

Discovery

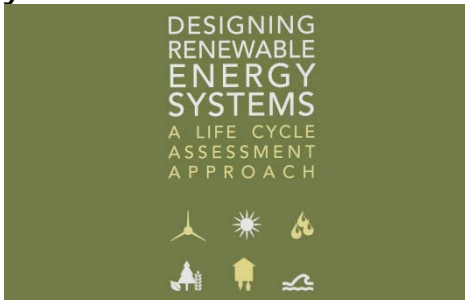
We SHARE to inspire and ignite ideas for Engineering Systems & Design (ESD) Pillar!

The titles featured here are to give you a peek into the wealth of resources we have. We hope, through this will encourage you to explore and read further. Share with us topics of importance to ESD and we can introduce relevant titles from some 400,000 eBooks we carry.

November 2015

LIFE CYCLE ASSESSMENT

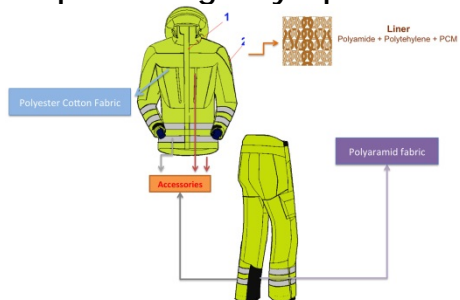
Designing Renewable Energy Systems



Using the life cycle assessment approach, this ebook discusses how renewable energy systems could be designed by presenting three case studies and how the approach allow designers to assess potential environmental impacts of the ways to generate energy.

Source: [CRCNetBase](#)

High-Protective Clothing for Complex Emergency Operations



The environmental impact of three different personal protective uniforms is evaluated by adopting the life cycle assessment approach, in the pursuit of reducing the risks of the workplace.

Source: [The Journal of The Textile Institute](#)

OPTIMIZATION

Decreasing Engineering Time With Variable Cad Models



Learn how the use of process optimization helps to cut production time to engineer various products. Variable CAD models are used for this comparative analysis.

Source: [Computer-Aided Design and Applications](#)

An optimization case study with coffee-flavoured milk



Using liking results, researchers apply product optimization methods to maximise liking and minimise dissatisfaction of products, which then can be used to study consumer behaviour and market goods

Source: [Food Quality and Preference](#)

PROBABILITY APPLICATION

Predicting The Probability Of Failure Of Cementitious Sewer Pipes Using Stochastic Finite Element Method



The article evaluates the use of the Stochastic Finite Element Method to predict the probability that sewer pipes made with cement would fail, hoping to predict failure for other products.

Source: [International Journal of Environmental Research and Public Health](#)

The Use Of PCs, Smartphones, And Tablets In A Probability-Based Panel Survey : Effects On Survey Measurement Error



By surveying which device respondents use to complete an Internet panel survey based on probability, researchers have found that there is higher measurement error in tablets and smartphones, compared to traditional devices,

Source: [Social Science Computer Review](#)