CURRICULUM VITAE

Dr. Moshe Averbukh 12.07.2015

PERSONAL

Date of birth:	June 29, 1949
Place of birth:	Karaganda (Kazahstan, USSR)
Marital status:	Married + 3
Home address:	Beer-Sheva, Sdr.Jerusalem, 2/102
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EDUCATION

2008-2011	Ph.D. Studies. Ben-Gurion University (Israel), The Albert Katz International School for Desert Studies (Campus Sde-Boqer)
1976 - 1984	Ph.D. Studies. Institute for Mining of USSR Academy of Sciences(IGD A.A.Sckochinsky),
1982-1984	M.A. (Cum laude) Moscow Phisical-Engineering University(MIFI), Faculty of Theoretical Phisics, Moscow
1966 - 1972	B.Sc, M.Sc.(Summa Cum laude) Moscow Mining State University (MGGU), Department of Automation And Telemechanics, Faculty of Electrical Engineering, Moscow

EMPLOYMENT HISTORY

ACADEMIC APPOINTMENTS

Period	Institution	Role
2013 - Present	Ariel University, Israel	Senior Faculty;
2008 –2014 2011-2014	Dept. of Solar Energy & Environmental Physics, Jacob Blaustein Inst. for Desert Research, Ben-Gurion Univ. of the Negev, Sde-Boqer Campus, Energy Department, Faculty of Engineering Sciences, Ben-Gurion University of the Negev	Researcher Faculty member
1996–2012	Negev Academic College of Engineering SCE, Department of Electrical Engineering	Lecturer;
1979–1991	Institute for Mining of USSR Academy of Sciences(IGD A.A.Sckochinsky) (Moscow), Department of Driving Machines and Processes, Department of New Physical Approaches in Mining Industry	Senior Scientist Fellow

TEACHING AND EDUCATIONAL EXPERIENCE

1994–2004	Technological College(Beer-Sheva), Beer-Sheva, Department of Mechanical Engineering	Lecturer
1996-2002	College Sapir, School of Engineering, Shderot	Lecturer
2000-2004	High-School "Amit", Beer-Sheva	Teacher
1991-1992	Teaching course for teachers of Physics, Ben-Grunion University, Beer-Sheva	Courses for scientists and engineers

INDUSTRIAL EXPERIENCE

Period	Company	Role&Theme
2010-2012	Al HaDeshe Green Energy	Off-Grid Mobile Solar Power Station (8 kWp) with very high reliability of electric energy supply, Head of R&D
2004-2006	Schnapp Batteries Co.", Israel,	Development of Battery testing methods and equipment for battery testing, Consultant
2006	Seraphim Optronica Ltd., Israel	Optimal construction and optimal control of solar panels, Consultant
2006	Volta Vulcan Batteries Ltd., Israel	Development of equipment for battery testing, Consultant
1995-1996	Afikim Electric Mobilizers, Israel	Development of small electrical carts and scooters with solar panels, Consultant
1992-1994	IMI (TAAS), Israel	Project Leader
1972–1979	Project Institute for Drilling Equipment, Moscow	Leading Engineer for electric, pneumatic and control systems

MEMBERSHIP in PROFESSIONAL SOCIETIES

1. Member, IEEE
2. Israeli Engineering Society
3. Worldwide Society of Automotive and Airspace Engineering (SAE)

AWARDS

The Diploma and Silver Medal on the 30-th Geneve International Salon of Inventions for the invention "Electronic Tester for automotive battery measurements", Geneve, 2 May, 2002.

TEACHING

Undergraduate Courses:

- Introduction to Electrical Engineering I
- Introduction to Electrical Engineering II
- Power Electronics
- Electric Drive
- Electrical machinery
-Projecting of Electric Machines and Transformers

Graduate Courses:

- Concentration course for doctoral students: “Energy storage systems on the base of electrochemical principles” as invited professor, Lappeenranta University of Technology (LUT), Finland, June, 4-10.

SUPERVISION OF GRADUATE STUDENTS

M.Sc Theses:

Year	Student	Title
2013	A.Pozin (with prof. S.Sukoriansky)	The efficiency of hydrodynamic system in electrolyte flow batteries

B.Sc Theses:

Year	Student	Title
2014	A.Mohammad	Mathematical modeling of iron losses in induction motors are fed by VFD FC-51 (Danfoss Co.)
2014	P. Eliseev	Optimal Control of Micro-Grid Autonomous Hybrid Power Stations Based on Modeling of Stochastic Energy Consumption
2014	P.Domorad	Partial shading problem solution for solar arrays fed by MPPT via permanent monitoring of individual panels
2014	M.Gohari, E. Demri	Optimal design of PV on-grid solar power plant
2013	D. Raskin, R.	The engineering solutions of electric power driving

	Rozen	systems on the base of Artificial Intelligence
2012	M. Krinitsky	Development of powerful moveable electrical source based on the synergetic partnership between conventional battery and ultracapacitors (UC)
2011	A. Uhananov, Yuval Ben-Galim	Development of a Quick Dynamic Response MPPT System for Off-Grid Solar Power Arrangment with Adaptive Switching of DC/DC Converter
2010	A. Hafzadi	Development of programming resources (on MATLAB base) for selection of AC electric motors are supplied by VF inverters
2009	J. Amar, A. Shay	Development of energy storage systems are based on battery usage together with ultracapacitors
2009	E. Solomon	Comparison between different MPPT algorithms for large photovoltaic power stations
2008	H. Avidan, Lizzy Farhi	Development of testing algorithm and testing procedure based on the usage of LabVEIW environment in the production line of the "ORBOTECH" company for special electronic boards
2007	G. Goldfarb, A.Sabrinovsky	Development of equivalent electrical circuit of new supercapacitor (MAXWELL) with capacitance of 2600F
2007	G. Rozen, E. Halek	The optimal MPPT electronic tracker for solar panels based on original DC-DC buck converter
2006	D.Cohen Israel, A. Manzur	The development of simulation mathematical program for predicting service life of UPS battery storage arrangement
2006	P. Becker	Control methods and circuit topologies for multilevel DC-AC inverters
2006	I. Abramov	Optimal topologies and electronic schemes for power circuits of multilevel DC-AC inverters
2006	G. Milman	The development of MATLAB program codes for optimization of multilevel DC-AC inverter
2006	S. Kundinsky	The 5-th level multi-level DC-AC inverter for middle power load
2005	E. Rachmistrov, E. Rakov	An optimal hybrid solar power station for specific loads
2005	O. Moskovitch, N. David	The development of mathematical(MATLAB) program for the evaluation of the main energetic parameters are characterizing stand-alone power stations in distributed electrical utilities
2005	A.Piltch	Mathematical model design for describing a dynamic behavior of the stand-alone power utilities based on the usage of photovoltaic panels, diesel-generator and battery storage
2004	Eduard Alchazov	The investigation of original multi-level DC-AC inverter for hybrid power stations
2003	R. Levitanos	Electronic acquisition system for data recording during deep battery shortening
2002	P. Solodky, E. Tumim	Control system of synchronous diesel-generator that supplies power together with solar panels and storage energy devices

2000	A. Ziv, Ben Chnaan Sinuhe	Development and design of original two-stroke engine based on stepped piston inside double-diameter cylinder

Thesis Examination of Research Students of High Degrees:

1. 2014(Januar) – Martin Mellinkovsky, M.Sc., Ariel University on "Optimal sizing of hybrid power sources".
2. 2014(Januar) - Y. Ditkovich, M.Sc., Ariel University on "Matching wind turbines with wind regime in Samaria".
3. 2007(August) – Mohammed K Osman, M.Sc., BGU of the Negev, Jacob Blaustein Institue for Desrt Research, Albert Katz International School for Desert Studies, on "Removal of Dust from Surfaces: Role of Particle Size".
4. 2007(April) – Roman Polatnic, M.Sc., BGU of the Negev, Nuclear Engineering Department, Faculta of Engineering, on "Real-time Clouds Motion Analisys ans Possibility of its Application to Solar Engineering".
5. 2006 – Murat Orynbaev, M.Sc., BGU of the Negev, Albert Katz International School For Desert Studies, on "Spectral Response Characterization and Stability of Polimer-Fullerene Solar Cells".

ARTICLES (Refereed journals and publications)

No.	Authors, Title, Journal, Details	Subject	Rank	Impact Factor[1]	Cited
1.	Z. Vainer, B. Epshtein, S. Tapuchi, Y. Horen, P. Strajnikov, M. Averbukh and A. Kuperman. Synchronous motor pull-in process analysis. *J Circuit Syst Comp* pp. 1550088. 2015. Available: http://dx.doi.org/10.1142/S0218126615500887. DOI: 10.1142/S0218126615500887.			0.33	
2.	M. Averbukh, S. Lineykin and A. Kuperman. Portable ultracapacitor-based circuit for emergency staring of internal combustion engines. Power Electronics, IEEE Transactions on PP(99), pp. 1-1. 2014. . DOI: 10.1109/TPEL.2014.2355422.			5.726 (2013)	

3.	V. Yuhimenko, M. Averbukh, G. Agranovich and A. Kuperman. Dynamics of supercapacitor bank with uncontrolled active balancer for engine starting. Energy Conversion and Management 88(0), pp. 106-112. 2014. . DOI: http://dx.doi.org/10.1016/j.enconman.2014.08.033.			3.590 (2013)	
4.	Lineykin, S.; Averbukh, M.; Kuperman, A., "Issues in Modeling Amorphous Silicon Photovoltaic Modules by Single-Diode Equivalent Circuit," Industrial Electronics, IEEE Transactions on , vol.61, no.12, pp.6785,6793, Dec. 2014 doi: 10.1109/TIE.2014.2317138			5.165 (2012)	6
5.	S. Lineykin, M. Averbukh and A. Kuperman, "An improved approach to extract the single-diode equivalent circuit parameters of a photovoltaic cell/panel," Renewable and Sustainable Energy Reviews 30(0), pp. 282-289. 2014. . DOI: http://dx.doi.org/10.1016/j.rser.2013.10.015.	Energy &Fuel	5/81 (2012)	5.627 (2012)	12
6.	M.Averbukh, A.Kuperman and S.Lineikin,"Obtaining small PV array operational curves for arbitrary cell temperatures and solar irradiation densities from standard conditions data," J. Progress in Photovoltaics, Volume 21, Issue 5, Page(s): 1016-1024, August, 2013.	Energy &Fuel	4/81 (2012)	7.712 (2012)	15
7.	M.Averbukh, Y.Ben-Galim and A. Uhananov,"Development of a Quick Dynamic Response MPPT Algorithm for Off-Grid System with Adaptive Switching (On-Off) Control of DC/DC Converter," J. of Solar Energy Engineering, Volume 135, Issue 2, May, 2013.	Engineering &Mechanics	48/125	0.941 (2012)	3
8.	A. Kuperman, M. Averbukh and S. Lineykin, "Maximum power point matching versus maximum power point tracking for solar generators," Renewable and Sustainable Energy Reviews 19(0), pp. 11-17. 2013. . DOI: http://dx.doi.org/10.1016/j.rser.2012.11.012.	Energy &Fuel	5/81 (2012)	5.627 (2012)	10
9.	Y. Horen, A. Kuperman, Z. Vainer, S. Tapuchi and M. Averbukh,"Emulating Time Varying Nonlinear Uncertainties and Disturbances in LTI Systems," SIMULATION, December 2012 vol. 88 no. 12, p.p. 1499-1507. DOI:10.1177/0037549712459788	Comp. Science	73/105 (2012)	0.692 (2012)	2
10.	M.Averbukh, B.Rivin and J.Vinogradov,"On-board	SAE			

	Battery Condition Diagnostics Based on Mathematical Modeling of Engine Starting System", SAE Paper 2007-01-1476, 2007.	Internal combust. engines			
11.	M.M. Averbukh, I.L. Geichman and E.V. Novikova,"Functional requirements for remote control system of driving heading machines which are controlled from the safe distance," Scientific publications: The driving, reinforcing and supporting of mining tunnels: Mining Inst. of Academy of Science, Moscow, 1989, p.p.75-82.	Mining Science			
12.	M.M.Averbukh and M.A.Bogorova,"The estimation of productivity and safety for different mining drivage technologies", Scientific publications of ZNIIEUGOL, Ministry of Coal Industry, Issue No.1, Moscow, 1989,(No.4760).	Mining Science			
13.	M.M. Averbukh, M.A. Bogorova and A.I. Yushko, "Selection method for technological scheme for driving mining drifts over the outburst dangerous coal strata". Scientific publications: The problems of driving, reinforcing and supporting of mining tunnels: Mining Inst. of Academy of Science, Moscow, 1988, p.p. 17-24.	Mining Science			
14.	M.M.Averbukh and N.S.Rodionov,"The rate of abrasive wearing of drilling bits during rocks boring (theoretical approach by PDE)", Scientific publications of Novocherkassk Polytechnic University, Novocherkassk, 1988, p.p. 63-66.	Mining Science			
15.	M.M.Averbukh and S.A.Kazansky,"Dynamic analysis of operation of hydraulic power unit with constant pressure for hydraulic systems of driving machines". Scientific publications of young scientists in mining industry: Mining Inst. of Academy of Science, Moscow, 1988, p.p.59-67.	Mining Machinery			
16.	M.M. Averbukh, "The method for evaluation of the necessary minimal efficiency level of new boring equipment, "Scientific publications: The problems of increasing the efficiency of driving methods in mine: Mining Inst. of Academy of Science, Moscow, 1987, p.p. 65-69.	Mining Science			
17.	M.M.Averbukh,"The estimation method for the determination of the minimum gap between the beneficence of the new developing generation of	Mining Machinery			

	drilling and boring equipment compare to the previous one," Scientific publications: Mining Inst. of Academy of Science, The Increasing of the Technical Level of Development Operations, Moscow, 1987, p.p.65-69.				
18.	M.M.Averbukh,"The main advantages of programmable handling of hammers drilling parameters in comparison with the searching control methods", Scientific publications of VINITI, No.12(194), Moscow, 1987, p.137.	Mining Machinery			
19.	M.M.Averbukh and J.V.Alexandrov,"The determination of the needed accuracy for movement control of drill manipulators," Scientific publications of VINITI, No.5(175), Moscow, 1986, p.146.	Mining Machinery			
20.	M.M.Averbukh, "One mathematical approach of description abrasive wear of drilling bits during drilling process," Scientific publications of VINITI, No.5 (175), Moscow, 1987, p.146.	Mining Science			
21.	M.M.Averbukh,"Estimation of automatic control efficiency of drilling machines compare with the operator handling of drilling parameters," Scientific publications of ZNIIEUGOL, Ministry of Coal Industry, Issue No.1, Moscow, 1983,(No.2678).	Control Theory			

22.	N.G. Petrov and M.M. Averbukh, "Function classification of control systems for drilling machines," Scientific publications: Mining Inst. of Academy of Science, Issue No. 212, Moscow, 1982,p.p.45-48.	Mining Machinery			
23.	N.G.Petrov and M.M.Averbukh,"The estimation of networking time of boring jumbos during drilling operations," Scientific publications: Mining Inst. of Academy of Science: The Scientific and Technical Problems of Driving Mining Tunnels" , Issue No. 190, Moscow, 1980,p.p.41-44.	Mining Machinery			
24.	N.G.Petrov and M.M.Averbukh, "Perspective ways for development of automatic control for drilling and boring processes", Scientific publications:Drilling equipment and tools for minings and quarries, Issue No. 4, NIPIGORMASH, Sverdlovsk, 1978, p.p.138-142.	Mining Machinery			

25.	J.M.Kotliarevsky and M.M.Averbukh, “Pneumatic frequency method of measuring rotating velocity of pneumatic hammer drills”, Scientific publications:Drilling equipment and tools for minings and quarries, Issue No. 4, NIPIGORMASH, Sverdlovsk, 1978, p.p.149-152.				
26.	J.M.Kotliarevsky, M.M.Averbukh and R.E.Shvarzer, “Optimal conditions for accelerating pneumatic signals in the pneumatic control systems of drilling equipment”, Scientific publications:Drilling equipment and tools for minings and quarries, Issue No. 3, NIPIGORMASH, Sverdlovsk, 1977, p.p.122-128.				
27.	M.M.Averbukh and D.S.Vaisblat, “The research of dynamic stability of pneumatic signal lines with the special block evaluating derivative transfer function on the end of the pneumatic pipe”, Scientific publications:Drilling equipment and tools for minings and quarries, Issue No. 2, NIPIGORMASH, Sverdlovsk, 1976, p.p.133-141.				
28.	M.M. Averbukh, "Electronic modeling of automatic control system for pneumatic motor of drilling hammer PK-50,"Journal of Metrology and Measuring techniques, 2.32.497, Moscow, 1976, p.p.25-75.				
29.	A.I. Dukov, V.Y. Feldman and M.M.Averbukh,"Dynamic of the automatic control system for pneumatic motor of drilling hammer PK-50," Journal of mining machines and automatization, V.167, N.2, Moscow, 1975, p.p.11-12.				

[1]Impact factor to be announced in 2013 JCR Edition
Total ISI: 10 papers.
Total Impact factor: 35.41
H-index: 4.

CONFERENCE PAPERS

1. M.Averbukh, G.Geula, and A.Kuperman, “Analysis of Passive Diesel-Generator-Supercapacitor Hybrid for Enhanced Low Throttle Operation”, 5th European Symposium of Super Capacitors&Hybrid Solutions, ESSCAP 2015, April 23-25, Brasov, Romania.
2. M.Averbukh, P.Domorov, “Finding Global Power Maximum among Locals for PV Array”, 19th Sede Boqer Symposium of Solar Electricity Production, February 23-25, 2015.
3. G. Geula, M. Averbukh and A. Kuperman, “Minimizing Fuel Consumption and Mechanical Wear of Diesel Generator Based Auxiliary Power Unit,” 2014 IEEE 28th Convention of Electrical and Electronics Engineers in Israel December 3-5, 2014, Eilat.
4. M. Averbukh and P. Domorad, “Partial Shading Problem Solution for Solar Arrays Fed by MPPT via Permanent Monitoring of Individual Panels,” ,” 2014 IEEE 28th Convention of Electrical and Electronics Engineers in Israel December 3-5, 2014, Eilat.
5. P. Eliseev and M. Averbukh, “Optimal Control of Micro-Grid Autonomous Hybrid Power Stations Based on Modeling of Stochastic Energy Consumption,” 2014 IEEE 28th Convention of Electrical and Electronics Engineers in Israel December 3-5, 2014, Eilat.
6. V. Yuhimenko, M. Averbukh, G. Agranovich and A. Kuperman, “Analysis of Supercapacitor Bank with Uncontrolled Active Balancer,” 2014 IEEE 28th Convention of Electrical and Electronics Engineers in Israel December 3-5, 2014, Eilat.
7. A. Mohamed, Y. Lokshin and M. Averbukh, “Energy Losses Modeling in Induction Motors Fed by Danfoss VFD Micro Drive FC51,” 2014 IEEE 28th Convention of Electrical and Electronics Engineers in Israel December 3-5, 2014, Eilat.

1. A. Pozin, M. Averbukh, and S. Sukoriansky, “Power Efficiency Optimization of Vanadium Redox Batteries Based on Experimental Analysis of Electrolyte Flow Through Carbon Felt Electrodes,” ASME 2014, International Mechanical Engineering Congress and Exhibition, November, 14-20, Montreal, Canada.
2. M. Averbukh, A. Kuperman, G. Geula, S. Gadelovitch , and V. Yuhimenko, “Combining Diesel Generators with Ultracapacitors to Enhance Stability and Reliability,” ASME 2014, International Mechanical Engineering Congress and Exhibition, November, 14-20, Montreal, Canada.
3. A. Pozin, M. Averbukh, and S. Sukoriansky, “Determination of Hydraulic Power Losses in Vanadium Redox Batteries Based on Experimental Analysis of Electrolyte Flow through Carbon Felt of Electrodes,” Israelectrochemistry 2014, Tuesday, Sept. 16 2014, Technion, Haifa, Israel.
4. Averbukh, M., Kuperman, and A., Lineykin, S., "Compact energy source for emergency engine staring based synergetic battery-ultracapacitor circuit," Power Electronics and Applications (EPE'14-ECCE Europe), 2014 16th

European Conference on , vol., no., pp.1,10, 26-28 Aug. 2014 doi: 10.1109/EPE.2014.6910693

5. M. Averbukh, D. Faiman, and K. Batat, “Modeling of dynamic behavior of vanadium redox batteries (VRB) with contamination properties of proton exchange membrane,” Presented at Electrical & Electronics Engineers in Israel (IEEEI), 2012 IEEE 27th Convention of. 2012, .

   Digital Object Identifier: 10.1109/EEEI.2012.6377034
   Publication Year: 2012 , Page(s): 1 - 5

6. M. Averbukh, M. Krinitsky and B. Rivin, “Development of compact electrical source based on the synergetic partnership between conventional electrochemical storage batteries and ultracapacitors,” Presented at Electrical & Electronics Engineers in Israel (IEEEI), 2012 IEEE 27th Convention of. 2012, . Digital Object Identifier: 10.1109/EEEI.2012.6377037

7. M. Averbukh, S. Lineykin and A. Kuperman,“Maximum power point matching of solar arrays to arbitrary loads,” Presented at Electrical & Electronics Engineers in Israel (IEEEI), 2012 IEEE 27th Convention of. 2012, . Digital Object Identifier: 10.1109/EEEI.2012.6377078
   Publication Year: 2012 , Page(s): 1 - 5

8. S. Lineykin, M. Averbukh and A. Kuperman,”Five-parameter model of photovoltaic cell based on STC data and dimensionless,” Presented at Electrical & Electronics Engineers in Israel (IEEEI), 2012 IEEE 27th Convention of. 2012, . Digital Object Identifier: 10.1109/EEEI.2012.6377079 Publication Year: 2012 , Page(s): 1 - 5

9. M.Averbukh, and A.Kuperman. Compact Ultracapacitor Electrical Source for Emergency Engine Starting. Presented at the Conference:"Science in Defence and Security-HLS", Ariel, Israel, June 6, 2013.

10. M.Averbukh, D.Faiman and K.Batat. Modeling Impurity Transport in a Vanadium Redox (VRB) Battery. Presented at "18th Sede Boqer Symposium on Solar Energy Production", Sede-Boqer,Israel, February, 17-18,2013.

11. A.Kuperman, S.Lineykin, M.Sitbon, S.Gadelovits, and M.Averbukh. Employing PV Panel Modeling to Predict Boundary Operation Conditions of Power Electronic Interfaces. Presented at "18th Sede Boqer Symposium on Solar Energy Production",Sede-Boqer,Israel, February, 17-18,2013.

12. S.Lineykin,M.Averbukh and A.Kuperman. Extracting the Parameters of Amorphous Solar Panels based on I-V Characteristics. Presented at "18th Sede Boqer Symposium on Solar Energy Production",Sede-Boqer,Israel, February, 17-18,2013.

13. M. Averbukh, D. Faiman, and K. Batat. Modeling of dynamic behavior of vanadium redox batteries (VRB) with contamination properties of proton

exchange membrane. Presented at Electrical & Electronics Engineers in Israel (IEEEI), 2012 IEEE 27th Convention of. 2012, .

14. M. Averbukh, M. Krinitsky, and B. Rivin. Development of compact electrical source based on the synergetic partnership between conventional electrochemical storage batteries and ultracapacitors. Presented at Electrical & Electronics Engineers in Israel (IEEEI), 2012 IEEE 27th Convention of. 2012, .
15. M. Averbukh, S. Lineykin, and A. Kuperman. Maximum power point matching of solar arrays to arbitrary loads. Presented at Electrical & Electronics Engineers in Israel (IEEEI), 2012 IEEE 27th Convention of. 2012, .
16. S. Lineykin, M. Averbukh, and A. Kuperman. Five-parameter model of photovoltaic cell based on STC data and dimensionless. Presented at Electrical & Electronics Engineers in Israel (IEEEI), 2012 IEEE 27th Convention of. 2012,
17. M.Averbukh, S.Lineikin, and A.Kuperman, “A normalization approach to solar panels paratemers extraction based on manufacturer’s datasheets”, Proceedings of the 17th Sede Boqer Symposium on Solar Electricity production, Sede-Boqer, Israel, October 24-26, 2011.
18. M.Averbukh, Y.Ben-Galim, and A.Uhananov,“Development of a quick dynamic response MPPT algorithm for off-grid PV systems with adaptive switching (On-Off) control of DC/DC Converter”, Proceedings of the 17th Sede Boqer Symposium on Solar Electricity production, Sede-Boqer, Israel, October 24-26, 2011.
19. M.Averbukh, B.Rivin, and J.Vinogradov,"On-Board Battery Condition Diagnostics Based on Mathematical Modeling of Engine Starting System", SAE International, 2007 World Congress, Vehicle Diagnostic (SP-2137), Detroit, Michigan, April 16-19,2007.
20. M.Averbukh, B.Rivin, J.Vinogradov, and S.Hartmann, "Diagnostics and Verification of Engine Starting Systems Based on Mathematical Modeling”, ABSTRACT, The 22-nd Annual Symposium of the Israeli Section of the Combustion Institute, Tel-Aviv, Israel, December 21, 2006, p.p. 42-44.
21. M. Averbukh, "One aspect of optimal construction of solar panels", Proceedings of the 13th Sede Boqer Symposium on Solar Electricity production, Sede-Boqer, Israel, October 31- November 1, 2005, p.p. 149-152.
22. M.Averbukh,"Optimization of Multilevel Middle Power DC/AC Inverters for Hybrid (Stand-Alone) Solar Power Electricity Station", Proceedings of the 12th Sede Boqer Symposium on Solar Electricity production, Sede-Boqer, Israel, 23-24 February, 2004, p.p. 141-144.
23. M.Averbukh, and A. Vilshtein, "Using MATLAB environment for the course education of Electrical machines and Electric Drives", Proceeding of Interational Simposium of Post-Graduate Education: The Higher Thing is Original, Kazan,26 Januar, 2003, p.p. 91-93.

24. M.Averbukh, and V. Melamud, "Solar Energy Transformation: Theory and Application in High-level Technological Education for Israeli High Schools", Proceedings of the 11th Sede Boqer Symposium on Solar Electricity production, Sede-Boqer, Israel, 30 September – 1 October, 2002, p.p. 126-128.
25. M.Averbukh, D. Dobson, and E. Shkudovich,"Optimal Solution for Hybrid Power Electrical Utilities under Israeli Conditions", Proceedings of the 11th Sede Boqer Symposium on Solar Electricity production, Sede-Boqer, Israel, 30 September – 1 October, 2002, p.p. 121-125.
26. M.M. Averbukh, "Small Electrical Car with Solar Panels", Proceedings of the 8th Sede Boqer Symposium on Solar Electricity production, Sede Boqer, Israel, 3-5 November, 1997, p.p.139-142.
27. M.M. Averbukh, "Design of magneto-electric impact machines", Scientific publications of the National Scientific Conference of Republic Kazachstan: "Theory, creation and application of impact machines", Karaganda,11-13 September, 1990, part II, p.p. 187-188.
28. M.M. Averbukh, "Concerning the classifying of drilling machines", Scientific publication of the 10-th Jubilee Conference: "Drilling and blasting", Gubkin(USSR),27-29 September, 1988, p.28.
29. I.F. Lurie, A.M. Averbukh, V.D. Kvashin,and M.M. Averbukh, "Projecting of impacting mechanism for drilling machine", Scientific publications of the Conference: "Design and manufacturing of automatic projecting systems in mining branch", Moscow, 25-27 March, 1986, p.p. 56-57.
30. M.M Averbukh, and I.F. Lurie, "The choice of optimization criteria for design of drilling machine parameters and the modes of drilling process", Scientific publications of the National Scientific Conference: "Creation problems of impact mining machines", Karaganda(Kazachstan), 18-20 September, 1985, p.p.92-93.
31. M.M. Averbukh, "Utilization of simulation for obtaining the output parameters of the hole drilling process", Scientific publications of the National Scientific Conference: "Creation problems of impact mining machines", Karaganda(Kazachstan),18-20 September, 1985, p.p.65-66.
32. N.G. Petrov,and M.M. Averbukh, "Definition of the terms and volumes of boring at the stage of drilling perforators commercial tests", Scientific publications of the National Scientific Conference: "Creation problems of impact mining machines", Karaganda(Kazachstan),18-20 September, 1985, p.p. 54-55..

Books and books chapters:

1. M.M.Averbukh, and I.L. Geichman "Application of the technical vision devices for mining in the world", Moscow, 1990, 32 p.
2. M.M. Averbukh, and A.A. Toporkov, "Automatization of tunnel driving equipment in the world", Moscow, 1989, 45 p.
3. M.M. Averbukh, and A.A. Toporkov, "Automatization of mining boring equipment in the world", Moscow, 1989, 28 p.
4. M.M. Averbukh, A.I. Dukov,and N.A. Bessudnova, "Automatization of drilling jumbos", Moscow, 1988, 67 p.
5. N.G. Petrov, M.M. Averbukh, V.B. Sokolinsky, and N.S. Rodionov, "Standard program and method for commercial tests of drilling perforators", Mining Inst. of Academy of Science, Moscow, 1986,22 p.

PATENTS:

1. Invention (USA patent application) No. 20050134282A1: "Method and apparatus for battery testing and measurement", M. Averbukh, 2003.
2. Invention (EP application patent) No. 95120000.5: "Electromagnetic percussion machine", M. Averbukh, 1998.
3. Invention (USA) No. 5,497,555: "Electromagnetic percussion device", M. Averbukh, 1996.
4. Invention (USA) No. 5,404,790: "Firearm with gas operated recharge mechanism", M. Averbukh, 1994.
5. Invention (USSR) No. 1710720:"Electromagnetic impact machine", M.M.Averbukh, Y.M. Gitman, B.M.Rafalovitch., Bull. Inventions no. 5, 1992.
6. Invention (USSR) No. 1602981: "Impact action machine", M.M. Averbukh, F.A.Chackvetadge, V.K.Bregman, A.V Perederko, Bull. Inventions no. 40, 1990.
7. Invention (USSR) No. 1555477: "Hydraulic control system of boring machine", M.M. Averbukh, S.V. Blumin, V.M. Goldin, Bull. Inventions no. 31, 1990.
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