

# 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 in 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 the University of New South Wales in Sydney, Australia between 2009 and 2011, and 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 PhD degree in the area of software reliability and performance modelling in 1991 both from Lund University. Dr Wohlin was appointed to docent (associate professor) at Lund University in 1995.

In 2011, he was elected as member number 1618 of the Royal Swedish Academy of Engineering Sciences (IVA) since the inception of the academy in 1919.

## 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 period 1971-2012 in an article published in *Scientometrics* in October 2014.

At several occasions, he has been ranked among the top 15 scholars in systems and software engineering by the *Journal of Systems and Software* for his contributions in terms of publications in the leading software engineering journals. Prof. Claes Wohlin has been ranked in the following periods 1998-2002 (No. 14), 1999-2003 (No. 10), 2002-2006 (No. 8), 2003-2007 (No. 9), and finally 2010-2017 (No. 11) in the experienced researcher category. Furthermore, he is listed as number 8 in terms of impact (citations) among the experienced researchers for the period 2010-2017. He is ranked fifth for his contributions to experimentation in software engineering from 1993 to 2002 in an article in *Transactions on Software Engineering* in September 2005. The journal also ranks institutions. Dr Wohlin has been instrumental in the ranking of Lund University (12th in the period 1999-2003) and Blekinge Institute of Technology (11th in the period 2002-2006, 5th in the period 2003-2007, 6th in the period 2004-2008 and 6th in the period 2010-2017) among the top 15 institutions. Blekinge Institute of Technology is the highest ranked in Europe.

## 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 the 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. Under Dr Wohlin's leadership, the group grew from four people in 2000 to 25 in 2013. 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 as well as industry. Dr Wohlin was the primary

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 6.5 years, i.e. July 1, 2002, until December 31, 2008. In the last ten years, he has been the principal applicant or project manager for research projects being granted close to 100 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. The book is the leading methodology book in software engineering with close to 7000 citations. 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 an editor of one book with a Canadian colleague titled: "Software Project Management in a Changing World" published by Springer Verlag in 2014.

He is the principal author or co-author of more than 90 international journal publications and more than ten 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 130 articles. It includes both invited papers and regular submissions. His total number of peer-reviewed publications internationally exceeds 240 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, the 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 Evaluation and Assessment in Software Engineering in Porto de Galinhas, Brazil and 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. In 2017, he held the academic keynote the 18<sup>th</sup> International Conference on Agile Software Development in Cologne, Germany and at the Lero (Irish Software Research Center) Annual Seminar in Athlone, Ireland. In 2018, he was the keynote speaker at the 22<sup>nd</sup> Conference on Evaluation and Assessment in Software Engineering in Christchurch, New Zealand.

He has an h-index of 59 in "My Citations" in Google Scholars with the book on Experimentation in Software Engineering having close to 7000 citations, and the total number of citations exceeds 21100.

## **Education**

In the postgraduate education, including licentiate and doctoral exams, Dr Wohlin has been the principal advisor for 15 doctoral exams and the advisor for nine doctoral exams. The exams include degrees awarded at Lund University, Linköping University and Blekinge Institute of Technology. Dr Wohlin has more than 30 academic grandchildren on the doctoral level, i.e. students finishing their degrees with former doctoral students of Dr Wohlin as the principal advisor or advisor. As part of the postgraduate education, Dr Wohlin has given more than ten different courses within the doctoral program. Today, seven of his former PhD students are full professors at different universities.

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 at Lund University. 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 limited by other commitments such as being pro-vice-chancellor (prorector), 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. Besides, 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 at 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. It 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 an expert reviewer for 25 professor chairs, promotions to full professor or guest professors in Sweden, Norway, Finland, UK, The Netherlands and USA. Moreover, he has 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, Finland, The Netherlands, Hong Kong, Qatar, Australia and USA (NSF).

Dr Wohlin was vice-chairman of an evaluation panel for research projects in computer science at the Swedish Research Council in 2016. He was on a review panel for research proposals in computer science at the Academy of Finland in 2017 and 2018.

### **Community service**

Dr Wohlin was the Editor-in-Chief of the journal of Information and Software Technology published by Elsevier from 2008 to 2015. Before becoming the Editor-in-Chief, he was Co-Editor-in-Chief since 2001. When stepping down from being Editor-in-Chief, Dr Wohlin was appointed to Special Content Editor (managing special issues and special sections) from 2016 to 2018. After stepping down as editor, he has been appointed emeritus editor to honour his contributions to the journal. He has been on the editorial board for three other journals: Software Quality Journal (2002-2018), Requirements Engineering Journal (2005-2018) and Empirical Software Engineering: An International Journal (2002-2010). 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, the 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 foremost 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.

Furthermore, 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 has over the years been on approximately 3-5 program committees each year 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 an editor, for some of the leading 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 (prorector) of Blekinge Institute of Technology for six years (2004-2010). He supported the vice-chancellor primarily concerning the strategic development of the university and acting as the substitute for the vice-chancellor when needed.

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. The faculties have later been merged into two faculties (the Faculty of Computing stayed unchanged), and some departments have merged. Dr Wohlin was re-elected to serve as the dean for the Faculty of Computing, and in total, he served as dean for five years (2014-2018). The dean was responsible for education, research and recruitment within the faculty. In the role as dean, he was part of the university management team.

Moreover, 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 on the Faculty Board at Blekinge Institute of Technology (before the re-organisation in 2014).