

Curriculum Vitae Sophie I. Hallstedt



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).

WORK EXPERIENCE

2018-present Associate Professor and Research area leader for

Sustainable Product Development at Dept. of Strategic Sustainable Development, BTH. **Project leader** for "SIP-step1" project and one subproject in the Profile project "MD3S". **Main supervisor** for three PhD-students (Jesko Schulte, Matilda Watz, Carolina



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- https://youtu.be/alLqKIamJQM

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

Villamil) and **supervisor** for one PhD-student (Patricia Lagun Mesquita). **Examiner and senior lecturer** in Master courses and PhD courses.

- 2015 2018 Associate Professor and Research area leader for Sustainable Product Development at Dept. of Strategic Sustainable Development, BTH. Project leader for "STOSIP" project and one subproject in the Profile project "MD3S". Main supervisor for three PhDstudents (Jesko Schulte, Matilda Watz, Carolina Villamil) and supervisor for one PhDstudent (Patricia Lagun Mesquita). Examiner and senior lecturer in Master courses and PhD courses.
- 2013 2015 Senior Lecturer and supervisor for two PhD-students (Patricia Lagun Mesquita and Rachael Gould) in Sustainable Product Development at Dept. of Strategic Sustainable Development, BTH. Research area leader and project leader in the Profile project "MD3S". Project leader in the "STOSIP" project. Examiner and senior lecturer in Master courses.
- 2011 2013 Head of Department and senior lecturer. Supervisor for two PhD-students (Cecilia Bratt and Rachael Gould) in Strategic Sustainable Development. Project leader for "Labelling and Procurement support for Sustainable Product Innovation". Post doc in the Vinnmer project "Sustainability criteria in concept evaluation methodology".
- 2008 2011 Senior Lecturer at the Dept. of Mechanical Engineering, BTH. Project leader for the research project "Labelling and Procurement support for Sustainable Product Innovation". Supervisor for two PhD-students (Cecilia Bratt). Programme Director and project leader for the development project of the Master Programme in "Sustainable Product-Service System Innovation".

1997 – 2008 **PhD student and lecturer** at the Dept. of Mechanical Engineering Development, BTH. Formally registered at the Department of Physical Resource Theory at Chalmers University of Technology. Course development and teaching.

1995 – 1997 **Teacher** at the Dept. of Mechanical Engineering, **Högskolan** Karlskrona/Ronneby

1995 Assisting traffic planner at Boverket, Karlskrona

1992 Environmental Engineer at SSAB Tunnplåt, Luleå

EDUCATION/EXAMS

- Associate Professor (Docent) in Mechanical Engineering with emphasis on Sustainable Product Development, Blekinge Institute of Technology, Karlskrona, Sweden, 2015.
- **Ph.D.** in Mechanical Engineering with emphasis on Sustainable Product Innovation, Blekinge Institute of Technology, Karlskrona, Sweden, 2008.
- Licentiate in Engineering in Environmental Sciences, Chalmers University of Technology, Gothenburg, Sweden, 2001.
- **M.Sc.** in Environmental Planning and Design (Civilingenjör), Luleå University of Technology, Luleå, Sweden, 1994.
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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. Lecturer promotion 2010
- 4. 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.
- 5. 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.

SUPERVISOR & ADVISORS FOR RESEARCH STUDIES

- Principal to postdoc Yin Kwok since 2017
- Principal Supervisor to PhD student Matilda Watz since 2017
- Principal Supervisor to PhD student Carolina Villiamil since 2017
- 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 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
- Supervisor to PhD student Rachael Gould since 2013. Finalized her Licentiate Degree in 2015: Integrating sustainability into concept selection decision-making.
- Advisor and conduct research with other PhD students at the Department since 2008.
- Completed "Forskarhandledarutvecklingskurs" (FLUS-2009)
- Completed "Docent Promotion Program at BTH" (2009-2011)

EXTERNAL OPPONENT/EXAMINER FOR PHD

- 2014 Examiner for Gunilla Clancy PhD. Title: Assessing sustainability and guiding development of more sustainable products. Chalmers, 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. KTH Royal Institute of Technology, Sweden.
- 2017 Examiner for Narges Asadi PhD. Title: Flexibility in assembly systems using product design. 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. Technical University of Denmark.

MANAGEMENT DEVELOPMENT & LEADERSHIP SKILLS

- Product Development and Leadership course in "Managing Product Development for Executives" by Chalmers Professionals (2012)
- Two full-day course in working environment and rehabiliation by Previa (2012).
- Followed 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)
- UGL Utveckling, Grupp, Ledare- utbildning enligt Försvarshögskolan (2013)

LEADERSHIP EXPERIENCES AT BTH

- Head of Department for Strategic Sustainable Development, 2 years
- Lead research track SPD since 2014 (2013)
- Lead research projects; UC1; STOSIP; (before labeling and ...KKS)
- 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 <u>https://www.designsociety.org</u>
- 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. <u>http://www.productdevelopmentacademy.se/2017/09/10/pda-future-workshop-at-design-sciences-lund-university/)</u>

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 Conference:

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

Chair at international conferences:

- International Society for Airbreathing Engines, 20th ISABE Conference, 12-16 September, 2011, Gothenburg, Sweden.
- 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.
- 21th International Conference on Engineering Design (ICED17) Vancouver, Canada, 21-25.08. 2017.
- NordDesign 2018, August 14 17, 2018, Linköping, Sweden

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?

APPLICANT AND ACCEPTED RESEARCH APPLICATIONS

- "Prioritisation Support for Sustainable Product Development"; 2006, accepted funding from the Knowledge Foundation (KK-Stiftelsen)
- "Labelling and procurement support for sustainable product innovation"; 2009, accepted funding from the Knowledge Foundation (KK-Stiftelsen)
- "Märknings- och upphandlingsstöd för hållbar produktinnovation"; 2009, accepted funding from Blekinge forskningsråd.
- "Post-doc for sustainable product innovation"; 2009 accepted funding from the Knowledge Foundation (KK-Stiftelsen)
- "Master i hållbar produkt-och tjänsteinnovation"; 2010, accepted for funding from the Knowledge Foundation (KK-Stiftelsen)
- "Sustainability criteria in concept evaluation methodology"; 2011, accepted for funding from Vinnova
- "Strategic, Tactical and Operational implementation of Sustainability into the Innovation Process STOSIP"; 2014, accepted for funding from the Knowledge Foundation (KK-Stiftelsen)
- "Sustainability Implementation Package SIP step 1, 2018, accepted for funding from Vinnova.

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 supervises several PhD-students and leads a subproject that aims to integrate sustainability and value in the early innovation phases. The project is funded by Knowledge Foundation. <u>http://bth-collaboration.se/content/model-driven-development-and-decision-support-md3s</u>.

2018

Sustainability Implementation Package – SIP step 1

This project is 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 will run 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 leads the STOSIP project. The overall project objective is 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 supervises several PhD-students and leads work packages in the project. The project is funded by Knowledge Foundation. https://www.bth.se/eng/stosip/

2010-2013

2009-2011

Sustainability criteria in concept evaluation methodology

Sophie initiated and applied for a post-doc period of two years. The project objective was to promote the project leader'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.

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 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 leading the project. 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

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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Hallstedt, S. and Pigosso, D., 2017. Sustainability integration in a technology readiness assessment framework. In DS 87-5 Proceedings of the 21st International Conference on Engineering Design (ICED 17) Vol 5: Design for X, Design to X, Vancouver, Canada, 21-25.08. 2017.
- 28. *Schulte, J. and Hallstedt, S., 2017. Challenges for integrating sustainability in risk management– current state of research. In DS 87-2 Proceedings of the 21st International Conference on

Engineering Design (ICED 17) Vol 2: Design Processes, Design Organisation and Management, Vancouver, Canada, 21-25.08. 2017.

- 29. Jaghbeer, Y., Motyka, Y. and Hallstedt, S., 2017. A process for designing lean-and sustainable production. In DS 87-1 Proceedings of the 21st International Conference on Engineering Design (ICED 17) Vol 1: Resource Sensitive Design, Design Research Applications and Case Studies, Vancouver, Canada, 21-25.08. 2017.
- 30. * Schulte, J. and Hallstedt, S., 2017. Challenges and preconditions to build capabilities for sustainable product design. In DS 87-1 Proceedings of the 21st International Conference on Engineering Design (ICED 17) Vol 1: Resource Sensitive Design, Design Research Applications and Case Studies, Vancouver, Canada, 21-25.08. 2017.
- 31. Schulte, J. and Hallstedt, S., (2018) Workshop method for early sustainable product development. International Design Conference - Design 2018 Dubrovnik - Croatia, May 21-24, 2018.
- 32. Schulte, J. and Hallstedt, S., (2018) Sustainability risk management for product innovation. International Design Conference - Design 2018 Dubrovnik - Croatia, May 21-24, 2018.
- 33. Villamil, Carolina; Nylander, Johanna; Hallstedt, Sophie; Schulte, Jesko; Watz, Matilda (2018) Additive manufacturing from a strategic sustainability perspective. International Design Conference - Design 2018 Dubrovnik - Croatia, May 21-24, 2018.
- 34. **Watz, Matilda; Hallstedt, I. Sophie (2018) Sustainability in product requirements. International Design Conference Design 2018 Dubrovnik Croatia, May 21-24, 2018.
- 35. **Bertoni, Alessandro; Dasari, Siva Krishna; Hallstedt, Sophie; Andersson, Petter (2018) Modelbased decision support for value and sustainability assessment: applying machine learning in aerospace product development. International Design Conference - Design 2018 Dubrovnik -Croatia, May 21-24, 2018.
- 36. Isaksson, Ola Hallstedt, I. Sophie, Rönnbäck, Ö. Anna. (2018) Digitalisation, sustainability and servitisation: Consequences on product development capabilities in manufacturing firms. International Design Conference - Norddesign – Linköping, August 14-17, 2018.
- Schulte, Jesko and Hallstedt, I. Sophie, (2018) Risk Management Practices in Product Development Companies. International Design Conference - Norddesign – Linköping, August 14-17, 2018.
- Watz, Matilda; Hallstedt, I. Sophie (2018) (2018) Addressing Sustainability in Product Requirements - a Systems Perspective International Design Conference - Norddesign – Linköping, August 14-17, 2018.
- Kwok Yin Sze, Hallstedt, Sophie, I. (2018) Towards Strategic Sustainable Product Development: Challenges and Opportunities for Communicating Sustainability in a Value Chain. International Design Conference - Norddesign – Linköping, August 14-17, 2018.
- 40. Hallstedt S., Nylander W. J. (accepted for publication) Sustainability research implementation in product development learnings from a longitudinal study. ICED, 22nd International Conference on Engineering Design. 5-8 August. Delft, The Netherlands.
- Eckert C., Isaksson O., Hallstedt S., Malmqvist J., Rönnbäck Ö. A., Panarotto M. (accepted for publication) Industry Trends to 2040. ICED, 22nd International Conference on Engineering Design. 5-8 August. Delft, The Netherlands.
- 42. Isaksson O., Eckert C., Borgue O. Hallstedt I. S., Hein M.A, Gericke K., Panarotto M., Reich Y., Rönnbäck Ö.A. (accepted for publication) Perspectives on innovation: The role of engineering design. ICED, 22nd International Conference on Engineering Design. 5-8 August. Delft, The Netherlands.

* Awarded best paper at the conference. Rated in the top 10% papers based on reviewer's scores.

** Awarded best paper of the conference. Rated in the top 5% papers based on reviewer's scores.

Book & Book chapter

- 1. Robèrt, K.-H., Broman G., Waldron D., Ny H., Byggeth S., Cook D., Johansson L. et al. 2007. Strategic leadership towards sustainability. Blekinge Institute of Technology, Sweden.
- Ny H., Hallstedt S., Ericsson Å. (2013) A strategic Approach for sustainable product service system development. pp 427-436. Editor: Amaresh C. Cirp Design – Sustainable Product development. Springer, London. ISBN 978-1-4471-4506-6.

Journals articles

- 1. Broman G., Byggeth S. and Robèrt K-H. 2002. Integrating Environmental Aspects in Engineering Education, International *Journal of Engineering Education*, ISSN 0949-149X, Vol. 18, No. 6.
- Byggeth S. H. and Hochschorner E. 2006. Handling trade-offs in Ecodesign tools for sustainable product development and procurement. *Journal of Cleaner Production*, vol. 14, issue 15-16, 1420-1430.
- 3. Byggeth S. H., Broman G. and Robèrt K.-H. 2007. A method for sustainable product development based on a modular system of guiding questions. *Journal of Cleaner Production*, vol. 15, issue 1, 1-11.
- 4. Ny H., Hallstedt S., Robèrt K.-H. and Broman G. 2008. Introducing templates for sustainable product development through an evaluation case study of televisions at the Matsushita Electric Group. *Journal of Industrial Ecology*, vol 12, issue 4, 600-623.
- 5. Hallstedt S., Ny H., Robèrt K.-H. and Broman G. 2010. An approach to assessing sustainability integration in strategic decision systems. *Journal of Cleaner Production*. vol.18, 703–712.
- 6. Bratt, C., Hallstedt, S., Robèrt, K.-H., Broman, G. and Oldmark, J. 2011. Assessment of ecolabelling criteria development from a strategic sustainability perspective. *Journal of Cleaner Production*. vol.19, 1631-1638.
- Bratt, C., Hallstedt, S., Robèrt, K.-H., Broman, G. and Oldmark, J. 2013. Assessment of criteria development for public procurement from a strategic sustainability perspective. *Journal of Cleaner Production*. vol. 52, 309–316.
- Hallstedt S. Thompson A., Lindahl P. 2013. Key Elements for Implementing a Strategic Sustainability Perspective in the Product Innovation Process. *Journal of Cleaner Production*. vol. 51, 277-288.
- 9. Hallstedt, S., Bertoni M., Isaksson O. 2015. Assessing sustainability and value of manufacturing processes: a case in the aerospace industry." *Journal of Cleaner Production* vol. 108, 169-182.
- Bertoni M., Hallstedt S., Isaksson O. 2015. A model-based approach for sustainability and value assessment in the aerospace value chain. *Journal of Advances in Mechanical Engineering*, Special Issue on "Environmentally Conscious Technologies in Mechanical Engineering".
- 11. Hallstedt S. 2017. Sustainability Criteria and Sustainability Compliance Index for Decision Support in Product Development, *Journal of Cleaner Production*. vol. 140, 251–266.
- 12. Hallstedt S. and Isaksson O. 2017. Material criticality assessment in early phases of sustainable product development. *Journal of Cleaner Production*. vol.161, 40-52.
- Villamil Carolina and Hallstedt Sophie (2018) Sustainability product portfolio a review. European Journal of Sustainable Development.

- 14. Schulte, J. and Hallstedt, S., 2018. Company Risk Management in Light of the Sustainability Transition. Sustainability, 10(11), p.4137.
- 15. Schulte, J. and Hallstedt, S., 2018. Self-Assessment Method for Sustainability Implementation in Product Innovation. Sustainability, 10(12), p.4336.
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