CURRICULUM VITAE

Elena Trotskovsky

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EDUCATION

M.Sc. 2009, Department of Education in Technology and Science, Technion, Haifa, Israel. Dissertation: "Engineering Thinking according to Experts and Students: Theory, Implementation and Pedagogy".

M.Sc. 1978, Industrial Electronics, Faculty of Electronics, Ufa Aviation University, Ufa, Russia. Thesis: "Combined memory development"



RESEARCH INTERESTS

- Engineering education
- Engineering thinking
- Students' cognitinive activities in learning process.

ACADEMIC APPOINTMENTS

1994 – present Adjunct Lecturer, Teacher, Senior Teacher, ORT Braude College,

Department of Electric and Electronics Engineering

2008 Adjunct Lecturer, the Technion – Israel Institute of Technology,

Faculty of Mechanical Engineering

1980 – 1984 Lecturer, Faculty of Automation, Ufa Oil Technical University,

Ufa, RUSSIA

TEACHING EXPERIENCE

ORT Braude College of Engineering:

Undergraduate Courses:

Switching and Digital Systems

Digital Electronics

Introduction to Control

Electricity and Electronics 1

Electricity and Electronics 2

Digital Electronics Laboratory

The Technion-Israel Institute of Technology

Undergraduate Courses:

Introduction to Mechatronics

Ufa Oil Technical University

Undergraduate Courses:

Electrical Networks Theory

Electrical Machines

Electrical Engineering Laboratory

PROFESSIONAL ACTIVITIES

ORT Braude College:

2010 - Present Member, ORT Braude College, Collegial Committee of Academic

Affaires

2010 - Present Member, ORT Braude College, Collegial Committee of Excellence

LIST OF PUBLICATIONS

Refereed Papers

- Trotskovsky, E., Waks, S., Sabag, N., and Hazzan, O. Students' misunderstandings and misconceptions in engineering thinking. Accepted to International Journal of Engineering Education, 2012.
- Sabag N., Trotskovsky E. Students' Reflections on their Internship Design Project in Industry. In: W. Aung, V. Ilic, V. Ilic, O. Mertanen, J. Moscinski, J. Uhomoibhi (Eds). *Innovations* 2012 World Innovations in Engineering Education and Research, pp. 305-314.
- 3. Waks S., Trotskovsky E., Sabag N., Hazan O. Engineering Thinking: The Experts' Perspective. *International Journal of Engineering Education*. Vol. 27, No. 4, pp. 838-851, 2011.
- 4. Sabag N., Trotskovsky E. Engineering Thinking: Characterization by Experts and its Appearance in Graduate Design Projects. In: W. Aung, V. Ilic, J. Moscinski, J. Uhomoibhi (Eds). *Innovations 2011 World Innovations in Engineering Education and Research*. 2011, pp. 401-411.
- 5. Sabag N., Trotskovsky E. Reflection in Engineering Design. *MoreTech. Journal of National Center of Technology teachers*. July 2010. pp. 9 20.
- Sabag N, Trotskovsky E. "Internship in Electrical and Electronics Engineering". *MoreTech. Journal of National Center of Technology teachers*. 2009. pp. 14 – 18

Other Publications

Thesis:

Trotskovsky, E., 2009. Engineering Thinking according to Experts and Students: Theory, Implementation and Pedagogy (Master's thesis, Technion – Israel Institute of Thechnology).

Professional Reports:

Valeev A., Chigvintsev S., Trotskovsky E., 1982. Signals Transmittion and Receiving Method. *Collected reports of Annual Conference*, *Ufa Oil Technical University*, Ufa, Russia.

Patents:

Bonn G., Levertov V., Valeev A., Chigvintsev S., Trotskovsky E., Zinov A., 1981. Signals Transmission and Receiving Device. Author certificate No. 985809. (In Russian)