Curriculum Vitae

Bjorn Martén

Date of Birth: June 23, 1951
Nationality: Swede

CONTACT DETAILS
Adress: Vägeröd 130 451 78 Fiskebackskil, Lysekil, Sweden.
Email: bjorn.marten@gmail.com
Cell phone: +46 733721402

EDUCATION
● 1970 –1976: M.Sc. Faculty of electronic engineering,
Chalmers University of Technology, CTH
● 1981: Teacher education, Gothenburg University

OVERVIEW
Specialisations
● Sustainable system design
● Applied biogas technology
● Sustainable lifestyle implementation

EMPLOYMENT SUMMARY
Engineer
● 1975 - 76: NMR – spectroscopy and gas chromatography, Bruker Spectrospin
● 1978 - 80: Medical ultrasound and dialysis, Organon Teknika
● 1983 - 2019: Consultant, innovator - Sustainable system design

Teacher
● 1982 - 83: Teacher in system control and electronics, Härnösands gymnasium
● 1984 - 94: Teacher in computer programming and electronics, Katrinelundsgymnasiet
● 1994 - 2015: Teacher in Ecological technology, mathematics and computer programming, Gullmarsgymnasiet in Lysekil

PROFESSIONAL EXPERIENCE - SUSTAINABLE DEVELOPMENT
● 1985 - 86 Initiative taker of Center for Ecological Technics, CET an NGO with environmental experts from all over Sweden aiming at promoting sustainable technologies by education, exhibition and development
● 1987: Initiator of the Swedish BioGas Federation 1987, SBGF an NGO with expertise within the field of biogas from all over Sweden aiming at promoting biogas technology
● 1987: Initiator of the first Biogas car project in Sweden including conversion of a VOLVO 244, 84 years model from gasoline to biogas.
● 1987-89: Coordinator for CET:s unique exhibition with 70 participating companies dealing with renewable energy, organic food and farming, sustainable transports including renewable vehicle fuels, small scale polyculture waste water treatment systems, recycling, and environmental friendly organic paint

● 1989 – 92: Constructor of the first biogas vehicle fuel filling plant in Sweden at Ryaverket in Gothenburgh
● 1994: Developer of new course plans involving sustainable development and introduction of the new subject Ecological technics, at Gullmarsgymnasiet in Lysekil
● 1995-96: Initiated the environmental activities leading to nomination of Gullmarsgymnasiet as a Green Flag school, an award for schools involved in sustainable activities.
● 1997: Coordinated and initiated the 4 day conference "The way towards an ecologically sustainable society" with 38 of Swedens most well known experts within all fields of sustainable development.
● 1998: Coordinated and initiated the conference "Rescue the West Coast Sea" at Kristinebergs Marine Research Center in Fiskebackskil
● 1999: Initiated the Save Lake Victoria course at Gullmarsgymnasiet aiming at giving the students awareness about environmental problems locally as well as in the Lake region and how to solve them.
● 2000: Initiated the development of family digester proto type at Gullmarsgymnasiet in Lysekil
● 2002: Installed a family digester prototype at Nyasanda High school in Ugunja Nyanza Province, Kenya
● 2003: Coordinator and initiator of the conference The school – a key agent for sustainable development or a toothless tiger
● 2004: Coordinator and initiator of the three day conference 'Education for sustainable development' in Kungalv, including exhibition/workshops with focus on sustainable food - lupine dishes, clay and straw house construction, biogas cars and eco textiles
● 2004: Lecturer at Atlantic College in Wales with the a speech "How to choose for a sustainable lifestyle "
● 2005: Mentor for Sweden's only student group participating in the World Youth Congress Stirling, Scotland
● 2006-07 Guest lecturer at Skövde University with speeches focussing at sustainable development
● 2007 Mentor for the Swedish- Kenyan group that was nominated for the Winning award in the Mondialogo contest with more then three thousands participants from universities all over the world. The name of their project was IWESS; Integrated Water Energy Sustainable Solutions.
The Mondialogo Engineering Award invites engineering students in developing and developed countries to form international teams to create project proposals that address the United Nations Millennium Development Goals – proposals to improve the quality of life in the developing world, particularly poverty eradication and the promotion of sustainable development. You will find more information at www.mondialogo.org
Each team was asked to actively engage in international cooperation and intercultural dialogue over a six-month period, from December 2006 to May 2007, to propose practical, high-quality engineering projects for the benefit of local communities in developing countries.
● 2008-2010 Coordinator for GEIST:s activities in East and West Africa
● 2011-2014 Consultant for OikosLab Future Solutions with focus on implementation of sustainable system design applications involving i.a source separation and recycling of wastewater and introduction of bio methane in combination with small scale synthetic diesel production for replacement of fossil vehicle fuels on a global level and at the same time creating food security, water security and food sovereignty.

2017- developer of the resilience adapted BGR – system used for recycling of source separated black water and grey water. The black water is urine separated for optimal fertilizer

performance. Urine and faeces are turned into nutrients by deep drill soilification, giving extreme high crop yields and very high crop draught resistance. The BGR-system can easily be adapted to any target group, from single households to metropolitan areas at a extreme low cost. The grey water recycling system can be adapted to intermittent high loads by adjustable internal recirculation.

AWARDS

● 1987: Winner of a regional innovation contest with the project the " Bio aquatic green house" , a small scale biogas based recycling system for sludge and household waste in urban areas.

● 2011 Winner of Environmental award to 'Ragnhilds memory´ from Centre for Ecological Technics

PUBLICATIONS

● 1990: Experiments with SCARA – robot, Compendium Production technical centre at Lindholmen, Gothenburg

● 1991: Computer programming and Control, Compendium Katrinelundsgymnasiet

● 1992: Bralanda report - a study of using crops and organic waste for biogas production. *Different user alternatives of the biogas are studied in the report and the conclusion is that the most economically beneficial use of the biogas is when used as a vehicle fuel. The report includes an all over energy balance, economical overview including a a sensitivity analysis. All environmental consequences of the proposed solutions are also presented. The report was financed by the Swedish Energy Board.*

● 2006. Sustainable Development, Compendium Gullmarsgymnasiet
Target group: Education at all levels and teacher trainings, involving all components of sustainable development.

● 2011 Biogas powered electricity production for developing countries.
Co-author:s Per Wennerberg, Lars Axellán, och Anna-Karin Jannasch. The report was financed by Vinnova

● 2013 Resource food
A report made together with Elsa Laurell, nutrionist, with focus on how Sweden can become self sufficient on food, fertilizer and vehicle fuel – biomethane. The report was financed by Ekhagastiftelsen. The report is presented on the website www.resursmat.se

CONFERENCES

● 2002:Nominated for the World Summit on Ssustainable Development in Johannesburgh as a representative for the Swedish Agenda 21 - committee. with a brochure and film, Agenda 21 – six examples , a survey of sustainable initiatives in Sweden including a presentation of how biogas is used as a vehicle fuel in Sweden, the leading country in the world when considering using biogas as a vehicle fuel. I was the editor of the brochure and directed the film.

● 2003: Participated in World Youth Congress on sustainable development and Peace in Casablanca with four students and an appreciated exhibition with focus on sustainable food, biogas, clay and straw house construction
and eco textiles

● 2008: Participated in World BioEnergy conference in Elmia, Sweden, with a speech focussing on global environmental problems and how to solve them by introduction of biogas technology and creation of circular flows of nutrients, with i.a waste water recycling.

● 2008: Participated in IREC 2008 in Abuja, Nigeria with a speech focussing on Biogas for a sustainable Africa and how to rescue the African rain Forest.

● 2010: Participated in World BioEnergy conference in Elmia, Sweden, with a speech focussing on Biogas technology for Africa and rescuing of the rainforest.

● 2010 Participated in IBIO 2010, WorldConferens on Industrial Biotechnology in Dalian China, with a speech focussing on a human right perspective on Biofuels including landgrabbing, food sovereignty and rescuing of the rain forest.

● 2011 Initiator , lecturer and coordinator of Biogas conference in Nairobi, March 14-18 with participants from all 9 countries in East Africa.

MEMBERSHIPS
● 2001 - Member of GEIST, managing board. GEIST is an NGO that constructed the first biogas plant running on 100% crops in Sweden
● 2008 - Nominated as chairman of GEIST

INTERESTS/HOBBIES
Biomimicry or Nature - a master piece of engineering, Living food, Kayaking, Traditional dancing and violin play

REFERENCES

1. Hans Sternlycke,
Senior Scientific environmental reporter Miljömagasinet,

Phone: +46 31828413
Mobile: +46 706707145
Email: hans.sternlycke@netatonce.net
Adress: Fässbergsgatan 8 431 69 Mölndal, Sweden

2. Ulf Nordberg
Researcher, Rise-Research Institutes of Sweden

Phone: +46 24110319
Mobile: +46 734018681
Email: ulf.nordberg@ri.se
Adress: Solvägen 6 785 61 Djurås, Sweden