

# **Professor Issachar Gilad**

## **CURRICULUM VITAE and LIST OF PUBLICATIONS**

### **Personal**

Place & DoB      Germany, November 03, 1946  
Address            Department of Industrial Engineering and Management, Ariel University, ISRAEL  
E Mail             igilad@ariel.ac.il  
Office Phone      +972 (0)3 906-6325

### **Education**

B.Sc.            1972 - Industrial Engineering and Management, Technion - Israel Institute of Technology  
M.Sc.            1976 - Industrial Engineering and Management, Technion - Israel Institute of Technology  
Ph.D.            1979 - Industrial Ergonomics and Biomechanics, New York University, USA

### **Academic Employment History**

2017            Head of Graduate Studies, Dept. of Industrial Engineering & Management, Ariel University.  
2017            Professor and Department Head, Dept. of Industrial Engineering & Management, Ariel University.  
2014            Visiting Professor and Research Scholar, Penn State University, Department of Industrial & Manufacturing Engineering, College of Engineering, USA.  
2013            Visiting Professor and Research Scholar, University of Miami, Department of Industrial Engineering, College of Engineering USA.  
2013            Visiting Professor and Research Scholar, Cambridge University, Institute for Manufacturing Engineering, United Kingdom.  
2013            Technion Visiting 'By Fellow' of the Churchill College, Cambridge University, United Kingdom.  
2012 - 2013    Steering Committee on Production Management Programs to the Israeli Ministry of Science.  
2009            Visiting Professor, National Cheng Kung University, Institute of Biomedical Engineering, Tainan, Taiwan.  
2008 - 2009    Visiting Professor, Penn State University, Department of Industrial & Manufacturing Engineering, College of Engineering, USA.  
2007 - 2009    Member of the High Academic Committee of the Holon Institute of Technology.  
2007 - 2008    Member of the National High Education Committee (Malag-Jerusalem), for accreditation of the Industrial Engineering and Management Program at Western Galil College.  
2002 - 2007    Member of the President's Sub-Committee for the Social Sciences Programs at the Open University.  
2001 - 2006    Academic Advisor to the President of the Open University on Engineering Laboratories.  
2001 - 2006    Member of the President's Sub-Committee for Engineering Programs at the Open University.  
2001 - 2004    Member of the National High Education Committee (Malag-Yosh), for accreditation of the Industrial Engineering and Management Program at Ariel College.  
1998 - 2004    Member of the National High Education Committee (Malag-Jerusalem), for accreditation of the Industrial Engineering and Management Program at Lev College of High Technology.  
1997 - 1999    Member of the National High Education Committee (Malag-Yosh), for screening of the Industrial Engineering and Management Program at Ariel College.  
1995 - 2016    Associate Professor, Faculty of Industrial Engineering and Management, Technion - Israel Institute of Technology.  
1991 - 1993    Visiting Professor, University of California - Berkeley, School of Public Health,

- California, USA.
- 1991 - 1992 Visiting Professor, San Jose State University, Department of Industrial and Systems Engineering, California, USA.
- 1985 - 1986 Visiting Associate Professor, University of Michigan, Department of Industrial and Operations Engineering, Michigan, USA.
- 1984 - 1995 Senior Lecturer, Faculty of Industrial Engineering and Management, Technion - Israel Institute of Technology.
- 1979 - 1983 Lecturer, Faculty of Industrial Engineering and Management, Technion - Israel Institute of Technology.

### **Significant Professional Projects**

- 1975 - 1990 Devices for Hand Amputees Based on Motion Efficiency.
- 1982 - 1988 Geometrical Analysis of In-Vivo Spinal Curvature.
- 1985 - 1989 Layout Simulation and Logical Design for Keyboards.
- 1985 - 1989 Modeling of Angular Displacement of Torso in Dynamic Lifting.
- 1988 - 1995 Design for Trauma Prevention in Polishing Tasks in Diamond Industry.
- 1990 - 1996 Expert System as for Ergonomic Analysis.
- 1991 - 1994 Ergonomics Evaluation in Computers FAB Manufacturing.
- 1995 - 1999 Ergonomics of Keyboards - Negative Slope Geometry.
- 1996 - 2001 Multimedia Based Computerized Work Measurement System.
- 2001 - 2003 Wage Incentive Pay” to the Law Advisors at the Ministry of Defense.
- 2001 - 2005 Industrial Engineering Laboratories for Long Distance Learning.
- 2004 - 2009 Re-stratification of Nursing Man Power in Hospitals.
- 2005 - 2013 Ergonomics of Driving Cabins in Multi-Tasking Off-Road Vehicles

### **Editorials and Editorial Boards**

- 1993 - Present International Journal of Occupational Safety and Ergonomics.
- 1992 - Present International Journal of Industrial Engineering.
- 1997 - 1999 Assoc. Editor, Encyclopedia of Industrial and Occupational Ergonomics.
- 1994 - 2000 Israel Journal of Occupational Health.
- 1994 - 1997 Maase Hoshev, Journal of the Information Processing Association.
- 1994 - 1995 Scientific Editor of the Israeli Industrial and Management Journal.
- 1990 - 2004 International Journal of Industrial Ergonomics.

### **Membership in Profession/Scientific Societies**

- Institute of Industrial Engineers - Senior Member
- International Ergonomics Association (IEA) - Member of the International Council
- International Foundation for Industrial Ergonomics and Safety Research - Board Member
- American Congress of Rehabilitation Medicine
- Human Factors and Ergonomics Society
- Israel Ergonomics Society – Past Chairman and President Elect of the IES
- New York Academy of Science

### **Research Interests**

- Design for Efficiency in Manufacturing Processes
- Design of man-machine systems
- Manual material handling
- Lifting analysis for homogeneous and non-homogeneous loads
- Architecture of expert systems on ergonomic intervention
- Effect of job complexity in learning process
- Methodologies for functional ergonomics in repetitive work
- Advanced work-measurement, computerized systems
- Performance evaluation and control in hi-tech operations
- Planning for Productivity and Processes Efficiency of Facilities and Man Power in Hospitals
- .

## **Awards and Honors**

- 2013 Technion Visiting Fellow of the Churchill College in Cambridge University United Kingdom.
- 1999 The E.R. Tichauer Special Edition Editor, prestigious memorial edition of the International Journal of Industrial Ergonomics. Vol. 23, No. 4, March 1999.
- 1997 The Raymond Klein Research Award for Advancement of Technology and Science in the State of Israel.
- 1977 The Arthur Davis Award for best paper on Rehabilitation Engineering, New York University, USA.
- 1975 The Lady Davis Award for Doctoral Studies, Israel.

## **Public Activities**

- 2012 - 2014 Member of the High School Education Committee at the Ministry of Education - Science and Technology Region on Industrial Engineering Programs in the State of Israel.
- 2005 - 2010 Head of National Fund-Raising Committee for Engineering Corp Heritage Hall.
- 2000 – present Member of The High Education Committees ‘Malag’, for accreditation of Industrial Engineering Programs in the State of Israel.
- 2001 – 2003 Head of Governmental Committee on “Feasibility for Implementation of Wage Incentive Plan, among the Law Advisor Section in the Israeli Ministry of Defense”. Appointed by the office of the Prime Minister.
- 1998 - 2002 President of the Israel Ergonomics Society.
- 1998 - 2000 Member of the International Scientific Advisory Board of the International Encyclopedia of Ergonomics and Human Factors.
- 1998 - 1999 Special Edition Editor for the International Journal of Industrial Ergonomics, 23, No. 4, March 1999.
- 1997 - 1999 Member of the National High Education Certification Committee for screening of the Industrial Engineering and Management Program at Ariel College.
- 1994 - 1998 Chairman of the Israel Ergonomics Society.
- 1992 - 1995 Board Member of the Silicon Valley Ergonomics Institute.
- 1991 - 1995 Member of the International Steering Committee on Ergonomics Guidelines and Problem Solving, USA.
- 1980 - 1986 Member of the Scientific Committee of ‘Focus on Rehabilitation Journal’.

## **Scientific Publications**

### **Theses**

- 1976 M.Sc. Research Thesis, Faculty of Industrial Engineering and Management, Technion, "A Comparison of the Industrially Useful Manipulative Patterns of Unimpaired Workers and those using Below Elbow Prostheses".
- 1979 Ph.D. Research Thesis, New York University, "Objective Assessment of the Work Performance of Amputees by Means of a System of Predetermined Motion Time".

### **Books**

- Gilad Issachar, and Shani, Zvi,  
Ergonomical and Biomechanical Aspects of the Human Back, 1982.
- Gilad Issachar, Theory of Work Study,  
“ 1st Edition - Published by Michlol, Technion Press, Israel, 1990.  
“ 2nd Edition - Published by Michlol, Technion Press, Israel, 1993.  
“ 3rd Edition - Published by Michlol, Technion Press, Israel, 1995.  
“ 4th Edition - Published by Michlol, Technion Press, Israel, 2001.
- Gilad Issachar, A Bridge of Scientific Management to Industry in the Years of 2000,  
Proceedings of the IE&M Conference, Israel, 1998.
- Gilad Issachar, Work Measurement - the Road Stones of Industrial Engineering, 3 Volumes,  
Published by Michlol, Technion Press. 2008.

### **Refereed Papers in Professional Journals**

- Gilad I., Using an Elemental Analysis of the Motion Patterns to Assess the Work Performance of Amputees, *Human Factors*, 24(4), 427-435, 1982.
- Gilad I., Motion Patterns of Amputee Workers: A study based on MTM, *International Journal of Production Research*, 21(2), 292-300, 1983.
- Gilad I., Micro Motion Analysis of the Human Arm, Performing with a Body Powered Hook, *Human Movement Science*, 2, 133-150, 1983.
- Gilad I. and Nissan M., The Cervical and Lumbar Vertebra an Anthropometric Model, *Engineering in Medicine*, 13(3), 111-115, 1984.
- Gilad I. and Nissan M., Sagittal Evaluation of Elemental Geometrical Dimensions of the Human Vertebrae, *Journal of Anatomy*, 143, 115-120, 1985.
- Gilad I., Motion Pattern Analysis for Evaluation and Design of a Prosthetic Hook, *Archives of Physical Medicine and Rehabilitation*, 66(6), 398-407, 1985.
- Gilad I. and Nissan M., Sagittal Radiographic Measurements of the Cervical and Lumbar Vertebrae in Normal Adults, *British Journal of Radiology*, 58, (5), 1031-1039, 1985.
- Gilad I., Performance Profiles and Motion Element Dispersion in the Design of Human Hand Substitutes, *The MTM Journal*, 12, 23-28, 1986.
- Gilad I. and Nissan M., A Study of Vertebra and Disk Geometrical Relations of the Human Spine, *Spine*, 11(2), 154-157, 1986.
- Gilad I., Objective Performance Analysis of Hand Amputees toward the Improvements of Function, *Ergonomics*, 29(4), 553-561, 1986.
- Gilad I. and Pollatschek M., Layout Simulations for Keyboards, *Behavior and Information Technology*, 5(3), 273-281, 1986.
- Pollatschek M. and Gilad I., The Customizable Keyboard, *Behavior and Information Technology*, 5(3), 283-287, 1986.
- Gilad I. and Kirschenbaum A., About the Risk of Back Pain and Work Environment, *International Journal of Industrial Ergonomics*, 1, 65-74, 1986.
- Nissan M. and Gilad I., Dimensions of Human Lumbar Vertebrae in the Sagittal Plane, *Journal of Biomechanics*, 19(9), 753-759, 1986.
- Gilad I. and Kirschenbaum A., Rates of Back Pain Incidence Associated with Job Attributes and Work Characteristics, *International Journal of Industrial Ergonomics*, 2, 267-277, 1988.
- Gilad I., Displacement of the Spine During Lifting, *Electrophysiological Kinesiology*, 7, 445-448, 1988.
- Gilad I., and Kirschenbaum A., Study Shows Work Environments, Job Tasks, May Cause Back Pain, *Journal of Occupational Health and Safety*, 58(2), 44-49, 1989.
- Gilad I., Redfern, M.S., Chaffin D.B. and Byun, S.N., Angular Displacement of Torso during Lifting:

- A System Comparison of Two Measuring Methods, *Human Movement Science*, 8, 547-569, 1989.
- Gilad, I., Chaffin, D.B. and Woolley, C., A Technique for Assessment of Torso Kinesiology, *Applied Ergonomics*, 20(2), 82-88, 1989.
- Gilad I. and Fidelman U., The Motoric Role of the Right Cerebral Hemisphere: Performance Analysis of Micro-movements, *Cybernetica*, 33(3), 151-173, 1990.
- Fidelman U. and Gilad I., Three Styles of Hand Movements: Possible Relations to Three Kinds of Handedness, *Cybernetica*, 35(1), 17-49, 1992.
- Gilad I. and Messer E., Ergonomic Design of the Diamond Polishing Workstation, *International Journal of Industrial Ergonomics*, 9, 53-63, 1992.
- Dar-El E.M., Ayas K. and Gilad I., A Dual-Phase Model for the Individual Learning Process in Industrial Tasks, *IIE Transactions*, 27, 265-271, 1995.
- Dar-El E.M., Ayas K. and Gilad I., Predicting Performance Times for Long Cycle Time Tasks, *IIE Transactions*, 27, 272-281, 1995.
- Gilad I., A Methodology for Functional Ergonomics in Repetitive Work, *International Journal of Industrial Ergonomics*, 15, 91-101, 1995.
- Gilad I., Lenger R. and Rempel D., Upper Limb Postures and Movements during Diamond Polishing, *International Journal of Occupational and Environmental Health*, 2(3), 177-184, 1996.
- Gilad I., Performance Analysis of Keyboard's Operation, *Israel Journal of Occupational Safety and Ergonomics*, 1(2), 101-110, 1996.
- Gilad I., Geometrical Parameters in Keyboard's Design, *Israel Journal of Occupational Safety and Ergonomics*, 1(2), 111-118, 1996.
- Gilad, I. and Karni, R., Architecture of an Expert System for Ergonomics Analysis and Design, *International Journal of Industrial Ergonomics*, 23(3), 205-221, 1999.
- Gilad, I. and Tichauer, E. R., Spinal Geometry during Lifting Tasks, *International Journal of Industrial Ergonomics*, 23(4), 307-318, 1999.
- Gilad, I., Tichauer, E. R., and Graves, S. B., Pelvic Positions During Lifting, a Multi Factor Analysis, *International Journal of Industrial Ergonomics*, 23(4), 319-329, 1999.
- Gilad, I. and Harel S., Muscular Effort in Four Keyboard Designs, *International Journal of Industrial Ergonomics*, 26(1), 1-7, 2000.
- Gilad, I. and Boughanim, D., Three Dimensional Lifting Model for Non Homogeneous Loads, *Journal of Occupational Safety and Ergonomics*, 8(4), 511-524, 2002.
- Gilad, I. and Boughanim, D., Lifter, a Computerized Lifting Analysis Technique, *Journal of Occupational Safety and Ergonomics*, 8(4), 525-537, 2002.
- Gilad, I., Elnekave M., and Freivalds A., Long Distance Performance Time Input for Across the Globe Work Measurement, *The International Journal of Industrial Engineering*, 12, (4), 314-321, 2005.
- Gilad, I., and Elnekave M., Quantitative Prediction of Manual Material Handling Hazard, Special issue

of the Zeitschrift für Arbeitswissenschaft, 59(3), 207-217, 2005.

- Elnekave M., and Gilad I., A Rapid Video-Based Analysis System for Advanced Work Measurement, *International Journal of Production Research*, 44(2), 271-290, 2006.
- Gilad, I., and Elnekave M., Time Based Approach to Obtain Quantitative Measures for Ergonomics Hazard Analysis, *International Journal of Production Research*, 44(23), 5147-5168, 2006.
- Gilad, I., and Elnekave M., Inserting Cost Effectiveness to the Ergonomic Equation, When Considering Practical Solutions, *International Journal of Production Research*, 44(24), 5415-5441, 2006.
- Gilad, I., Hazbani, S. and Shpitalny, M., Parallel Mixed-Model Assembly Lines for Efficient Operations and Cost Reduction, *CIRP Journal of Manufacturing Systems*, 35(6), 513-522, 2006.
- Gilad, I. and Byran, E., Ergonomic Evaluation of the Ambulance Interior to Reduce Paramedic Discomfort and Posture Stress, *Human Factors*, 49(6), 1019-1032, 2007.
- Lati, N. and Gilad, I., Minimizing Idle Times in Cluster Tools in the Semiconductor Industry, *International Journal of Production Research*, 48(21), 6443-6459, 2010.
- Byran E. and Gilad I., Design Considerations to Enhance Patient Compartment Safety in Ambulance Transporters, *Journal of Occupational Safety and Ergonomics*, 18(2), 221-231, 2012.
- Balaila I. and Gilad I., A Manpower Allocation Model for Service Jobs, *International Journal of Service Science, Management Engineering, and Technology*, 3(2), 13-34, 2012.
- Byran E., Gilad I. and Oxman R., Ergonomic Design: Experimental Studies of Multi-Task Vehicle, *Science Journal - Agriculture, Forestry and Fisheries*, 2(1), 23-32, 2013.
- Sadai E. P. and Gilad I., Harnessing an ergonomic solution for prolonged flights sitting, *Ergonomics in Design*, 23(1), 20-25, 2015.

### **Papers in Books and Book Chapters**

- Gilad I., Biomechanical and Engineering Anthropometry Considerations for the Assessment of Amputees' Work Performance, in *Anthropometry and Biomechanics, Theory and Applications*, Easterby, Kroemer, Chaffin (Eds.), Plenum Press, NY, 241-249, 1982.
- Gilad I., Displacement of the Spine During Lifting, in *Electrophysiological Kinesiology*, W. Wallinga, Boom and De Vries (Eds.), Elsevier Science Pub. 445-448, 1988.
- Gilad, I., Chaffin, D.B., Redfern, M.S. and Byun, S.N., System Comparison of Two Advanced Methods for Measuring Angular Displacement of Torso, in *Trends in Ergonomics/Human Factors*, Aghazadeh (Ed.), Elsevier Science Pub. 847-856, 1988.
- Gilad I., Ergonomics in the Design of Hand Tools, in *Integrated Systems - The Plant of the Future*, Finger (Ed.), Negev University Press, 1.21. 1988.
- Gilad, I., and Messer E., Analysis and Redesign of Workstation in the Diamond Polishing Industry, in *Advances in Industrial Ergonomics and Safety III*, Karwowski and Yates (Eds.), Taylor and Francis, London, 31-38, 1991.
- Gilad I., Dar-El E.M., and Brenner M., Learning Curve Parameter Prediction, in *International Production Research*, Ming (Ed.), Taylor and Francis, London, 609-612, 1991.

- Gilad, I., and Messer E., A., Occupational Hazard and Biomechanical Evaluation in the Diamond Polishing Industry, in *Research Perspectives in Occupational Health and Ergonomics, Occupational and Work-Related Diseases*, Scientific Session, Bangkok, Thailand, pp. 184-189, 1991.
- Boughanim D., and Gilad I., A Three-Dimensional Lifting Analysis, in *Advances in Industrial Ergonomics and Safety IV*, Kumar (Ed.), Taylor and Francis, London, 853-860, 1992.
- Zellner S., Gilad I. and Karni R., An Expert Advisor for Ergonomic Evaluation, in *Advances in Industrial Ergonomics and Safety IV*, Kumar (Ed.), Taylor and Francis, London, 1073-1080, 1992.
- Gilad I., and Lenger R., Cumulative Trauma Analysis in Diamond Polishing Operations, in *Advances in Industrial Ergonomics and Safety IV*, Kumar (Ed.), Taylor and Francis, London, IV, 1387-1394, 1992.
- Gilad I., and Messer E., Biomechanics Considerations and Ergonomic design in Diamond Polishing, in *Advances in Industrial Ergonomics and Safety IV*, Kumar (Ed.), Taylor and Francis, London, 1395-1402, 1992.
- Gilad I., A Methodology for Functional Ergonomic Evaluation of Repetitive Operations, in *Advances in Industrial Ergonomics and Safety V*, Nielsen and Jorgensen (Eds.), Taylor and Francis, London, 177-184, 1993.
- Karni R., and Gilad I., Expert-System-Based Workplace Design, in *Production Research 1993*, Orpana and Lukka (Eds.), Elsevier, Amsterdam, 617-618, 1993.
- Gilad I., and Rempel D., Ergonomic Evaluation of Fine Manual Operations, in *The Ergonomics of Manual Work*, Marras, Karwowski, Smith and Pacholski (Eds.), Taylor and Francis, London, 369-372, 1993.
- Klinenberg E., Martin B., Gilad I. and Rempel D., Muscle Activity in the Riveting Task: Effects of Work Practice and Protective Gloves, in *Advances in Industrial Ergonomics and Safety VI*, Aghazadeh (Ed.), Taylor and Francis, London, 613-617, 1994.
- Gilad I., and Pomagreen D., Biomechanical Modeling of Recoil and Impact of the Clavicle During Shoulder Shooting, in *Advances in Applied Ergonomics*, Ozok and Salvendy (Ed.), USA Publishing, Istanbul - West Lafayette, 898-903, 1996.
- Gilad I., and Harel S., Geometric Variables in Keyboard Operations, in *Advances in Occupational Ergonomics and Safety I*, Mital, Krueger, Kumar, Menozzi and Fernandez (Ed.), Taylor and Francis, London, 496-501, 1996.
- Gilad I., Performance Evaluation of New Types of Prosthetic Prehensors, in *Musculoskeletal Disorders Rehabilitation Volume 4*, Seppala, Luopajarvi, Nygard and Mattila (Ed.), Finnish IOH, Helsinki, 497-499, 1997.
- Gilad I., A Study on Wheelchairs and Users in Rehabilitation, in *Musculoskeletal Disorders Rehabilitation Volume 4*, Seppala, Luopajarvi, Nygard and Mattila (Ed.), Finnish IOH, Helsinki, 500-502, 1997.
- Gilad I., and Harel S., Keyboard Operations in a Negative Slope Design, in *Design of Computing Systems: Cognitive Considerations*, Salvendy, Smith and Koubek (Ed.), Elsevier, Amsterdam, 611-614, 1997.

- Gilad I., System Design in Diamond Manufacturing, in ILO Encyclopedia of Occupational Health and Safety, Forth Edition, Chapter 29 – Ergonomics Tools and Approaches, 29.91-29.93, 1997.
- Balila I., and Gilad I., Dynamic Model for on Duty Assignments in the Service Sector, Survey Results, in A Bridge of Scientific Management to Industry in the Years of 2000, Gilad (Ed.), 122-126, 1998.
- Surani Y., Gilad I. and Pinkas B., Wage Incentives in Caprice, a Gem Industry, Survey Results, in A Bridge of Scientific Management to Industry in the Years of 2000, Gilad (Ed.), 137-141, 1998.
- Fruchter D. and Gilad I., Overview on the Educational Programs of Industrial and Management Engineers, in A Bridge of Scientific Management to Industry in the Years of 2000, Gilad (Ed.), 137-141, 1998.
- Pomagreen D. and Gilad I., A Biomechanical Model for Recoil and Impact on the Clavicle, in A Bridge of Scientific Management to Industry in the Years of 2000, Gilad (Ed.), 271-275, 1998.
- Gilad I., The Professional Profile of Industrial and Management Engineers in Israel, Survey Results, in A Bridge of Scientific Management to Industry in the Years of 2000, Gilad (Ed.), 20-24, 1998.
- Gilad, I., Mini Inclinometer for Accurate Detection of Postural Geometry, in Industrial and Occupational Ergonomics User's Encyclopedia, ISBN 0-9654506-0-0, 1999.
- Gilad, I., The Computerized Work Station, in Working with Computers; Safety, Ergonomics and Hygiene, The Institute for Safety and Hygiene, ISBN 965-490-023-8, 33-43, 1999 (in Hebrew).
- Gilad, I., Ergonomics of Keyboards and Computers, in Working with Computers; Safety, Ergonomics and Hygiene, The Institute for Safety and Hygiene, ISBN 965-490-023-8, 59-71, 1999 (in Hebrew).
- Gilad I. and Elnekave M., A Multimedia Generator for Advanced Work Measurement, in Productivity and Quality Management Frontiers IX, Dar-El (Ed.), 229-234, 2000.
- Gilad, I., Freivalds, A., Pollatschek, M. and Kong, Y.K., Using LAD for CTD Risk Assessment, in Advances in Occupational Ergonomics and Safety, Bittner et al. (Eds.), ISO Press, 70-79, 2001.
- Gilad, I., Performance of New Prosthetic Hand Designs, in International Encyclopedia of Ergonomics and Human Factors, 2, 944-946, 2001.
- Gilad, I., Optimal Selection of Wheelchairs for User Needs, in International Encyclopedia of Ergonomics and Human Factors, 2, 981-984, 2001.
- Gilad, I., The Biomechanical Profile of Repetitive Manual Work Routines, in Industrial Engineering Handbook, Ergonomics and Risk Process Section - Maynard's 5th Edition, K.J. Zandin (Ed.), (6.8) 139-150, 2001.
- Hazbany, S., Gilad, I. and Shpitalni M., About the Efficiency and Cost Reduction of Parallel Mixed-Model Assembly Lines, in The Future of Product Development, F. Louhar Krause (Ed.), Berliner Kreis - Springer Pub. 483-492, 2007.
- Gilad I., and Khabia, O. Allocation of Nursing Workforce in Hospital Wards with Mixed Patient Needs, in Improving Utilization of Resources, Mital and Pennathur (Eds.), Momentum Press, Chapter 8, 143-156, 2010.



Gilad I. and Elnekave M., Ergonomics improvements for the human operator – Cost effectiveness approach, in Human Work Productivity, A Global Perspective, Kumar, Mital and Pennathur (Eds.), CRC Press, Chapter 1, pp 1-24, 2013.

Gilad I., and Khabia, O. Allocation of Nursing Workforce in Hospital Wards a Case Study, in Resource Utilization and Productivity Enhancement Case Studies, Mital and Pennathur (Eds.) Momentum Press LLC, Chapter 5, 73-92, 2015.

### **Research Reports and Case Reports**

Gilad I., An Overview of the Back System and the Potential Damage to the Human in Working Situations, Tech. Report No. WSHE 79-2, Technion, Research Center for Safety and Human Engineering, 1979.

Gilad I., Egozi D. and Shani Z., Data Collection System for a study of Potential Damage to the Vertebral Column, Tech. Report No. HEIS-81-1, Technion, Research Center for Work Safety and Human Engineering, 1981.

Gilad I., Ergonomics and the Human Back, Tech. Report No. HEIS-82-1, Technion Research Center for Work Safety and Human Engineering, 1982.

Gilad I. and Nissan M., The Geometry of the Human Vertebrae, a Two-Dimensional Model and Anthropometry Study, Tech. Report No. HEIS-82-14/A, Technion, Research Center for Work Safety and Human Engineering, 1982.

Gilad I. and Nissan M., Anthropometric Measurements of the Human Vertebrae: Design Considerations and Statistical Data, Tech. Report No. HEIS-82- 14/B, Technion, Research Center for Work Safety and Human Engineering, 1984.

Gilad I. and Zellner I., The Causes of Back Pain Among Workers in Different Occupational Situations, Research Report No. IEM-G-85, Technion, 1985.

Gilad I. and Kirschenbaum A., The Impact of Work Environmental Factors on the Incidence of Back Pain, Research Report No. 190-797, Technion, 1988.

Gilad I., Pelvic Geometry During the Lifting Act, Research Report No. 190-798, Technion, 1988.

Gilad I. and Stein H., Back Pain Phenomena Among Diamond Industry Workers, Research Report No. 190-793, Technion, 1989.

Gilad I., Dar-El E.M. and Zer M., Parameter Prediction for Modeling of a Learning Curve, Research Report No. 190-785, Technion, 1989.

Gilad I., A Computerized Model for Safe Lifting Definitions, Research Report No. 190-831, Technion, 1989.

Gilad I. and Rubinovitz J., Methodology for Planning Optimal Path and Minimal Motion Time of Robotics Arm, Research Report No. 190-864, Technion, 1989.

Gilad I., Performance Analysis of hand Amputees, Research Report No. 190-904, Technion, 1990.

Gilad I., The Motoric Role of the Human Hemispheres. Research Report No. 190-905, Technion, 1990.

Gilad I., Expert Systems in Ergonomics Design, Research Report for the Committee for Research and Prevention in occupational Safety and Health, Israel Ministry of Labor and Social Affairs, 1991.

- Gilad I., Analysis of Lifting Tasks, Research Report for the Committee for Research and Prevention in occupational Safety and Health, Israel Ministry of Labor and Social Affairs, 1991.
- Gilad I., Ergonomics of Workstation for the Diamond Polisher, Research Report for the Committee for Research and Prevention in occupational Safety and Health, Israel Ministry of Labor and Social Affairs, 1991.
- Gilad I., Performance Analysis of Hand Amputees - Hook Design, Research Report No. 190-904, Technion, 1992.
- Gilad I., About the Reliability of MTM Values for Lifting Tasks, Research Report No. 190-969, Technion, 1992.
- Gilad I., The Role of Ergonomics in Rehabilitation, Research Report No. 21-1206-4182, San Jose State University Research Foundation, 1992.
- Gilad I., Ergonomic Evaluation of the MRC - Eclipse Star, Sputtering System, Intel Corp. Santa Clara, CA, 1992.
- Gilad I., Karni R., Zellner S. and Boughanim D., Expert System, a Tool for Ergonomics Analysis, Technion, Research Center for Work Safety and Human Engineering, Research Report No. HEIS-7-92, Technion, 1992.
- Gilad I., Neuritis Ulnaris Among Diamond Polishers, an Ergonomic Study, Technion, Research Center for Work Safety and Human Engineering, Research Report No. HEIS-1-93, Technion, 1993.
- Gilad I., Performance Operations of Computer Keyboards, Research Report No. 191-134, Technion, 1994.
- Gilad I., Geometrical Parameters in Keyboard's Design, Research Report No. 191-134, Technion, 1995.
- Gilad I., Diamonds Polishing Workstations Toward the 2000 Years, Research Report No. 191-249, Technion, 1996.
- Gilad I., Diamonds Polishing Workstations in the 2000'th, Research Report No. 191-249, Technion, 1997, (a continued 3 years project).
- Gilad I., Multimedia Based Computerized Work Measurement, Research Report No. 191-297, Technion, 1998.
- Gilad I., Diamonds Polishing Workstations in the 2000'th, Research Report No. 191-249, Technion, 1998, (a continued 3 years project).
- Gilad I., Diamonds Polishing Workstations in the 2000'th, Research Report No. 191-249, Technion, 1999, (a continued 3 years project).
- Gilad I., A Biomechanical Study of Training Efforts in Field Troops, Research Report No. 191-389, Technion, 1999.
- Gilad I., Multimedia Based Computerized Work Measurement, Research Report No. 191-297, Technion, 1999.
- Gilad I., Computerized Work-Study with Multimedia Abilities, Research Report No. 191-297,

Technion, 2000, (a continued 3 years project).

Gilad I., Forecasting Work Forces in Police Tasks, Research Report No. 191-428, Technion, 2000.

Gilad I., Computerized Work Study with Multimedia Abilities, Research Report No. 191-428, Technion, 2001.

Gilad I., Virtual Sight for Rifle Grenade Shooting, Research Report No. 191-429, Technion, 2001.

Gilad I., Computerized Work Study with Multimedia Abilities, Research Report No. 191-428, Technion, 2002.

Gilad I., Yaari A., Zalmanovitz Y., Feasibility Study for Implementation of Wage Incentive Plan, among the Law Advisor Section in Israel Ministry of Defense, Ordered by the Office of the Prime Minister, 2003.

Gilad I., Improvement of the Driving Cabin in Two Off-Road Multi-Purpose Vehicles, in the IL Journal of Safety No. 347, pp 24-25, 2014.

Gilad I., An Ergonomic Solution for Prolong Seating Support in Long Range Commercial Flights, in the IL Journal of Safety No. 355, pp 14-15, 2015.

### **Review and Survey Papers**

Gilad I. and Shani Z., Biomechanical Study of the Potential Damage to the Spine at Work, International Bulletin of Current Research in Anthropometry, University of Aston, Birmingham, 1981.

Gilad I., Myo-Electric Arm with Feedback Sensor Ability, Focus on Rehabilitation,4, 19-21, 1981. Invited paper.

Gilad I., The Human Back, Its Components and their Objectives, Eitanim Journal of Health,394, No. 11, 322-325, 1982. Invited paper.

Gilad I., The Development of the Spiral System, Eitanim Journal for Health,395, No. 12, 363-365, 1982. Invited paper.

Gilad I., Back Pain, Development and Causes, Eitanim Journal for Health,396, No. 1, 20-22, 1983. Invited paper.

Gilad I., The Relations between Back Pains and the Occupation, Eitanim Journal for Health,397, No. 2, 50-52, 1983. Invited paper.

Gilad I., Lifting and Material Handling, Eitanim Journal for Health,398, No. 3, 82-84, 1983. Invited paper.

Gilad I., How Should the Worker Sit, Eitanim Journal for Health,399, No. 4. 97-99, 1983. Invited paper.

Gilad I., Sedentary Work in the Modern Office, HaAretz - Computer Review Edition, No. 18, June 1983. Invited paper.

Gilad I., The Ergonomically Relations between Back Pain and Occupations, Labor and Social Affairs. No. 9/10, 1983.

- Gilad I., Working in Reclined Sitting Posture, Eitanim Journal for Health. Vol. 414, No. 7, 202-207, 1984. Invited paper.
- Gilad I., Sedentary Work in the Modern Office, Mechanical Engineering,10, No. 11, 3-5, 1985. Invited paper.
- Gilad I., Considerations for New Design of Human Hand Prosthetics, Rehabilitation R&D Reports,24. No. 4, 31-32, 1985.
- Gilad I., Principles of Sedentary Work, Mechanical Engineering,11, No. 1, 21-29, 1986. Invited paper.
- Gilad I., The Correct Industrial Seating, HaMifal,33, No. 318, 16-22, 1987. Invited paper.
- Gilad, I. and Kirschenbaum, A., About the Risk of Back Pain and Work Environment, ISMEC Scientific Abstracts, Bulletin of the International Society of Mechanical Engineers, Cambridge Scientific Abstracts,20. No. 4, 1987.
- Gilad I., The Characteristics of an Ergonomic Chair, HaMifal,33, No. 320, 22-28, 1987. Invited paper.
- Gilad I., Body Posture and the Design of Seating Aids, HaMifal,34, No. 324, 36-46, 1988. Invited paper.
- Gilad, I. and Kirschenbaum, A., Back Pain - Work Environment and Job Tasks, The Occupational Medical Digest, No. 5016, May 1989.
- Gilad I., Present and Advanced Workstations in the Diamond Polishing Industry, The Diamond, Journal of the Diamond Industry and Trade, Special Issue of the 1st International Diamond Technical Symposium, 74-77, 1991.
- Gilad I., Ergonomics - Interdisciplinary Science, Its Contribution to Industry, How to Fit the Machine to the Operator, Industrial Engineering,28, 29-34, 1994. Invited paper.
- Gilad I., Ergonomics, Well Thinking Begins in Posture, Maase Hoshev,22, No. 1, 17-28, 1995. Invited paper.
- Gilad I., Results of Industrial and Management Engineers Survey, Machines and Tools,80, 8-10, 1998. Invited paper.
- Fruchter D. and Gilad I., For a Change in the Education of Industrial and Management Engineers, Machines and Tools,80, 15-16, 1998. Invited paper.
- Gilad I., The Computerized Workstation, Working in Front of Computers, 33-44, 1999. Invited paper.
- Gilad I., Ergonomics of Keyboards, Working in Front of Computers, 59-72, 1999. Invited paper.
- Gilad, I., Israel Ergonomics Society, International Encyclopedia of Ergonomics and Human Factors,1, pp. 122, 2001.

## **Presentations in Professional Conferences**

### **Plenary or Invited Talks**

- 1984 - 2nd International Symposium on Design for Disabled Persons, Tel-Aviv, November 1984. Subject of paper: Motion Pattern Analysis for the Design of a New Prosthetic Hand.

- Invited paper.
- 1987 - Bi-National Conference Israel-Holland for Advanced Technology in Aiding the Disabled, Haifa, January 1987. Subject of paper: Objective Performance Analysis of Artificial Hand Grippers. Invited paper.
- 1988 - 5th Conference of Industrial Engineering and Management, Beer-Sheba, May 1988. Subject of paper Ergonomics in the Design of Hand Tools. Invited paper.
- 1990 - 2nd Annual Conference of the Israel Ergonomics Society, Ramat-Gan, June 1990. Subject of paper: Ergonomic Considerations in the Design of Diamond Polishing Procedures (with Messer E.). Invited paper.
- 1991 - 13th Asian Conference on Occupational Health and 3rd Conference of South East Asian Ergonomics Society, Bangkok, Thailand, November 1991. Subject of paper: Occupational Hazard and Biomechanical Evaluation in the Diamond Polishing Industry. Invited paper.
- 1992 - 7th International Industrial Ergonomics and Safety Conference '92, Denver, Colorado, USA, June 1992. Subject of paper: A 3-Dimensional Lifting Analysis (with Boughanim D.). Invited paper.
- 1992 - 7th International Industrial Ergonomics and Safety Conference '92, Denver, Colorado, USA, June 1992. Subject of paper: An Expert Advisor for Ergonomic Evaluation (with Zellner S., and Karni. R.). Speaker Zellner invited paper.
- 1992 - 7th International Industrial Ergonomics and Safety Conference '92, Denver, Colorado, USA., June 1992. Subject of paper: Cumulative Trauma Analysis in Diamond Polishing Operations (with Lenger R.). Invited paper.
- 1992 - 7th International Industrial Ergonomics and Safety Conference '92, Denver, Colorado, USA., June 1992. Subject of paper: Biomechanics Considerations and Ergonomic design in Diamond Polishing (with Messer E.). Invited paper.
- 1993 - 8th International Industrial Ergonomics and Safety Conference '93, Copenhagen, Denmark, June 1993. Subject of paper: A Methodology for Functional Ergonomic Evaluation of Repetitive Operations. Invited paper.
- 1993 - International Ergonomics Association Conference on Ergonomics of Material Handling, Warsaw, Poland, June 1993. Subject of paper: Ergonomic Evaluation of Fine Manual Operations (with Rempel D.). Invited paper.
- 1994 - 8th Conference of Industrial Engineering and Management, Beer-Sheba, April 1994. Subject of paper: CTD, Its Causes Diagnosis and Prevention Measures. Invited paper.
- 1996 - 1st International Conference on Applied Ergonomics, Istanbul, Turkey, May 1996. Subject of paper: Biomechanical Modeling of Recoil and Impact of the Clavicle during Shoulder-Shooting (with Pomagreen D.). Invited paper.
- 1996 - 11th International Occupational Ergonomics and Safety Conference, Zurich, Switzerland, July 1996. Subject of paper: Geometric Variables in Keyboard Operations (with Harel S.). Invited paper.
- 1998 - 10th Israel Congress on Industrial Engineering and Management, Haifa, June 1998. Subject of paper: Overview on the Educational Programs of Industrial and Management Engineers, (with Fruchter D.). Invited paper.
- 1998 - 10th Israel Congress on Industrial Engineering and Management, Haifa, June 1998. Subject of paper: The Professional Profile of Industrial and Management Engineers in Israel, Survey Results. Key note paper.
- 2000 - 11th Israel Congress on Industrial Engineering and Management, Beer-Sheba, May 2000. Plenary session on the subject: The Future of the Industrial Engineering Profession. Conducting a round table with 3 IE Department Heads.
- 2009 - International Conference on Enhancing Resource Effectiveness in the Workplace, Kathmandu Nepal, August 2009. Plenary session on the subject: Revisiting the Role of Industrial Engineers in Improving Effectiveness of Resources Utilization.

### **Contributed Talks**

- 1980 - NATO Symposium, Anthropometry and Biomechanics: Theory and Applications, Cambridge, England, July 1980. Subject of paper: Biomechanical and Engineering Anthropometry Considerations for the Assessment of Amputees' Work Performance.

- 1983 - 1st Conference of the Israel Ergonomics Society, Tel Aviv, January 1983. Subject of paper: The Back-Pain Phenomena and the Measurements of Spinal Configuration for the Improvement of Working Postures.
- 1983 - 4th World Congress of the International Society for Prosthetics and Orthotics, London, England, September 1983. Subject of paper: Motion Pattern Analysis for Evaluation and Design of a New Terminal Device.
- 1984 - 2nd Conference of Health Safety and Hygiene at Work, Tel-Aviv, January 1984. Subject of paper: The Influence of Back Pain in Work Situations.
- 1984 - 3rd Conference of Industrial Engineering and Management, Tel -Aviv, February 1984. Subject of paper: The Use PMTS for Design of Artificial Hands.
- 1988 - 7th Congress of the International Society of Electro-Physiological Kinesiology, Enschede, The Netherlands, June 1988. Subject of paper: Displacement of the Spine during Lifting.
- 1988 - International Industrial Ergonomics and Safety Conference, New Orleans, USA, June 1988. Subject of paper: System Comparison of Two Advanced Methods for Measuring Angular Displacement of Torso (with Chaffin D.B, Redfern M. and Seong N.B.).
- 1988 - 12th Annual Meeting of the American Society of Biomechanics, Urbana-Champaign, Illinois, USA, Sept. 1988. Subject of paper: A Method to Assess Angular Displacement of Torso Based on Miniature Inclinator Detectors (with Chaffin D.B. and Woolley C).
- 1989 - 10th International Conference on Production Research, Nottingham, England, August 1989. Subject of paper: Predicting Learning Curve Parameters (with Dar-El E.M. and Sabag K.), Speaker Dar-El.
- 1989 - 6th World Congress of the International Society for Prosthetics and Orthotics Kobe, Japan, November 1989. Subject of paper: Performance Profiles of Prosthetic Hand Grippers.
- 1989 - International Conference on Occupational Hazards in the Diamond Industry, Kfar-Sabba, December 1989. Subject of paper: Ergonomically Considerations in Diamond Polishing Postures.
- 1990 - 5th Conference on Health, Safety and Hygiene at Work, Ramat-Gan, March 1990. Subject of paper: Ergonomically Considerations in Working Station of Diamond Polishers (with Messer E.).
- 1990 - 5th Conference on Health, Safety and Hygiene at Work, Ramat-Gan, March 1990, Subject of paper: Expert System in Ergonomic Design (with Karni R. and Boughanim D.).
- 1990 - 6th Conference of Industrial Engineering and Management, Herzelia, April 1990. Subject of paper: Planning Optimal Path and Minimal Motion Time of Robotics Manipulator Tool-Center Point (with Rubinovitz J.).
- 1990 - 6th Conference of Industrial Engineering and Management, Herzelia, April 1990. Subject of paper: Lifter-A 3D Lifting Analysis (with Boughanim D.).
- 1990 - 6th Conference of Industrial Engineering and Management, Herzelia, April 1990. Subject of paper: A Model for Analysis of Manual Lifting Tasks (with Ben-David A.).
- 1990 - 6th Conference of Industrial Engineering and Management, Herzelia, April 1990. Subject of paper: Workstation Design in the Diamond Polishing Industry (with Messer E.).
- 1990 - 6th Conference of Industrial Engineering and Management, Herzelia, April 1990. Subject of paper: Parameter Prediction for the Learning Curve Theory (with Zer M. and Dar-El E.M.), Speaker Zer.
- 1990 - 6th Conference of Industrial Engineering and Management, Herzelia, April 1990. Subject of paper: Prediction of Learning Behavior in Long Cycle Tasks (with Dar-El E.M. and Sabag K.), Speaker Sabag.
- 1990 - 6th Conference of Industrial Engineering and Management, Herzelia, April 1990. Subject of paper: An Expert System for Ergonomic Analysis (with Karni R. and Boughanim D.), Speaker Karni.
- 1991 - International Conference on Airline Ground Safety, Tel-Aviv, February 1991. Subject of paper: Causes of lower Back in Blue and White-Collar Jobs.
- 1991 - Annual Conference of the Israel Ergonomics Society, on Human Factors in Expert Systems, Tel-Aviv, February 1991. Subject of paper: Methodology of Expert System for Ergonomically Design (with Karni R.).
- 1991 - 6th International Industrial Ergonomics and Safety Conference '91, Lake Tahoe, Nevada,

- USA, June 1991. Subject of paper: Analysis and Redesign of Workstation in the Diamond Polishing Industry (with Messer E.).
- 1991 - 11th International Conference on Production Research, Hefei, China, August 1991. Subject of paper: Learning Curve Parameter Prediction (with Dar-El E. and Zer M.), Speaker Dar-El.
- 1992 - 6th Annual Conference on Health, Safety and Hygiene at Work, Ramat-Gan, March 1992. Subject of paper: ErgoEx - Expert System as a Tool for Ergonomics Evaluation (with Karni R.).
- 1992 - 6th Annual Conference on Health, Safety and Hygiene at Work, Ramat-Gan, March 1992. Subject of paper: Neuritis Ulnaris among Diamond Polishers (with Stein H. and Shaffer A.).
- 1993 - Chairman of the Evaluation Methods Session in the 8th International Industrial Ergonomics and Safety Conference, Copenhagen, Denmark.
- 1993 - 12th International Conference on Production Research, Lappeenranta, Finland, August 1993. Subject of paper: Expert-System-Based Workplace Design" (with Karni R.), Speaker Karni.
- 1994 - 8th Conference of Industrial Engineering and Management, Beer-Sheba, April 1994. Subject of paper: Methods Used for Ergonomic Evaluation.
- 1994 - 8th Conference of Industrial Engineering and Management, Beer-Sheba, April 1994. Subject of paper: Functional Ergonomics for Analysis of Repetitive Tasks.
- 1994 - 8th Conference of Industrial Engineering and Management, Beer-Sheba, April 1994. Subject of paper: Engineering Considerations and Strategy in Ergonomics Design.
- 1994 - 9th International Industrial Ergonomics and Safety Conference '94, San Antonio, Texas, USA, June 1994. Subject of paper: Muscle Activity in the Riveting Task: Effects of Work Practice and Protective Gloves (with Klinenberg E., Martin B. and Rempel D.), Speaker Klinenberg.
- 1995 - 29th IPA Conference Jerusalem (Information Processing Ass.), Jan. 1995. Subject of paper: Ergonomic Variants in Keyboards Design.
- 1995 - 13th International Conference on Production Research, Jerusalem, August 1995. Subject of paper: Automatic Vs. Manual Manufacturing in the Diamond Industry.
- 1995 - 25th Scientific Conference of the Israel Psychology Association, Beer-Sheva, October 1995. Subject of paper: Ergonomics Intervention and Design of Advanced Workstation for Diamond Polishing.
- 1996 - 9th Conference of Industrial Engineering and Management, Herzelia, May 1996. Subject of paper: Geometry of the Ergonomic Keyboard (with Harel S.).
- 1996 - 9th Conference of Industrial Engineering and Management, Herzelia, May 1996. Subject of paper: Trends in Work-Study towards the Year 2000.
- 1996 - New Industrial Engineering Tools '96 Conference, Pittsburgh, USA, September 1996. Subject of paper: Biomechanical Profiles for Evaluation of Highly Condensed Work.
- 1996 - ERGO '96, Israel Ergonomics Society Annual Conference, Tel-Aviv, December 1996. Subject of paper: Geometry of Keyboards (with Harel S.), Speaker Harel.
- 1997 - 13th Triennial Congress of the International Ergonomics Association, Tampere, Finland, June 1997. Subject of paper: Performance Evaluation of New Types of Prosthetic Prehensors.
- 1997 - 13th Triennial Congress of the International Ergonomics Association, Tampere, Finland, June 1997. Subject of paper: A Study on Wheelchairs and Users in Rehabilitation.
- 1997 - 7th International Conference on Human-Computer Interaction (HCI International '97), San Francisco, USA, August 1997. Subject of paper: Keyboard Operations in a Negative Slope Design.
- 1997 - 1st Israeli Conference on Ergonomics, Occupational Medicine and Industrial Hygiene, Netanya, December 1997. Subject of paper: Proper Ergonomics is Good Economics.
- 1998 - 10th Israel Congress on Industrial Engineering and Management, Haifa, June 1998. Subject of paper: Dynamic Model for on Duty Assignments in the Service Sector, (with Balila I.), Speaker Balila.
- 1998 - 10th Israel Congress on Industrial Engineering and Management, Haifa, June 1998.

- Subject of paper: Wage Incentives in Caprice, a Gem Industry, (with Surani Y. and Pinkas B.), Speaker Surani.
- 1998 - 10th Israel Congress on Industrial Engineering and Management, Haifa, June 1998. Subject of paper: A Biomechanical Model for Recoil Impact on the Clavicle, (with Pomagreen D.), Speaker Pomagreen.
- 1998 - Global Ergonomics Conference, Cape-Town, South Africa, September 1998. Subject of paper: Ergonomics Participatory Plan in the Diamond Industry.
- 2000 - 11th Biannual Industrial Engineering and Management Congress, Beer-Sheva, May 2000. Subject of paper: Multimedia Generator for Defining Time Standards, (with Moran Elnkave).
- 2000 - 11th Biannual Industrial Engineering and Management Congress, Beer-Sheva, May 2000. Subject of paper: Forecasting Man Power Requirements in Service Assignments, (with Balaila I.).
- 2000 - 9th Conference on Safety and Health, Jerusalem, May 2000. Subject of paper: Negative Ergonomic Keyboard for Relief of Typing Trauma (with Harel S.).
- 2000 - 9th Conference on Safety and Health, Jerusalem, May 2000. Subject of paper: Parameters for Design an Effective Driving Cell in Tractors (with Rahamim O.).
- 2000 - 9th Conference on Safety and Health, Jerusalem, May 2000. Subject of paper: Ergonomics Considerations in Design of Gynecological Ultra Sonography Tooling (with Tal O.).
- 2000 - 9th Intentional Conference on Productivity and Quality Research, Jerusalem, June 2000. Subject of paper: A Multimedia Generator for Advanced Work Measurement, (with Elnkave M.).
- 2000 - The Maynard Forum for Industrial Engineering, Them: Using Lean Tools and Techniques, Pittsburgh September 2000. Subject of paper: A Multimedia Generator for Advanced Work Measurement, (with Elnkave M.).
- 2001 - 15th Annual Intentional Occupational Ergonomics and Safety Conference, Fairfax Virginia, USA, June 2001. Subject of paper: Using Logical Analysis of Data for Cumulative Trauma Disorders Risk Assessment, (with Freivalds A., Pollatschek M. and Y.K. Kong).
- 2001 - 15th Conference on Occupational Ergonomics and Safety, Amsterdam, The Netherlands 2001. Subject of paper: Using LAD for CTD Risk Assessment, (with Freivalds A., Pollatschek M. and Y.K. Kong).
- 2002 - 12th Biannual Industrial Engineering and Management Congress, Tel-Aviv, May 2000. Subject of paper: Methodology for Assessment of Ergonomic Hazards in the Work-Situation, (with Elnkave M.).
- 2002 - 12th Biannual Industrial Engineering and Management Congress, Tel-Aviv, May 2000. Subject of paper: Cost of Service User Assignments Considerations to Save Idle Times, (with Balaila I.).
- 2002 - 12th Biannual Industrial Engineering and Management Congress, Tel-Aviv, May 2000. Subject of paper: Is it Possible to determine Performance Time for Software Programmers, (with Regev-Mevorach R.).
- 2004 - 13th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2004. Subject of paper: Screening Postural Work Elements - to Obtain Most Important Data for Ergonomics Design, (with Elnkave M.).
- 2004 - 13th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2004. Subject of paper: Ergonomics Design for an Ambulance Cabin, (with Byran E.).
- 2004 - 13th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2004. Subject of paper: Long Distance Performance Time Inputs for Global Work-Measurement Practice, (with Elnkave M.).
- 2005 - 12th Annual Conference on Quality in Medicine, Tel-Aviv, June 2005. Subject of paper: Methodology for Optimal Scheduling of Hospital Operation Room Facilities, (with Rodenski D.).
- 2006 - 14th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2006. Subject of paper: Computerized Assembly Cell Design Comprising Automatic Semi-Automatic and Manual Processes, (with Elnkave M.).
- 2006 - 14th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2006.



- Subject of paper: Inserting Cost Effectiveness to the Ergonomic Equation, when Considering Practical Solutions, (with Elnekave M.).
- 2006 - 14th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2006. Subject of paper: Methodology for Scheduling Hospital Operation Room Facilities, (with Rodenski D.).
- 2006 - 14th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2006. Subject of paper: Nursing Man Power Allocation in Hospitals, (with Khabia O.).
- 2008 15th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2008. Subject of paper: Visual Command Effectiveness in Field Vehicles, (with Byran E.).
- 2008 15th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2008. Subject of paper: Ergonomic Improvements in the Ambulance Working Space, (with Byran E.).
- 2008 15th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2008. Subject of paper: Nursing ManPower Allocation in Hospitals - Staff Vs. Quality of Care, (with Khabia O.).
- 2009 - The 2009 Industrial Engineering Research Conference, Miami FL, May 2009. Subject of paper: Triage Decision Making: Discrepancies in assigning the Emergency Severity Index (with Fields E., Claudio D., Okudan G., Carol A. Smith C. and Freivalds A.).
- 2009 - International Conference on Enhancing Resource Effectiveness in the Workplace, Kathmandu Nepal, August 2009. Subject of paper: Allocation of Nursing Workforce in Hospital Wards with Mix Patient Needs, (with Khabia O.).
- 2010 16th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2010. Subject of paper: Effectiveness of Command in Field Vehicles, (with Byran E.).
- 2010 16th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2010. Subject of paper: Minimizing Idle Times in Cluster Tools in the Semiconductor Industry, (with Lati N.).
- 2010 16th Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2010. Subject of paper: Quality Driven Approach to Determine Nursing Allocation in Hospital's Wards, (with Khabia O.).
- 2010 Annual Ergonomics, Human-Factors and Safety Conference, Beer-Sheva, Februar 2014. Subject of paper: Methodology for Design of Operator's Cabin in Off Road Vehicles, (with Byran E.).
- 2014 Annual Ergonomics, Human-Factors and Safety Conference, Te-Aviv, April 2010. Subject of paper: Design of a Sitting Supportive Device and Evaluation of its Effect on Muscle Activity and Mean Heart Rate Based on Two Sitting Sessions in a Long Haul Aircraft Seat, (with Saddai E. P.).

### **Refereed Papers in Conference Proceedings**

1. Biomechanical and Engineering Anthropometry Considerations for the Assessment of Amputees' Work Performance, in the Proceedings of NATO Symposium on Biomechanics, Cambridge, England, July 1980.
2. The Back-Pain Phenomena and the Measurements of Spinal Configuration for the Improvement of Working Postures, in the Proceedings of the I Annual Conference of the Israeli Ergonomics Society, Tel-Aviv, Jan. 1983.
3. Motion Pattern Analysis for Evaluation and Design of a New Terminal Device, in the Proceedings of the IV World Congress of the International Society for Prosthetics and Orthotics, London, England, Sept. 1983.
4. The Use of PMTS for Design of Artificial Hands, in the Proceedings of the III Annual Congress of Industrial Engineering and Management, Tel-Aviv, February 1984.
5. Motion Pattern Analysis for the Design of a New Prosthetic Hand, in the Proceedings of the II International Symposium on Design for Disabled Persons, Tel-Aviv, November 1984.
6. Objective Performance Analysis of Artificial Hand Grippers, in the Proceedings of the Bi-National Workshop for Advanced Technology in Aiding the Disabled, Haifa, January 1987.
7. Ergonomics in the Design of Hand Tools, in the Proceedings of the IV Conference of Industrial

- Engineering and Management, Beer-Sheva, May 1988.
8. Displacement of the Spine during Lifting, in the Proceedings of the VII Congress of the International Society of Electrophysiological Kinesiology, Enschede, The Netherlands, June 1988.
  9. System Comparison of Two Advanced Methods for Measuring Angular Displacement of Torso, in the Proceedings of the Annual International Industrial Ergonomics and Safety Conference, New Orleans, USA, June 1988, (with Chaffin, D.B., Redfern M. and Byun S.N.).
  10. A Method to Assess Angular Displacement of Torso Based on Miniature Inclinometer Detectors, in the Proceedings of the XII Annual Meeting of American Society of Biomechanics, Urbana-Champaign, Ill., USA, Sept. 1988, (with Chaffin D.B. and Woolley C.).
  11. Predicting Learning Curve Parameters", in the Proceedings of the X International Conference on Production Research, Nottingham, England, Aug. 1989, (with Dar-El E.M. and Sabag K.).
  12. Performance Profiles of Prosthetic Hand Grippers, in the Proceedings of the VI World Congress of the International Society for Prosthetics and Orthotics, Kobe, Japan, Nov. 1989.
  13. Ergonomics Considerations in Working Station of Diamond Polishers, in the Proceedings of the V Annual Conference in Health, Safety and Hygiene at Work, Ramat-Gan, March 1990, (with Messer E.).
  14. Expert System in Ergonomic Design, in the Proceedings of the V Annual Conference in Health, Safety and Hygiene at Work, Ramat-Gan, March 1990, (with Karni R. and Boughanim D.).
  15. Planning Optimal Path and Minimal Motion Time of Robotics Manipulator Tool-Center Point", in the Proceedings of the VI Conference of Industrial Engineering and Management, Herzelia, April 1990 (with Rubinovitz J.).
  16. Lifter-A 3D Lifting Analysis, in the Proceeding of the VI Conference of Industrial Engineering and Management, Herzelia, April 1990, (with Boughanim D.).
  17. A Model for Analysis of Manual Lifting Tasks, in the Proceeding of the VI Conference of Industrial Engineering and Management, Herzelia, April 1990 (with Ben-David A.).
  18. Work Station Design in the Diamond Polishing Industry, in the Proceeding of the VI Conference of Industrial Engineering and Management, Herzelia, April 1990, (with Messer E.).
  19. Parameter Prediction for the Learning Curve Theory, in the Proceedings of the VI Conference of Industrial Engineering and Management, Herzelia, April 1990 (with Zer M. and Dar-El E.M.).
  20. Prediction of Learning Behavior in Long Cycle Tasks", in the Proceedings of the VI Conference of Industrial Engineering and Management, Herzelia, April 1990 (with Sabag K. and Dar-El E.M.).
  21. An Expert System for Ergonomic Analysis, in the Proceedings of the VI Conference of Industrial Engineering and Management, Herzelia, April 1990 (With Karni R. and Boughanim D.).
  22. Ergonomic Considerations in the, Design of Diamond Polishing Procedures, in the Proceedings of the II Annual Conference of the Israel Ergonomics Society, Israel, June 1990 (with Messer E.).
  23. Analysis and Redesign of Work Station in the Diamond Polishing Industry, in the Proceedings of the Annual International Industrial Ergonomics and Safety Conference '91, Lake Tahoe, Nevada, USA, June 1991 (with Messer E.).
  24. Learning Curve Parameter Prediction, in the Proceedings of the XI International Conference on Production Research, Hefei, China, August 1991 (with Dar-El E.M. and Brenner M.).
  25. Present and Advanced Workstations in the Diamond Polishing Industry, in the Proceedings of the International Conference of the World Diamond Syndicate, Tel-Aviv, October 1991.
  26. Occupational Hazard and Biomechanical Evaluation in the Diamond Polishing Industry, in the Proceedings of the XIII Asian Conference on Occupational Health and the III Conference of South-East Asian Ergonomics Society, Bangkok, Thailand, November 1991.
  27. ERGOEX - Expert System as a Tool for Ergonomics Evaluation, in the Proceedings of the XI Annual Conference on Health, Safety and Hygiene at Work, Ramat-Gan, March 1992 (with Karni R.).
  28. Neuritis Ulnaris among Diamond Polishers, in the Proceedings of the VI Annual Conference on Health, Safety and Hygiene at Work, Ramat-Gan, March 1992 (with Stein H. and Shaffer A.).
  29. A 3-Dimensional Lifting Analysis, in the Proceedings of the Annual International Industrial Ergonomics and Safety Conference, Denver, Colorado, USA, June 1992 (with Boughanim D.).

30. An Expert Advisor for Ergonomic Evaluation, in the Proceedings of the Annual International Industrial Ergonomics and Safety Conference, Denver, Colorado, USA, June 1992 (with Zellner S. and Karni R.).
31. Cumulative Trauma Analysis in Diamond Polishing Operations, in the Proceedings of the Annual International Industrial Ergonomics and Safety Conference, Denver, Colorado, USA, June 1992, (with Lenger R.).
32. Biomechanics Considerations and Ergonomic Design in Diamond Polishing, in the Proceedings of the Annual International Industrial Ergonomics and Safety Conference, Denver, Colorado, USA, June 1992 (with Messer E.).
33. A Methodology for Functional Ergonomic Evaluation of Repetitive Operations, in the Proceedings of the Annual International Industrial Ergonomics and Safety Conference, Copenhagen, Denmark, June 1993.
34. Expert-System-Based Workplace Design, in the Proceedings of the XII International Conference on Production Research, Lappeenranta, Finland, August 1993 (with Karni R.).
35. Ergonomic Evaluation of Fine Manual Operations, in the Proceedings of the International Ergonomics Association Conference on Ergonomics of Material Handling, Warsaw, Poland, June 1993 (with Rempel D.).
36. CTD, Its Causes Diagnosis and Prevention Measures, in the Proceedings of the VIII Conference of Industrial Engineering and Management, Beer-Sheba, April 1994.
37. Methods Used for Ergonomic Evaluation, in the Proceedings of the VIII Conference of Industrial Engineering and Management, Beer-Sheba, April 1994.
38. Functional Ergonomics for Analysis of Repetitive Tasks, in the Proceedings of the VIII Conference of Industrial Engineering and Management, Beer-Sheba, April 1994.
39. Engineering Considerations and Strategy in Ergonomics Design, in the Proceedings of the VIII Conference of Industrial Engineering and Management, Beer-Sheba, April 1994.
40. Muscle Activity in the Riveting Task: Effects of Work Practice and Protective Gloves, in the Proceedings of the 9th International Industrial Ergonomics and Safety Conference, San Antonio, Texas, USA, June 1994.
41. Ergonomic Variants in Keyboards Design, in the Proceedings of the 29th IPA Conference, Jerusalem, January 1995.
42. Automatic Vs. Manual Manufacturing in the Diamond Industry, in the Proceedings of the XIII International Conference on Production Research, Jerusalem, August 1995.
43. Ergonomics Intervention and Design of Advanced Workstation for Diamond-Polishing, in the Proceedings of the 25th Scientific Conference of the Israel Psychology Association, Beer-Sheba, October 1995.
44. Biomechanical Modeling of Recoil and Impact on the Clavicle During Shoulder Shooting, in the Proceedings of the 1st International Conference on Applied Ergonomics, Istanbul, Turkey, May 1996, (with Pomagreen D.).
45. Geometry of the Ergonomic Keyboard, in the Proceedings of the 9th Conference of Industrial Engineering and Management, Herzelia, May 1996, (with Harel S.).
46. Trends in Work-Study Towards the Year 2000, in the Proceedings of the 9th Conference of Industrial Engineering and Management, Herzelia, May 1996.
47. Geometric Variables In Keyboard Operations, in the Proceedings of the 11th International Occupational Ergonomics and Safety, Zurich, Switzerland, July 1996, (with Harel S.).
48. Ergonomic Intervention In Diamond Production Machinery, in the Proceedings of the 2nd International Symposium on Ergonomics, Occupational Health, Safety and Environment, New Delhi, India, November 1996.
49. Performance Evaluation of New Types of Prosthetic Prehensors, in the Proceedings of the 13th Triennial Congress of the International Ergonomics Association, Tampere, Finland, June 1997.
50. A Study on Wheelchairs and Users in Rehabilitation, in the Proceedings of the 13th Triennial Congress of the International Ergonomics Association, Tampere, Finland, June 1997.
51. Keyboard Operations in a Negative Slope Design, in the Proceedings of the 7th International Conference on Human-Computer Interaction, San Francisco, USA, August 1997, (with Harel S.).
52. The Professional Profile of Industrial and Management Engineers in Israel, Survey Results, in A Bridge of Scientific Management to Industry in the Years of 2000, Haifa, June 1998.

53. Dynamic Model for on Duty Assignments in the Service Sector, in A Bridge of Scientific Management to Industry in the Years of 2000, Haifa, June 1998, (with Balila I.).
54. Wage Incentives in Caprice, a Gem Industry in the Proceedings of the 10th Biannual Industrial Engineering and Management Conference, Haifa, June 1998, (with Surani Y. and Pinkas B.).
55. Overview on the Educational Programs of Industrial and Management Engineers, the Proceedings of the 10th Biannual Industrial Engineering and Management Conference, Haifa, June 1998, (with Fruchter D.).
56. A Biomechanical Model for Recoil and Impact on the Clavicle, the Proceedings of the 10th Biannual Industrial Engineering and Management Conference, Haifa, June 1998, (with Pomagreen D.).
57. Ergonomics Participatory Plan in the Diamond Industry, in the Proceedings of the Global Ergonomics, Cape-Town, South Africa, September 1998.
58. Multimedia Generator for Defining Time Standards, in the Proceedings of the 11th Biannual Industrial Engineering and Management Conference, pp. 338-342, Beer-Sheva, May 2000, (with Elnekave M.).
59. Forecasting Man-Power Requirements in Service Assignments, in the Proceedings of the 11th Biannual Industrial Engineering and Management Conference, pp. 159-163, Beer-Sheva, May 2000, (with Balila I.).
60. Negative Ergonomic Keyboard for Relief of Typing Trauma, in the Proceedings of the 9th Conference on Safety and Health, pp. 67-68, Jerusalem, May 2000, (with Harel S.).
61. Parameters for Design an Effective Driving Cell in Tractors, in the Proceedings of the 9th Conference on Safety and Health, pp. 69-71, Jerusalem, May 2000, (with Rahamim O.).
62. Ergonomics Considerations in Design of Gynecological Ultrasonography Tooling, in the Proceedings of the 9th Conference on Safety and Health, pp. 72-75, Jerusalem, May 2000, (with Tal O.).
63. A Multimedia Generator for Advanced Work Measurement, in the Proceedings of the 9th Intentional Conference on Productivity and Quality Research, pp. 229-234, Jerusalem, June 2000, (with Elnekave M.).
64. Using LAD for CTD Risk Assessment, in Advances in Occupational Ergonomics and Safety, Proceedings of the 15th Annual Intentional Occupational Ergonomics and Safety Conference, Bittner et al. (Eds.), ISO Press, pp. 70-79, Fairfax Virginia, USA, June 2001, (with Freivalds A., Pollatschek M. and Y.K. Kong).
65. Methodology for Assessment of Ergonomic Hazards in the Work-Situation, in the Proceedings of the 12th Biannual Industrial Engineering and Management Conference, pp. 418-422, Tel-Aviv, March 2002, (with Elnekave M.).
66. Cost of Service User Assignments Considerations to Save Idle Times, in the Proceedings of the 12th Biannual Industrial Engineering and Management Conference, pp. 443-447, Tel-Aviv, March 2002, (with Balaila I.).
67. Is it Possible to determine Performance Time for Software Programmers? in the Proceedings of the 12th Biannual Industrial Engineering and Management Conference, pp. 495-500, Tel-Aviv, March 2002, (with Regev-Mevorach R.).
68. Screening Postural Work Elements - to Obtain Most Important Data for Ergonomics Design, in the Proceedings of the 13th Biannual Industrial Engineering and Management Conference, on CD, Abstracts Book pp. 136-137, Tel-Aviv, March 2004, (with Elnekave M.).
69. Ergonomics Design for an Ambulance Cabin, in the Proceedings of the 13th Biannual Industrial Engineering and Management Conference, on CD, Abstracts Book pp. 52-55, Tel-Aviv, March 2004, (with Byran E.).
70. Methodology for Optimal Scheduling of Hospital Operation Room Facilities, in the Proceedings of the 12th Annual Conference on Quality in Medicine, Tel-Aviv, June 2005, (with Rodenski D.).
71. Long Distance Performance Time Inputs for Global Work-Measurement Practice, in the Proceedings of the 13th Biannual Industrial Engineering and Management Conference, on CD, in Abstracts Book pp. 89-90, Tel-Aviv, March 2004, (with Elnekave M.).
72. Methodology for Scheduling Hospital Operation Room Facilities, in the Proceedings of the 14th Biannual Industrial Engineering and Management Conference, on CD, in Abstracts Book pp. 57, Tel-Aviv, March 2006, (with Rodenski D.).

73. Nursing Man Power Allocation in Hospitals - Staff Vs Quality of Care, in the Proceedings of the 14th Biannual Industrial Engineering and Management Conference, on CD, in Abstracts Book pp. 49, Tel-Aviv, March 2006, (with Khabia O.).
74. Inserting Cost Effectiveness to the Ergonomic Equation, when Considering Practical Solutions, in the Proceedings of the 14th Biannual Industrial Engineering and Management Conference, on CD, in Abstracts Book pp. 7e, Tel-Aviv, March 2006, (with Elnekave M.).
75. Computerized Assembly Cell Design Comprising Automatic, Semi-Automatic and Manual Processes, in the Proceedings of the 14th Biannual Industrial Engineering and Management Conference, on CD, in Abstracts Book pp. 53e, Tel-Aviv, March 2006, (with Elnekave M.).
76. About the Efficiency and Cost Reduction of Parallel Mixed-Model Assembly Lines, in the 17th CIRP Design Conference on The Future of Product Development, F. Louhar Krause (Ed.), pp 483-492, Berlin, April 2007, (with Hazbany, S. and Shpitalni M.).
77. Visual Command Effectiveness in Field Vehicles, in the Proceedings of the 15th Biannual Industrial Engineering and Management Conference, on CD, in Abstracts Book pp. 50, Tel-Aviv, March 2008 (with Byran, E.).
78. Ergonomic Improvements in the Ambulance Working Space, in the Proceedings of the 15th Biannual Industrial Engineering and Management Conference, on CD, in Abstracts Book pp. 51, Tel-Aviv, March 2008 (with Byran, E.).
79. Nursing ManPower Allocation in Hospitals - Staff Vs. Quality of Care, in the Proceedings of the 15th Biannual Industrial Engineering and Management Conference, on CD, in Abstracts Book pp. 38, Tel-Aviv, March 2008 (with Khabia, O.).
80. Allocation of Nursing Workforce in Hospital Wards with Mix Patient Needs, in the Proceedings of the International Conference on Enhancing Resource Effectiveness, Kathmandu Nepal, August 2009 (with Khabia O.).
81. Effectiveness of Command in Field Vehicles, in the Proceedings of the Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2010 (with Byran E.).
82. Minimizing Idle Times in Cluster Tools in the Semiconductor Industry, in the Proceedings of the Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2010 (with Lati N.).
83. Quality Driven Approach to Determine Nursing Allocation in Hospital's Wards, in the Proceedings of the Biannual Industrial Engineering and Management Congress, Tel-Aviv, March 2010 (with Khabia O.).

### **Participation in Organizing Conferences**

- 1981 - Member of the Scientific Committee and Chairman of the Work-Study and Incentives Session in the 2nd Conference of Industrial Engineering and Management, Beer-Sheba.
- 1984 - Chairman of the Human Factors Session in the 3rd Conference of Industrial Engineering and Management, Tel-Aviv.
- 1988 - Chairman of the Human Factors Engineering Session in the 5th Conference of Industrial Engineering and Management, Beer-Sheba.
- 1990 - Chairman of the Human Factors Engineering Session in the 6th Conference of Industrial Engineering and Management, Tel-Aviv.
- 1991 - Chairman of the Design, Selection and Use of Hand Tools Session in the First International Symposium on Ergonomic Guidelines and Problem Solving, Lake Tahoe, Nevada, USA.
- 1992 - Member of the Scientific Program and Chairman of the International Ergonomics Session in the 7th International Industrial Ergonomics and Safety Conference, Denver, Colorado, USA.
- 1993 - Member of the Scientific Committee and Chairman of the Ergonomics in Repetitive Manual Tasks Session in the International Ergonomics Association Conference on Ergonomics of Material Handling, Warsaw, Poland.
- 1994 - Chairman of the Ergonomics and the Work Study Sessions in the 8th Conference of Industrial Engineering and Management, Beer-Sheba.
- 1995 - Conference Chair, Applied Ergonomics at IPA '95, Israel Ergonomics Society Annual Conference, January 1995, Jerusalem.

- 1995 - Member of the Scientific Program and Chairman of the Applications in Man Machine Systems Sessions in the 29th IPA (Information Processing Assoc.) Conference, January 1995, Jerusalem.
- 1995 Conference Chair, ELBIT '95, Israel Ergonomics Society Annual Conference, May 1995, Haifa.
- 1995 - Member of the Program Committee and Chairman of the Human Factors Session in the 13th International Conference on Production Research, August 1995, Jerusalem.
- 1995 - Chairman of the Human Factors Session in the 25th Scientific Conference of the Israel Psychology Association, October 1995, Beer-Sheba.
- 1996 Conference Chair, INTEL '95, Israel Ergonomics Society Annual Conference, February 1996, Jerusalem.
- 1996 - Chairman of the Work Environment and Back Pain Prevention Session in the 7th National Conference on Safety and Hygiene at Work, March 1996, Jerusalem.
- 1996 - Member of the International Scientific Committee of the 1st International Conference on Industrial Engineering Applications and Practice, Houston, USA.
- 1996 - Chairman of the Ergonomics and the Work Study Sessions in the 9th Conference of Industrial Engineering and Management, Herzelia.
- 1996 - Chairman of the Occupational Health and Safety III Session in the 1st International Conference on Applied Ergonomics, May 1996, Istanbul, Turkey.
- 1996 - Chairman of the Tools Session in the 11th International Ergonomics and Safety Conference, July 1996, Zurich, Switzerland.
- 1996 Conference Chair, ERGO '96, Israel Ergonomics Society Annual Conference, December 1996, Tel-Aviv.
- 1997 Conference Chair, ISCAR '97, Israel Ergonomics Society Annual Conference, June 1997, Teffen, Gush-Segev.
- 1997 - Member of the Scientific Program Board of the 7th International Conference on Human-Computer Interaction, August 1997, San Francisco, USA.
- 1997 - Member of the Program Board and Chairman of the Quantitative Issues in Safety Session, in the 1st Israeli Conference on Ergonomics, Occupational Medicine and Industrial Hygiene, December 1997, Netanya.
- 1998 - Chairman of the 10th Israel Congress on Industrial Engineering and Management – IE&M'98, June 1998, Haifa.
- 2000 - Chairman of the Round Table on the Future of the Industrial Engineering Profession, in the 11th Israel Congress on Industrial Engineering and Management, Beer-Sheva, May 2000.
- 2000 - Chairman of the Developments in Ergonomics Session, in the 9th Conference on Safety and Health, Jerusalem, May 2000.
- 2000 - Chairman of the Measurement Technology Session, in 9th Intentional Conference on Productivity and Quality Research, Jerusalem, June 2000.
- 2000 - Member of the International Scientific Advisory Board of the 14 Triennial Congress of the International Ergonomics Association, IEA/HFES 2000, San Diego, USA.
- 2002 - Member of the International Advisory Committee of the 16th Conference of the International Society of Occupational Ergonomics and Safety (ISOES) 2002, Toronto, Canada.
- 2003 - Member of the International Scientific Advisory Board for the 7th International Symposium on Human Factors in Organizational Design and Management (ODAM 7), 2003, Aachen, Germany.
- 2003 - Member of the International Scientific Advisory Board of the 17th Annual Conference of the International Society of Occupational Ergonomics & Safety (ISOES), 2003, Munich, Germany.
- 2008 - Member of the Program Board and the Scientific Advisory Board of the 15th Israel Congress on Industrial Engineering and Management – IE&M '08, March 2008, Tel-Aviv.
- 2009 - Member of the Program Board and the International Scientific Advisory Board of the International Conference on Enhancing Resource Effectiveness, Kathmandu Nepal, August 2009.

## Research Grants

- 1976 - \$25,000, National Research Council, Arthur V. Davis Fund, USA, "Assessment of the Occupational Potential of I.E. Techniques in the Service of the Physically Handicapped".
- 1979 - 260,000 IS, Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "The Back System of the Human in Working Situations".
- 1981 - 550,000 IS, Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "The Back System in Work Situations" (Cont.).
- 1982 - 70,000 IS, Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "The Geometry of the Vertebrae Column".
- 1985 - \$35,000, GenCorp and Owens Corning Fiberglass Corp. USA, "Displacement of Torso in Lifting" (with Chaffin D.B.), Principal Investigator, Gilad.
- 1988 - 115,000 NIS, Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "Expert System as a Tool for Ergonomic Analysis" (with Shemer Y.), Principal Investigator, Gilad.
- 1989 - 260,000 NIS, Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "Neurosis Ulnaris Phenomena among Hand Polishers in the Diamond Industry" (with Stein H. and Laurig W.), Principal Investigator, Gilad.
- 1990 - \$5,000, Coleman Research Fund, Japan "Methodology for Planning Optimal Path and Minimal Motion Time of Robotics Arm" (with Rubinovitz J.), Principal researcher, Gilad.
- 1990 - 283,000 NIS, Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "Neurosis Ulnaris Phenomena among Hand Polishers in the Diamond Industry" (Cont. with Stein H. and Laurig W.), Principal Investigator, Gilad.
- 1991 - 74,000 NIS, the Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "Expert System Ergonomic Analysis" (with Karni R.), Principal Investigator, Gilad.
- 1991 - 270,000 NIS, Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "Neurosis Ulnaris Phenomena among Hand Polishers in the Diamond Industry" (Cont. Stein H. and Laurig W.), Principal Investigator, Gilad.
- 1996 - 80,000 NIS, Committee for Research and Prevention in Occupational Safety and Health Fund, Ministry for Labor and Social Affairs, "Expert System Ergonomic Analysis" (Cont. Project with Karni R.), Principal Investigator, Gilad.
- 1996 - \$2,800, Tech Fund for the Promotion of Research, "Diamond Polishing Workstations for the 2000 Years".
- 2000 - \$13,000, The Hal Marcus Research Fund for Research in Industrial Engineering, "Using LAD for Improving CTD Risk Assessment" (with Pollatschek M. and Freivalds A.).
- 2000 - \$2,800, Tech Fund for the Promotion of Research, "Multimedia Generator for Advanced Measurement of Work".
- 2001 - \$13,000, The Hal Marcus Research Fund for Research in Industrial Engineering, "A Multimedia Platform for Advanced PMT Systems" (with Freivalds A.), Principal Investigator, Gilad.
- 2001 - \$2,800, Tech Fund for the Promotion of Research, "Computerised Work Study with Multimedia Abilities".
- 2001 - \$855, The William Davidson Applied Research Fund, "Managing Operation Times in Remote Production Situations".
- 2002 - \$12,000, The Hal Marcus Research Fund for Research in Industrial Engineering, "Use of a PDA Device as a Tool for Collecting Time Study Data" (with Freivalds A.).
- 2002 - \$22,000, A study on "Feasibility Study for Implementation of Wage Incentive Plan, among the Law Advisor Section in Israel Ministry of Defence". Funded by the office of the Israel Prime Minister.

- 2003 - \$140,000, Distance Learning for Virtual Work Study Laboratories. Funded by The Open University of Israel.
- 2004 – \$65,000, Restratification of Man Power among Hospital Nursing Workers. Funded by Sheba Medical Center Fund.
- 2005 – \$30,000, Evaluation and Modeling the Human Effort of Nursing Workers in Clinical Departments. Funded by Sheba Medical Center Fund.