



**Strategic Research Program
Environmental Management and Corporate
Social Responsibility (EM&CSR) in Global
Value Chains**

Annual report 2012



**Department of Industrial Economics and Technology Management
Norwegian University of Science and Technology**



1. Teaching and supervision 2012

Courses 2012:

Based on the mainstreaming of the courses related to environmental management that are offered to the 2-year master in HSE, 2-year international master in Industrial Ecology, 2-year master in Project Management and 2-year international master in Globalization, the following courses are offered:

Master level courses

TIØ4195 – Environmental management and corporate governance, co-ordinated by Annik Magerholm Fet: this course is mandatory for all students in the industrial ecology international master programme.

TIØ5215 - Corporate Social Responsibility and green supply management, co-ordinated by Tim Torvatn and John E Hermansen (Annik M Fet 2012)

TIØ4300 - Environmental Science, Ecosystems and Sustainability, coordinated by John E. Hermansen

TIØ4853 – EIT Village – Verdiskapning og samfunnsansvar, co-ordinated by John E. Hermansen

TIØ4855- EIT Village- Standardization and Globalization - a Tool for global Innovation, coordinated by Annik Magerholm Fet (planned for Spring 2013)

Other courses

TIØ 4260 Bedriften, samfunnsansvar, organisasjon og miljø

TIØ4520 HMS Project

TIØ4525 HMS Specialization course

TIØ4925 HMS-master

TIØ4955 Industrial Ecology, Master Thesis

TIØ5335 Industrial Ecology, Project

IØ3012 Globalization program - internship

2. Master's thesis spring 2012

"Corporate Social Responsibility as a Driver for Innovation and Growth in Small and Medium-sized Enterprises - A Quantitative and Qualitative Study of High-Growth Small and Medium-sized Enterprises", Line Lavendel Nygård Hansen, NTNU School of Entrepreneurship, Supervisor: Lars Øystein Widding, IØT, Co-supervisor: Annik Magerholm Fet, IØT, Department of Industrial Economics and Technology Management, Submission date: June 2012

"Establishment of EPD programme in Latvia: case of construction industry", Ilze Garda. IndEcol program, - supervisor Professor Annik Magerholm Fet, Department of



Industrial Economics and Technology Management, Submission date: August 2012

"The quality of stakeholder engagement: An empirical study of Norwegian companies", Karoline Burdahl Teien, Master of Science degree in Globalization – Global politics and culture. Supervisor Professor Annik Magerholm Fet, co-supervisor Cecilia Haskins, Submission date: June 2012

"Uncovering Corporate Social Responsibility - Deparadoxation of power in the CSR-discourse", Marius Lervåg Aasprong Master thesis in Sociology, co-supervised Annik Magerholm Fet, Faculty of Social Sciences and Technology Management, Department of Sociology and Political Science, NTNU 2012

"Driving sustainable ship recycling", Madhur Ahuja, Project Management, - supervisor Professor Annik Magerholm Fet, Department of Industrial Economics and Technology Management, Submission date: June 2012

3. Specialization projects Autumn 2012

- Karina Nilsen: CSR in Polaris Media Fall-12
- Erika Palmer: CSR in Faveo Prosjektledelse Fall-12
- Kristoffer Magerøy and Sigurd Vildåsen: The UN Global Compact seen from a business perspective
- Petter Nordby and Torje Nedland Molnes: Environmental Management Systems
- Volkan Tunarli: Improved stakeholder management in Aliaga ship recycling yards of Turkey
- Piotr Winther: Environmental management in the petroleum industry
- Eirik Vågsether: How can different understandings of CSR be seen in light of societal, political, economic, and cultural conditions?

4. Active Phd-projects 2012

Aspen, Dina: "Life Cycle Management as a Tool for Sustainable Decision-Making in Maritime Value Chain", 2011-2015

Vakar, Natallia: "Evaluation of the Impact of CSR on Competitiveness of Production Enterprises operating globally", 2009-2013

Schau, Erwin M.: "Environmental life cycle assessment of fish food products with emphasis of the fish catch process", defence: 8. February 2012, committee: Professor Helias A. Udo de Haes, Dr. Scient. Ragni Ofstad, Dr. Scient John Hermansen

Skaar, Christofer: «An overview of different types of Eco-labels, their respective application areas and related management aspects», defence: 16th of January 2013, supervisor: Annik Magerholm Fet, committee: Professor Matthias Finkbeiner, Technische Universität Berlin, Germany; Professor Mette Morsing, Handelshøjskolen

i København, Denmark; Professor Luitzen de Boer, Institutt for industriell økonomi og teknologiledelse, NTNU.

Sparrevik, Magnus: "Methods for Sustainable Urban Coastal Area Management applied on Contaminant Sources", supervisor: Annik Magerholm Fet, defence: 19. April, committee: Associate Professor Gregory A. Kiker, Associate Professor Henrikke Baumann, Professor Kristin Svendsen

Publications 2012

Journal Articles

Cornelissen, Gerard; Sparrevik, Magnus; Martinsen, Vegard; Shitumbanoma, Victor; Hoel, Terje; Formo, Otto; de Kruijff, Hans; Kros, Mathijs; van Keur, Matthijs. *Improving crop yield and storing carbon. Biochar in conservation farming in Zambia. Phase 2 report* 1. NGI report no. 20100920-07-R. Oslo: NGI 2012 52 s. ,UMB

Haskins, Cecilia; Spangenberg, Joachim. *Sustainability Science*. Newsletter of the International Sustainable Development Research Society 2012 ; Volume 2012.(2) s. 16-18.

Hermansen, John Eilif. *Methodology for Forest Ecosystem Mediating Indicator - Case Mt. Kilimanjaro, Tanzania. I: Sustainable forest management - case studies*. INTECH 2012 ISBN 978-953-51-0511-4. s. 3-26 NTNU

Hermansen, John Eilif; Hewes, Anne; Pacca, Sergio. *Report from International Society for Industrial Ecology Delegates to Rio+20 UN Conference on Sustainable Development June 2012*. ISIE News 2012 ;Volum 12.(2) Suppl. July s. NTNU

Skaar, Christofer; Fet, Annik Magerholm. *Accountability in the Value Chain: From Environmental Product Declaration (EPD) to CSR Product Declaration*. Corporate Social Responsibility and Environmental Management 2012 ;Volum 19.(4) s. 228-239 NTNU

Skaar, Christofer; Jørgensen, Rikke Bramming. *Integrating human health impact from indoor emissions into an LCA: a case study evaluating the significance of the use stage*. The International Journal of Life Cycle Assessment 2012 s. – NTNU

Shainee, Mohamed; Haskins, Cecilia; Ellingsen, Harald; Leira, Bernt Johan. *Designing Offshore Fish Cages Using Systems Engineering Principles*. Systems Engineering 2012; Volum 15 (4) s. 396-406 NTNU

Zhang, Fengrong; Fet, Annik Magerholm; Xiao, Xinwei. *Grey RBF Neural Network Forecasting on LV Under the View of Government Responsibility*. Advanced Materials Research 2012 ;Volum 452-453. s. 700-704 NTNU

2. Conference papers

Aspen, Dina Margrethe; Fet, Annik Magerholm. Using life cycle eco-efficiency assessments to evaluate marine systems design. ICMT2012; 2012-06-25 - 2012-06-28, China

Fet, Annik Magerholm; Aspen, Dina Margrethe; Ellingsen, Harald; Skaar, Christofer. Sustainable Designs in view of Life Cycle Management. 11th International Marine Design Conference; 2012-06-11 - 2012-06-14, Glasgow

Fet, Annik Magerholm; Panthi, Laxmi. Standards on Carbon and Water Footprints and their implications for the Maritime Sector. ICMT-China; 2012-06-23 - 2012-06-26, Harbin, Heilongjiang, China

Fet, Annik Magerholm; Magerøy, Marina; Aspen, Dina Margrethe; Malnes, Dagfin. Harmonization of documentation for EPD-generation - the Norwegian model. Pathways to environmental sustainability: Methodologies and experiences; Invited speaker, 2012-12-13 - 2012-12-14; Sicily, Italy

Haskins, Cecilia. *Systems engineering for the Shell Eco-marathon student project*. Proceedings of the 6th APCOSE 2012: 30.april-2.may, 2012, Brisbane Australia.

Haskins, Cecilia; Welland, Alexander Lervaag. *Systems engineering saves the day!* Proceedings of the 22nd Annual INCOSE International Symposium; 7-9. July, 2012, Rome, Italy.

Haskins, Cecilia; Welland, Alexander Lervaag. *The Marriage of Project Management and Systems Engineering in Design and Manufacturing of A Shell Eco-Marathon Car*. Proceedings of IWAMA - (International workshop of Advanced Manufacturing and Automation); 21-22. June 2012, NTNU, Trondheim, Norway.

Schau, Erwin A. Meissner; Fet, Annik Magerholm; Finkbeiner, Matthias; Ellingsen, Harald. Life cycle assessment as a basis for eco-labelling of fish food products, In Corson MS, van der Werf HMG, editors. Proceedings of the 8th International Conference on Life Cycle Assessment in the Agri-Food Sector (LCA Food 2012). 8th International Conference on Life Cycle Assessment in the Agri-Food Sector; 2012-10-01 - 2012-10-04

4. Other publications/reports

Hanssen, Ole Jørgen; Abrahamsen, Uno. *Forebyggende miljøvern i Norge - 20 års tilbakeblikk*. Østfoldforskning AS 2012 (ISBN 978-82-7520-667-9) 46 s. Oppdragsrapport (Østfoldforskning)(OR.10.12) NTNU ØSTFOLDFORSKNING

Schau, Erwin A. Meissner. Environmental life cycle assessments of fish food products with emphasis on the fish catch process. : NTNU 2012 (ISBN 978-82-471-3299-9) 206 s. Doktoravhandling ved NTNU(2012:18)

Sparrevik, Magnus, Methods for Sustainable Management of Contamination Sources in Urban Coastal Areas: NTNU 2012 (ISBN 978-82-471-3464-1), Doktoravhandling ved NTNU (2012:94)

Fet, Annik Magerholm. Tenker miljø fra vugge til grav. Sunnmørsposten [Avis] 2012-12-17

Research activities and projects

1. Arranged conferences and guest visits at the EMCSR Group

In cooperation with IGLO WP1 (MARINTEK), the IGLO-WP workshop “Status and the way forward” was arranged in Trondheim, 1-2nd March with researchers and industrial partners attending.

Internal EMCSR Research seminar at the EMCSR Group, August 15th, 2012

2. National cooperation

Since 2010 the EMCSR research group have collaborated in a cooperative project with the Norwegian School of Management (BI) and the University of Stavanger with the topic “CSR as a Strategic Tool for Sustainability Focused Innovation in Small and Medium Sized Enterprises”. This project assessed the level of innovation in Norwegian “gazelle companies”. Findings from the project was presented at the Nordic Innovation conference on CSR in Trondheim 11th of October 2012.

EMCSR Collaboration with the Fiskeridirektoratet, SINTEF and other research organizations and companies on the development of the national standard for PCR for seafood.

The conference “Building competence for a sustainable Norwegian maritime Industry” took place at Ålesund University College, 5.June 2012. The conference was supported by the MAROFF-program and was organized with the collaboration between NTNU, Marintek, Ålesund University College and NCE Maritime. The aim of the conference was to share the activities and outcomes of following three R&D projects:

The whole conference was designed to share the activities and research results achieved under each of these projects. In addition the conference was intended to discuss the further challenges in strengthening & improving the competitive capabilities of the Norwegian maritime industry. Each project was allotted a presentation slot, with a special keynote and a panel discussion.

Annik Magerholm Fet is a board member in the Norwegian Research Council's largest program, BIA: Brukerstyrt Innovasjonsarena.

Annik Magerholm Fet is board member of Standards Norge and the announced Norwegian expert in ISO 14000-revise processes.

Annik Magerholm Fet is a member of the Utvalg for Etikk og Samfunnsansvar in the Norwegian Confederation (NHO) and advisor to the NHO board.

Dina Margrete Aspen is the NTNU representative in the Technical Committee of EPD Norge.

Annik Magerholm Fet is Director of Education and Cecilia Haskins is the secretary of Norwegian Council of Systems Engineering (NORSEC).

3. International cooperation

"Building networks North East Normal University and Norwegian University of Science and Technology, NENU-NTNU", 21st of May, 2012, Institutt for Industriell Økonomi og Teknologiledelse, NTNU; with guests from the NENU visiting NTNU.

"Cooperation between NW Russia and Nordic countries on corporate social responsibility including anticorruption activities-phase II", 31st of May, 2012, UNDP/Global Compact, Oslo

4. Attended conferences and other events

- PhD-candidate Dina Aspen participated on the RINA conference "Systems Engineering in Ship and Offshore Design" in London 28th – 29th March.
- Post doc Cecilia Haskins participated in the 6th APCOSE held in Brisbane, Australia, 30.April-2.May, where she presented a paper on NTNU student projects in Systems Engineering.
- Marine and Maritime Science Partnership in Europe", the MARCOM+ and EMAR2RES projects concluding event in Brussels 22. March, Professor Annik Magerholm Fet participated in the conference
- Annik Magerholm Fet was invited with Standard Norge to The British Standards Institute, to discuss the use of Standards in education: London, November 16th, 2012.
- Omdømmeseminar, Ålesund, 14th of October Professor Annik Magerholm Fet
- The Oslo Conference on CSR, Oslo 13th to 15th of November 2012, Professor Annik Magerholm Fet
- Hermansen, John Eilif. Comments on United Nations Global Compact (UN Global Compact) and the assessment of progress, achievement and shortfalls. The Fifth ISBEE World Congress 2012; 2012-07-11 - 2012-07-14, NTNU
- Hermansen, John Eilif. Objectification of ecological stakes by means of indicators. EcoSummit 2012 4th International Ecosummit on Ecological Sustainability; 2012-09-30 - 2012-10-05, NTNU

Presentations

1. Guest presentations and invited speeches by the EMCSR Group

Aspen, Dina Margrethe; Fet, Annik Magerholm. Eco-efficiency assessments in marine systems design. CLEANTECH AT SEA, SUMMER SCHOOL; 2012-08-08 - 2012-08-08

Fet, Annik Magerholm. Mindre dingser – mer ressursbruk. Conference: Avfall Innland; 2012-01-26

Fet, Annik Magerholm. CSR – Myter og muligheter. LO-konferansen; 2012-03-28

Fet, Annik Magerholm. Environmental Management and CSR at NTNU: An overview of research activities. Research Seminar; 2012-04-20, NTNU

Fet, Annik Magerholm. Miljøanalyser/Analyse av bærekraft og CSR i havbrukssektor. Seminar; 2012-05-07, NTNU

Fet, Annik Magerholm. Miljøstyring. HMS-konferanse SIT; 2012-05-15, Nord Trøndelag

Fet, Annik Magerholm. CSR-Norway and Competence Generation. UNDP and Global Compact; Oslo; 2012-05-31

Fet, Annik Magerholm. Life Cycle Thinking in the maritime industry. CLEANTECH AT SEA, SUMMER SCHOOL; 2012-08-08 - 2012-08-08, Aalborg, Denmark

Fet, Annik Magerholm. Samfunnsansvar og bærekraft innen innovasjon og nyskaping i bedrifter. Haugesund Forsknings- og Innovasjonsfestival; Haugesund; 2012-09-24

Fet, Annik Magerholm. CSR and knowledge generation for the future we want. CSR - a driver of innovation and competitiveness in the Nordic region; 2012-10-11

Fet, Annik Magerholm. Life cycle project management in the maritime sector. Scientific Seminar for the Maritime Sector; 2012-10-25

Fet, Annik Magerholm. Life Cycle Analysis as a Strategic Tool for Eco-Modernity. Exploring Ecomodernity as a Business Agenda; 2012-11-15, BI-Oslo

Fet, Annik Magerholm. Is CSR a driver for success in Gazelle companies?. The role of corporations in a 'world at risk'; 2012-11-18 - 2012-12-19, NTNU

Fet, Annik Magerholm; Midttun, Atle. Is CSR a Strategic Tool for Innovation and Growth in Small and Medium Sized Enterprises?. Governance of Natural Resources; 2012-12-18 - 2012-12-19, NTNU

Haskins, Cecilia. Requirements management in context. Seminar in Requirements Management; 2012-06-07, NTNU

Haskins, Cecilia; Welland, Alexander Lervaag. The Marriage of Project Management and Systems Engineering in Design and Manufacturing of A Shell Eco-Marathon Car. IWAMA - (International workshop of Advanced Manufacturing and Automation); 2012-06-21 - 2012-06-22, NTNU

Haskins, Cecilia. Systems Engineering Primer. Introduction to Systems Engineering; 2012-08-27, NTNU

Haskins, Cecilia. Role of the systems engineer in safety critical systems. Workshop of Critical Software; 2012-09-27 - 2012-09-28, NTNU

Haskins, Cecilia. Sustainable industries and eco-cities-challenges of industrial symbiosis and system engineering. International Workshop On Eco-Cities And Industrial Symbiosis; 2012-09-28 NTNU

Hermansen, John Eilif. Input on fair social forest management and ecological indicators. Rio+20 Sustainable Development Dialogues Online Platform 2012 NTNU

Hermansen, John Eilif. Objektifisering av økologiske indikatorer. Utvikling av økologisk økonomi i Skandinavia; 2012-09-13 - 2012-09-14, NTNU

Hermansen, John Eilif. Grønn økonomi: fins det og er det i så fall noe for oss? Grønn økonomi mellom økologisk bærekraft og bærekraftig samfunn. IØTs Strategiseminar; 2012-10-25, NTNU

Hermansen, John Eilif. Valuation of ecosystem services and objectification of ecological indicators. The role of corporations in a world at risk; 2012-11-19 - 2012-11-20 NTNU

Hermansen, John Eilif. Sustainability and green economy. Governance of natural resources; 2012-12-18 - 2012-12-19, NTNU

Active research projects 2012

1. CSR Kompetansenettverk for Innovasjon and Nyskapning, CSR Norway

Project period: 2011-2013

Project manager: Professor Annik Magerholm Fet,

Project secretary: Dina Aspen/ Karina Nilsen

Website: www.csr-norway.no

In collaboration with business partners (NTE, SpareBank 1 SMN, Pharmaq, Polaris Media, Faveo Prosjektledelse and Fokus Bank), Innovasjon Norge and NHO – The Network is financed partly through the Research Council of Norway (NRC).

CSR Competence network aims to increase the CSR-competence in the intersection between education, research and the industry. The network is a collaboration-project between companies and knowledge partners from the region, where seminars, lectures and workshops are used to share and create new knowledge within the field. The network was established in 2011 and will last til Spring 2013, and is planned to create new projects in the spring of 2013.

Seminars and workshops by the CSR Network in 2012

- "CSR og Innovasjon i SMBer", 16th of February 2012, NTNU
- "Environmental management and CSR", 20th of April 2012, NTNU
- "CSR: Strategisk visjon eller etisk forpliktelse?" 10th of May, 2012, Konferansesenteret, Sparebank 1 SMN, Trondheim
- "Internal EMCSR research-seminar" 15th of August, 2012, NTNU
- "The future we want" 11th of October, 2012, Nordic Innovation, Rockheim
- "CSR in projects" 18th of October, 2012, Faveo Prosjektledelse
- "CSR in the Boardroom" 4th of December, 2012, NTNU

2. ShipSoft

Project period: 2011-2013

Project managers: Professor Annik Magerholm Fet and Dina Aspen

Building of software solutions for environmental- and cost analysis for the maritime sector, financed through regional forskningsfond, RFF, Annik M Fet og Dina Aspen. Project ShipSoft is a pre-project where the opportunities for integrating system analyses in marine systems design is explored. By investigating the informational, computational and analytical requirements for assessing marine design, opportunities and barriers for adopting such methods in the industry is identified. The project is connected to IGLO-MP 2020 with partners from Ulstein Design and Solutions, Pon Power, Fiskerstrand Shipyard and Fjord1.

3. CSR as a Strategic Tool for Sustainability Focused Innovation in Small and Medium Sized Enterprises

Project period: 2010-2012

Project leader at NTNU: Professor Annik Magerholm Fet

Project participant: Natallia Vakar, case-study I PhD

This project is a collaborative project between the Norwegian School of business (BI), University of Stavanger and NTNU. The project is headed by BI. The primary objective of the project is to strengthen the insight into how CSR contributes to sustainable innovation in small and medium sized enterprises and to contribute to building a Norwegian competency cluster capable of advising industry and policy-makers in this field. The secondary objective include the following: 1) To push the research frontier in the field and contribute to the international literature; 2) At the level of business, to contribute to useful practical insight into management tools, technology development approaches and innovation oriented business models for SMEs; 3) At the level of policy: to suggest additional policy tools and approaches to further innovation, sustainability and economic growth. The project is financed by Norges Forskningsråd, Forfi-program.

4. IGLO-MP: Innovation in Global Maritime Production (IGLO-MP2020)

(Website: www.iglo-mp2020.no)

Project periode: 2008-2012, budget 15 million

Project manager: Professor Annik Magerholm Fet

Prosjektsekretær: Laxmi Pant

IGLO-MP 2020 is a knowledge-building project with user involvement (KMB) with collaboration between the Norwegian University of Science and Technology (NTNU), Marintek and the industrial partners Ulstein International AS, Pon Power AS, Siemens AS and Fiskerstrand Verft AS. The project draws on the expertise in international institutions, on Roll Royce Maritime and the Norwegian Center of Expertise Maritime in Ålesund (NCE Maritime). The overall focus of this KMB is to strengthen the competitive capabilities of the Norwegian maritime industry in order to improve competitiveness. IGLO-MP 2020 has identified a few key areas and themes, which the consortium members perceive as critical for future development and sustainability of the maritime industry in Norway. These are elements which are believed to provide Norwegian ship owners, ship designers, ship consultants and maritime equipment suppliers with competitive advantages in years to come. In 2012, a seminar on "Status and the way forward" was arranged on the 1st and 2nd of March. The IGLO Conference was held on the 5th of June 2012, with the theme "Building competence for a sustainable Norwegian maritime industry"

5. Biochar on acidic agricultural lands in South-East Asia: Sequestering carbon and improving crop yield

Project period: 2010 - 2013

Project leader: Prof Jan Mulder, Norges Geotekniske Institutt

Project responsible at NTNU: Professor Annik Magerholm Fet

NTNU will in particular contribute to Work Package 6 with our expertise and experiences on LCA and its application on social aspects as well as the traditional environmental LCA. A special focus will be on the development of environmental and social life cycle assessment for application on biochar, especially its contribution to the development of impact assessment and weight models for land use areas. NTNU will further contribute to the use of life cycle management and systems engineering in new project areas

6. NS 9418: Norwegian Standard for Carbon footprint of seafood

Project period: 2012

Project leader: Erik Hognes (SINTEF)

Project responsible at NTNU: Professor Annik Magerholm Fet

A cooperation between SINTEF Fiskeri og Havbruk, NTNU, Østfoldforskning, NOFIMA and SIK to develop a new standard for carbon footprinting from seafood products. The project is developed in collaboration with actors from the Norwegian seafood and fishing industry.

Websites

www.csr-norway.no

www.iot.ntnu.no/csr

www.iglo-mp2020.no

www.netimpact.no

Twitter: @csrntnu

Plans for the EMCSR Group for 2013

1 Continuing active projects

ShipSoft: Work on LCA databases in the maritime sector, report June 2013.

Decision support for sustainable production of offshore ships in global fluctuating markets (2013-2017)

This is a knowledge building project (KMB) with collaboration between the NTNU-departments industrial economics and technology management (IØT), production- and quality management (IPK) and marine technology (IMT) and leading industries. This project will start in spring 2013 and environmental life cycle management will be a cross work-package activity.

The CSR Network project

Arrange and support activities in the CSR Network, host seminars and workshops on CSR in Norway.

2 Strategic development at IØT: sustainable value creation

IØT strategic development

- Supporting the IØT strategic development. Sustainable value creation: grønn verdiskapning.
- International seminar with Fritz Balkau (UNEP) 14.-14.th of March.
- Host internal research seminars.

3 Work on NTNU strategic goals on sustainable societal development

Havromsvitenskap og teknologi:

Work on different initiatives towards marine / maritime industries.

Bærekraftig samfunnsutvikling:

Work on initiatives on analytical tools and methods

4 Pending applications, planned initiatives and projects

New projects and applications,

- FP7-project: COMMITMENT - A Comprehensive Framework for the Analysis of the Impact of Transnational Companies on Human Development
- SSH.2013.3.2-1: LENS - Learning Based Social Innovation
- NANO2021 - SUSI Sustainable intermediate band solar cells
- Applying systems engineering method for accelerating transformative eco-innovations for sustainable personal mobility, collaboration with Latvia
- A Tool-Kit for Environmentally Conscious Energy Sector, collaboration with Poland
- Strategies for Eco-modernity: The Energy Sector under User Driven Transformation, collaboration with BI



Masters thesis are offered in different areas, 10 in total for the spring semester 2013
PhD-course IØ 8503 is offered spring 2013

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