

Zamir P. Shalita, Ph.D

Consultant on Electromagnetic & Chemical Hazards

3 Hashoshan Str. Ramat Gan 52365, ISRAEL,

Phone & Fax: +972-3-574-7527, mobile: +972-544-567-977

zshalita@actcom.com RF meter at ISO 17025

Curriculum vitae & List of publications

Born: July 20, 1937

Marital status: Married, three children, six grandchildren.

Israeli ID#: 009295619.

American Soc. Sec. # : 04-60-9472.

Consultations

2000-present Consultant on Electromagnetics and Chemical Hazards. Radio frequency (RF) radiation. and electromagnetic field (EMF) measurements, / surveys / consultations / lectures / expert opinions to courts: Recent selected cases involved: Consultant to courts in Israel (Ramat Gan, Tel Aviv, Jerusalem, Haifa, and security training school at Maccabim) . Consultant to Maalot residents vs three cellphone companies, Consultation to the Israeli navy seals that got cancer after routinely trained in the polluted Kishon river (2003), Opinions to cancer patients exposed to a residential cellphone antennae (Ramat Gan 2006, Tel Aviv 2005, Givataim 2006, Haifa-Neve Shaanan (2006 -), Kibbutz Megido (2006), Ramat Hagolan residents (Majdal Shams, and Buqata 2007). Opinion to Eng. A Golod, Beit Hillel vs cellphone company's antenna (2008), Residents of Raanana vs cellphone antenna (2008), Opinions to district courts: Opinion to Haifa district court on Kishon anchored fishermen anchored at the polluted Kishon estuary, that got cancer (2003-). Residents of Baka El Gharbiya vs cellphone companies (2005). Opinion on high cancer incidence among Porat residents exposed to Israel Radio ("Hillel") antenna in mid Israel, law suit against Bezeq (2003 -). Opinions to courts for cancer patients IDF soldiers (Navy-missile vessel, and Sayeret Matcal), a worker in the military industry, and a cellphone antennae technician.

Opinions to the supreme court (Herzliya municipality vs. cellphone companies (2004), Haifa (Almogi residential area) vs military (IDF) radio station Palnord (2004 -), Opinion to Adam Teva Vadin vs cellphone companies (2005), Opinions to Lawyer M. Bach: Against cellphone companies (Mitkan-Gisha),

and a representative law suit. Consultation to residents of Usfie vs cellphone companies (2003-), Kfar Vradim (2005-2006), on RF radiation and chemical pollution, consultation to residents in Yokneam, Maale Adomim, Jerusalem, Kfar Saba, Kfar Yassif, Ein Hamifratz, Tel Aviv, Givataim, Ramat Gan, Kfar Rame, Mevaseret Zion (2005 - 2007). Testimonies on cellphone radiation hazards presented at the Israeli Parliament's Committees (Science, state controller, and Interior & environment, and economy committees 2000 -). Participant in Knesset phrasing the EMF new bill proposal of non ionizing radiation - endorsed by the government (2006), and regulations to this bill (Nov. 2007). Opinion presented to court: A constructor vs cellphone companies in Kiryat Ono. Consulting to Kiryat Gat residents about a unique cancer cluster in children (2006-). Consulted to Zoran residents vs Israel Radio transmission site "Hillel" (2000-2003). Antennae dismantled (2003). Consulted to Usfie residents exposed to cellphone and illegal radio stations, where a cancer cluster was detected (2003 - 2007). Antennae dismantled (2006) Consulted to Heffer valey residents vs a cellular server - Cellular antenna dismantled (2001). Bnei Brak residents vs cellular server - Cellular antenna dismantled (2001). Phone consultations by a free line for the public on electromagnetic hazards. Consultation via Internet websites in Israel and England. Appeared on TV channels 1-9, and Israel Radio on programs about cellphone radiation, and power lines / transformers hazards.

2002 (May) Invited lecturer to Tokyo International Forum on Health Issues of EMFs, organized by Gauss Company, Tokyo. Measurements of EMF near powerlines (Tokyo) ,in a "cancer cluster" residential area. Testimony on the cancer cluster and cellphone radiation hazards, at a ministers committee of the Japanese parliament (2002)., and testifying, to a Ministers' Committee of the Japanese parliament.

Research activity dates

2007- Research on cellphone radiation absorbed in the head and its effects on brain waves (in progress).

2006- Research on non ionizing radiation from cathodic ray tube and LCD screens, absorbed and modulated in the human head (in progress).

2006- Cellphone antennae radiation, and magnetic field induced in Jerusalem residential areas (collaboration with the nature protection association).

2000 - present Research of cancer clusters in residential areas near cellphone antennae: In Zoran (2000 - 2003) Usfie (2003 -), Porat (2003 -), Naan (2005 -), Kiryat Gat (2006 -), Kfar Rame (2007-), Mevaseret (2007 -).

1993 - 1999 Studies of environmental pollution (physical and chemical).

1993 Early retired from the Israel Institute for Biological Research (IIBR) as a senior staff member (associate professor).

1992 - 1993 Associate professor at Rutgers University, New Jersey, at the lab of - Prof. Douglas E. Eveleigh, Dept. Biochemistry and Microbiology (RU).

1966 - 1993 Member of the research staff of the IIBR, Ness Ziona, Israel.

1987, 1988 Summer collaborations at RU. Genetic engineering project

1985 - 1986 Associate professor at RU. Genetic engineering project

1984 - 1985 Research associate at RU. Genetic engineering project.

1977 - 1979 Post doctoral research fellow at the Public Health Research Institute of the City of New York, at the lab of the chief, Prof. Richard P. Novick (PHRI-NYC), with collaboration, with Prof. Daniel Bouanchaud of the Pasteur Institute in Paris.

1972 - 1976 Ph.D. Studies and thesis at the Weizmann Institute of Science, Rehovot, Israel, supervised by Prof. Israel Hertman, and Dr Sara Sarid.

1966 - 1967 M.Sc. thesis at Tel Aviv University (TAU) and at the IIBR, supervised by Dr. George Miller, and Dr Shlomo Ben Ephraim.

1964 - 1967 M.Sc. studies at TAU Major: Medical microbiology, Minors: Pathological chemistry, and Parasitology.

1958 - 1961 B.Sc. Agr. Studies at the Hebrew University (HU) in Jerusalem and Rehovot.

Research Projects

Pending projects in China: Atmospheric nitrogen fixing bacteria involved enhancement of nitrogen fixing ability of *Azospirillum* strains for enhancement of corn / wheat / rice protein contents. Production of a biodegradable biopolyester poly- β -hydroxybutyrate (PHB) in *Azotobacter*, and PHB derivatives produced in vivo, for medical and industrial applications (in progress)

RF / ELF radiation absorbed in the head and modulated. Its effects on brain waves (in progress).

Cancer clusters in Israel (affiliated with the Hebrew University in Jerusalem (in progress) A collaboration with the Nature Protection Society - RF radiation in Jerusalem.

At IIBR, molecular genetic studies in medical, projects. and R&D in biotechnological and industrial studies. They involved an environmental project: Bacterial bioleaching of precious metals from coal ash (emitted by coal propelled power stations). Commercially profitable yields of metals were obtained, and an international patent was achieved. Preliminary studies of removal of oil spills from sea water, microbial desulfurization of crude oil in storage pools in Israel, and reclaiming of vulcanized rubber by microbial desulfurization.

Genetic engineering studies involved cloning and expression of human and bovine interferon genes. R&D in biotechnology involved scaling up of

fermentation and purification processes, introduction of computer controlled fermentation procedures, production of human and veterinary vaccines, production of genetic engineered pharmaceuticals, production of edible fungal mass, and enzymes for food industry. A feasibility study involved production of endoglucanase, β -glycosidases and pectinase, by genetic engineering technology for enhancing aroma/ flavor of wines, and extraction yield of grape juice. Other feasibility studies involved identification and prevention of contaminants in wine fermentation, Feasibility studies involved anaerobic degradation of cellulose, preparation of cyclodextrins for slow release of compounds, and bacterial vs yeast production of ethanol for fuel from sugar cane. Maximal (98%) yields were achieved by a selected *Zymomonas mobilis* strain. Screening of herbal extracts, revealed effective active antiviral and antibacterial agents. Some extracts well treated pressure sores and diabetic gangrenes in humans. Some herbal selected extracts were found effective for preservation of meat products. Studies on atmospheric nitrogen fixing bacteria involved enhancement of nitrogen fixing ability of *Azospirillum* strains for enhancement of corn and wheat protein contents. Industrial feasibility study involved production of a biodegradable biopolyester poly- β -hydroxybutyrate (PHB) and its derivatives produced in vivo: Derivatives were planned for medical and industrial applications.

At RU studies involved cloning endoglucanase, and β -glycosidases genes of *Microbispora bispora* (a soil actinomycete) in order to clone them in *Zymomonas* (ethanol producing bacterium) for production of ethanol for fuel.

IIBR studies involved genetic control of enterotoxins synthesis by staphylococci that caused food poisonings.

At the Public Health Research institute of New York City (PHRI) Studies in collaboration with Pasteur Institute involved Extra chromosomal genes, of antibiotic resistant strains of *Staphylo-coccus aureus* that caused post surgical infections in hospitals in the US, UK, Sweden, France, and Japan. Electron microscopy analyses of heteroduplexes of staphylococcal resistance genes of different origins revealed related genes. It suggested their molecular evolution, that yielded a global genealogy tree of staphylococcal antibiotic resistance genes.

Academic studies

2006 ICEMS workshop on precaution principle on non ionizing radiation.

1976 Advanced NATO summer school on genetic engineering and molecular genetics. Kavoury, Greece.

1972 - 1976 Studies at the Weizmann Institute of Science. Graduated in Molecular Genetics (Ph.D).

1972 An advanced biochemistry course on biotechnical processes, at Surrey University, UK.

1967 Biotechnology course at the Hebrew University in Jerusalem.

1966 - 1967 Thesis in Tel Aviv University (TAU In collaboration with the IIBR, on staphylococcal enterotoxins that caused a food poisoning.

1964 - 1967 Studies at TAU majored on Medical Microbiology, minored on Medical Parasitology and Pathological Chemistry.

1959 - 1962 Studies of agriculture, at the Hebrew University in Jerusalem. (BSc.Agr.).

Publications

2002 - present Author of an articles "Evidence of Cellphone hazards", and "My eyes" (in Hebrew), in Israeli PC Journal.

Author of articles: "Cellular radiation: Immediate effects, cancer, and denials" "Cellphones, what we have is just the beginning", "Radon, ozone, and other environmental pollutants" currently presented in Israeli Best Shopping website: www.bsh.co.il (in Hebrew).

2000 - 2001 Author of an article: "Risks in computer work" - in an Israeli computer journal (in Hebrew), and an article: "My eyes watch the screen " in Security workers journal (in Hebrew)..

Teaching and lecturing experience

2000 - present . Lectures on electromagnetic hazards.

1972 - 1977 Lectures on molecular genetics and popular science in high schools, organized by the Weizmann institute of science.

1964 - 1965 Biology teacher of Biology majors, at Tichon H), Tel Aviv, Israel.

1962-1964 Biology teacher at Canoth rural agricultural high school, Gedera, Israel.

Military Service

1966 - 1982 Reserve service in the artillery of the Israeli army.

1958 - 1966 Reserve service in the central Israeli air force control unit.

1955 - 1958 At the Israeli Air Force. Trained and graduated Flying Course # 22. Graduated OCU course in a fighter jet (Gloster Meteor) squadron. Grounded at will. Served in the central control unit of the Israeli Air Force.

Highschool education

1951 - 1955 Grown and educated in Kibbutz Tel Yoseph, Israel. Self supported since the age of 16 (1953) by farm works. Got a highschool diploma, and matriculation certificate (BAGRUT). Took premilitary gliding and flying courses. Graduated flying course (solo) on Piper Cub.

List of peer reviewed publications

1. **Shalita, Z.**, S. Sarid, and I. Hertman. 1976. Plasmid control of enterotoxin B synthesis in *Staphylococcus aureus*. Isr. J. Med. Sci. 12: 698.
2. **Shalita, Z.P.** 1976. Isolation, characterization and transcription of a plasmid carrying a gene for enterotoxin B production in *Staphylococcus aureus*. Ph.D. Thesis. The Weizmann Institute of Science, Rehovoth, Israel.
3. **Shalita, Z.**, I. Hertman, and S. Sarid. 1976. Isolation and characterization of a plasmid involved with enterotoxin B production in *Staphylococcus aureus*. In Clowes, R.C., P.M. Kontomichalou, and M.H. Richmond (eds). The Proceedings of the NATO Advanced Study Institute, The Biology of Bacterial Plasmids. Kavouri, Athens, Greece.
4. **Shalita, Z.**, I. Hertman, and S. Sarid. 1977. Isolation and characterization of a plasmid involved with enterotoxin B production in *Staphylococcus aureus*. J. Bacteriol. 129: 317-325.
5. Shafferman, A., **Z. Shalita** and I. Hertman. 1978. Cleavage maps of a tetracycline plasmid from *Staphylococcus aureus*. J. Bacteriol. 134:345-348
6. **Shalita, Z.**, E. Murphy and R.P. Novick. 1980. Penicillinase plasmids of *Staphylococcus aureus*: Structural and evolutionary relationships. Plasmid. 3: 391-411.
7. El-Solh, N., J.M. Fouace, **Z. Shalita**, D.H. Bouanchaud, R.P. Novick, and Y.A. Chabbert. 1980. Epidemiological and structural studies of *Staphylococcus aureus* R-plasmids mediating resistance to tobramycin and streptogramin. Plasmid. 4: 117-120.
8. **Shalita, Z.P.**, M.D. White, M. Katz, M. Zur, and A. Mizrahi. 1981. Ethanol production by *Zymomonas mobilis* CP4 from sugar cane chips. Biotechnol. Lett. 3: 729-733.
9. Markenson, Y., Y. Chai, and **Z.P. Shalita**. 1983. A simple device for inflicting standard burns in mice. Isr. J. Med. Sci. 19: 371-373.
10. **Shalita, Z.P.** 1983. A novel method for selection of high capacity N₂-fixing *Azospirillum* strains, by their enhanced reduction of cyanide and azide compounds (MS prepared for patent submittal).
11. Shafferman, A., **Z.P. Shalita**, S. Cohen, and B. Velan. 1983. Expression of a novel α -interferon in human lymphoblastoid cells (Namalva). Isr. J. Med. Sci. 19: 668
12. Cohen, S., B., Velan, **Z. Shalita**, C. Frist, and A. Shafferman. 1983. Use of synthetic oligonucleotides as hybridization probes: Identification of IFN mRNA's expressed in Namalva cell lines. Isr. J. Med. Sci. 19: 669.
13. Grosfeld, H., S. Cohen, B. Velan, **Z. Shalita**, and A. Shafferman. 1984. Mutations not altering the symmetrical sequences in the *trp*^o operator yield a constitutive phenotype. Molec. Gen. Genet. 195: 358-360.
14. Cohen, S., B. Velan, H. Grosfeld, **Z. Shalita**, M. Leitner, C. Frist, and A. Shafferman. 1985. Cloning, expression and biological activity of a new

variant of human interferon alpha identified in virus induced lymphoblastoid cells. Dev. Biol. Stand. 60: 111-122.

15. Velan, B., S. Cohen, H. Grosfeld, **Z. Shalita**, and A. Shafferman, 1985. Cloning of a bovine interferon alpha gene sub-family, and comparison between genetically engineered and leucocyte bovine interferons. Dev. Biol. Stand. 60: 355-369.

16. Buchholz, S.E., C. Colson, M.M. Dooley, D.E. Eveleigh, A. Lejeune, **Z.P. Shalita**, and M.D. Yablonsky. 1985. Genetic approaches in *Zymomonas mobilis*. In Biochemical Conversion Program, Semi-Ann. Rev. Meeting, pp 285-293. Solar Energy Res. Inst. Golden, CO. SERI/CP-231-2726.

17. **Shalita, Z.P.**, M.D. Yablonsky, M.M. Dooley, S.E. Buchholz, and D.E. Eveleigh. 1986. Cloning and characterization of cellulase genes of *Microbispora bispora* for ethanol production from biomass by *Zymomonas mobilis*. In Biochemical Conversion Program, Rev. Meeting, Solar Energy Res. Inst. Golden CO. USA.

18. **Shalita, Z.P.**, M.D. Yablonsky, M.M. Dooley, S.E. Buchholz, S.K. Kahrs, K. Murphy-Holland, and D.E. Eveleigh. 1987. Genetic engineering of bacteria for alcohol fuels production. (An invited chapter) In D.L. Klass (ed). Energy from Biomass and Wastes X. Elsevier, Essex, UK.

19. Chai, Y., Y. Markenson, R. Barzilay, and **Z.P. Shalita**. 1988. A "live" vaccine of non-replicatable *Pasteurella multocida* FS3 cells prepared by psoralen treatment and long wave UV irradiation. Isr. J. Vet. Med. 44: 195-201

20. Yablonsky, M.D., T. Bartley, K.O. Elliston, S.K. Kahrs, **Z.P. Shalita**, and D.E. Eveleigh. 1988. Characterization and cloning of the cellulase complex of *Microbispora bispora*. In J.P. Aubert, P. Beguin, and J. Millet, (eds). Biochemistry and genetics of cellulose degradation. Academic Press, London, UK.

21. Ben-Nathan, D., E.W. Low, N. Rothschild, E. Lupu, and **Z.P. Shalita**. 1990. Antiviral and antibacterial activity of herbal extracts. Isr. J. Med. Sci. 26: 359.

22. Marcus, D., Y. Papier, S. Reuveny, M.D. White, D. Gabison, **Z. Shalita**, S. Habousha, S. Cohen, H. Grosfeld, G. Friedman, M. Leitner, B. Velan, and A. Shafferman. 1991. Factors affecting the renaturation of recombinant bacterial bovine interferon alpha. In M.D. White, S. Reuveny, and A. Shafferman (eds). Biologicals from Recombinant Microorganisms and Animal Cells. Production and Recovery. Proceedings of the 34th Oholo Conference, Eilat, Israel. 1990. pp 361-368.

23. Leitner, M., S. Cohen, M. Lion, Y. Flashner, N. Katzir, H. Grosfeld, **Z. Shalita**, M. White, B. Velan, and A. Shafferman. 1991. Strategy for constructing synthetic genes for efficient expression in bacteria. In M.D. White, S. Reuveny, and A. Shafferman(eds). Biologicals from Recombinant

Microorganisms and Animal Cells. Production and Recovery. Proceedings of the 34th Oholo Conference, Eilat, Israel. 1990. pp83-89

24. Cohen, S.* , M. White, D. Marcus, **Z. Shalita**, N. Katzir, M. Leitner, H. Grosfeld, T. Sery, G. Friedman, Y. Papier, D. Gabison, M. Helfer, S.Reuveny, B. Velan, and A. Shafferman. 1991. Production of soluble versus aggregated proteins in bacteria. In M.D. White, S. Reuveny, and A. Shafferman (eds). Biologicals from Recombinant Microorganisms and Animal Cells. Production and Recovery. Proceedings of the 34th Oholo Conference, Eilat, Israel. 1990. pp349-359.

25. White, M.D, **Z.P. Shalita**, D. Marcus, and S. Reuveny. 1991. A systematic route for optimization of media composition and growth conditions. In M.D. White, S. Reuveny, and A. Shafferman (eds). Biologicals from Recombinant Microorganisms and Animal Cells. Production and Recovery. Proceedings of the 34th Oholo Conference, Eilat, Israel. 1990. pp101-116.

26. **Shalita, Z.P.**, M.D. Yablonsky, R.M. Wright. and D.E. Eveleigh. 1991. Does *Microbispora bispora* have only one cellobiase gene ? Isr. J. Med Sci. (In press).

27. Ben-Nathan, D., E.W. Low, and **Z.P. Shalita**. 1991. Antiviral and antimicrobial activity of herbal extracts. J. Ind. Microbiol. (In press).

28. Yablonsky, M.D., K. Elliston, Z.P. Shalita and D.E. Eveleigh. 1991. Molecular analysis of the *mbicel1* gene of *Microbispora bispora*. (In press).

29. Meital,Z.,D. Ben-Nathan, E.W. Low,D. Kobiler,and **Z.P. Shalita**. 1991. Curing of pressure sores in humans by a herbal extract. Isr. J. Med. Sci. (In Press).

30. Wright, R.M., M.D. Yablonsky, **Z.P. Shalita**, A.K.Goyal, and D.E. Eveleigh. 1992. Cloning, characterization and nucleotide sequence of a gene encoding *Microbispora bispora* BglB, a thermostable β -glucosidase expressed in *Escherichia coli*. Appl. Environ. Microbiol. 58:3455-3465.

31. **Shalita, Z.P.**, M.D. Yablonsky, and D.E. Eveleigh. 1992. Three β -xylobiase gene duplicates scattered on *Microbispora bispora* chromosome, cloned and expressed in *E. coli*. (MS in preparation).

32. **Shalita, Z.P.**, M.D. Yablonsky, and D.E. Eveleigh. 1992. Chitobiase gene duplicates of *Microbispora bispora* cloned in *E.coli* found and expressed in direct and inverted orientations (MS in preparation).

Lectures presented in meetings

1. **Shalita, Z.**, E. Murphy and R.P. Novick. 1980. Penicillinase plasmid families in *Staphylococcus aureus*. Abst. In A. Yaniv (ed). The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Tel-Aviv, Israel.

2. **Shalita, Z.P.**, M.D. White, M. Katz, M. Zur, and A. Mizrahi.1982. Ethanol production from large sugar cane chips by *Zymomonas mobilis* CP4.

Abst. In I. Cahana (ed) . The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Mount Scopus Jerusalem, Israel.

3. Cohen, S., B. Velan, H. Grosfeld, **Z. Shalita**, M. Leitner, C. Frist, and A. Shafferman. 1984. Cloning, expression, and biological activity of a new variant of human interferon alpha identified in virus induced lymphoblastoid cells. Abst. The Sixth International Congress of Virology, Sendai, Japan, Sept. 1-7. 1984.

4. Yablonsky, M.D., **Z.P. Shalita**, S.K. Kahrs, K. Murphy-Holland, and D.E. Eveleigh. 1986. Cloning and expression of cellulase complex genes from *Microbispora bispora* in *Escherichia coli*. Abst. The Annual Meeting of Theobald Smith Society. New Brunswick, NJ. US. Feb. 20. 1986.

5. **Shalita, Z.P.** M.D. Yablonsky, M.M. Dooley, S.E. Buchholz, S.K. Kahrs, K. Murphy-Holland, and D.E. Eveleigh. 1986. Genetic engineering of bacteria for alcohol fuels production. Abst. (An Invited lecture). The Tenth Annual Conference, Energy from Biomass and Wastes. Washington DC. US. Apr. 7-10. 1986.

6. **Shalita, Z.P.**, M.D. Yablonsky, and D.E. Eveleigh. 1987 . Cloning and expression of cellulase genes from *Microbispora bispora* in *Escherichia coli*. Abst. In Y. Okon (ed). The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Rehovoth, Israel. Feb. 24-25. 1987.

7. Kahrs, S.K, M.D. Yablonsky, **Z.P. Shalita**, and D.E. Eveleigh. 1987. Characterization of exo- and endoglucanases of *Microbispora bispora* by physiological and immunological techniques. Abst. The Annual Meeting ASM, Atlanta GA. US. March 1-6. 1987.

8. White, M.D., D. Marcus, and **Z. Shalita**. 1987. Application of the "Symphony" electronic worksheet for fermentation control. Abst. The Twenty third Annual Meeting of the Israel Society for Chemical Engineering, Beer Sheba, Israel, Apr. 15-16. 1987.

9. Yablonsky, M.D., **Z.P. Shalita**, T.D. Bartley ,S.K. Kahrs, and D.E. Eveleigh .1987. The cellulase complex of the thermophilic actinomycete *Microbispora bispora*. Abst. Colloque FEMS Symposium on Biochemistry and Genetics of Cellulose Degradation, Paris, France, Sept. 6-10. 1987.

10. Yablonsky, M.D., K. Elliston, D.E. Eveleigh, and **Z.P. Shalita**. 1988. The sequence, and expression of *Microbispora bispora* endoglucanase gene mbicel1 in *E. coli*. Abst. In E. Segal (ed). The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Tel-Aviv, Israel. Feb. 8-9. 1988.

11. Marcus, D., S. Reuveny, Y. Papier, D. Gabison, M.D. White, and **Z.P. Shalita** 1988. Use of microfiltration for continuous washings of inclusion bodies in the purification process of recombinant proteins. Abst. In E. Segal (ed). The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Tel-Aviv, Israel. Feb. 8-9. 1988.

12. Yablonsky, M.D, K. Elliston, **Z.P. Shalita**, and D.E. Eveleigh. 1988. Analysis of the MBICEL1 gene of *Microbispora bispora* and comparison to cellulase genes from other organisms. Abst. The Annual Meeting of the Theobald Smith Society, North Brunswick, NJ US.
13. Yablonsky, M.D., K. Elliston, **Z.P. Shalita** and D.E. Eveleigh, 1988. Cellulases - perspectives, practice, pontifications. Abst. The Annual Meeting SIM , Chicago IL US. Aug. 7- 12. 1988
14. Wright, R.M., M.D. Yablonsky, P. Hu, Z.P. Shalita, and D.E. Eveleigh. 1989. Cloning and characterization of a β -glucosidase from *Microbispora bispora* in *Escherichia coli*. Abst. The Annual Meeting ASM, New Orleans, LA US. May 14-18. 1989.
15. Ben-Nathan, D., E.W. Low, N. Rothshild, E. Lupu, and Z.P. Shalita . 1990. Antiviral and antimicrobial activity of herbal extracts. Abst. (An invited lecture) The First Israeli Congress of Clinical & Investigative Herbology, Ramat-Gan, Israel, Jan. 30-31. 1990.
16. White, M.D, **Z.P. Shalita**, D. Marcus, and S. Reuveny. 1991. A systematic route for optimization of media composition and growth conditions. Abst. In M.D. White and S. Reuveny, (eds). The 34th Annual Oholo Meeting, Eilat, Israel. Apr. 23-27, 1990.
17. Cohen, S, M. White, D. Marcus, **Z. Shalita**, N. Katzir, M. Leitner, H. Grosfeld, T. Sery, G. Friedman, Y. Papier, D. Gabison, M. Helfer, S. Reuveny, B. Velan, and A. Shafferman. 1990. Production of soluble versus aggregated proteins in bacteria. Abst. In M.D. White and S. Reuveny, (eds). The 34th Annual Oholo Meeting, Eilat, Israel. Apr. 23-27, 1990.

Posters presented in meetings

1. Velan, B., S. Cohen, **Z. Shalita**, and A. Shafferman. 1983. Bovine interferon: A multigene family. Abst. The Proceedings of the First Joint Meeting of the Israeli Societies for Life Sciences. Givat-Ram, Jerusalem, Israel.
2. Cohen, S., B. Velan, H. Grosfeld, **Z. Shalita**, C. Frist, and A. Shafferman. 1983. A new human alpha interferon identified in virus induced lymphoblastoid cells (Namalva) - cloning and expression in bacteria. The Proceedings of the First Joint Meeting of the Israeli Societies for Life Sciences. Givat-Ram, Jerusalem, Israel.
3. **Shalita, Z.P.**, and D.E. Eveleigh. 1985. Transformation of partial spheroplasts *Zymomonas mobilis* CP4 by broad host range vector plasmids. Abst. Gordon Conference on Applied and Environmental Microbiology. New London, NH. US. Aug. 12-16. 1985.
4. Yablonsky, M.D., **Z.P. Shalita**, S.K. Kahrs, K. Murphy-Holland, and D.E. Eveleigh. 1986. Cloning and expression of several *Microbispora bispora* endoglucanase genes in *E.coli*. Abst. The First Annual ASM Conference on Biotechnology. Washington DC. US. March 20-23. 1986.

5. **Shalita, Z.P.**, M.D. Yablonsky, S.E. Buchholz, M.M. Dooley, and D.E. Eveleigh. 1986. Transformation of partial spheroplasts of *Zymomonas mobilis* CP4 by broad host range plasmids. Abst. The Annual Meeting ASM, Washington DC. US. March 23-28. 1986.
6. Buchholz, S.E., M.D. Yablonsky, M.M. Dooley, and **Z.P. Shalita**. 1986. Transformation of *Zymomonas mobilis* CP4 by plasmid DNA. Abst. The Annual Meeting ASM, Washington DC. US. March 23-28. 1986.
7. **Shalita, Z.P.**, M.D. Yablonsky, and D.E. Eveleigh. 1986. Genetic characterization of the cellulase of *Microbispora bispora*. Abst. The Fifth International Symposium on Genetics of Industrial Microorganisms, Split, Yugoslavia, Sept. 14-20. 1986.
8. Chai, Y., Y. Markenson, R. Barzilay, and **Z.P. Shalita**. 1988. *Pasteurella multocida* "live" non-replicatable vaccine from a virulent strain FS3 cells treated by psoralen and exposed to UV-A irradiation. Abst. In E. Segal (ed). The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Tel-Aviv, Israel. Feb. 8-9. 1988.
9. Yablonsky, M.D., K. Elliston, **Z.P. Shalita**, and D.E. Eveleigh. 1987. Sequencing and expression of an endoglucanase gene of *Microbispora bispora*. Abst. The Annual Meeting SIM, Baltimore MD. US. Aug. 9-14, 1987
10. Yablonsky, M.D., K. Elliston, **Z.P. Shalita**, and D.E. Eveleigh. 1987. Molecular characterization of *Microbispora bispora* endoglucanase gene *mbicel1*. Abst. Colloque FEMS Symposium on Biochemistry and Genetics of Cellulose Degradation, Paris, France, Sept. 6-10. 1987.
11. Ben-Nathan, D., E.W. Low, and **Z.P. Shalita**. 1989. Antiviral and antimicrobial activity of herbal extracts. Abst. The Annual Meeting SIM Seattle, WA, US. Aug. 13-18, 1989.
12. Ben-Nathan, D., E.W. Low, E. Lupu, N. Rothshild, and **Z.P. Shalita**. 1990. Antiviral and antimicrobial activity of herbal extracts. Abst. In I. Cahana (ed). The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Mount Scopus Jerusalem, Israel.
13. Marcus, D., S. Reuveny, Y. Papier, D. Gabison, M.D. White, and **Z.P. Shalita**, B. Velan, G. Friedman, S. Cohen, and A. Shafferman. 1990. Factors affecting the renaturation of recombinant bovine interferon. Abst. In M.D. White and S. Reuveny, (eds). The 36th Annual Oholo Meeting, Eilat, Israel. Apr. 23-27, 1990.
14. Leitner, M., S. Cohen, M. Lion, Y. Flashner, N. Katzir, H. Grosfeld, **Z. Shalita**, M. White, B. Velan, and A. Shafferman. 1990. Strategy for constructing synthetic genes for efficient expression in bacteria. Abst. In M.D. White and S. Reuveny, (eds). The 34th Annual Oholo Meeting, Eilat, Israel. Apr. 23-27, 1990.

15. Meital, Z., D. Ben-Nathan, E.W. Low, D. Kobiler, and **Z.P. Shalita**. 1991. Curing of pressure sores in humans by a herbal extract. Abst. In I. Nitzan (ed). The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Bar-Ilan University, Ramat-Gan, Israel. Mar.25-26, 1991.
16. **Shalita, Z.P.**, M.D. Yablonsky, R.M. Wright, and D.E. Eveleigh. 1991. Does *Microbispora bispora* have only one cellobiase gene? Abst. In I. Nitzan (ed). The Proceedings of the Annual Meeting of the Israel Society for Microbiology, Bar-Ilan University, Ramat-Gan, Israel. Mar.25-26, 1991.
17. Meital, Z.D. Ben-Nathan, E.W.Low, D. Kobiler, and **Z.P. Shalita**. 1991. Antibacterial herb extract curing of pressure sores in humans. Abst. The Annual Meeting SIM, Philadelphia, PA US. Aug.4-9, 1991.
18. **Shalita, Z.P.**, D.E. Eveleigh. A. Goyal, R.M. Wright, and M.D. Yablonsky. 1991. Aryl- β -glycosidases of *Microbispora bispora*. Abst. The Annual Meeting SIM, Philadelphia, PA US. Aug.4-9, 1991.
19. Fass, R., Y. Geva, J. Fleming, J. Propes, M.D. White, S. Reuveny, A. Mizrahi, and **Z.P. Shalita**. 1991. Bioleaching of metals and toxic elements from coal ash by *Thiobacillus thiooxidans*. Abst. The Annual Meeting SIM, Philadelphia, PA US. Aug.4-9, 1991.

Reviewed research proposals

1. **Shalita, Z.P.** 1980. Synthesis of peptides having opiate activity by recombinant *E. coli*, cloned with synthesized genes. (A preproposal, in Hebrew). Submitted at the IIBR.
2. **Shalita, Z.P.** 1980. The increase of nitrogen fixation capacity of corn rhizosphere bacterium *Azospirillum brasilense* by genetical methods for the replacement of nitrogen fertilizers. Submitted to BARD Agency.
3. **Shalita, Z.P.** 1980. The increase of nitrogen fixation capacity of corn rhizosphere bacterium *Azospirillum brasilense* by genetical methods for the replacement of nitrogen fertilizers. Submitted to the West German Ministry of Research and Development.
4. White, M.D., and **Z.P. Shalita**. 1980. Bacterial degradation of lignin: The application of anaerobic lignolytic bacteria for the increase of cellulolytic enzymes efficiency. Submitted to the West German Ministry of Research and Development.
5. White, M.D., and **Z.P. shalita**. 1980. Bacterial degradation of lignin: The application of anaerobic lignolytic bacteria for the increase of cellulolytic enzymes efficiency. Submitted to ENFOR - Energy from Forest Canadian Forestry Service Environment, Ottawa, Canada.
6. Markenson, Y. and **Z.P. Shalita**. 1981. Treating burn wounds infected by *Pseudomonas aeruginosa* by non conventional methods. (In Hebrew). Submitted at the IIBR.

7. **Shalita, Z.P.** 1982. Increasing ethanol production in the bacterium *Zymomonas mobilis* CP4, by genetical methods and by genetic engineering methods. (In Hebrew). Submitted at the IIBR.
8. **Shalita, Z.P.** 1984. Production of poly- β -hydroxybutyrate (PHB), a thermoplastic biodegradable polyester in a nitrogen fixing bacterial cells. Submitted to PSTC-AID, Biotechnology.
9. **Shalita, Z.P.** 1987. Production of poly- β -hydroxybutyrate (PHB), a biodegradable thermoplastic biopolyester in bacterial cells. Submitted to ICL Industries, Israel, and to two private agencies.
10. Fass, R.,Y. Geva, and **Z.P. Shalita.** 1987. Microbial desulfurization of crude oil in storage pools in Israel.(In Hebrew). Submitted to the Israeli Oil Administration (At present approved for financing, 1989).
11. Shalita, Z.P., M.D. White, D. Marcus, S. Reuveny, and A. Mizrahi. 1988. Production and modification of cyclodextrins (An abridged form). Submitted at the IIBR.
12. Shalita, Z.P., and A. Domb. 1988. Production of microbial biodegradable biopolyester (An abridged form). Submitted in a revised form to a financing agency by the IIBR.
13. **Shalita, Z.**, M.D. White, D. Marcus, S. Reuveny, and A. Mizrahi. 1988. Production and modification of cyclodextrins . Submitted at the IIBR.
14. **Shalita, Z.P.**, and A. Domb. 1988. Production of poly- β -hydroxybutyrate (PHB), a biodegradable thermoplastic biopolyester in bacterial cells. Production of microbial biodegradable biopolyester . Submitted at the IIBR. (Pending for financing).
15. **Shalita, Z.P.**, M.D. White, and D. Marcus. 1988. Production of recombinant endoglucanase of *Microbispora bispora* in *Escherichia coli* . A preproposal submitted to US DOE, via the Israeli Ministry of Energy and Infrastructure.
16. **Shalita, Z.P.**, D. Marcus, and M.D. White. 1988. Characterization of β -glucosidase gene products of *Microbispora bispora*. A preproposal submitted to US DOE, via the Israeli Ministry of Energy and Infrastructure.
17. **Shalita, Z.P.**, D. Marcus, and M.D. White. 1988. Production of bacterial β -glycosidases for enhancing aroma in fruit juices . (In Hebrew , pending for financing by a chemicals producing company in Israel).
18. **Shalita, Z.P.**, and I. Baranes. 1989. Production & modification of biodegradable biopolyester PHB. (An abridged form). Submitted to ARC Company, France, through a financing agency (A. Ronen) by the IIBR.
19. **Shalita, Z.P.**, and I. Baranes. 1989. Production & modification of biodegradable biopolyester PHB. (A detailed proposal & estimation for medical products). Submitted to ARC Company, France, through a financing agency (A. Ronen) by the IIBR.

20. **Shalita, Z.P.** 1989. Production of bacterial β -glycosidases for increasing aroma in grapes & other fruit juices. (Abridged). Submitted to ARC Company, France, through a financing agency (A. Ronen) by the IIBR.
21. **Shalita, Z.P.**, D. Marcus, and M.D. White. 1989. Production of bacterial β -glycosidases for enhancing aroma in fruit juices. Submitted to ARC Company, France, through a financing agency (A. Ronen) by the IIBR.
22. **Shalita, Z.P.**, and I. Baranes. 1990. Production & modification of biodegradable biopolyester PHB. (An abridged form). Submitted to Intercon Company, IL, USA, by the IIBR.
23. **Shalita, Z.P.** 1991. Production of β -glycosidase and pectinase for enhancing aroma/flavor and extraction yield of grape juice. Submitted to Carmel Mizrahi Winecellars, Israel (Pending for financing).
24. **Shalita, Z.P.** 1991. Identification and prevention of contaminants in wine fermentation. A preproposal submitted to Carmel Mizrahi Winecellars, Israel (Pending for financing).
25. **Shalita, Z.P.** 1991. Novel modified-adhesive cyclodextrins. Submitted to Pharmatec pharmaceutical company, FL, US.
26. Fass, R., Y. Geva, and **Z.P. Shalita**. 1991. Microbial desulfurization of crude oil in storage pools in Israel- A feasibility study. (In Hebrew). Submitted to the Israeli Oil Administration (Approved for financing).
27. Fass, R., Y. Geva, M.D. White, and **Z.P. Shalita**. 1991. Reclaiming of vulcanized rubber by microbial desulfurization- A feasibility study. (In Hebrew, pending at Carmel Olephines Ltd)
28. **Shalita, Z.P.** 1991. Production of poly- β -hydroxybutyrate (PHB) based copolyesters in fermentation - A feasibility study. (Submitted to Carmel Olephines Ltd).

Research Proposals were submitted in the US:

1. In collaboration with RP Novick, (**PHRI, NYC**) awarded financing by **FDA**
2. In collaboration with DE Eveleigh (**RU, NJ**) awarded financing by **DOE**

Research & Development Reports

A list of additional 56 research reports is available upon request.

Herbal extracts reports

1. Ben-Nathan, D., E.W. Low, and **Z.P. Shalita**. 1990. Antiviral and antimicrobial activity of herbal extracts. I. Screening for active preparations: Main results in vitro and in vivo.
2. **Shalita, Z.P.**, E.W. Low, D. Kobilier, and D. Ben-Nathan. 1990. Antiviral and antimicrobial activity of herbal extracts. I. Screening for active preparations.

3. **Shalita, Z.P.**, E.W. Low, D. D. Kobiler, and D. Ben-Nathan. 1990. Protection of food by herbal extracts, against bacterial and fungal contamination: Results of a field test.
4. **Shalita, Z.P.**, .E.W. Low, D. Kobiler, and D. Ben-Nathan. 1990. Antipseudomonad and antistaphylococcal activity of herbal extracts.
5. Meital, Z., D. Ben-Nathan, E.W. Low, D. Kobiler, and **Z.P. Shalita** 1990. Curing of pressure sores in humans by herbal extract #54. (In Hebrew).
6. Meital, Z., D. Ben-Nathan, E.W. Low, D. Kobiler, and **Z.P. Shalita**. 1991. Curing of pressure sores in humans by a herbal extract. Abst. The Second Israeli Congress of Clinical & Investigative Herbology, Ramat-Gan, Israel, Feb. 5-6. 1991.

Books

- 2006** Your Health with Computer and Celphone. Translated to French (ms in preparation).
- 2005** Your Health with Computer and Celphone. Omega News website (Germany).
- 2003** Keep Healthy with Pollution, Computer and Cellphone (Translated to Japanese). Published in Tokyo. ISBN 8461-0401-X
- 2002** Law and Justice. A collection of Latin phrases, translated to Hebrew. ISBN 965-7098-15-7
- 1999** Your health with computer and cellphone (508pp) Maarechet Publ. Comp. (in Hebrew). ISBN 7014-33-6

Translated & edited Hebrew versions

1996 - 2002

- Translated and edited 9 volumes of Time-Life series on "Understanding Science & Nature" : (out of 12) Media-Direct, Israel (In Hebrew).
- Translated and edited : Parker, S. "The Human Body". Kinneret Publ. House, Israel . (In Hebrew) ISBN 965-509-229-1
- Translated and edited: Weston T. Atlas of Anatomy. Kinneret Publ. House, Israel . (In Hebrew) ISBN 965-517-036-5
- Edited Kurzweil R. "The age of spiritual machines". Kinneret Publ. House, Israel (In Hebrew) ISBN 965-509-208-9

Patents

1. Eveleigh, D.E., et al. 1985. A method for the conversion of a cellulosic substrate to glucose using *Microbispora bispora* strain Rutgers P & W. Serial # 526,407 , 37 C.F.R. @1.132 . USA.
2. Fass, R., et al. 1991. Elimination of crude oil spills on sea water and shore by coal fly ash. Israel Electric Company & IIBR (pending) Israel & USA, Europe, Japan.

3. Fass, R., et al. 1991. Bioleaching of valuable metals and toxic elements from coal fly ash. Israel Electric Company & IIBR . Israel & USA, Europe, Japan.
4. Shalita, ZP. 1993. A unique inter dental brush. Israel & USA, Europe