

2. EMPLOYMENT**a. Academic Ranks**

Dates	Name of Institution	Rank
5/6/2000	Technion-Israel Institute of Technology	Adjunct Lecturer
1/3/2004	Technion-Israel Institute of Technology	Visiting Senior Lecturer
1/10/2004	HIT-Holon Institute of Technology	Senior Lecturer
1/10/2007	HIT-Holon Institute of Technology	Associate Professor
1/10/2010	George Mason University (GMU), Virginia, USA	Visiting Professor
29/8/2016	IAC-Israel Academic College	Associate Professor

b. Academic Employment

Period (dates)	Name of Institution (city, country)	Department	Rank/Function
2018-present	IAC-Israel Academic College	Educational Counselling	Head, Center for Advancement of Teaching
2016-2018	IAC-Israel Academic College	Human Resource Management	Vice President for Academic Affairs
2011-2016	HIT-Holon Institute of Technology	Faculty of Management of Technology	Vice President for Academic Affairs
2015-2016	HIT-Holon Institute of Technology	Faculty of Management of Technology	Head, M.Sc. Program
2008-2016	HIT-Holon Institute of Technology	Faculty of Management of Technology	Head, Systems Engineering Track
2008-2016	HIT-Holon Institute of Technology	Faculty of Management of Technology	Head, Systems Engineering Track
2010-2011	George Mason University (GMU), Virginia, USA	Dept. of Systems Engineering and Operations Research	Visiting Professor
2007-2010	HIT-Holon Institute of Technology	Faculty of Management of Technology	Head, Department of Management of Technology
2005-2007	HIT-Holon Institute of Technology	Department of Management of Technology	Senior Lecturer
2005-2010	HIT-Holon Institute of Technology	Center for the Advancement of Teaching	Head
2005-2007	Technion-Israel Institute of Technology	Department of Technology and Science Education	Part time Senior Lecturer

Name: Moti Frank, Ph.D.

Date: 1st. Jan. 2019

c. Academic Employment (cont.)

Period (dates)	Name of Institution (city, country)	Department	Rank/Function
2000-2004	Technion-Israel Institute of Technology	Department of Technology and Science Education	Adjunct Lecturer
2000-2005	Technion-Israel Institute of Technology	Center for the Advancement of Teaching	Head
2000-2005	Technion-Israel Institute of Technology	Center for the Advancement of Teaching	Director, Technion's E-Learning Project
1996-1999	Technion, Israel Institute of Technology	Technology and Science Education; Industrial Engineering and Management	Graduate Student and Teaching Assistant
1976-1980	Technion – Israel Institute of Technology	Faculty of Electrical and Electronics Engineering	Undergraduate Student

d. Other Professional Employment

Period (dates)	Name of Institution (city, country)	Department	Rank/Function
1992-1996	Israeli Air Force	Electronics and Systems	Lt. Col. Head, Communication and Navigation Branch
1970-1992	Israeli Air Force		מצורף בסוף נספח בעברית עבור תקופה זו

3. ACADEMIC ACTIVITIES

Period (dates)	Name of Institution/Conference/ Journal (city, country)	Occasion
Sept. 1999	International Seminar on Reflective Education and Teaching, Newcastle, UK	Member of Organizing Committee
Dec. 2000	Conference on Education and Technology, Technion, Haifa, Israel	Member of Organizing Committee
Feb. 2002	The Annual Conference on E-Learning in Academic Teaching, Technion, Haifa, Israel	Chairman of Program Committee
Feb. 2003	The Annual Conference on E-Learning in Academic Teaching, Bar-Ilan University, Ramat-Gan, Israel	Member of Program Committee and Session Chair
May. 2003	Ben-Gurion University, Israel / Conference on Academic E-Learning	Invited Speaker: How to Manage E-Learning Project – Organizational and Pedagogical Aspects
Nov. 2003	Seminar on Technology Education. Technion, Haifa, Israel	Member of Organizing Committee Invited Speaker: Educational Technology in Technology Education
2000-2005	Cathedrion: Newsletter on Teaching, Technion	Editor
2001-2004	Meital: IUCEL- Inter University Center for E-Learning, Tel-Aviv University, Israel	Member, Pedagogy working group
2003-2004	Meital: IUCEL- Inter University Center for E-Learning, Tel-Aviv University, Israel	Head, Research working group
2003-2004	Meital: IUCEL- Inter University Center for E-Learning, Tel-Aviv University, Israel	Member, Steering Committee
Sept. 2004	Special Issue of the Journal of Engineering Education, 94(1), 2005	Reviewer
Nov. 2004	Bar-Ilan University, Israel / Seminar on Involving the Academy in the Education System	Invited Speaker: The Project-Based Technology Model for Developing Technological Literacy
Dec. 2004	International Workshop on Learning and Assessment in Science, Engineering & Management in Higher Education, Technion, Haifa, Israel	Member of Organizing Committee and Invited Speaker: Applying the Engineering Systems Thinking Approach in the Engineering Education

3. ACADEMIC ACTIVITIES (cont.)

Period (dates)	Name of Institution/Conference/ Journal (city, country)	Occasion
Dec. 2004	Seminar on the Advancement of Teaching in Higher Education. The College of Management Academic Studies, Israel	Member of Organizing Committee and Invited Speaker: Project-Based Learning in Higher Education as a Learning Environment for Educating the Future Engineers towards the Modern Engineering Work Place
May. 2005	International Conference on Learning in Higher Education, Ort Braude College, Carmiel, Israel	Advisor to the Organizing Committee and Session Chair
May. 2005	Research proposal. ISF – The Israel Science Foundation	Reviewer
Oct. 2005	Golan, Bar-Ilan University	Referee - Ph.D. proposal: Karmi, Learning in computer mediated communication environment as improvement intellectual thinking dispositions
Nov. 2005	Conference: "Systems Engineering – Engineering or Engineering Management. Holon Institute of Technology, Israel	Organizer and Chair
Nov. 2005	Computers and Education Journal	Reviewer: Fuzzy, iterative learning models in asynchronous learning environments
May 2006	Technion, Haifa, Israel	Referee and member on the examiners board - Ph.D. Thesis: Merdler, M. Characteristics of Creativity and Systems Thinking in Practical Engineering Students' Final Project Work
July 2006	Journal of Geosciences Education	Reviewer
July 2006	Information Resources Management Journal: Special issue on information systems research and the systems approach	Reviewer
July 2006	Computers and Education Journal	Reviewer: Beyond threaded discussion: Representational guidance in asynchronous collaborative learning environments
Sept. 2006	European Systems Engineering Conference, 18-20 September 2006	Invited Speaker
Oct. 2006	IRMA-2007: Information Resource Management Association Conference	Member of the Review Program Committee Reviewer paper #678 and paper #325:

3. ACADEMIC ACTIVITIES (cont.)

Period (dates)	Name of Institution/Conference/ Journal (city, country)	Occasion
Oct. 2006	Journal of Science Education and Technology	Reviewer: Distance learning as a tool for poverty reduction and economic development
Oct. 2006	SE Day, Technion, Israel	Participation as panelist on the topic: Is SE quantitative enough?
2006-present	Journal of Information Technology and Systems Approach (JITSA)	Senior Member in the Editorial Review Board
Nov. 2006	Technion, Haifa, Israel	Referee and Chair of the examiners board – M.Sc. Thesis
Jan. 2007	Council for Higher Education	Member of the Committee for evaluating the application of Ort Braude to open a M.Sc. program in Systems Engineering
Feb. 2007	The Israel Science Foundation (ISF)	Reviewer of a research proposal
March 2007	Asia-Pacific Systems Engineering Conference (APSEC 2007)	Member of the Technical Committee
May 2007	Journal of Systems Engineering	Reviewer
July 2007	The Annual Conference of Chais Research Center, The Open University Israel	Member of the Program Committee
Sept. 2007	IRMA 2008: International Conference on Information Resources Management	Member of the Technical Program Committee
Nov. 2007	Seminar on Innovation in the Information Era, Szold Research Institute, Jerusalem, Israel	Invited lecture: Pedagogical aspects of advanced instructional technologies
Dec. 2007	The 12th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2008	Reviewer
2007-2009	The Inter University Center for E-Learning	Head, Committee for evaluating the outcomes of the second project for developing e-learning courses
June 2008	18th Annual International Symposium of INCOSE, 6th Biennial European Systems Engineering Conference, The Netherlands 15-19 June 2008	Session Chair

3. ACADEMIC ACTIVITIES (cont.)

Period (dates)	Name of Institution/Conference/ Journal (city, country)	Occasion
Sept. 2008	International Journal of Decision Support System Technology	Reviewer - Paper: Decision-making Approach for Catastrophic Scenario Selection in Disaster Recovery Planning
Nov. 2008	International Journal of Decision Support System Technology	Reviewer. Paper: A Framework for Supporting Analysis, Design and Management of Complex Large-Scale Interconnected Open Socio-technological Systems
Dec. 2008	International Journal of Information Technology and the Systems Approach	Reviewer - Paper: Disaster Prevention: A Systemic Methodology that includes persons with different capacities
April 2009	INCOSE Region V Chapters Spring 09 Conference, Suffolk, VA, USA, 2-4 April 2009	Invited Presentation
July 2009	19th Annual International Symposium of INCOSE, Singapore, 20-23 July 2009	Session Chair
August 2009	The Journal of Systems Engineering	Reviewer of paper: Applying the Discipline of Systems Engineering to Socio-Technical Global Challenges
Sept. 2009	International Journal of Information Technology and the Systems Approach	Reviewer of paper: Information and Communication Technology and Environmental Sustainability
Nov. 2009-present	International Journal of Project Organization and Management Science (IJPOM)	Member of the Editorial Board
Jan. 2010	International Journal of Project Organisation and Management (IJPOM)	Reviewer of paper: Deterministic, Path-Sensitive Heuristics for Project Earned Value Management
March 2010	16th Industrial Engineering and Management Conference, Tel-Aviv, Israel, 23 March 2010	Session Chair
March 2010	IEEE Systems Journal	Reviewer of paper: Collaborative Systems Thinking: Uncovering the Rules of Team-level Systems Thinking
March 2010-present Sept. 2010	ICED – The International Consortium for Educational Development 3rd International Conference on Model Based Systems Engineering (MBSE), Fairfax, USA, 27-28 September 2010	The representative of the Israeli teaching centers' network at ICED Session Chair

3. ACADEMIC ACTIVITIES (cont.)

Period (dates)	Name of Institution/Conference/ Journal (city, country)	Occasion
March 2011	Book: Research Methodologies in Engineering of Software Systems and Information Systems: Philosophies, Methods and Innovations	Reviewer of two chapters: <ul style="list-style-type: none"> • Engineering Design as Research • Validation and Design Science Research in Information Systems
April 2011	Conference on Systems Engineering Research (CSER 2011), CA, USA, 15-16 April 2011	Session Chair
May 2011	Journal of Systems Engineering	Reviewer of paper: Effectiveness of Systems Engineering Techniques on New Product Development
May 2011	International Journal of Project Organization and Management (IJPOM)	Reviewer of paper: Integrating Time, Cost and Quality Perspectives in Probability Impact Tables
June 2011	Journal of Systems Engineering	Reviewer of paper: Systems Engineering: A 21st Century Introductory Course on Systems Engineering
June 2011	The 21st Annual Int'l. Symp.of INCOSE (Int'l. Council on Systems Engineering) – Denver CO, USA, 20-23 June 2011	Session Chair
Jan. 2012	International Journal of Information Technologies and Systems Approach (IJITSA)	Reviewer of paper: Requirements Prioritization and design considerations for the next generation of corporate environmental management information systems – A foundation for innovation
April 2012	Journal of Systems Engineering	Reviewer of paper: Educating the defense systems engineering workforce: The next evolution of SE education considering competency alignment, curricular design and project-based learning
July 2012	Journal of Systems Engineering	Reviewer of paper: Systems Engineering Knowledge Asset (SEKA) consumption improvement
March 2013	International Journal of Project Organization and Management (IJPOM)	Reviewer of paper: Factors influencing life cycle management for community infrastructure development
Dec. 2013	International Journal of Project Organisation and Management (IJPOM)	Reviewer of paper: Critical success factors influencing the performance of constituency development fund construction projects in Kenya: A confirmatory factor analysis

3. ACADEMIC ACTIVITIES (cont.)

Period (dates)	Name of Institution/Conference/ Journal (city, country)	Occasion
March 2014	Journal of Systems Engineering	Reviewer of paper: The value of preparation in a systems engineering masters module: A longitudinal case study
April 2014	Annual Meeting Faculty of Management of Technology, HIT – Systems Thinking in Complex, Multi-dimensional and Multi-disciplinary Reality, Holon, Israel, 3 April 2014	Chair, Organizer and Opening Lecturer
May 2014	Seminar on Excellence in Higher Education Teaching, Bar-Ilan University, Ramat Gan, Israel, 27 May 2014	Panel Member: How to encourage excellence in both teaching and research in higher education
Nov. 2014	Journal of Systems Engineering	Reviewer of paper: Thinking Tracks for Multidisciplinary System Design
Jan. 2015	International Journal of Information Technologies and Systems Approach (IJITSA)	Reviewer of paper: Analyzing the Relative Contribution of Plan-Driven, Agile and Open Systems Development Methodologies to Software Evolution
May 2015	Research and Best practices in Systems Engineering and Project Management Herzlia, Israel, 5 May 2015	Conference Co-Chair
July 2015	ISF – Israel Science Foundation	Committee Member
Aug. 2015	Journal of Systems Engineering	Reviewer of paper: Key Elements in the Career Paths of Systems Engineers from the Defense Community
Apr. 2016	Mini-Conference on Innovations and Challenges in Applying Systems Engineering Principles to other Disciplines	Conference Chair
June 2015	Ruppin Annual Conference on Industrial Engineering and Management, 4 June 2015	Session Chair
Period (dates)	Name of Institution/Conference/ Journal (city, country)	Occasion
2000-2007	Ministry of Education, Tel-Aviv, Israel	Board Member - Pedagogical Secretariat
2000-present	הוראה באקדמיה (former: על הגובה) - Journal on Teaching in Higher Education	Editorial Board
May 2006	Rafael, Israel	Invited lecture: The roles of systems engineers
Feb. 2007	Rafael, Israel	Invited Lecture: The Roles of Systems Engineer

3. ACADEMIC ACTIVITIES (cont.)

March 2007	4th Israeli Conference on Systems Engineering INCOSE 2007, Herzeliya, Israel, 20-21 March 2007	Co-Chair of the Program Committee and Chair of the first day
May 2007	Ministry of Education, Israel	Member of the Steering Committee for updating the curriculum of the Operation Management subject
June 2007-present	INCOSE_IL: The Israeli Chapter of the International Council on Systems Engineering	Board Member
Jan. 2008	INCOSE_IL: The Israeli Chapter of the International Council on Systems Engineering	Invited lecture: Sustainable Design and Systems Engineering
Feb. 2008	IAI and Rafael Seminar on Systems Engineering	Invited lecture: Systems Engineering – needs and programs
March 2009	5th Annual Israeli National Conference on Systems Engineering (INCOSE_IL 2009) Herzlia Israel, 2-3 March 2009	Member of the Program Committee/ Session Chair
Period (dates)	Name of Institution/Conference/ Journal (city, country)	Occasion
June 2009	IDF – Department of Systems and Projects, Isra	Invited Lecture: Sustainable Design
March 2011	6th Annual Israeli National Conference on Systems Engineering (INCOSE_IL 2011) Herzlia Israel, 8-9 March 2011	Member of the Program Committee
Jan. 2012	INCOSE_IL Seminar on Systems Engineering Practices, Herzlia, Israel, 30 January 2012	Invited Speaker: The Systems Engineering Process: Principles, Concepts and Elements
March 2013	7th Israeli International Conference on Systems Engineering (INCOSE_IL 2013) Herzlia, Israel, 5 March 2013	<ul style="list-style-type: none"> • Chair of the 1st day • Member of the Steering Committee • Member of the Program Committee
March 2015	8th Israeli International Conference on Systems Engineering (INCOSE_IL 2015) Herzlia, Israel, 1 19 March 2015	Conference Chair
June 2015	19th Annual Conference on Project Management Institute (PMI) – Israel Chapter Te Aviv, Israel, 3 June 2015	Session Chair
June 2015	Ruppin Annual Conference on Industrial Engineering and Management	Session Chair
1.1.2013- 31.12.2014	The Israeli Association for Systems Engineering	President
Dec. 2016	Seminar on Quality Management	Invited Speaker: Applying Systems Thinking to Quality Management
March 2017	9th Israeli International Conference on Systems Engineering (INCOSE_IL 2017) Herzlia, Israel, 2 30 March 2017	<ul style="list-style-type: none"> • Member of the Steering Committee • Member of the Program Committee • Session Chair

3. ACADEMIC ACTIVITIES (cont.)

June 2017	15th Annual Conference of Meital: IUCEL- Inte University Center for E-Learning, Haifa Universit Israel	Session Chair
Jan. 2018	Systems Engineering Course Graduation Ceremony. Soreq Nuclear Research Center	Invited Keynote Speaker
Feb. 2018	Conference: The Role of the Academic Campus an Era of Technological Progress, Ariel Universi	Member of the Organizing and Academic Committee
June 2018	The semi-annual meeting of the Gordon Center Systems Engineering, Technion	Invited Speaker: Challenges for Systems Thinking in Systems Engineering

Present Research and Development Activities

- Systems Thinking; Systems Engineering; Engineering Systems Thinking
- Higher Education Teaching
- Educational Technology; e-Learning

3. ACADEMIC ACTIVITIES (cont.)**Doctoral and Post-Doctoral Students**

Year	Name of Student	Title of Thesis	Name of Academic Institution
2004-2006	Dr. Naftaly Dov	Using simulations and animations in physics and electrical engineering teaching	Technion – Israel Institute of Technology
2004-2008	Zila Choresh	Teaching through argumentation as a means to promote technological literacy	Bar-Ilan University
2006-2010	Sigal Kordova	The contribution of final project performance in industrial and management engineering to the depth dimension against the breadth dimension and to capacity for engineering systems thinking	Technion – Israel Institute of Technology

Doctoral Referee

Year	Name of Student	Title of Final Project	Name of Academic Institution
2014	ח'אלד אסעד	הוראת נושא מדעי-טכנולוגי עתיר ידע: המקרה של עיבוד תמונה במחשב	אוניברסיטת בן גוריון בנגב
2015	אלברט דוד	טיפוח הכוונה עצמית בלמידה בתהליכי פתרון בעיות ואיתור תקלות אצל מומחים בתעשייה	אוניברסיטת בן גוריון בנגב
2016	Rea Lavi	חשיבה מערכתית ומידול קונספטואלי של בעיות בינתחומיות בהוראת מדעים והנדסה	הטכניון-מכון טכנולוגי לישראל

M.A./M.Sc. Students (Thesis)

Year	Name of Student	Title of Thesis	Name of Academic Institution
2003-2007	Orit Levy	Model for preparing and evaluating TAs teaching	Technion – Israel Institute of Technology
2003-2007	Galia Mezger	Faculty and students attitudes towards e-Learning	Technion- Israel Institute of Technology

3. ACADEMIC ACTIVITIES (cont.)**M.A./M.Sc. Students (Final Projects)**

Year	Name of Student	Title of Final Project	Academic Institution
2007-2008	Shani Eyal/ Roi Yomtovian	הגורמים המשפיעים על עזיבת מקום העבודה של מהנדסי אלקטרוניקה צעירים בדרגי הביניים	HIT – Holon Institute of Technology
2008-2009	Sharon Ashkenazi/ Limor Atrian	בחינת הקשר בין מידת הנטייה לתפקידים הדורשים יכולת ראייה מערכתית וסוג הפרויקט לבין הצלחת הפרויקט	HIT – Holon Institute of Technology
2008-2009	Kobi Katz	כלי להערכת נטיות לתפקידים הדורשים יכולת ראייה מערכתית	HIT – Holon Institute of Technology
2008-2009	Amit Smikt/ Shachar Even Chen	מדיניות השקעה בחברה: השקעה בשיפור תשתיות טכנולוגיות קיימות מול השקעה בטכנולוגיות חדשות	HIT – Holon Institute of Technology
2009-2010	Boaz Carmi	אסטרטגית פיתוח מועדפת בהנדסת מערכות רק"ם	HIT – Holon Institute of Technology
2009-2010	Amir Harel	הדרך האופטימאלית לתכנון תהליכי אינטגרציה	HIT – Holon Institute of Technology
2009-2010	Elad Sagi	תהליכי אימות תיקוף ובדיקותיות – השוואת מתודולוגיית	HIT – Holon Institute of Technology
2010-2011	Edi Gelman	הקשר בין כמות וסוגי ממשקי המערכת לבין משך האינטגרציה המערכתית	HIT – Holon Institute of Technology
2010-2011	Avi Nisani	בחינת הקשר בין מידת מעורבות הלקוח לבין מידת הצלחה של פרויקטים ביטחוניים	HIT – Holon Institute of Technology
2010-present	Dalia Shoshani	היערכות הנדסת מערכות לעידן דירקטיבות בנושא תכן בר-קיימא (Sustainable Design) בהיבט הטכנולוגי	HIT – Holon Institute of Technology
2010-present	Adi Spiegel	השוואה של כלים לניהול דרישות בפרויקטים מערכתיים	HIT – Holon Institute of Technology
2011-2013	Shai Perl	הערכת תהליכי קייזן בחה"א	HIT – Holon Institute of Technology
2011-2013	Peter Szilagyi	אפיון יתר בפרויקטים ביטחוניים	HIT – Holon Institute of Technology
2011-2013	Avshalom Knimach	בדיקת היתכנות למקור אנרגיה (או שילוב של מספר מקורות) אופטימאלי לתחנת כוח	HIT – Holon Institute of Technology
2012-2014	Roman Plotkin	יתרונות ואתגרים במערכות תוכנה וחומרה מבוססות COTS	HIT – Holon Institute of Technology
2012-2014	Leonid Issacov	השפעת תהליך ניהול שינויים (תוכנה) על טיבו של המוצר הסופי	HIT – Holon Institute of Technology
2012-2013	Alex Frenkel	בחינת הקשר בין מידת השימוש בכלי בדיקה אוטומטיים להצלחת פרויקטים	HIT – Holon Institute of Technology
2012-2014	Alex Kustanovitch	שרידות מערכות בחברת תקשורת סלולרית	HIT – Holon Institute of Technology
2012-2014	Dror Brener	הקשר בין עומק מערכת לבדיקה עצמית BIT במערכות נשק צבאיות לבין שביעות רצון המשתמשים	HIT – Holon Institute of Technology
2013-2014	Yochai Varuch	Lean and Agile Systems Engineering	HIT – Holon Institute of Technology
2013-2014	Shauli Keren	תהליך ניהול סיכונים בפיתוח אמצעי לחימה	HIT – Holon Institute of Technology
2013-2015	Yuval Elbo	הקשר בין אסטרטגיות הפיתוח וסוג הפרויקט לבין מידת הצלחה בפרויקטי מחקר ופיתוח צבאיים וביטחוניים	HIT – Holon Institute of Technology
2012-2015	David Tzioni	פיתוח וחקר כלי לבחירת אסטרטגית פיתוח לפי מאפייני הפרויקט בשלב הייזום	HIT – Holon Institute of Technology

From 1999 to 2001 Chief mentor of 24 graduate students towards MA in Education at University of Northumbria, Newcastle, UK (Israel Extension). List will be given upon request.

4. AWARDS AND GRANTS

Year	Name of Institution (city, country)	Occasion
1997	Technion - Taub and Chester Hurwitz Foundation	Full Ph.D. Research Scholarship
1998	Technion	TA: Excellence in Teaching Prize
1998	Technion - Gutwirth Fund	Scholarship for distinction
1998	Technion	Full Ph.D. Research scholarship
1999	Technion - Gutwirth Fund	Scholarship for distinction
1999	Technion	Full Ph.D. Research scholarship
2000	International Council on Systems Engineering (INCOSE) Annual Conference, Minneapolis, USA	Best Paper Award
2004	Technion	Lecturer: Excellence in Teaching Prize
2006	H.I.T. – Holon Institute of Technology	Excellence in Teaching Prize
2007	H.I.T. – Holon Institute of Technology	Excellence in Teaching Prize
2007	Asia-Pacific Systems Engineering Conference, Singapore Segment, 23-24 March 2007	Certificate of Appreciation for valuable contribution and support rendered to the success of this conference
2008	H.I.T. – Holon Institute of Technology	Excellence in Teaching Prize
2009	H.I.T. – Holon Institute of Technology	Excellence in Teaching Prize
2010	H.I.T. – Holon Institute of Technology	Excellence in Teaching Prize
2012-2016	Technion – Gordon Center for Systems Engineering	Engineering Systems Thinking – Innate or Learned? <ul style="list-style-type: none"> • 2012 – grant 40,000 NIS • 2013 – grant 50,000 NIS • 2016 – grant 60,000 NIS

5. LIST OF PUBLICATIONS

a. Peer Reviewed Papers

1. S. Waks, M. Frank
Application of the Total Quality Management approach principles and the ISO 9000 standards in engineering education
European J. of Engineering Education, 24(3), 1999 (249-258)
2. S. Waks, M. Frank
Engineering curriculum versus industry needs – A case study
IEEE Trans. on Education, 43(3), 2000 (349-353)
3. M. Frank, S. Waks
Electronics engineers – Correlation between scores towards B.Sc. and the professional work level
Int'l. J. Engineering Education, 16(1), 2000 (12-19)
4. M. Frank
Engineering systems thinking and systems thinking
Systems Engineering, 3(3), 2000 (163-168)
5. M. Frank, S. Waks
Engineering systems thinking: A multifunctional definition
Systemic Practice and Action Research, 14(3), 2001 (361-379)
6. M. Frank
What is 'engineering systems thinking'?
Kybernetes: The Int'l. J. of Systems and Cybernetics, 31(9/10), 2002 (1350-1360)
7. M. Frank, G. Kurtz, N. Levin
Implications of presenting pre-university courses using the blended e-learning approach
Educational Technology and Society, 5(4), 2002 (137-147)
8. M. Frank, N. Reich, K. Humphreys
Respecting the human needs of students in the development of e-learning
Computers & Education, 40(1), 2003 (57-70)
9. M. Frank
Characteristics of engineering systems thinking – A 3-D approach for curriculum content
IEEE Trans. on Systems, Man, and Cybernetics, 32(3), Part C, 2002 (203-214)
10. M. Frank, I. Lavy, D. Elata
Implementing the project-based learning approach in an academic engineering course
Int'l. J. of Technology and Design Education, 13(3), 2003 (273-288)
11. M. Frank, A. Barzilai
Integrating alternative assessment in a project-based learning course for pre-service science and technology teachers
Assessment and Evaluation in Higher Education, 29(1), 2004 (41-61)
12. M. Frank, A. Barzilai,
Designing course web sites for supporting lecture-based courses in higher education – some pedagogical aspects
Int. J. of Instructional Technology & Distance Learning, Dec. 2004.
http://www.itdl.org/Journal/Dec_04/article04.htm (1-15)

5. LIST OF PUBLICATIONS (cont.)

a. Peer Reviewed Papers (cont.)

13. M. Frank, D. Elata
Developing the Capacity for Engineering Systems Thinking (CEST) of freshman engineering students
J. of Systems Engineering, 8(2), 2005 (187-195)
 14. M. Frank
A systems approach for developing technological literacy
J. of Technology Education, 17(1), 2005 (19-34)
 15. M. Frank
Knowledge, abilities, cognitive characteristics and behavioral competences of engineers with high Capacity for Engineering Systems Thinking (CEST)
J. of Systems Engineering, 9(2), 2006 (91-103)
[Republished with permission in IEEE Engineering Management Review, 34(3), 2006 (48-61)]
 16. M. Frank, A. Barzilai
Project-based technology: Instructional strategy for developing technological literacy
J. of Technology Education (JTE), 18(1), 2006 (39-53)
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17. M. Frank, O. Zwikael, M. Boasson
Jobs requiring a Capacity for Engineering Systems Thinking (CEST): Selection using an interest inventory
Project Management J., 38(3), 2007 (36-44)
 18. M. Frank
Toward a quantitative tool for assessing the capacity for engineering systems thinking
Int'l. J. of Human Resources Development and Management, 7(3/4), 2007 (240-253)
 19. M. Frank, A. Barzilai
Using principles of the instructional systems design approach for implementing open-source learning management system in higher education
The Open Education J., 1, 2008 (1-8).
 20. M. Mora, O. Gelman, M. Frank, D.B. Paradice, F. Cervantes, G.A. Forgionne
Toward an interdisciplinary engineering and management of complex IT-intensive organizational systems: A systems view
Int'l. J. of Information Technologies and the Systems Approach (JITSA), 1(1), 2008 (1-24)
 21. M. Frank
Capacity for Engineering Systems Thinking (CEST) – Literature review, principles for assessing and the reliability and validity of an assessing tool.
Int'l. J. of Information Technologies and the Systems Approach (JITSA), 2(1), 2009 (1-14)
 22. A. Gonen, E. Brill, M. Frank
Learning through business games: An analysis of successes and failures
On the Horizon, 17(4), 2009 (356-367)
 23. C. Choresh, Z.R. Mevarech, M. Frank
Developing argumentation ability as a way to promote technological literacy
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24. M. Frank
Assessing the interest for systems engineering positions and other engineering positions' required Capacity for Engineering Systems Thinking (CEST)
J. of Systems Engineering, 13(2), 2010 (161-174)
25. M. Frank, S. Kordova
Developing Capacity for Engineering Systems Thinking (CEST) of industrial engineering and technology management students
J. of Education, Informatics, and Cybernetics, 2(2), 2010 (47-50)
26. M. Frank, A. Sadeh, S. Ashkenasi
The relationship among systems engineers' capacity for engineering systems thinking, project types, and project success
|Project Management J., 42(5), 2011 (31-41)
27. J. Kasser, D. Hitchins, M. Frank, Y.Y. Zhao
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J. of Systems Engineering, 16(1), 2013 (29-44)
28. M. Frank, S. Kordova
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29. M. Frank, A. Harel, U. Orion
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30. M. Frank, B. Carmi
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31. S. Kordova, M. Frank
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32. M. Frank, S. Kordova
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Industrial Engineering and Management, 4(5), 2015 (doi: 10.4172/2169-0316.1000178)
33. S. Kordova, M. Frank, A. Miller
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Systems 2018, 6(3), 29; doi: 10.3390/systems6030029.
34. S. Kordova, M. Frank
Systems thinking as an engineering language
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35. S. Kordova, M. Frank, E. Katz
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J. of Systems Engineering, xx(y), 2019 (xxx-yyy)

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b. Books

1. M. Frank, H. Shaked S. Koral Kordova (eds.)
Systems Thinking: Foundation, Uses and Challenges
Hauppauge, NY: Nova Science Publishers, 2016
ISBN: 978-1-63485-223-4

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1. M. Frank
Communication systems
In: A. Lapidot (ed)
The Pilot Handbook
Israeli Air Force, 1987 (315-342) [in Hebrew]
2. M. Frank
How to teach using today's technology: Matching the teaching strategy to the E-learning approach
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Handbook of Research on Literacy in Technology at the K1-2 Level
Hershey, PA: Idea Group Publishing, 2006 (372-393)

3. M. Frank
Active learning and its implementation for teaching
In: Lawrence, A. Tomei (ed), *Encyclopedia of Information Technology Curriculum Integration*
Vol.1 A–Interactive Videoconferencing
Hershey, PA: Idea Group Publishing, 2008 (1-8)
4. M. Frank
Synchronous and asynchronous learning environments
In: Lawrence, A. Tomei (ed.), *Encyclopedia of Information Technology Curriculum Integration*
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5. M. Frank
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In: M. Gordon Hunter (ed.),
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6. M. Mora, O. Gelman, M. Frank, D.B. Paradice, F. Cervantes, G.A. Forgionne
Towards an interdisciplinary engineering and management of complex IT-Intensive
organizational systems: A systems view
In: M. Gordon Hunter (ed)
Strategic Information Systems: Concepts, Methodologies, Tools and Applications (4 volumes)
Information Science Reference (an imprint of IGI Global), 2010 [2,922 pages - printed online]
7. M. Frank
Selecting strategies and approaches in systems engineering: Applying the descriptive
research method
in: *Research Methodologies, Innovations and Philosophies in Software Systems*
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Chapters (cont.)

8. M. Frank, J. Kasser
Assessing the Capacity for Engineering Systems Thinking (CEST) and other competencies of systems engineers
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Boris Cogan (ed.), Intech Open Access Publisher, Ch.10, 2012 (217-230)
[ISBN: 978-953-51-0322-6] **[11 Feb. 2014: accessed 4000 times]**

9. M. Frank
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M. Frank, H. Shaked S. Koral Kordova (eds.)
Nova Science Publishers, Ch. 7, 2016 (121-130)
[ISBN: 978-1-63485-223-4]

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M. Frank, H. Shaked S. Koral Kordova (eds.)
Nova Science Publishers, Ch. 3, 2016 (43-58)
[ISBN: 978-1-63485-223-4]

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1. M. Frank, S. Waks
Structuring systems approach in engineering education
Proc. World Multiconference on Systemics, Cybernetics and Informatics
Orlando, Florida, USA, 12-16 July 1998, 4 (369-372)
2. M. Frank
Cognitive and personality characteristics of successful systems engineers
Proc. 10th Annual Int'l. Symposium of the Int'l. Council on Systems Engineering
Minneapolis, USA, 16-20 July 2000 (765-773) **[Best Paper Award]**
3. M. Frank
Constructing capacity for engineering systems thinking
Establishment Conf. of the Israeli Chapter of the Int'l. Council on Systems Engineering
Tel-Aviv, Israel, ILTAM - Israeli Users' Association of Advanced Technologies for Design and
Manufacturing in the Electronics Industry, 18 Sept. 2000
4. M. Frank
Characteristics of technological thinking in the era of internet and hi-tech
Education and Technology Conf.
Haifa, Israel, 28 Dec. 2000
5. M. Frank, A. Barzilai
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performance in the course 'Methods of Teaching Technology and Science'
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Assessment and Evaluation Conf: Learning Communities and Assessment Cultures:
Connecting Research with Practice, Newcastle, UK, 28-30 Aug. 2002
6. M. Frank, I. Lavi, D. Elata
Project-based learning in an engineering course at the Technion
Proc. AYALA (Israeli Society for Educational Research) 2002 Conf.
Ramat Gan, Israel, 2-3 Oct. 2002 [in Hebrew]
7. G. Kurtz, M. Frank
Synchronous e-learning: Value and practicability
Annual Conf. of the Israeli Association for Information Technology
Tel-Aviv, Israel, 13 Nov. 2002 [in Hebrew]
8. M. Frank, D. Elata, I. Lavy
Developing the capacity for engineering systems thinking of mechanical engineering freshmen
29th Israel Conf. on Mechanical Engineering
Technion, Haifa, Israel, 12-13 May 2003
9. M. Frank, D. Elata, I. Lavy
Developing capacity for engineering systems thinking in a project-based learning environment
Proc. 13th Annual Symposium of the Int'l. Council on Systems Engineering (INCOSE 2003)
Washington, USA, 29 June - 3 July 2003 (957-964)
10. I. Lavy, M. Frank
Staff development in a higher education course based on project-based learning approach
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11. M. Frank, A. Barzilai
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12. M. Frank, D. Elata
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13. M. Frank, A. Barzilai
Project-based technology approach for promoting technological literacy
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Ben-Gurion University, Beer-Sheva, Israel, 12 Oct. 2004 (1-4) [in Hebrew]
14. M. Frank, D. Elata
Applying the systems approach in engineering education
Proc. Int'l. Workshop on Learning and Assessment in Science,
Engineering & Management in Higher Education
Technion – Israel Institute of Technology, Israel, Dec. 8-9, 2004 (33a-34a)
15. M. Frank, D. Elata
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Stevens Institute of Technology, Hoboken, NJ, USA, 23-25 March 2005 (284-291)
16. N. Dov, T. Milgrom, M. Frank
Effective learning environment in electricity and electronics laboratory: Developing an
innovative model for evaluation and assessment
11th Biennial Conf. of European Association for Research on Learning and Instruction (EARLI)
Nicosia, Cyprus, 22-27 Aug. 2005 (427-428)
17. M. Frank
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Herzlia, Israel, 20-21 Sept. 2005 [in Hebrew]
18. M. Frank
Excellence in systems engineering: What characterizes successful systems engineers?
4th Annual Conf on Systems Engineering Research
University of Southern California, Los Angeles, USA, 6-9 Apr. 2006 (1-9)
19. M. Frank
Assessing systems thinking ability in project managers and systems engineers
The Annual Conf. on Project Management (organized by the Israeli chapter of the
Project Management Institute)
Tel-Aviv, Israel, 7th June 2006 [in Hebrew]
20. M. Frank
Knowledge, abilities, cognitive characteristics and behavioral competences of engineers with
high capacity for engineering systems thinking
EuSEC 2006 – European Systems Engineering Conference
Edinburgh, UK, 18-20 Sep. 2006 **[Invited Speaker]**

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21. M. Frank, O. Zwikael, M. Boasson
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18th Int'l. Conf. on Systems Research, Informatics and Cybernetics
Baden-Baden, Germany, 7-12 Aug. 2006
 22. N. Dov, M. Frank
Work in progress: Implementing computerized simulations and animations in teaching: Improving and advancing the instruction of electricity and physics in Israeli institutes of higher education
36th Annual Frontiers in Education Conf. (ASEE/IEEE)
San Diego, USA, 28-31 Oct. 2006 (M2H-15–M2H-16)
 23. M. Frank
Assessing interest for systems engineers' job positions – Results of a recent study
5th Annual Conf. on Systems Engineering Research (CSER 2007)
Stevens Institute of Technology, Hoboken, NJ, USA, 14-16 March 2007
 24. M. Frank
A tool for assessing interest for systems engineers' job positions
4th Annual Israeli National Conf. on Systems Engineering (INCOSE_IL 2007)
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 25. M. Frank
Characteristics of successful systems engineers, systems architects and IT architects
Proc. of the Asia Pacific Systems Engineering Conf.
Singapore, 23-24 March 2007
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26. C. Choresh, M. Frank
The patent: Using meta-cognition instructional method in the technological classroom
The 3rd Biennial Meeting of the EARLI (European Association for Research on Learning and Instruction) Special Interest Group 16 Metacognition
University of Ioannina, Greece, 8-10 May 2008 (31-32)
 27. M. Frank
Sustainable design and systems engineering
The 12th Annual Conf. on Project Management (organized by the Israeli chapter of the Project Management Institute)
Tel-Aviv, Israel, 28th May 2008 [in Hebrew]
 28. M. Frank, N. Zeitouni
Applying principles for sustainable design to sustainable management of a natural system
The 18th Annual Int'l. Symp.of INCOSE (Int'l. Council on Systems Engineering) – INCOSE 2008
Systems Engineering for the Planet
The Netherlands, 15-19 June 2008
[also presented at the INCOSE Region V Chapters Spring 09 Conf.
Suffolk, VA, USA, 2-4 April 2009 (**invited presentation**)]
 29. M. Frank
Teaching technology management in a project-based learning environment
Proc. IEEE International Engineering Management Conference (IEMC – Europe 2008)
Estoril, Portugal, 28-30 June 2008 (547-550).

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30. S. Koral-Kordova, S. Waks, M. Frank
The T shape dilemma (depth against width) in the education of industrial engineering and management and its reflection on the students' team project
The 17th Int'l. Conf. of the Israel Society for Quality
Jerusalem, Israel, 18-20 Nov. 2008
31. A. Gonen, E. Brill, M. Frank
On-line training for improvement of business decisions
IEEE Int'l. Conf. on Industrial Engineering and Engineering Management
Singapore, 8-11 Dec. 2008 (1253-1257).
32. M. Frank, I. Horowitz, O. Solomon, O. Avraham, R. Dimitry, O. Nir
Incremental development strategy of intelligent transport systems
אסטרטגית פיתוח ב'צעדים קטנים' בפיתוח מע' תחבורה 'חכמה' - אכיפה אוטומטית לחגירת חגורות בטיחות
5th Annual Israeli National Conf. on Systems Engineering (INCOSE_IL 2009)
(organized by the Israeli Chapter of the Int'l. Council on Systems Engineering)
Herzlia, Israel, 2-3 March 2009 [in Hebrew]
33. M. Frank
Towards an era of sustainable design in systems engineering
(Sustainable Design) הערכות הנדסת מערכות לעידן של תכן ירוק בר-קיימא
5th Annual Israeli National Conf. on Systems Engineering (INCOSE_IL 2009)
(organized by the Israeli Chapter of the Int'l. Council on Systems Engineering)
Herzlia, Israel, 3 March 2009 [in Hebrew]
34. S. Kordova, M. Frank
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תרומת מעורבות בפרויקטים רב תחומיים להבניית חשיבה מערכתית הנדסית
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(organized by the Israeli Chapter of the Int'l. Council on Systems Engineering)
Herzlia, Israel, 2-3 March 2009
35. N. Amit, M. Frank, A. Zonenshein
Types of systems engineers (in Hebrew)
טיפוסים של מהנדסי מערכות
5th Annual Israeli National Conf. on Systems Engineering (INCOSE_IL 2009)
(organized by the Israeli Chapter of the Int'l. Council on Systems Engineering)
Herzlia, Israel, 2-3 March 2009
36. M. Frank, S. Kordova
Developing the Capacity for Engineering Systems Thinking (CEST) of senior engineering
management students: learning in a Project-Based Learning (PBL) environment
Proc. 7th Annual Conf. on Systems Engineering Research (CSER 2009)
Loughborough, Leicestershire, UK, 20-23 April 2009
37. M. Frank, S. Kordova, Y. Kedem
The T-shape dilemma (depth against width) in industrial engineering and
management curriculum design and its implication on the final project's outline
Proc. Int'l. Academy of Business and Economics Annual Conf. (IABE-2009)
Las Vegas, USA, 18-21 October 2009, 6(1) (214-218)

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38. M. Frank, S. Kordova
Development of systems thinking in the context of business education
Proc. 2nd EuroMed Conf. of the EuroMed Academy of Business
Salerno, Italy, 26-28 October 2009 (1999-2001)
39. M. Frank
Design for environment
10th National Conf. of the Israel Society for Quality
Tel-Aviv, Israel, 24-25 November 2009 [in Hebrew]
40. S. Kordova, M. Frank, Y. Kedem
From robots development to organizations management: The multidisciplinary
of the industrial engineering and management discipline
16th Industrial Engineering and Management Conf.
Tel-Aviv, Israel, 23-24 March 2010 [in Hebrew]
41. J. Kasser, M. Frank, Y. Zhao
Assessing the competencies of systems engineers
7th European Systems Engineering Conference (EuSEC 2010)
Stockholm, Sweden, 23-26 May 2010
42. S. Kordova, M. Frank
The importance of systems thinking for successful project management
14th Annual Conference on Project Management Institute – Israel Chapter, Tel-Aviv, Israel,
25 May 2010
[in Hebrew]
43. M. Frank, S. Kordova
Developing a high Capacity for Engineering Systems Thinking (CEST)
in an active learning environment
The 2nd Int'l. Symp. on Engineering Education and Educational Technologies (EEET 2010)
Orlando, USA, 29 June-2 July 2010
44. J. Kasser, M. Frank
A maturity model for the competency of systems engineers
The 20th Anniversary INCOSE Int'l. Symp. (Int'l. Council on Systems Engineering)
(INCOSE 2010), Chicago, USA, 12-15 July 2010
45. B. Carmi, M. Frank
Selecting development strategy in defence projects (in Hebrew)
בחירת אסטרטגית פיתוח בפרויקטים ביטחוניים
6th Annual Israeli National Conf. on Systems Engineering (INCOSE_IL 2011)
Herzlia, Israel, 8-9 March 2011
46. S. Ashkenasi, M. Frank
The relationship among systems thinking, project type and project success (in Hebrew)
בחינת הקשר בין מידת הנטייה לתפקידים הדורשים יכולת ראייה מערכתית וסוג הפרויקט לבין הצלחת הפרויקט
6th Annual Israeli National Conf. on Systems Engineering (INCOSE_IL 2011)
Herzlia, Israel, 8-9 March 2011

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47. M. Frank, B. Carmi
Selecting development strategy under pressure for shortening Time to Market (TTM).
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Redondo Beach LA, USA, 15-16 April 2011
48. M. Frank
Engineering systems thinking: Definition, assessing, and correlation with project success
23rd Annual Systems and Software Technology Conf. (SSTC 2011)
Salt Lake City, UT, USA, 16-19 May 2011
49. M. Frank, A. Sadeh, S. Ashkenasi
Capacity for Engineering Systems Thinking (CEST) and project success
Proc. of the 21st Annual INCOSE Int'l. Symp. (Int'l. Council on Systems Engineering) – IS2011
Denver CO, USA, 20-23 June 2011
50. M. Frank
Engineering systems thinking: Cognitive competencies of successful systems engineers
Proc. 10th Annual Conf. on Systems Engineering Research (CSER 2012)
St. Louis, Missouri, USA, 19-22 March 2012
Procedia Computer Science, 8, 2012 (273-278)
51. R. Wiess, V. Holzmann, M. Frank
The factors affecting the quality of the software requirements specifications in
technological projects: A report on a research in progress
14th IFAC Symp. on Information Control Problems in Manufacturing (INCOM 2012)
Bucharest, Romania, 23-25 May 2012
52. M. Frank
Panel; Can we train for systems thinking?
22nd Annual INCOSE International Symposium (International Council on Systems
Engineering) – IS2012, Rome, Italy, 9-12 July 2012
53. S. Kordova, M. Frank
Improving Capacity for Engineering Systems Thinking (CEST) among
industrial engineering students
Proc. IEEE Int'l. Conf. on Industrial Engineering and Engineering Management (IEEM 2012)
Hong Kong, 10-13 December 2012
54. S. Kordova, M. Frank
From the development of robots to the management of organizations: The integrative
approach of the industrial engineering and management discipline (in Hebrew)
"מפיתוח רובוטים ועד לניהול ארגונים – התפיסה האינטגרטיבית של המקצוע 'הנדסת תעשייה וניהול'
The 4th Annual Conference of Industry-Academia: Interdisciplinary and Multidisciplinary
as a Lever for Development in Industry and Academia
Ort Braude, Karmiel, Israel, 13 March 2013
55. S. Kordova, M. Frank
Developing systems thinking skill among industrial engineering students
Int'l. Conf. The Global Reach of Industrial Engineering
Istanbul, Turkey, 26-28 June 2013

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56. S. Kordova, M. Frank
From the development of robots to the management of organizations: A discussion of the integrative approach of the industrial engineering discipline
The IEEE Int'l. Conf. on Industrial Engineering and Engineering Management (IEEM 2013)
Bangkok, Thailand, 10-13 December 2013
57. M. Frank
Towards a 4-D systems engineering cognitive competency model
Proc. 24th Annual INCOSE Int'l. Symp. (Int'l. Council on Systems Engineering) (IS2014)
Las Vegas NV, USA, 30 June-3 July 2014
58. M. Frank
The human factor in systems engineering: engineering systems thinking
Proc. 5th Intl. Conf. on Applied Human Factors and Ergonomics (AHFE 2014)
Krakow, Poland, 19-23 July 2014
59. S. Koral-Kordova, M. Frank
Technology management education for improving systems thinking
24th Proc. Portland Intl. Center for Management of Engineering and
Technology Conf. (PICMET 2014), Kanazawa, Japan, 27-31 July 2014
60. M. Frank, U. Orion, H. Broodney
Integration practices and virtual shift
Int'l. Council of Systems Engineering (INCOSE) EMEA Sector Conf. (EMEASEC 2014)
Cape Town, South Africa, 27-30 October 2014
61. S. Koral Kordova, G. Ribnikov, M. Frank
Developing systems thinking among engineers: Recent study findings
Proc. 9th Annual IEEE International Systems Conference (SysCon 2015)
Vancouver, BC, Canada, 13-16 April 2015
62. A. Gonen, M. Frank
Educating systems thinking through wargaming
Joint Int. Meeting of Canadian Operational Research Society (CORS) and Institute for
Operations Research and the Management Sciences (INFORMS) 2015
Montreal, QC, Canada, 14-17 June 2015
63. S. Koral Kordova, M. Frank, G. Ribnikov
Technology management education for improving systems thinking
25th Proc. Portland Intl. Center for Management of Engineering and
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64. M. Frank, S. Koral Kordova
Four layers approach for developing a tool for assessing systems thinking
The 59th Meeting of the International Society for the Systems Sciences (ISSS 2015)
Berlin, Germany, August 2015
65. S. Kordova, M. Frank
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66. M. Frank, U. Orion, H. Broodney, S. Kordova
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67. S. Kordova, M. Frank
Can we train students to be systems thinkers – additional results.
Proc. 61st Meeting of the Int'l Society for the Systems Sciences (ISSS 2017)
Vienna, Austria, 9-14 July 2017

68. S. Kordova, M. Frank
The concept of Systems Thinking Education: Moving from the parts to the whole.
The IEEE Int'l Conf. on Industrial Engineering and Engineering Management (IEEM 2018)
Bangkok, 16-19 December 2018

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1. M. Frank
Evaluating outcomes of an engineering curriculum
Technion – Israel Institute of Technology, Cathedron, 12, 1999 (3-5)
2. M. Frank
Tips for effective teaching in higher education
Technion – Israel Institute of Technology, 2001 (1-9)
3. M. Frank
Why build and use a website for your course. Part A - Active learning
HI Hagova, Journal on Teaching in Higher Education, 1, 2002, (32-33)
4. M. Frank
Why build and use a website for your course. Part B - Computerized feedback
HI Hagova, Journal on Teaching in Higher Education, 2, 2003, (44-45)
5. R. Levin-Peled, M. Frank
Evaluation of the METEORT project
ORT, 2003 (1-95)
6. I. Werthim, M. Frank
Evaluation of the MATHNET project
Technion – Israel Institute of Technology, 2004 (1-22)
7. M. Frank
Why build and use a website for your course. Part C – Effects of multimedia
HI Hagova, Journal on Teaching in Higher Education, 3, 2004, (50-51)
8. M. Frank
E-learning approaches in academic teaching
HI Hagova, J. on Teaching in Higher Education, 4, 2005, (45-49)
9. M. Frank
Project-based learning in academic teaching
HI Hagova, J. on Teaching in Higher Education, 4, 2005, (10-12)
10. M. Frank, A. Barzilai
Teaching workshop for novice teaching assistants: Available versus desirable
HI Hagova, J. on Teaching in Higher Education, 6, 2007, (13-16)
11. M. Frank
Characteristics of successful systems engineers
The Voice of the Systems, 2 (8-9)
12. Y. Bar, M. Frank
Effective class management
HI Hagova, J. on Teaching in Higher Education, 7, 2008, (8-12)
13. M. Frank, R. Hammer, L. Saar-Inbar
What are the most important teaching's factors for students? Analysis of teaching surveys
מה באמת חשוב לסטודנטים? ניתוח תוצאות סקרי ההוראה במכון טכנולוגי חולון
Academic Teaching J. on Teaching in Higher Education, 1, 2011, (55-57)
(also presented at the Conf. on Teaching Surveys, Tel-Aviv University, Israel, 5 Dec. 2010)

14. M. Frank
Systems Thinking – Innate or Learned?
אנשים ומחשבים, 25th Dec. 2016
מולדת או מלמדת: דרושים – אנשים עם יכולת ראייה מערכתית
15. M. Frank, S. Kordova
Four Layers Approach for Developing Systems Thinking Assessment Tool
The Voice of the Systems, 22 (35-36), June 2018

83 classified reports have been published in the IAF, all of them related to systems engineering and project management

**Annex 1:
List of Classified Reports**

Advanced Voice, Data and Video Communication System for F-16

27/2/1992	Full scale development plan for the encoder module
25/8/1991	Development verification and validation report
28/7/1991	Integration the system with data and video communication systems
23/7/1991	Status of software acceptance test
30/6/1991	Proposal for updating the system specification and retrofit plan - final
25/6/1991	Proposal for updating the system specification and retrofit plan 4
17/6/1991	Kick-off evaluation flights phase 2
13/6/1991	Software testing results for transceiver version 8.5 and control panel version 4.0
14/3/1991	Characterizing mechanical retrofit scope
18/2/1991	Integration the system with the time distribution system
12/2/1991	Proposal for updating the system specification and retrofit plan 3
6/1/1991	Proposal for updating the system specification and retrofit plan 2
26/12/1990	Proposal for updating the system specification and retrofit plan 1
22/11/1990	Encoder evaluation plan
29/10/1990	Engineering retrofit plan and design
22/10/1990	Crash safety analysis and test report
13/9/1990	Integrating and installing the system in F-16 (2)
12/9/1990	Third order compression point (IP3) requirements for the ground station
9/8/1990	Explosive atmosphere analysis and test report
17/7/1990	Electro magnetic compatibility analysis and test report
15/7/1990	Upgrading the operational system software
10/7/1990	Operating with number of spread spectrum modes
16/6/1990	Evaluation flights phase 1 results
9/1/1990	Safety of flight and qualification tests report
17/10/1989	Acceptance test program version 1.0
18/8/1989	Integrating and installing the system in F-16 (1)
15/7/1989	Critical Design Review technical report

Airborne Positioning and Radar Communication Network

7/1/1993 Full scale development status report
 22/7/1992 Optimal proposals and solutions for demonstrating flight
 19/5/1992 Alternative solutions – benefits and limitations

Developing Frequency Hopping Spread Spectrum Mode

4/1/1994 Upgrading hardware and software (version 4.5) – scope and specification
 26/12/1993 Ground installation feasibility study report
 4/7/1993 Evaluation flight results – debriefing and follow-on activities
 9/2/1993 Installing in mobile ground stations - trade and feasibility study report

Various Projects

24/10/1993 Integrating UHF and HF radios, Up Front Control panel and Integration Unit in F-15i
 15/10/1993 Analysis of electromagnetic compatibility in cargo aircraft
 5/8/1993 Installing ground data communication system – trade and feasibility study
 30/6/1993 Integrating air-to-air-to-ground data communication system with F-16 avionic system
 21/6/1993 Ground computerized data communication system – design review
 21/6/1993 Integrating video communication system with ground mobile radios
 16/5/1993 Integrating airborne multicoupler with UHF radios
 24/3/1993 Preliminary Design Review – embedded GPS/INS system for fighter helicopter
 9/5/1993 Designing broad band antenna for relay aircraft
 19/2/1993 Defining the CNI (communication, navigation and identification) system in Blackhawk
 8/2/1993 Characterizing integration lab for integrating voice, data and video comm systems
 24/11/1992 Integrating mobile data communication system with HF radio
 15/10/1992 Integrating height altimeter and video comm.. system with the F-4 2000 avionic system
 6/10/1992 Digital navigation map in F-18 aircraft
 31/8/1992 Integrating and evaluating of GPS system in F-4 aircraft
 22/7/1992 Integrating a satellite communication system in a fighter helicopter – trade study
 1/6/1989 Analysis, evaluation and flight tests report for the electronic warfare system of F-16
 15/2/1989 F-16 electronic warfare system: Developing an algorithm for identifying a new treat
 10/8/1988 F-16 electronic warfare system: Developing direction finder and range algorithm
 1985-1987 Ten classified reports related to communication systems in fighter airplanes
 1982-1984 Eight classified reports related to encryption methods and equipment
 1980-1981 Twelve classified reports related to ground communication systems

Hebrew Appendix – please see next page

נספח – מיומנויות וניסיון מקצועי לא אקדמי

תמצית

ב-1970 התגייסתי לחיל האוויר ולאחר כ-6 שנים נשלחתי מטעם צה"ל ללימודי הנדסת חשמל בטכניון. בין השנים 1980-1996 שירתתי כקצין בחיל האוויר ועבדתי כמהנדס מערכות אלקטרוניקה ותקשורת. מילאתי שורה של תפקידים ובהם תפקידי פיקוד, תפקידי מטה, קצין פרויקט וראש מינהלת פרויקט. עסקתי בפעילויות מו"פ בתחומי אלקטרוניקה מובילים: תקשורת, אויוניקה, ניווט, ל"א, מיחשוב ונושאים מערכתיים - רב תחומיים. בתפקידי האחרון נשאתי באחריות כוללת למערכות התקשורת והניווט בכל מטוסי חיל האוויר.

ב-1992 הוענקה לי דרגת מחקר א' (דרגת המחקר הגבוהה ביותר במערכת הביטחון).
שלושת התפקידים האחרונים בחיל האוויר:

1992 – 1996 ראש ענף קשר אווירי וניווט (בדרגת סא"ל).

1989 – 1992 ראש פרויקט מערכת תקשורת מתקדמת.

1987 – 1989 קצין פרויקט מערכת ל"א בארה"ב.

מיומנויות ניהול

- ניהול בחיל האוויר – ניהול יחידות בהיקף רחב (ענף, מינהלת פרויקט, גף). ניהול כ"א, ניהול תקציב, הגדרת חזון, תכנון והצבת יעדים, הכנת וניהול תוכניות עבודה וכד'. בענף אותו ניהלתי שרתו עשרות מהנדסים ובמערך עליו הייתי ממונה שרתו עשרות קצינים ומאות טכנאים.
- ניהול פרויקטים בחיל האוויר – ניהול פרויקטים בהיקפים רחבים מאוד בתחומי הי-טק, הנדסת מערכות תקשורת ומערכות ל"א.
- ניהול באקדמיה – ניהול יחידות בהיקף רחב (מחלקה לניהול טכנולוגיה, מרכז לקידום הוראה, סגן נשיא מכללה) – ניהול כ"א, טיפוח וקידום סגל אקדמי, ניהול תקציב, תכנון אסטרטגי, תכנון שנתי, הכנת והגשת תכניות לימודים חדשות, ניהול קשרי עבודה שוטפים עם מל"ג/ות"ת, ניהול מרכז לקידום הוראה, ניהול פרויקט תיקשוב הוראה ארגוני (טכניון ומכון טכנולוגי חולון)