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# LIGHT AND FLOW

*Perspectives and  
Experiences from the  
World of Electricity*



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**LIGHT and FLOW**  
**– Perspectives and Experiences**  
**from the World of Electricity**

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## **Preface**

# **The enticing, energizing electricity**

## ***Interesting and up-to-date topics***

*Electricity is used for stimulating growth, for moving from place to place, for cooking, and for drying hands. Soon the whole world is all electric!”*

*(Seura-magazine 18/1936)*

This is how things were in 1936, at the time of eager electrification of the Finnish households. Today, “the whole world is all electric”. Electricity is such a common and ever-present commodity that we can not imagine life without it. Because electricity is such an essential part of our lives, people are naturally interested in it and it raises many questions in their minds.

This book, *Light and Flow – Perspectives and Experiences from the World of Electricity*, sheds light on electricity from various points of view. It aims at increasing information about issues that we all consider important while also evoking extensive discussion on alternative ways for building a better future. The book also functions as a resource for peer group work as the groups are able to discuss the themes of the book.

### **Seven themes on electricity**

The book consists of seven themes. ‘Electricity and health’ deals with a subject that entices all of us, i.e. the potential health effects of growing electricity use. The theme ‘Electrical engineering’ describes electricity production, the changing market and the much discussed environmental effects. The third theme, ‘Electricity and ethics’, is about ethics from the viewpoint of appliance design. The fourth theme relates closely to the third one, as it deals with usability of devices and systems. The theme ‘Well-being at work’ seeks for ways to improve ergonomics and slow

down our busy lives. The E-learning theme introduces a virtual environment as an alternative learning environment. In ‘Women and technology’ we have a look at female leadership and think of how to make girls study technical sciences.

Each theme contains two different approaches to the topic. The first approach is the article written by the specialist of this book, Leena Korpinen, professor, Doctor of Medicine and Technology. Leena Korpinen is the leader of the Laboratory of Electrical Engineering and Health at Tampere University of Technology. Besides solid theoretical knowledge of the topics, she also possesses versatile and wide experience. The other approach is the interview of professor Korpinen, which further enhances the article.

### **Warmest thanks to the commentators**

Those sparkling women and men, who in one way or another have furthered the creation of this book, commented on the text, corrected and found the missing commas deserve our warmest thanks.

### **Let’s discuss!**

Come and dive into the enticing and thought-provoking world of electricity! Read. Throw in your two cents worth and participate in the discussion – on a train, at the coffee table, at home, at work.

Tampere November 5, 2007

*The Authors*