 2005, he was ranked as number 5 in the world for his contributions to controlled experiments in software engineering in an article published in *IEEE Transactions on Software Engineering* in September 2005. The ranking was based on contributions between 1993 and 2002.

## **Research leader**

In 1993, Dr. Wohlin founded the software engineering research group at Lund University. He directed the research group until moving to Blekinge Institute of Technology in year 2000 and he was responsible for the growth of the research and education in software engineering at Lund University 1993-2000. He headed the Software Engineering Research Lab at Blekinge Institute of Technology from 2000 until 2013. The group grew from four people in 2000 to 25 in 2013 under the leadership of Dr. Wohlin. The research group has together with a handful of teachers become a department at Blekinge Institute of Technology within the Faculty of Computing from January 1, 2014.

As a research leader, Dr. Wohlin, and his research groups, has successfully attracted research funding from both national and international agencies and industry. Dr. Wohlin was the main applicant for a large research project (BESQ) funded by the Knowledge Foundation. The total size of the project including matching funds (mostly in-kind) from industry was 86 million SEK over more than 6.5 years period, i.e. July 1, 2002 until December 31, 2008. In the last ten years he has been the main applicant or project manager for research projects being granted than 85 million SEK in external funding (approximately 10 million Euros).

Dr. Wohlin's main research interests are: empirical methods and studies, software management, agile methods, software metrics, software process assessment and improvement, requirements engineering, software quality and global software engineering.

## **Authorship**

Dr. Wohlin is the principal author of the book "Experimentation in Software Engineering" published by Springer in 2012. The book is a revision and update of the book "Experimentation in Software Engineering – An Introduction" published by Kluwer Academic Publishers, Boston, MA in the USA in 2000. The book has been translated into Chinese, and the Chinese edition was released in 2015. He is the author of a textbook on software engineering in Swedish published by Studentlitteratur in 2005. He is an editor of two books together with colleagues from Australia: "Managing Software Engineering Knowledge" published by Springer Verlag in 2003, and "Engineering and Managing Software Requirements" published by Springer Verlag in 2005, and more recently with a Canadian colleague, editor of a book entitled "Software Project Management in a Changing World" to be published by Springer Verlag in 2014.

He is the main author or co-author of more than 85 international journal publications and more than 10 book chapters. Dr. Wohlin is regularly publishing himself at international conferences and workshops in software engineering. The total number of meeting publications, most with a thorough review process, is more than 120 articles. This includes both invited papers and regular submissions. His total number of peer-reviewed publications internationally exceeds 200 articles.

Dr. Wohlin has been a keynote speaker at the European Software Control and Metrics conference in Munich, Germany in 2000, the conference on Empirical Assessment in Software Engineering at Keele University, UK in 2001, and the 37<sup>th</sup> Euromicro conference on Software Engineering and Advanced Applications in August 2011. In 2013, he was the keynote speaker at 17<sup>th</sup> International Conference on Empirical Assessment in Software Engineering in Porto de Galinhas, Brazil and at the 8<sup>th</sup> International Joint Conference on Software Technologies in Reykjavik, Iceland. He was a keynote speaker at the 10<sup>th</sup> International Symposium on Empirical Software Engineering and Measurement in Ciudad Real, Spain in 2016. He will be the academic keynote speaker at 18<sup>th</sup> International Conference on Agile Software Development in Cologne, Germany in 2017.

He has an h-index of 52 in “My Citations” in Google Scholars with the book on Experimentation in Software Engineering having more than 3800 citations, and the total number of citations exceeds 12000. His h-index in ISI Web of Science (only journal articles) is 23.

### **Education**

In the postgraduate education, including licentiate and doctoral exams, Dr. Wohlin has been the main advisor for 14 doctoral exams and the advisor for 9 doctoral exams. He has been the main advisor for 16 licentiate exams and the advisor of 14 licentiate exams. The exams include degrees awarded at Lund University, Linköping University and Blekinge Institute of Technology. Dr. Wohlin has 24 academic grandchildren on the doctoral level, i.e. students finishing their degrees with former doctoral students of Dr. Wohlin as the main advisors. As part of the postgraduate education, Dr. Wohlin has given more than 10 different courses within the doctoral program.

In the master programs at Lund University, Dr. Wohlin has initiated new courses, improved existing courses and been the responsible lecturer for several courses, both in performance analysis and software engineering. In 1995, the large-scale software development course under the management of Dr. Wohlin was voted the best course in the Computer Science and Engineering program. He has since 1993 advised 55 master theses in the area of software engineering at different universities. Dr. Wohlin was the initiator of a bachelor program in software engineering launched at Lund University (campus in Helsingborg) in 1998. At BTH, he has provided courses and been responsible for the Master theses in software engineering. The teaching at Blekinge Institute of Technology has been somewhat limited by other commitments such as being pro vice chancellor, dean and being successful in attracting external funding.

### **Industrial experience**

As a complement to his academic career, he has five years of industrial experience from software development, quality management and as a software engineering consultant. Dr. Wohlin’s industrial work has included being the software quality manager for the first release of the Base Station Controller of the GSM system at Ericsson. In addition, he has worked as an expert consultant with statistical usage testing, process assessment and evaluation as well as system management issues for a new generation of telecom networks at Ericsson in the beginning of the 1990s. At four occasions, he has been contracted to be part of a team doing a worldwide assessment of the software development of an international company in the area of process automation.

### **Evaluator**

Dr. Wohlin is regularly invited to perform different evaluations as an expert reviewer. This includes being on doctoral committees, expert reviewer for promotions to different professor levels, evaluator of research project proposals and quality evaluator. Dr. Wohlin has been an evaluator of 33 doctoral theses in Sweden, Norway, Finland, The Netherlands, Italy, Singapore and Australia. He has been expert reviewer for 25 professor chairs, promotions to full professor or guest professors in Sweden, Norway, Finland, UK, The Netherlands and USA. In addition, he has also been an expert reviewer for 16 positions or promotions to assistant/associate professor in Sweden, Austria, UK and Australia. Dr. Wohlin has acted as a reviewer of research project proposals from Sweden (incl. the Vinnova Excellence Centre applications in the ICT area), Norway, The Netherlands, Hong Kong, Qatar, Australia and USA (NSF).

Dr. Wohlin is on the Scientific Advisory Board for the School of Science at Aalto University in Finland, and on the board for the ITS-EASY industrial research school at Mälardalen University in Sweden.

Dr. Wohlin was vice chairman of evaluation panel for research project in computer science at the Swedish Research Council in 2016. He will be on a review panel for research proposals in computer science at the Academy of Finland in 2017.

### **Community service**

Since January 1, 2016 Dr. Wohlin is Special Content Editor (managing special issues and special sections) for the journal of *Information and Software Technology* published by Elsevier with their main office in Amsterdam. He was the Editor-in-Chief of the journal from 2008 to 2015. Before becoming the Editor-in-Chief for the aforementioned journal, he has been Co-Editor-in-Chief since 2001. He is also on the editorial boards of two additional journals: *Software Quality Journal* (since 2002) and *Requirements Engineering Journal* (since 2005). From 2002 to 2012, he was on the editorial board of *Empirical Software Engineering: An International Journal*. Springer Verlag, Germany, publishes all these three journals. Dr. Wohlin has been the guest editor for special issues or special sections for *Transactions on Software Engineering, Information and Software Technology, Software Quality Journal, and Empirical Software Engineering: An International Journal*.

Dr. Wohlin was the program chair for the International Software Metrics Symposium in London, UK in 2001; publicity chair for the International Conference on Software Engineering Education & Training in Madrid, Spain in 2003, program chair for the International Symposium on Empirical Software Engineering in Rio de Janeiro, Brazil in 2006 and main responsible for the International Advanced School of Empirical Software Engineering, which was co-located together with the International Symposium on Empirical Software Engineering and Measurement in Madrid in 2007. More recently, he was the research program chair for XP 2012 in Malmö, Sweden. In 2014, he was the program co-chair for the International Conference on Software Testing in Cleveland, USA. Dr. Wohlin is yearly on approximately 3-5 program committees for international conferences in software engineering. In total, he has been on more than 100 program committees over the years. Dr. Wohlin is a regular reviewer, in addition to those where he serves on the editorial board or as editor-in-chief, for some of the key journals in software engineering, including *IEEE Transactions on Software Engineering, ACM Transactions on Software Engineering and Methodology, Journal of Systems and Software and IEEE Software*.

### **University management**

Dr. Wohlin was pro vice chancellor of Blekinge Institute of Technology for six years (2004-2010). He has been supporting the vice chancellor primarily in relation to the strategic development of the university and acting as the substitute for the vice chancellor when needed.

Dr. Wohlin served as the first dean for Undergraduate and Graduate Education at Blekinge Institute of Technology, which included chairing the Board for Undergraduate and Graduate Education. He has also been on several other boards, including the University Board at Blekinge Institute of Technology, one of the research boards at Lund University, and employment and promotion boards at both Lund University and Blekinge Institute of Technology, and he is currently on the Faculty Board at Blekinge Institute of Technology.

When Blekinge Institute of Technology re-organized from January 1, 2014 into three faculties with 12 departments, he became the first dean of the newly created Faculty of Computing. He has five departments in the faculty and he is overall responsible for education, research and recruitment within the faculty. In the role as dean he is part of the university management team.