

Curriculum Vitae

Sophie I. Hallstedt

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SHORT BIO AND AGENDA

Sophie I. Hallstedt is an Associate Professor at BTH. In 2008 she initiated the research area Sustainable Product Development (SPD). Since then, she has developed the research area together with her colleagues and is now supervising four PhD students within this research area and leads a research group of seven. Sophie is leading the research area SPD within the Profile project Model Driven Development and Decision Support as one of the prioritized and selected research tracks at BTH. Her research is about how a strategic socio-ecological sustainability perspective can be integrated and implemented on strategic, tactical and operational levels in companies in order to be able to bring forward sustainable solutions. Several methods, models and approaches have resulted from her research which for example, enhance the ability to measure: i) maturity level of sustainability implementation; ii) sustainability consequences of different solutions, and then; iii) quantify and visualize the progress of sustainability implementation. The purpose of her research is to increase the product design teams' capabilities to make strategic choices and contribute to a more proactive company regarding sustainability issues and make business advantages out of that.

Sophie has initiated and finalized several research projects, for example Sustainability criteria in concept evaluation methodology - a postdoc project of two years funded by Vinnova; and, Strategic, Tactical and Operational implementation of Sustainability into the Innovation Process (STOSIP) - a KKSHög project of three years. The research from the STOSIP project was one key reason to a sustainability prize awarded to one of the research partners from their most important customer.

Sophie has also initiated and developed courses and programmes at BTH such as the Master programme in Sustainable Product-Service System Innovation, MSPI, and was the Programme Director during several years until she during two years had the role as Head of the department of Strategic Sustainable Development at BTH. Sophie devotes her teaching efforts to sustainable development and product development courses, both via BTH lectures and via lectures on other universities and in industry on national and international level. During her research she has contributed in some 70-peer-reviewed publications within her research area, and has around 1700 citations and a h-index of 17 (according to google scholar).

AREAS OF EXPERTISE

- Sustainable product development
- Sustainability assessments
- Sustainability integration in early product innovation phases
- Strategic Sustainable Development Planning

LANGUAGES

- Swedish (mother tongue)
- English (fluent)
- German (beginner's level)

ADDITIONAL EDUCATION

- Pedagogy courses for higher education, BTH, Sweden
- Ph.D. Supervision Course, Linné University, Växjö, Sweden.
- Managing Product
 Development for
 Executives, Chalmers
 Professional Education
- Development- Group-Leader- education, Försvarshögskolan

ACADEMIC WORK EXPERIENCE

Below is a summary of different positions and roles during my employment at Blekinge Institute of Technology (BTH), followed by a detailed description over the years.

Appointed positions:

- Course responsible and/or Examiner for several courses: since 2002-
- Project Leader in several research projects: since 2006-
- Programme Director of Master Programme in Strategic Leadership towards Sustainability and/or Master Programme in Product Service System Innovation: 2008-2011
- Supervisor to PhD students: since 2008-
- Head of Department of Strategic Sustainable Development, BTH: 2011-2013
- Vice Head of Department: since 2013-
- Research area leader in Sustainable Product Development: since 2013-
- Chairman of the hearing process of BTH's vice chancellor candidates: 2018
- Teacher representative on the Board of Governors for BTH: since 2019-
- An Advisory Board Member of the the International Design Society: since 2019-

Employment positions:

• Teacher: 1995

• PhD student:1995-2008

• Lecturer – 2001-2008

• Senior Lecturer – since 2008

2018-present

- Senior Lecturer, Associate Professor
- **Research area leader** for Sustainable Product Development at BTH.
- **BTH applicant** for a project to Vinnova "Challenge driven innovation program" step 2.
- Applicant and Project leader for a Vinnova program funded project called "SIP-step1" project
- Research track leader in one subproject in the KKS-funded Profile project "MD3S".
- **Main supervisor** for three PhD-students (Jesko Schulte, Matilda Watz, Carolina Villamil) and **supervisor** for one PhD-student (Patricia Lagun Mesquita).
- Examiner and senior lecturer in Bachelor & Master courses and PhD courses.
- Vice Head of the TISU department
- Chairman of the hearing process of BTH's vice chancellor candidates.
- Teacher representative on the Board of Governors for BTH.
- Advisory Board Member of the International Design Society

2015 - 2018

- Senior Lecturer, Associate Professor
- **Research area leader** for Sustainable Product Development at BTH.
- Project leader for the KKS-funded "STOSIP" project
- Research track leader in one subproject in the KKS-funded Profile project "MD3S".
- Main supervisor for three PhD-students (Jesko Schulte, Matilda Watz, Carolina Villamil) and supervisor for one PhD-student (Patricia Lagun Mesquita).

- Examiner and senior lecturer in Bachelor & Master courses and PhD courses.
- **Vice Head** of the TISU department.

2013 - 2015

- Senior Lecturer, PhD
- Supervisor for two PhD-students (Patricia Lagun Mesquita and Rachael Gould)
- Research area leader for Sustainable Product Development at BTH.
- Applicant and Project leader for the KKS-funded "STOSIP" project.
- Examiner and senior lecturer in Bachelor & Master courses.
- Vice Head of the TISU department.

2011 - 2013

- Senior Lecturer, PhD
- **Head of Department of Strategic Sustainable Development, BTH**
- Supervisor for two PhD-students (Cecilia Bratt and Rachael Gould)
- **Project leader** for the KKS-funded "Labelling and Procurement support for Sustainable Product Innovation".
- **Project leader and Post doc** for the Vinnova funded project "Sustainability criteria in concept evaluation methodology".
- Examiner and senior lecturer in Bachelor & Master courses.

2009 - 2011

- Senior Lecturer, PhD
- **Senior Lecturer** at the Dept. of Mechanical Engineering, BTH.
- **Project leader** for the KKS-funded "Labelling and Procurement support for Sustainable Product Innovation".
- **Supervisor** for PhD-student (Cecilia Bratt).
- **Programme Director** of the Master Programme in "Sustainable Product-Service System Innovation".
- **Project leader** for the development project of the Master Programme in "Sustainable Product-Service System Innovation".
- Examiner, course responsible and senior lecturer in Bachelor & Master courses.

2008-2009

- Senior Lecturer, PhD
- Project leader for the KKS-funded research project "Prioritisation Support for Sustainable Product Development"
- **Project leader** for the KKS-funded research project "Sustainability-based product Labelling and Procurement".
- Supervisor for PhD-student (Cecilia Bratt)
- Programme Director for the Master Programme "Strategic Leadership towards Sustainability"
- Programme Director for the Master Programme "Sustainable Product-Service System Innovation"
- Examiner, course responsible and senior lecturer in Bachelor & Master courses.

2006-2008

- Lecturer, Lic
- Project leader for the research project "Prioritisation Support for Sustainable Product Development"
- Project leader for the research project "Sustainability-based product Labelling and Procurement".
- Lecturer in Bachelor & Master courses.

2002-2006

- Lecturer, Lic
- **Examiner, course responsible and senior lecturer** in Bachelor & Master courses.
- Developed a course "Introduction to Sustainable Engineering"
- Started up an exchange programme with Kunming University of Technology in China.
- Took part in the development and teaching of a new international Master Programme "Strategic Leadership towards Sustainability".

1997-2001

- PhD-student
- **Ph.D. studies** at the Department of Mechanical Engineering (formally registered at the Department of Physical Resource Theory at Chalmers University of Technology).
- Course development and teaching.

1995-1997

- Teacher
- Integrated environmental aspects in courses at the Department of Mechanical Engineering and at the Department of Spatial Planning.
- **Developed the course** "Cleaner Technology" for a EU-exchange programme (Erasmus)
- Taught the course "Cleaner Technology" at the University of Gdansk in Poland.

EDUCATION/EXAMS

- **Associate Professor (Docent)** in Mechanical Engineering with emphasis on Sustainable Product Development, Blekinge Institute of Technology, Karlskrona, Sweden, 2015. *(Appendix X)*
- **Ph.D.** in Mechanical Engineering with emphasis on Sustainable Product Innovation, Blekinge Institute of Technology, Karlskrona, Sweden, 2008. (*Appendix X*)
- **Licentiate** in Engineering in Environmental Sciences, Chalmers University of Technology, Gothenburg, Sweden, 2001. (*Appendix X*)
- **M.Sc.** in Environmental Planning and Design (Civilingenjör), Luleå University of Technology, Luleå, Sweden, 1994. (*Appendix X*)

OTHER EDUCATIONS

- Basic studies in pedagogy during 6 months at Luleå University of Technology, 1991.
- Studies in ecology, biology, environmental engineering and other subjects relevant for sustainability and environmental issues. These studies are additional studies to the formal exams and have taken place during one year at Curtin University of Technology, Perth, Australia, 1993.

PEDAGOGICAL ADVANCEMENT

- 1. Philosophy of Science with pedagogical application to higher education
 - 7, 5 ECTS credit points; Course code: FI2402, 2009, BTH
- 2. Higher Education Pedagogy- project course,
 - 7, 5 ECTS credit points; Course code: PE2403, 2010, BTH
- 3. Publications:
 - Scientific article in International Journal of Engineering Education

 Broman G., Byggeth* S. and Robèrt K-H. 2002. Integrating Environmental Aspects in

 Engineering Education, International Journal of Engineering Education, ISSN 0949149X, Vol. 18, No. 6.
 - Proceeding in EMSU- Environmental Management for Sustainable Universities, 2004. Waldron, D., Byggeth, S., Ny, H., Broman, G., & Robèrt, K. H. 2004. Structured comprehension for systems thinking, learning and leadership towards sustainability. In: Proceedings of EMSU- Environmental Management for Sustainable Universities.
 - Proceeding in Pedagogical conference "Läralärdom", 2010.
 Hallstedt Sophie. 2010. How can Master students be supported and evaluated on their Master thesis for a good learning result? (Extended abstract) Lärarlärdom, Karlskrona, 18 August 2010.
 - Proceeding in the International Conference ERSCP & EMSU, 2010.
 Hallstedt S., Thompson A. (2010) Integrating sustainability and innovation through a master's program in product-service systems. Conference ERSCP & EMSU, Delft 25-29 October 2010.
- 4. Teaching material:
 - Co-author of a course book "Sustainability Handbook". In this course book, I contributed to a chapter on Sustainable Product Development. The book was used and is still widely used in courses at BTH. An estimated 200-250 students per year from BTH have benefited from the book.

Robèrt K-H., Broman G., Waldron D., Ny H., Byggeth* S., Cook D., Johansson L., Oldmark J., Basile G., Haraldsson H., MacDonald J., Moore B., Connell T. and Missimer M. Sustainability Handbook, Studentlitteratur, Lund, Sweden, 2012. ISBN 978-91-44-07549-5.

- 5. Programme development and Program director.
 - Programme Director of Master programme in Strategic Leadership towards Sustainability (MSLS) during 2009.
 - Project leader for the development project of the Master Programme in "Sustainable Product-Service System Innovation" (MSPI), 2009-2010.
 - Programme Director of the Master Programme in "Sustainable Product-Service System Innovation" (MSPI), 2009-2011.
- 6. Experience of teaching and supervision of students:
 - Ask for my pedagogical portfolio to get a full overview of different courses and their different course levels, my different responsibilities in these courses, and examples of my teaching forms in each course.
 - In my pedagogical portfolio is a summary excerpts from the last six years of supervision of thesis work, licentiate work, doctoral dissertations, and my responsibility role for each work.
 - Completed "Forskarhandledarutvecklingskurs" (FLUS-2009)
 - Completed "Docent Promotion Program at BTH" (2009-2011)
- 7. Research pedagogical development
 - Completed Research supervisor development course- "Forskarhandledarutvecklingskurs" (FLUS-2009)
 - Completed Associate Professor Promotion Program (2009-2011)

SUPERVISOR & ADVISORS FOR RESEARCH STUDIES

- Principal Supervisor to postdoc Yin Kwok since 2017
- Principal Supervisor to PhD student Carolina Villiamil since 2017, will finalize her Licentiate Degree in 2020.
- Principal Supervisor to PhD student Matilda Watz since 2017. Will finalize her Licentiate Degree in 2019, 9th of December: Utilizing requirements to support sustainable product development. Introductory approaches for strategic sustainability integration
- Principal Supervisor to PhD student Jesko Schulte since 2016. Finalized his Licentiate Degree in 2019: Sustainability Risk Management in Product Development Companies motivating change.
- Supervisor to PhD student Patricia Lagun Mesquita since 2015. Finalized her Licentiate Degree in 2016: The missing pillar: Exploring social sustainability in product development.
- Supervisor to PhD student Rachael Gould since 2013. Finalized her Licentiate Degree in 2015: Integrating sustainability into concept selection decision-making.
- Supervisor to PhD student Cecilia Bratt since fall 2009. Finalized her PhD research in 2014:
 Bratt, C. Integrating a Strategic Sustainability Perspective into Eco-Labelling, Procurement and Supply Chain Management Technology Doctoral Dissertation Series No. 2014:06. Blekinge Institute of Technology
- Advisor and conduct research with other PhD students at the Department since 2008.

EXTERNAL OPPONENT/EXAMINER FOR PHD

- 2014 Examiner for Gunilla Clancy PhD. Title: Assessing sustainability and guiding development of more sustainable products. Department of Chemical and Biological Engineering, Chalmers University of Technology, Gothenburg, Sweden.
- 2015 Examiner for Romain Allais PhD. Title: Systematic transition for a sustainable development: between design and territory. University of Technology of Troyes, France
- 2016 Examiner for Sofia Poulikidou PhD. Title: Assessing design strategies for improved life cycle environmental performance of vehicles. Department of Sustainable Development, Environmental Science and Engineering. KTH Royal Institute of Technology, Sweden
- 2017 Examiner for Narges Asadi PhD. Title: Flexibility in assembly systems using product design. School of Innovation, Design and Engineering, Mälardalen University, Sweden.
- 2019 Examiner & Opponent for Raphaelle Stewart PhD. Title: Integration of Sustainability Approaches in Companies: an Exploration of Narratives and Internal Organizational Functioning. Department of Management Engineering, Technical University of Denmark & Department of Design, Norwegian University of Science and Technology.

DEVELOPMENT & LEADERSHIP SKILLS

- 10 credits course in Product Development and Leadership: "Managing Product Development for Executives" by Chalmers Professionals (2012).
- Two full-day course in working environment and rehabilitation by Previa (2012).
- Leadership coaching and supervision by Previa and consultant Expandio (2012-2013).
- 1-day course in"Leadership and management" by consultant Expandio (2012).
- 2-day course in Art of hosting (2012).
- Literature study in coaching and leadership (2012-2013.
- Five full-days course in Development, Group, Leader (UGL in Sweden) by National Defence University (Försvarshögskolan) (2013).

LEADERSHIP EXPERIENCES AT BTH

- Head of Department for Strategic Sustainable Development in two years (2011-2013).
- Research area leader for Sustainable Product Development at BTH (since 2014).
- Project leader for seven different educational- and research projects with external funding (since 2006).
- Appointed chairman of BTH's Hearing Committee for evaluating Vice Chancellor candidates (2018).

OTHER ENGAGEMENTS AND MEMBERSHIPS

- Steering group member for Sustainable Design a Special Interest Group in the Design Society, https://www.designsociety.org
- Advisory Board Member of the International Design Society, https://www.designsociety.org
- Run (together with 2 other researchers) a national PhD course in Sustainability in Engineering Product Development as part of the course Engineering Product Development within the Product

Development Academy. http://www.productdevelopmentacademy.se/2017/09/10/pda-future-workshop-at-design-sciences-lund-university/)

Review of papers for Journals:

- International Journal of Production Economics
- Journal of Sustainable Engineering
- Journal of Cleaner Production
- Journal of Design Research (JDR)

Review of papers for International Conferences:

- 20th International Conference on Engineering Design (ICED15)
- 21th International Conference on Engineering Design (ICED17)
- 2nd International Conference on Engineering Design (ICED19)
- 15th Design Conference (Design 18)

Chair at international conferences:

- International Society for Airbreathing Engines, 20th ISABE Conference, 12-16 September, 2011, Gothenburg, Sweden. (*Presentation session*)
- ASME, 18th Design for Manufacturing and the Life Cycle Conference (DFMLC) 2013 in the International Design Engineering Technical Conferences & Computers and Information in Engineering Conference. August 4-7, 2013 in Portland, USA. (*Presentation session*)
- International Design Conference Design 2016, Dubrovnik, Croatia, May 16-19, 2016. (*Workshop organizer and chair*)
- 21th International Conference on Engineering Design (ICED17) Vancouver, Canada, 21-25.08. 2017. (Presentation session and Workshop organizer and chair)
- NordDesign 2018, August 14 17, 2018, Linköping, Sweden. (*Presentation session*)
- International Design Conference Design 2018, Dubrovnik, Croatia, May 21-24, 2018. (*Presentation session and Workshop organizer and chair*)
- 22nd International Conference on Engineering Design (ICED19) Delft, The Netherlands, 5-8 August, 2019. (*Presentation session and Workshop organizer and chair*)

Key note speaker/invited guest speaker

- 23 November 2016 in Gothenburg, Swedish Life Cycle Center's 20th anniversary From thinking to action. Title: Life Cycle Thinking in Sustainable Product Development.
- 6 September 2018 in Gothenburg The future of engineering design capabilities. Title How can engineering decisions contribute to a sustainable society- as we move into the unknown?
- 5th December 2019 in Karlshamn Frukostföreläsning at Netport --TOBE. Title: Sustainable Product Development methods and tools for sustainable and resource efficient solutions. (Hållbarproduktutveckling metoder och verktyg för hållbara och resurseffektiva lösningar.)

APPLICANT AND ACCEPTED RESEARCH APPLICATIONS IN NATIONAL COMPETITION FROM RESEARCH FOUNDATIONS

- "Prioritisation Support for Sustainable Product Development"; 2006, accepted funding from the Knowledge Foundation (Dr#: 2005/0293). I was co-applicant and lead the project in practice.
- "Labelling and procurement support for sustainable product innovation"; 2009, accepted funding from the Knowledge Foundation (Dr#: 20120214) I was co-applicant and lead the project in practice.

- "Märknings- och upphandlingsstöd för hållbar produktinnovation"; 2009, accepted funding from Blekinge forskningsråd. I was main applicant and lead the project.
- "Post-doc for sustainable product innovation"; 2009 accepted funding from the Knowledge Foundation (Dnr 2008/0618) I was main applicant and lead the project.
- "Master i hållbar produkt-och tjänsteinnovation"; 2010, accepted funding from the Knowledge Foundation (Dnr 20100221) I was main applicant and lead the project.
- "Sustainability criteria in concept evaluation methodology"; 2011, accepted funding from Vinnova (Dnr 2011-01287) I was main applicant and lead the project.
- "Strategic, Tactical and Operational implementation of Sustainability into the Innovation Process STOSIP"; 2014, accepted funding from the Knowledge Foundation (Dnr: 20140154) I was main applicant and lead the project.
- Profile project Model Driven Development and Decision Support MD3S+ accepted funding from the Knowledge Foundation (Dnr 20120278 och BTH 6.1.1-0087-2018) I was co-applicant, leads subprojects and research track.
- "Sustainability Implementation Package SIP step 1, 2018, accepted funding from Vinnova.(Dnr2018-0036). I was main applicant and lead the project.
- "Digital Sustainability Implementation Package DSIP step 2, submitted to Vinnova 2019. (Dnr BTH-6.1.1-0114-2019). I was co-applicant.

In addition, I have been a co-applicant for international EU projects:

- "An integrated solution for waste reduction, reuse and material recovery of engineered products", submitted to H2020 WASTE -6a- 2015, was not approved funding. (Dnr BTH-6.1.1-0020-2015).
- "MEDISCY submitted to H2020 CIRC-01-2016-2017, was not approved funding (Proposal nr: 730295-1).

RECENT PROJECTS

2013—present

Model Driven Development and Decision Support - MD3S+

This research profile aims, in co-production mode develop, disseminate, and integrate relevant, user-friendly and efficient support methods and tools for sustainable product service system innovation. Within the project, Sophie leads the Sustainable Product Development research area and supervises several PhD-students. She also leads a subproject that aims to integrate sustainability and value in the early innovation phases. The project is funded by Knowledge Foundation. http://bth-collaboration.se/content/model-driven-development-and-decision-support-md3s.

2018

Sustainability Implementation Package - SIP step 1

Sophie initiated, applied and lead this project. It was an initiating project with the aim to create a base for developing an implementation package with methodology and interconnected methods and tools to systematically integrate and implement sustainability in product development companies. The project is funded by Vinnova and the project ran in 9 months, (2018). https://www.bth.se/sip step 1

2015 -2018

Strategic, Tactical and Operational implementation of Sustainability into the Innovation Process – STOSIP.

Sophie initiated, applied and lead the STOSIP project. The overall project objective was to support manufacturing companies to integrate and implement sustainability on strategic, tactical and operational levels in the company. Within the project, Sophie has investigated how to guide decisions for down-selection and exploration of emerging

technologies and materials from a sustainability and value perspective. Sophie supervised several PhD-students and lead work packages in the project. The project was funded by Knowledge Foundation. https://www.bth.se/eng/stosip/

2010-2013

Sustainability criteria in concept evaluation methodology

Sophie initiated and applied for a post-doc period of two years. The project objective was to promote Sophie's qualifications, and build up a long-term partnership between BTH and GKN. The research aim was to clarify how to define sustainability features in the early product innovation phases and suggest an improved concept design and evaluation methodology, including sustainability aspects during the product life cycle. The project was funded by Vinnova.

2009-2011

Post-doc for Sustainable Product Innovation

Sophie initiated and applied for a post-doc period of two years. During this period, she spent some of her working time in industry and at the same time developed her research profile more towards early phases of the product innovation process with the manufacturing industry as target group. The main purpose for this project was also to further develop research in sustainable product development through application and implementation of support tools for Sustainable Product Development. The project was funded by Knowledge Foundation.

2009-2012

Labelling and Procurement Support for Sustainable Product Innovation

The main question for this project was a framework for strategic sustainable development that could aid development of criteria and guidelines for sustainability-based product labelling and sustainability-based procurement policies. Sophie was the initiator, project leader in practise and supervisor for the PhD student Cecilia Bratt. The project was funded by Knowledge Foundation.

2006-2009

Prioritisation Support for Sustainable Product Development

Sophie was one of the researchers initiating and lead the project in practise. Within the project she worked with the main question - how organizational understanding and adoption of a strategic sustainability perspective at senior management level permeate product and process development. The project was funded by Knowledge Foundation.

2005-2008

Effective and Sustainable Waterjet Cutting

This project took a multidisciplinary approach that involved fluid dynamics, machine dynamics/virtual prototyping and sustainability assessment as the main and interrelated areas. Within this project Sophie suggested an approach for sustainability-driven design optimization. The project was funded by the Knowledge Foundation.

1998-2000

Tool for Sustainable Product Development and Investment Planning

The project which was carried out in collaboration between the Department of Mechanical Engineering, BTH, and the Department of Physical Resource Theory, Chalmers University of Technology and Göteborg University. Within the project Sophie developed a method for sustainable product development. The project was funded by the Swedish National Board for Industrial and Technical Development.

MAIN PUBLICATIONS

Note: Before 2007 my surname was Byggeth.

Thesis

- 1. Hallstedt S and M. Byggeth. *Performance validation of the Bio-Sensor, an automated biomonitoring system using the Fathead minnow (Pimephales promelas) as sensor species.* Master Thesis, Luleå University of Technology 1994.
- 2. Byggeth S. H. *Integration of Sustainability Aspects in Product Development*. Licentiate Thesis, Department of Physical Resource Theory, Chalmers University of Technology and Göteborg University, ISSN 0280-2872, Göteborg, Sweden, 2001.
- 3. Hallstedt, Sophie. *A Foundation for Sustainable Product development*. Doctoral Thesis, School of Enginering, Blekinge Institute of Technology. ISBN 978-91-7295-136-5, Karlskrona, Sweden, 2008.

Conference Proceedings

- 1. Byggeth S. H., Broman G., Holmberg J., Lundqvist U., and Robèrt K-H. 2000. A Method for Sustainable Product Development in Small and Medium Sized Enterprises. In: *Proceedings of Third International Symposium on Tools and Methods of Competitive Engineering TMCE2000*, April 18-21, 2000, Delft University of Technology, Delft, the Netherlands.
- 2. Byggeth S.H. and Broman G.I. 2001. Environmental aspects in product development An investigation among small and medium-sized enterprises, in: *Proceedings of SPIE, Environmentally Conscious Manufacturing*, Surendra M. Gupta, Editor, vol. 4193, 261-271. ISBN: 0-8194-3858-8.
- 3. Byggeth S. H., Broman G., Lundqvist U., Robèrt K-H., and Holmberg J. 2001. An Approach to Sustainability Product Analysis in Product Development. In: *Proceedings of ERCP*, 7th European Roundtable on Cleaner Production, May 2-4, 2001, Lund, Sweden.
- 4. Waldron, D., Byggeth, S., Ny, H., Broman, G., & Robèrt, K. H. 2004. Structured comprehension for systems thinking, learning and leadership towards sustainability. In: *Proceedings of EMSU*-Environmental Management for Sustainable Universities.
- 5. Byggeth S., Ny H., Wall J., Broman G. & Robèrt K-H. 2007. Introductory procedure for sustainability-driven design optimization. In: *Proceedings of the International Conference on Engineering Design*, ICED' 07, 28-31 August, 2007, Cite des Sciences et de l'industrie, Paris, France.
- 6. Hallstedt, S. 2009. Strategic decisions guided by tools and methods based on sustainability questions. In: *Proceedings of the International Conference on Research into Design*, ICoRD'09. 7-9 January, 2009, Indian Institute of Science, Bangalore, India.
- 7. França, C. L., Hallstedt, S. and Broman, G. 2009. Systematic guidance for how to integrate a strategic sustainability perspective in core business decision systems. In: *Proceedings of the International Conference on Engineering Design*, ICED' 09, 24-27 August, 2009. Standford University, Standford, CA, USA.
- 8. Hallstedt S. 2010. Sustainability driven product development -some challenges and opportunities for aero industry. 2010. In: *Proceedings of Flygteknik kongress* 18-19 October, Stockholm City Conference Centre, Sweden.
- 9. Hallstedt Sophie. 2010. How can Master students be supported and evaluated on their Master thesis projects for a good learning result?, *Lärarlärdom*, 18 Agugust, 2010, Karlskrona, Sweden.
- 10. Hallstedt S., Thompson A. (2010) Integrating sustainability and innovation through a master's program in product-service systems. *Conference ERSCP & EMSU*, 25-29 October, 2010, Delft Technical University, The Netherlands.
- 11. Thompson A., Lindahl P., Hallstedt S., Ny H., Broman G. (2011). Decision Support Tools for Sustainability in Product Innovation in a few Swedish Companies. In: *Proceedings of the*

- International Conference on Research into Design, ICoRD'11. 10-12 January, 2011, Indian Institute of Science, Bangalore, India.
- 12. Hallstedt S. and Thompson Anthony (2011). Sustainability driven product development -some challenges and opportunities for aero industry. 2011. In: *Proceedings of International Society for Airbreathing Engines*, 20th ISABE Conference, 12-16 September, Gothenburg, Sweden.
- 13. Bratt, C., Hallstedt, S., Robèrt, K.-H., Broman, G and Oldmark, J. 2011. Eco-labelling criteria development for strategic life cycle management. *Proceedings of the Life Cycle Management Conference* LCM 2011 Towards Life Cycle Sustainability Management, August 28th 31st 2011, Berlin, Germany.
- 14. Ny, H., Hallstedt, S., Ericson Å. 2012. A Strategic Approach for Sustainable Product Service System Development. In: *Proceedings of CIRP Design 2012 Sustainable Product Development*, 28-30 March 2012, Indian Institute of Science, Bangalore, India.
- 15. Thompson, A. W. Hallstedt S., Isaksson O. (2012). Introductory approach for sustainability integration in conceptual design. In: *Proceedings of International design conference DESIGN 2012*. Dubrovnik, Croatia, May 21 24, 2012.
- 16. Bratt C., Broman G., Robèrt K-H, Hallstedt S. (2012). Procurement as driver of sustainable product-service innovation. In: *17th International Conference Sustainable Innovation*. Bonn, Germany. 29th-30th October 2012.
- 17. Hallstedt S. and Isaksson O. (2013) Clarification of sustainability consequences of manufacturing processes in conceptual design. *Proceedings of the 19th International Conference on Engineering Design, ICED'* 13, 19-22 August, 2013. Seoul, Korea.
- 18. Hallstedt S., Thompson A., Isaksson O., Larsson T., Ny H. (2013) A decision support approach for modeling sustainability consequences in an aerospace value chain. *Proceedings of ASME, 18th Design for Manufacturing and the Life Cycle Conference (DFMLC) 2013 in the International Design Engineering Technical Conferences & Computers and Information in Engineering Conference.* August 4-7, 2013 in Portland, USA.
- 19. Bertoni M., Hallstedt S., Isaksson O. (2014) Value assessment of sustainability hotspots in conceptual design: an aerospace study. *Proceedings of Tools and Mehtods for Competitive Engineering (TMCE)*. May 19-23, 2014, Budapest, Hungary, ISBN 978-94-6186-177-1.
- 20. * Hallstedt S. How to define a sustainability design space. *Proceedings of the 20th International Conference on Engineering Design (ICED)*. Milan, Italy, July 27-30, 2015.
- 21. Isaksson O., Bertoni M., Hallstedt S., Lavesson N. Model Based Decision Support for Value and Sustainability in Product Development. *Proceedings of the 20th International Conference on Engineering Design (ICED)*. Milan, Italy, July 27-30, 2015.
- 22. Mesquita L.P., Hallstedt S., Broman G., Isaksson O. An introductory approach to concretize social sustainability for sustainable manufacturing. *Proceedings of TMCE*, 2016, Aix-Provence, France, May 9-13, 2016.
- 23. Mesquita L.P., Broman G., Hallstedt S. Analyzing Social LCA approaches through the lens of Strategic Sustainable Development. *Proceedings of the XXVII ISPM Innovation Conference: Blending tomorrow's innovation Vintage, Porto, Portugal, June 19-22, 2016.*
- 24. Zetterlund H., Hallstedt S., Broman G. Implementation potential of sustainability-oriented decision support in product development. *Proceedings of the 26th CIRP Design Conference*. Stockholm, Sweden, June 14-17, 2016.
- 25. Hallstedt S., Isaksson O., Wallin J., Zetterlund H. (2016) Material Criticality Method product vulnerability from a sustainable business perspective. *Proceedings of the International Design Conference Design 16. Dubrovnik, Croatia*, May 16-19, 2016.
- 26. Jaghbeer, Y., Hallstedt, S.I., Larsson, T. and Wall, J., 2017. Exploration of simulation-driven support tools for sustainable product development. Procedia CIRP, 64, pp.271-276.
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