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Systems analysis of stock buffering: development of a dynamic substance flow-stock model for the identification and estimation of future resource, waste streams and emissions

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Curriculum Vitae

Personal

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Place of birth	Rafah, Palestine

Education

B.Sc., Chemical Engineering, El-Fateh University, Tripoli, Libya, 1996.
M.Sc., Environmental Chemistry, Leiden University, Leiden, The Netherlands, 2000.
Ph.D., Environmental Science, Leiden University (2007, expected)

Employment record

Chemical Engineer, Palestinian Energy Authority, Gaza Strip, 1997-1998
Student Assistance, Centre of Environmental Science - Leiden University, Leiden, 2000
Chemical Engineer, Palestinian Ministry of Environmental Affairs, Gaza Strip, 2001
Research Assistant, Centre of Environmental Science - Leiden University, Leiden, 2001- present

Articles

- Elshkaki, A., Voet, E. van der, Holderbeke, M. van, and Timmermans, V. The Economy of chemicals: combining substance characteristics with socio-economic information in a dynamic SFA model. Proceeding of the Fifth International Conference on EcoBalance, 6-8 November 2002, Tsukuba, Japan.
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- Elshkaki, A., Voet, E. van der. Estimating the long term environmental consequences of the energy used in producing platinum that is required for fuel cells using dynamic substance flow-stock analysis (in preparation).
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Elshkaki, A., Voet, E. van der, Holderbeke, M. Van, Timmermans, V. Claeys, P. and Geerken, T. Development of a dynamic model for substance flow analysis: Part 2 – Integration of stock and flow model. Report no. 2004/IMS/R/293. Mol, Belgium: Flemish Institute for Technological Research (VITO). 2004.

Working papers

Kleijn, R., Elshkaki, A., Koning, de A., Tukker, A, Literature Study on Degradation Products of Known Emissions, CML working paper, CML, Leiden University, The Netherlands, March, 2001.

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Presentations

DYNFLOW, Substance Flow Modelling in Simulink, In Industrial Ecology Conference, NH, USA, 2000.

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Dynamic Substance Flow Analysis: Integrating Substance Flow and Stock Models to Analyse the Long-term Consequences of Recycling. In the 2nd International Conference of the International Society of Industrial Ecology. University of Michigan, Ann Arbor, MI, USA, 2003.

The long-term environmental and economic consequences of lead non-intentional applications. ConAccount Meeting, Zurich, Switzerland, 2004.

The Environmental impacts of the use of rare materials in new technologies using a dynamic substance flow-stock model. ConAccount Meeting, Vienna, Austria, 2006.