

**JOSEPH KOST**  
**Curriculum Vitae**

Faculty of Engineering Sciences  
Ben-Gurion University of the Negev  
Beer-Sheva, 84105, ISRAEL

**Academic Degrees:**

- 1977 - 1981 D.Sc. in Biomedical Engineering, Technion, Israel Institute of Technology  
Thesis: "Characteristics of Polymeric Bioelectrodes" Supervisors: Prof  
M. Narkis and A. Foux.
- 2002 - 2004 M.B.A. School of Management, Ben-Gurion University, Israel.
- 1973 - 1975 M.Sc. in Chemical Engineering, Technion, Israel Institute of Technology.
- 1969 - 1973 B.Sc. in Chemical Engineering, Technion, Israel Institute of Technology.

**Academic Positions and Professional Experience:**

- 2016-present Distinguished Professor, Department of Chemical Engineering, Ben-Gurion  
University of the Negev, Beer-Sheva, Israel.
- 2011-2017 Dean, Faculty of Engineering Sciences, Ben-Gurion University of the  
Negev, Beer-Sheva, Israel
- 2010-2011 Head, Department of Chemical Engineering, Ben-Gurion University of the  
Negev, Beer-Sheva, Israel.
- 1996-2016 Professor, Department of Chemical Engineering, Ben-Gurion University of  
the Negev, Beer-Sheva, Israel.
- 1998-2002 Chief Scientific Officer, Sontra Medical Corp., Franklin MA. USA.
- 1990-1996 Associate Professor, Department of Chemical Engineering, Ben-Gurion  
University of the Negev, Beer-Sheva, Israel.
- 1985-1990 Senior Lecturer, Department of Chemical Engineering, Ben-Gurion  
University of the Negev, Beer-Sheva, Israel.
- 1987-1988 Visiting Associate Professor, Department of Applied Biological Sciences,  
Mass. Institute of Technology, (MIT), Cambridge, MA, USA.
- 1984-1985 Lecturer, Department of Chemical Engineering, Ben-Gurion University of  
the Negev, Beer-Sheva, Israel.
- 1983-1984 Visiting Scientist, Department of Biomedical Engineering, Harvard  
Medical School, Boston, MA, USA.
- 1982-1984 Research Associate, Department of Applied Biological Sciences, Mass.  
Institute of Technology, (MIT), Cambridge, MA, and Children's Hospital  
Medical Center, Harvard Medical School Boston, MA, USA.
- 1981- 1982 Postdoctoral Research Associate, Department of Chemical Engineering,  
(Bioengineering), University of Washington, Seattle, WA, USA.

- 1978 -1981 Engineer, Department of Oral and Maxillofacial Surgery, "Rambam" Medical Center, Haifa, Israel.
- 1977 -1981 Instructor, Department of Biomedical Engineering, Technion, Israel Institute of Technology.
- 1975 -1977 Research Engineer, Faculty of Chemical Engineering, Technion, Israel Institute of Technology.
- 1973 -1975 Teaching Assistant, Faculty of Chemical Engineering, Technion, Israel Institute of Technology.

### **Memberships in Professional Societies:**

- Israel Academy of Sciences and Humanities (**Member 2015-**)
- Polish Academy of Engineers (**Foreign Member 2014-**).
- United States National Academy of Engineering (NAE). (**Foreign Member 2007-**).
- American Institute for Medical and Biological Engineering (**Fellow 1997 -**).
- Israel Institute of Chemical Engineers. (**President 2007- 2011**).
- American Institute of Chemical Engineers.
- The Society for Biomaterials (USA).
- Israel Society for Medical and Biological Engineers (**Board of Governors 1989 - 1996**).
- Controlled Release Society (USA) (**College of Fellows 2014-**).
- Israel Polymer and Plastics Society.
- Israel Society for Controlled Delivery of Bio-Materials (**Founder and President 1996-1997**).
- American Diabetes Association Professional Section (**by invitation**).

### **Research Interests:**

- Biomaterials
- Controlled drug delivery
- Transdermal drug delivery and sensing
- Ultrasound
- Gene therapy
- Cellular and tissue engineering
- Biosensors
- Transport phenomena in polymers and biological tissues
- Diabetes technology
- Nano-medicine

### **Funded Research Projects:**

- United States - Israel Binational Science Foundation (BSF): "Ultrasound Controlled Polymeric Delivery Systems" 1986-1989, (\$136,000).

- Israel Ministry of Trade and Industry: "Development of a Novel Technology for Spermeation Advancement by Controlled Release of Gonadotropin Releasing Hormones", 1987-1989, (\$60,000).
- Cygnus, USA: "Transdermal permeation enhancement by ultrasound", 1987 - 1989, (\$60,000).
- Israeli Ministry of Health: "Clinical Trials with Glycogen Storage Disease Patients", 1989 - 1990, (NIS 10,100), with Prof. S. Mozes.
- United States - Israel Binational Science Foundation (BSF): "Ultrasonically Controlled Delivery Systems to the Brain", 1990-1994, (\$110,000).
- Contraceptive Research and Development Program (CONRAD), Eastern Virginia Medical School, Virginia, USA: "Ultrasound as an External Trigger to Shut Off the Activity of Contraceptive Controlled Delivery Implants", 1990-1991, (\$15,000).
- Israel Ministry of Science and Development: "Development of Biosensor for Glucose", 1991-1993, (\$40,000), with Dr. H. Guterman.
- Israel Ministry of Science and Development: "Enhanced Membrane Separation by Ultrasound", 1992-1995, (\$50,000).
- Mifal Hapais Foundation: "Chemical Burns of the Skin", 1991-1992, (NIS 28,000), with Prof. L. Rosenberg and Dr. N. Grossman.
- United States - Israel Binational Science Foundation (BSF): "Ultrasound and Electrical Currents for Regulated Chemotherapy of Neoplastic Diseases", 1994 - 1999, (\$120,000).
- Commission of the European Communities - Israel Joint Projects: "Characterization and Development of Bioadhesive Controlled Drug Delivery Systems Based on Modified Polysaccharides", 1995 - 1998, (145,000 ECU), with Dr. S. Geresh.
- Joint German Israeli Research Program with the German Ministry of Science and Technology: "Water Purification Based on Specially Modulated Ultrasound Signals Enhancement of Membrane Separation Processes", 1995 - 1997, (198,000 DM), with Prof. V. Guntar.
- Israel Ministry of Science and Development: "Development of Biosensor for Glucose", 1994-1995, (34,500 NIS).
- Israel Cancer Association: "Self-Regulated Controlled Delivery of Polymer-Sequestered 1,25-Dihydroxyvitamin D3 for Prevention of Colon Cancer", 1995-1996, (35,000 NIS), with Prof. S. Shani.
- Ben-Gurion University, The Institute for Applied Research, The Center of Natural Polysaccharides: "A Technology for Enhancing the Production of Microbial Exopolysaccharides Using Ultrasound Irradiation", 1998-2000, (\$25,000).
- Juvenile Diabetes Foundation International, The Diabetes Research Foundation: "Glucose-Sensitive Hydrogel Development: Optimizing the System by Characterization and Mathematical Modeling", 2000-2002, (\$100,000).
- MediWound: "Ultrasound Effect on Scar Tissue Penetration", 2004, (\$17,500).
- Israel Academy of Science: "Nano-capsules Preparation and Characterization", submitted by Professor Shlomo Efrima who passed away in April 2005, 2002-2005.
- The Jacqueline Seroussi Memorial Foundation for Cancer Research: "Ultrasound for Efficient Non-viral Sustained Gene Therapy of Breast Cancer", 2005-2006, (\$125,000).

- Israel Science Foundation, Bikura Program: "Carrier-Mediated Ultrasound-Enhanced Sub-Cellular Delivery of Phosphoinositides", 2006-2009, (\$170,000), with Dr. Rudich.
- Ben-Gurion University, Applied Research Fund: "Non-Invasive Detection of Amniotic Fluid" 2007-2008, (\$100,000).
- InSightec Inc. "Focused Ultrasound for Targeted Drug Delivery" 2008-2010, (\$25,000).
- GFI "Application of DNA in fuel tagging" 2008-2011, (\$340,000).
- EC FP7 "Electrically Modified Biomaterials' Surfaces: From Atoms to Applications" 2008-2011, (EU 267,840), with Prof. Lang.
- United States - Israel Binational Science Foundation (BSF): " Modified Pectin and High Intensity Focused Ultrasound (HIFU) for Non-Invasive Brain Cancer Gene Therapy", 2010 - 2014, (\$152,000) with Prof. Henry Brem Johns Hopkins University.
- "Bio-Disc" R&D Cooperation Israel - Germany "MRI guided focused Ultrasound induced targeted drug delivery" 2010 – 2011 (60,000 EU).
- Magnet Rimonim (Consortium 18M IS) " Development of Pectin Based Complexes and Ultrasound Application for Targeted RNAi delivery" 2011 -2012, (IS 800,000)
- Amniotex Medical Ltd, "Non-Invasive Sampling of Amniotic Fluid" 2011, (\$25,800)
- Magnet P3 (Consortium 12.8M IS) " Development of antimicrobial and antifouling packaging films" 2011-2014, (IS 1,400,000)
- Israel Academy of Science (ISF) Equipment Grant: Fast Scanning Transmission Microscope 2012-2015 (IS 900,000) with Prof. Golan and Prof. Yelinek
- Council for Higher Education, Focal Technology Area (FTA), in the framework of the second national 5-year Nano-Science and Technology Program. "Bio-inspired Nano-carriers for Sub-Cellular Targeted Therapeutics" (11 members, leader J Kost), 2012-2017 (\$11M)
- Children's Cincinnati Hospital- Ben Gurion University Fund "Prolonged administration of surfactants to the lungs of prematures, based on PLGA based nanoparticles." 2013-2014 (\$58,000)
- Israel Ministry of Industry, Trade and Labor, Kamin Program "Validate miRNA as potential topical therapeutic agents in human psoriasis model in SCID mice" with Prof. Yehezkel Sidi and Dr. Dror Avni from Sheba Medical Center, 2014-2016 (IS 1,200,000)
- Sienna Labs Inc, "Ultrasound for Topical Delivery" 2014 (\$25,000)
- Mass. Inst. of Technology (MIT) – Ben-Gurion Univ. Fund (\$10,000)
- Israel Science Foundation (ISF) "Effect of ultrasound on topically delivered RNAi" 2015 2019, ( \$278,000)
- Adama Inc. "Modified Polysaccharides for Targeted Delivery of Herbicides" 2016-2017 (\$120,000)
- Insightec "Development of custom ultrasound agents for clinical applications 2017-2018 (\$220,000)
- Ferring Holdings Ltd, "Sustained release of bioactive compounds" 2017-2018 (\$150,000)

**Academic Activities:**

- 2017 – present Senior Advisor to President on International Research Strategies
- 2011 – 2017 Head of the Promotion and Appointment Committee, Faculty of Engineering Sciences, Ben-Gurion University.
- 2011 – 2017 Member, University's Management Committee.
- 2008 – 2017 Member of the Ben-Gurion University Senate.
- 2007 – 2010 Member of the Promotion and Appointment Committee, Faculty of Engineering, Ben-Gurion University.
- 2007 – 2009 Chairman of a Committee of The Council for Higher Education in Israel “MALAG” for the evaluation of a new MSc program in Plastic’s Engineering.
- 2006 – 2014 Chairman of a Committee of The Council For Higher Education in Israel “MALAG” for the evaluation of a new BSc program in Pharmaceutical Engineering.
- 2004 – 2009 Head of Undergraduate Studies Committee, Department of Chemical Engineering, Ben-Gurion University.
- 1999 – 2003 Member of Steering Committee, Biotechnology and Environmental Engineering, Faculty of Engineering, Ben-Gurion University.
- 2002 - 2004 Head of Graduate Studies Committee, Department of Chemical Engineering, Ben-Gurion University.
- 2002-2004 Member of Graduate Committee Faculty of Engineering Ben-Gurion University.
- 1991-1996 Head of Graduate Studies Committee, Department of Chemical Engineering, Ben-Gurion University.
- 1993-1996 Member of Graduate Studies Committee. Interdisciplinary Program for Biotechnology, Faculty of Engineering Sciences, Ben-Gurion University.
- 1993-1995 Chairman, Program for Biotechnology, Faculty of Engineering Sciences, Ben-Gurion University.
- 1993-1995 Head of Graduate Studies Committee. Interdisciplinary Program for Biotechnology, Faculty of Engineering Sciences, Ben-Gurion University.
- 1989-1995 Member of Graduate Studies Committee, Faculty of Engineering Sciences, Ben-Gurion University.
- 1990-1993 Member of Graduate Studies Committee. Interdisciplinary Program for Biotechnology, Faculty of Engineering Sciences, Ben-Gurion University.
- 1988-1993 Chairman, Center for Biomedical Engineering and Biomedical Engineering program, Faculty of Engineering Sciences, Ben-Gurion University.
- 1987-1990 Member of Undergraduate Studies Committee. Faculty of Engineering Sciences, Ben-Gurion University.
- 1987-1990 Head of Undergraduate Studies Committee. Department of Chemical Engineering, Ben-Gurion University.
- 1986-1988 Biotechnology Committee (Proposal for New Degree in Biotechnology) Ben-Gurion University.
- 1985-1987 Member of Undergraduate Studies Committee. Department of Chemical Engineering, Ben-Gurion University.

1985-1991 Undergraduate Advisor. Department of Chemical Engineering, Ben-Gurion University.

### Other Activities

- 1985 Public and Regulatory Affairs Committee of the Controlled Release Society (1985-1986), USA.
- 1988 Advisory Board of the International Conference on Pharmaceutical Sciences and Clinical Pharmacology May 29 - June 3, 1988, Jerusalem, Israel.
- 1989 Member of the official Israeli Delegate for the Binational Israel - Italy Conference on Biomedical Polymers and Composites, April 1989, Trento, Italy.
- 1990 Organizing Committee, Networks 90, 10th Polymer Networks Group Meeting and IUPAC 10<sup>th</sup> International Symposium on Polymer Networks, May 22-25, 1990, Jerusalem, Israel.
- 1990 Program Chairperson, workshop of the Israel Polymer and Plastics Society and Israel Society for Medical and Biological Engineers on Medical Applications of Polymers, June, 1990, Herzlia, Israel.
- 1991 Scientific Committee of the International Conference on Biomedical Polymers, June 9-13, Jerusalem, Israel.
- 1991 Program Chair of the Annual Scientific Meeting of the Israel Society for Medical & Biological Engineering, part of the 15th World Congress of the Israel Medical Association, November 6, 1991 Jerusalem, Israel.
- 1992 International Advisory Board of the 2nd Jerusalem Conference on Pharmaceutical Sciences and Clinical Pharmacology, May 24-29, 1992, Jerusalem, Israel.
- 1993 Member of the Scientific Program Committee of the 20th Anniversary International Symposium on Controlled Release of Bioactive Materials, July 25-29, 1993, Washington D.C., USA.
- 1993 Organizer and Chairperson of a Symposium on Modulated Drug Delivery the 20th Anniversary International Symposium on Controlled Release of Bioactive Materials, July 25-29, 1993, Washington D.C., USA.
- 1993 Member of the Scientific Program Committee of the 2nd Far Eastern Conference on Medical and Biological Engineering, August 15-19, 1993, Beijing, China.
- 1993 Membership team and the Global Network team of the Controlled Release Society USA.
- 1994 Organizer and Program Chair of the Annual Scientific Meeting of Israel Institute of Chemical Engineers, March, 1994, Beer-Sheva, Israel.
- 1994 International Organizing Committee of The XI Congress of the International Society for Artificial Cells and Immobilization Biotechnology, July 23-28, 1994, Boston, USA.
- 1995 Symposium and Workshop Scientific Program Committee of the 22nd International Symposium on Controlled Release of Bioactive Materials, July 30 - August 2, 1995, Seattle, USA.
- 1995 Member of the Scientific Program Committee of the Mediterranean Conference on Biomedical Engineering, MEDICON 95, September, 1995, Jerusalem, Israel.

- 1995 Organizer and Chairperson of a Minisymposium on Temporal Delivery/Chronopharmacology at the 22<sup>nd</sup> International Symposium on Controlled Release of Bioactive Materials, 1995, Seattle, USA.
- 1996 International Advisory Board of the 3rd Jerusalem Conference on Pharmaceutical Sciences and Clinical Pharmacology, September 1- 6, 1996, Jerusalem, Israel.
- 1996 Member of the Scientific Program Committee of the Controlled Release Society Conference on Advances in Controlled Delivery, Baltimore, 1996, USA.
- 1996 Founder of the Israel Society for Controlled Delivery of Bio-Materials and the Israeli Chapter of the Controlled Release Society.
- 1996 Organizer and Program Chair of the First Meeting of the Israeli Chapter of the Controlled Release Society, June 1996, Tel-Aviv, Israel.
- 1996 President of the Israeli Society for Controlled Delivery of Bio-Materials and the Israeli Chapter of the Controlled Release Society (1996-1997).
- 1998 Board of Directors, Sontra Medical Corp. Franklin, MA, USA. (1998-2003).
- 1999 Member International Advisory Board, Joint Meeting 3<sup>rd</sup> Congress of the European Association for Clinical Pharmacology and Therapeutics and 4<sup>th</sup> Jerusalem Conference on Pharmaceutical Sciences and Clinical Pharmacology, October 1999, Jerusalem, Israel.
- 2000 Member of the Scientific Program Committee International Conference 2000 – The Era of Biotechnology, October, 2000, Beer-Sheva, Israel.
- 2000 Member of the Scientific Committee Euromembrane 2000, September 2000, Judean Hills, Israel.
- 2002 Member Scientific Advisory Board, Sontra Medical Corp. Franklin, MA, USA.
- 2003 Member International Advisory Committee, First International Conference on Medical Implants, July, Washington DC 2003.
- 2004 Member Organizing Committee of The 5<sup>th</sup> Annual Meeting of the Israeli Chapter of Controlled Release Society, Session Chairman, Haifa, September 2004.
- 2006 Member of the selection committee for the CRS/Jorge Heller Journal of Controlled Release Best Paper Award.
- 2006 College of Reviewers for the Canada Research Chairs Program.
- 2007 President of the Israel Institute of Chemical Engineers (2007-2010).
- 2007 Member of the Organizing Committee of The 6<sup>th</sup> Annual Meeting of The Israeli Chapter of The Controlled Release Society, September 2007, Caesarea, Israel
- 2008 Member of the Organizing Committee of the 44<sup>th</sup> Annual Meeting of the Israel Institute of Chemical Engineers, November 2008, Tel-Aviv, Israel.
- 2009 Member of the Organizing Committee, Polymers for Advanced Technologies, PAT 2009 October Jerusalem 2009.
- 2009 Member of the Organizing Committee of the 45<sup>th</sup> Annual Meeting of the Israel Institute of Chemical Engineers, November 2009, Tel-Aviv, Israel.
- 2010 Member of the Organizing Committee of the 46<sup>th</sup> Annual Meeting of the Israel Institute of Chemical Engineers, June 2010, Haifa, Israel.
- 2010 Member Organizing Committee of The 7<sup>th</sup> Annual Meeting of the Israeli Chapter of Controlled Release Society, Session Chairman, Haifa, October, 2010.

- 2011 Member of the Organizing Committee of the 47<sup>th</sup> Annual Meeting of the Israel Institute of Chemical Engineers, June 2011, Ramat-Gan, Israel.
- 2012 Chairman of the 1<sup>st</sup> Polish-Israeli Seminar, Biomedical Engineering Approaches in Chronic Diseases, September 3-5, 2012, Warsaw, Poland
- 2013 Organizer and Chairman of the ICS Symposium in Honor of the 2013 Wolf prize Laureate Robert Langer, May 2013, Beer-Sheva, Israel.
- 2014 Member Selection Committee for The Best Industrial Incubator for 2013, Office of the Chief Scientist, Ministry of Economy.
- 2014 Member of the Academic Community for Israel Society “Beshaar”
- 2014 Member of the Steering Committee of the IEEE 28<sup>th</sup> Convention of Electrical Engineers in Israel, December 2014, Eilat, Israel
- 2014 Controlled Release Society (CRS) College of Fellows Selection Committee
- 2016 Chairman of the Israel Academy of Sciences and Humanities Committee for the Evaluation of the Israeli Patent Office Activities on the Israeli Economy
- 2017 Member of the Steering Committee of the BraMat 2017 10<sup>th</sup> International Conference on Materials Science & Engineering, March 2017 Brasov Romania

### **Prizes and Honors**

- 1996 Juludan Prize for Outstanding Scientific Research Achievements, Technion - Israel Institute of Technology.
- 1996 President of the Israel Society for Controlled Delivery of Bio-Materials and the Israeli Chapter of the Controlled Release Society (1996-1998)
- 1998 Fellow of the American Institute for Medical and Biological Engineering.
- 1998 Clemson Award for Applied Research in Recognition of the Outstanding Contributions to Applied Biomaterials Research, Society for Biomaterials
- 1998 Founding member of the Journal Diabetes Technology & Therapeutics.
- 2001 Joel G Hardman Student-Invited Pharmacology Forum (Vanderblit University)
- 2004 Popular Science announced SonoPrep as the best new product for "personal health". (SonoPrep technology has been invented and developed by Kost and coworkers).
- 2005 Jacqueline Seroussi 2005 Award for Cancer Research in recognition of the project entitled: Ultrasound for efficient non-viral sustained gene therapy of breast cancer.
- 2006 Second Place Winner (Highlights of Student Poster Session), “Wolloch, L., and Kost, J., Approaches for Sonophoretic Flux Optimization,” 33rd Annual Meeting of the Controlled Release Society, Vienna.

- 2007 Outstanding Student Poster Award 3<sup>rd</sup> Prize; Shroeder A., Barenholz Y, Kost, J., Controlled Release of Drugs from Liposomes by Low-Frequency Ultrasound The 6<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Advances In Drug Delivery, New Carriers, Devices and Therapies Caesarea.
- 2007 President of the Israel Institute of Chemical Engineers.
- 2007 Elected a Foreign Member of the United States National Academy of Engineering (NAE). For discoveries that led to ultrasonic drug release and self-regulated drug delivery systems.
- 2007 Sustaining Correspondent, NAS/NAE/IOM Committee on Human Rights
- 2008 TevaTech Lecturer (Ben-Gurion University)
- 2008 2<sup>nd</sup> place in the posters competition; Wolloch, L., A. Azaguri, Traitel, T R. Goldbart, R., Shmilovitch, D., Hallak, M., and Kost, J. "Ultrasound For Non-Invasive Detection of Amniotic Fluid", The Israel Institute of Chemical Engineers (IICHE) 44<sup>th</sup> Annual Convention, Tel-Aviv.
- 2008 President's Prize for Outstanding Scientific Achievements, Ben-Gurion University
- 2010 1<sup>st</sup> Place in the posters competition; Azaguri, A., Wolloch, L., Traitel, T., Goldbart, R., D. Shmilovitch, D., Hallak, M., and Kost, J. "Use of Chemical Enhancers and ultrasound for Non-Invasive Detection of Amniotic Fluid", The Israel Institute of Chemical Engineers (IICHE) 46<sup>th</sup> Annual Convention, Haifa.
- 2010 First Place Winner (Highlights of Student Presentations Session), Perets, E., Rudich, A., and Kost, J. "Controlled delivery system to elicit anti-cancerous properties of the HIV protease inhibitor Nelfinavir" The 7<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Haifa.
- 2010 Incumbent of the The Abraham and Bessie Zacks Chair in Biomedical Engineering.
- 2012 Honorary Fellow of the Israel Institute of Chemical Engineers.
- 2014 Elected a Foreign Member of the Polish Academy of Engineers
- 2014 Induction into the Controlled Release Society College of Fellows
- 2015 Elected a Member of The Israel Academy of Sciences and Humanities
- 2016 Ben-Gurion University Distinguished Professor

2016 The Israeli Chapter of the Controlled Release Society Award for Outstanding Achievement in Drug Delivery, in recognition of his pioneering work in the field of Ultrasound-Based Drug Delivery Systems

### **Editorial Boards.**

1992- 2007 Biomaterials  
1994- 1999 Tissue Engineering  
1995- 2006 Journal of Controlled Release  
1998-2016 Diabetes Technology & Therapeutics (Founding Member)  
1998 Reviews in Chemical Engineering  
2006 Recent Patents on Endocrine Metabolic & Immune Drug Discovery  
2006 Recent Patents on Drug Delivery & Formulation  
2008 Open Pharmacology Journal  
2010 World Journal of Pharmacology (WJP)  
2015 Regenerative Engineering and Translational Medicine  
2017 Biocybernetics and Biomedical Engineering

### **Supervision of Graduate Students:**

Shefer Shmuel "Starch- as a Natural Polymer for Controlled Drug Delivery systems", Ph.D., Chemical Engineering Dept., Ben-Gurion University, 1986-1991.

Goldraich Margalit "Glucose Sensitive Drug Delivery", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 1988-1991.

Machluf Marcell "Effect of Ultrasound on Transdermal Drug Delivery", M.Sc., Biomedical Engineering Dept., Ben-Gurion University, 1988-1991.

Luz Tamar "Glucose Sensitive Hydrogels", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 1991-1995.

Segal Carmen "Polymeric Controlled Delivery System for Vitamin D3 - Development, Characterization and Application in Chemoprevention of Colon Cancer", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 1991-1996 (with Prof. S. Shani and Prof. S. Lempracht).

Goldbart Rivka "Calcium Dependent Controlled Drug Delivery", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 1991- 1996.

Krasovicki Alina "Characterization of Immobilized Tryptophanase", M.Sc., Program for Biotechnology, Ben-Gurion University, 1991-1996.

Lavon Ilana "Effect of Ultrasound on Drug Delivery Implants to the Brain", Center for Biomedical Engineering, Ben-Gurion University, 1992-1995.

Kolani Ronit	"Polysaccharides of the Red Microalgae as Polymers for Controlled Drug Delivery", M.Sc., Program for Biotechnology, Ben-Gurion University, 1992-1995 (with Prof. S. Arad).
Eliaz Rom	"Polymeric Matrices for Controlled Delivery of TBP", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 1993-1996 (with Prof. D. Wallach).
Eliaz Rom	"Polymeric Matrices for Controlled Delivery of TBP", Ph.D., Chemical Engineering Dept., Ben-Gurion University, 1996-1998 (with Prof. D. Wallach).
Sigalit Amitai	"Encapsulation Processes for Langerhan Islets based on Alginate Polysaccharides", M.Sc., Program for Biotechnology, Ben-Gurion University, 1994 -1997.
Chaim Aschkenasy	"Encapsulation Processes for Bone Cells Based on Acrylate Polymers", M.Sc., Biomedical Engineering Dept., Ben-Gurion University, 1994-1997.
Dina Cohen	"Effect of Ultrasound on liposomal Drug Delivery Systems", M.Sc., Biomedical Engineering Dept., Ben-Gurion University, 1994-1999 (with Prof. Y. Barenholtz and A. Gabizon).
Traitel (Luz) Tamar	"Glucose Sensitive Hydrogels", Ph.D., Chemical Engineering Dept., Ben-Gurion University, 1995-2000.
Osnat Malka	"Characterization of Controlled Release System for Materials that Affect Proliferation and Differentiation of Skin Cells", M.Sc., Program for Biotechnology, Ben-Gurion University, 1996-1999 (with Dr. N. Grossman).
Boinover Ariel	"Enhancement of Pollulan Production by Ultrasound Irradiation of Aureobasidium Pullulans Cells", 1996 - (with Dr. J. Shabtai).
Chaim Aschkenasy	"Effect of Ultrasound on Mass Transport Phenomena in Polymers", Ph.D., Biomedical Engineering Dept., Ben-Gurion University, 1997-2002.
Goldbart Rivka	"Calcium Dependent Controlled Drug Delivery", Ph.D., Chemical Engineering Dept., Ben-Gurion University, 1996- 2000.
Segal Carmen	"Polymeric Controlled Delivery System for Vitamin D3 - Development, Characterization and Application in Chemoprevention of Colon Cancer", Ph.D., Chemical Engineering Dept., Ben-Gurion University, 1996-2000 (with Prof. S. Shani and Prof. S. Lempracht).
Lavon Ilana	"Characterization of the Ultrasound Enhancing Mechanism on Transdermal Mass Transfer", Ph.D., Chemical Engineering Dept., Ben-Gurion University, 2001-2005 (with Dr. N. Grossman).
Naim Bracha	"Non-Viral Vector for Gene Delivery Based on Quaternized Potato Starch", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2002-2004 (with Dr. Z. Reich).
Tali Kruzal	"Gene Delivery System Based on Pectin", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2003-2005 (with Prof. Wolfson).
Inbal Fried	"Gene Delivery by pH-Sensitive Polyplexes Encapsulated in a Biodegradable Polymeric Implant for Sustained Therapy of Breast

- and Ovarian Cancer" M.Sc. Biomedical Engineering, Ben-Gurion University 2003-2005 (with Prof. M. Wolfson).
- Avi Shroeder "Controlled Release of Drugs from Liposomes Using Low Frequency Ultrasound", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2003-2007 (with Prof. Y. Barenholtz).
- Patela Israel "Fluorescent Nanoparticles-Synthesis, Analysis and a Novel Biological Application", M.Sc., Chemistry Dept., Ben-Gurion University, 2003-2006 (with Prof. S. Efrima).
- Shiratzki Rivka "Quaternized Starch as a Carrier for Gene Delivery Applications", Ph.D., Biotechnology Engineering Dept., Ben-Gurion University, 2003- 2008.
- Wolloch Lior "Characterization of Low Frequency Sonophoresis Homogeneity", M.Sc., Biomedical Engineering Dept., Ben-Gurion University, 2003-2007.
- Moliver Lili "Development of Polymeric Systems Based on Chitosan for multi-gene Therapy", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2004-2006.
- Kachko Ilana "Intracellular Delivery of Phosphatidylinositol-trisphosphate to Overcome Insulin Resistance in Skeletal Muscle and Fat cells", Ph.D., Chemical Engineering Dept., Ben-Gurion University, 2004-2010 (with Dr. A. Rudich).
- Kam Yossi "Development of Animal Model and Assessment of New Treatment of HPV Warts Using Topical Drugs and Ultrasound Methods for Enhanced Skin Permeability", M.Sc., Biomedical Engineering Dept., Ben-Gurion University, 2002-2006 (with Prof. A. Gilhar).
- Pokras Mariana "Molecular Interactions of DNA with Ni ions and their Implementation as a Labeling Tool", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2005-2008 (with Prof. Polak and Dr M. Azoulay).
- Rozenhek Irit "Low Frequency Ultrasound Enhanced Gene Therapy Using pDMAEMA Polyplexes", M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2006-2009 (**Special Excellence**).
- Avi Shroeder "Controlled Release of Drugs from Liposomes Using Low Frequency Ultrasound", Ph.D., Chemical Engineering Dept., Ben-Gurion University, 2007- 2010 (with Prof. Y. Barenholtz).
- Wolloch Lior "Characterization of Low Frequency Sonophoresis Homogeneity", Ph.D., Biomedical Engineering Dept., Ben-Gurion University, 2007-2011.
- Shemesh Michal "Fluorescent Nanoparticles for Non-Viral Gene Delivery Applications" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2007-2009.
- Azagouri Roni "Non Invasive Detection of Amniotic Fluids" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2007-2009.
- Peretz Ekaterina "Development of a Controlled Delivery System for an Anti-Cancer Drug Nelfinavir" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2009-2011.

- Abu Hacera Yael "Development and Characterization of Nano Electrically Charged Surfaces" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2009-2012. (with Prof. S. Lang)
- Azagouri Roni "Non Invasive Detection of Amniotic Fluids" Ph.D., Chemical Engineering Dept., Ben-Gurion University, 2009-2014.
- Amar Eliz "Modified Pectin as a Carrier for the Delivery of siRNA" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2010-2013.
- Noa Haberman "Ultrasound Triggered Polymer Degradation, an Approach for Ultrasound Triggered Inferior Vena Cava Filter Resorption" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2010-2013.
- Luai Khoury "A Novel Approach to Detection of Low -Concentration Biomarkers" Ph.D., BioMedical Engineering Dept., Ben-Gurion University, 2010 - present. (with Dr G. Enden)
- Rinat Lifshiz "Ultrasound Induced Increased Skin Permeability of siRNA for Psoriasis Treatment" M.Sc., Chemical Engineering Dept , Ben-Gurion University, 2012 – 2014
- Nitsa Buaron "Modified Pectin and High Intensity Focused Ultrasound (HIFU) for Non Invasive Brain Cancer Gene Therapy" M.Sc., Chemical Engineering Dept. , Ben-Gurion University, 2012 – 2014
- Amar Eliz "Modified Pectin and Ultrasound for targeted Delivery of siRNA" Ph.D., Nano-Institute, Ben-Gurion University, 2013-present.
- Nitzan Marelly "Polymeric Carrier Mediated Intracellular Delivery of Phosphatidylinositol for Autophagy Control" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2013-2016.
- Shani Attias "Prolonged administration of surfactants within nanoparticles to the lungs of prematures" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2013-2016.
- Shahar Gat "Development and characterization of system based on modified starch for optimizing plasmid DNA delivery to the nucleus" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2014-2016.
- Etili Hollander "Development of Modified Starch Based Nanoparticles as PIP3 Delivery System for Wound Healing" M.Sc., Chemical Engineering Dept., Ben-Gurion University, 2014-2017.
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167. Lavon I., Grossman, N., Kost, J. Transdermal Delivery Using Ultrasound: Elucidating the Mechanism Involved. The 4<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Haifa, September 2003.
168. Kost, J. Ultrasound to Overcome Biological Barriers. Fifth International Symposium on Frontiers in Biomedical Polymers" Abstract IL 15, Ischia, September 2003 (**invited lecture**).
169. Kost, J. Transdermal Delivery of Insulin Through Ultrasonically Permeated Skin. Third Annual Diabetes Technology Meeting, San Francisco, November 2003 (**invited lecture**).
170. Kost, J. Clinical Applications of Ultrasound in Transdermal Drug Delivery and Non-Invasive Diagnostics. The 4<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Haifa, September 2003 (**invited lecture**).

171. Kost, J. Continuous Non-invasive Glucose Monitoring Through Ultrasonically Permeated Skin. The 3<sup>rd</sup> Bi-National France-Israel Workshop on Biosensors, Biochips and Nanotechnology, Eilat, December 2003 (**invited lecture**).
172. Lavon, I., Grossman, N., Kost, J. Transdermal Delivery Using Ultrasound and SLS: Elucidating the Synergistic Mechanism. The ninth international conference: perspectives in percutaneous penetration, La Grande Motte, France, April 2004.
173. Kost, J., Ultrasound for Transdermal Drug Delivery and Non-Invasive Diagnostics. 9<sup>th</sup> Meeting of the European Society of Sonochemisrty, Badajoz, April 2004, (**invited lecture**).
174. Kost, J., Naim, B., Traitel, T., Sieradzki, R., Geresh, S., Reich, Z. Polysaccharide Carriers for Non-Viral gene Delivery Applications. 228<sup>th</sup> ACS National Meeting, Philadelphia, PA, August 2004, (**invited Lecture**).
175. Kost, J. Ultrasound for Controlled Drug Delivery and Non-Invasive Diagnostics, from Idea to Biotechnological Start-Up. Meeting of the Israel Institute of Chemical Engineers, Tel-Aviv, June 2004 (**invited lecture**).
176. Kost, J. FDA Approval of a Novel Device for Topical Local Anesthesia. Conference on Medical Devices Regulatory Issues, Tel-Aviv, November 2004 (**invited lecture**).
177. Azoulay, M., Pokrass, M., Kadar, T., Goldbart, R., Kost, J. Materials Tagging and Detection. The 70<sup>th</sup> Meeting of the Israel Chemical Society, Tel-Aviv, February 2005.
178. Kost, J. Breaking the Skin Barrier; No pain, More gain. Meeting of the Israeli Society for Medical and Biological Engineering, Tel-Aviv, February 2005 (**Guest Lecture**).
179. Fried, I., Wolfson, M., Traitel, T., Eisenberg, N., Sagi, O., Kost, J. Gene Delivery by pH-Sensitive Polyplexes Encapsulated in a Biodegradable Polymeric Implant for Sustained Cancer Therapy. Meeting of the Israeli Society for Medical and Biological Engineering, Tel-Aviv, February 2005.
180. Gurfinkel, R., Lavon, I., Volgin, K., Shaltiel, L., Kost, J., Rosenberg, L. Enhanced Enzymatic Debridement Using Combined Treatment of Ultrasound and Debrase. The Plastic Surgery at the Red Sea International Symposium, Eilat, March 2005.
181. Pokras, M., Kost, J., Goldbart, R., Azoulay, M. Molecular Interaction of DNA in Aqueous and Organometallic Solutions. The 6<sup>th</sup> Minerva Student Symposium on Molecular Based Devices, Rehovot, March 2005.
182. Shroeder, A., Avnir, Y., Lerner, D., Ulmanski, R., Tulchinsky, D., Weisman, S., Talmon, I., Naparstek, Y., Kost, J. Barenholz, H. Controlled Release of Drugs from Liposomes Using Low-Frequency Ultrasound. The 6<sup>th</sup> Minerva Student Symposium on Molecular Based Devices, Rehovot, March 2005.
183. Shroeder, A., Talmon, Y., Barenholz, H., Kost, J. Controlled Release of Drugs from Liposomes Using Low-Frequency Ultrasound. The 41<sup>st</sup> Conference of the Israel Institute of Chemical Engineers, Tel Aviv, June 2005.
184. Katav, T., LinShu, L., Wolfson, M., Kost, J. Gene Therapy Systems Based on Pectin. The 41<sup>st</sup> Conference of the Israel Institute of Chemical Engineers, Tel Aviv, June 2005.
185. Fried, I., Wolfson, M., Traitel, T., Aizenberg, N., Sagi, O., Kost, J. Releasing pH-sensitive polyplexes from a biodegradable implant: a novel gene delivery strategy

- for cancer therapy. The 41<sup>st</sup> Conference of the Israel Institute of Chemical Engineers, Tel Aviv, June 2005.
186. Pokras, M., Kost, J., Goldbart, R., Azoulay, M. The Effect of Cu<sup>+2</sup> and Ni<sup>+2</sup> on the Physical Characteristics of DNA. The 41<sup>st</sup> Conference of the Israel Institute of Chemical Engineers, Tel Aviv, June 2005.
187. Lavon, I., Gurfinkel, R., Volgin, K., Shaltiel, L., Rosenberg, L., Kost, J. Enhanced Enzymatic Debridement Using Combined Treatment of Ultrasound and Debrase. Proceedings of the 32<sup>nd</sup> International Symposium on Controlled Release of Bioactive Materials, Miami, June 2005.
188. Sieradzki, R., Kost, J., Geresh, S. Quaternized Starch as a Carrier for Gene Delivery Applications. The Future of Applied Glycobiology: A Meeting in Memory of Prof. Shimona Geresh, Beer-Sheva, November 2005.
189. Schroeder, A., Avnir, Y., Najajreh, Y., Weismann, S., Booktov, Y., Tulchinsky, D., Talmon, Y., Barenholtz, Y., Kost, J. Liposomal Controlled Drug Release. International Liposome Society Meeting, School of Pharmacy, London, Dec. 2005.
190. Schroeder, A., Avnir, Y., Najajreh, Y., Weismann, S., Booktov, Y., Tulchinsky, D., Talmon, Y., Barenholtz, Y., Kost, J. Controlled Release of Drugs from Liposomes Using Low-Frequency Ultrasound. Proceedings of the 4<sup>th</sup> Chemical Engineering Conference for Collaborative Research in Mediterranean Countries, Dead Sea, January 2006 (proceedings pp 329-332).
191. Kachko, I., Traitel, T., Kost, J., Rudich, A. Insulin actions induced in muscle and fat cells by polyethyleneimine-mediated intracellular PIP3 delivery. Annula Meeting of the Israeli Diabetes Association, Tel Aviv, June 2006
192. Kost, J. Breaking the Skin Barrier; No Pain, More Gain. International Seminar in Pharmaceutical Sciences Lucknow, India, February 2006, (**invited lecture**).
193. Kost, J. Ultrasound in Drug Delivery and Diagnostics. Conference Celebrating Thirty Years of Robert Langer's Science, Cambridge, US, July 2006, (**invited lecture**).
194. Schroeder, A., Avnir, Y., Tzemach, D., Najajreh, Y., Weismann, S., Ulmasnki, R., Naparstek, Y., Talmon, Y., Gabizon, A., Barenholtz, Y., Kost, J. Controlling Nanoscale Drug Release *In-Vitro* and *In-Vivo* by Focused Ultrasound. Transaction of the 33<sup>rd</sup> Annual Meeting and Exposition of the Controlled Release Society, Vienna, July 2006.
195. Sieradzki, R., Arad, S., Geresh, S. Kost, J. Quaternized Starch as a Carrier for Gene Delivery Application. Transaction of the 33<sup>rd</sup> Annual Meeting and Exposition of the Controlled Release Society, Vienna, July 2006.
196. Fried, I., Traitel, T., Goldbart, R., Shmilowitz, D., Wolfson, M., Kost, J. Cancer Gene Therapy Using pH-Sensitive Polyplexes Released From an Injectable PLGA Implant. Transaction of the 33<sup>rd</sup> Annual Meeting and Exposition of the Controlled Release Society, Vienna, July 2006.
197. Wolloch, L., Kost, J. Approaches for Sonophoretic Flux Optimization. Transaction of the 33<sup>rd</sup> Annual Meeting and Exposition of the Controlled Release Society, Vienna, July 2006.

198. Patla, I., Gheber, L., Efrima, S., Kost, J. CdS nanorods as a non viral vector for gene delivery. Transaction of the 33<sup>rd</sup> Annual Meeting and Exposition of the Controlled Release Society, Vienna, July 2006.
199. Katav, T., LinShu, L., Traitel, T., Wolfson, M., Kost, J. Cell Targeted Gene Delivery System Based on Modified Pectin. Transaction of the 33<sup>rd</sup> Annual Meeting and Exposition of the Controlled Release Society, Vienna, July 2006.
200. Enden, G., Lavon, I., Kimmel, E., Kost, J. A Mathematical Model of Sonophoresis by Rectified Diffusion. Transaction of the 33<sup>rd</sup> Annual Meeting and Exposition of the Controlled Release Society, Vienna, July 2006.
201. Park, H., Williams, R., Goldman, N., Kost, J., Kobler, Langer, R. Ultrasonic treatment of human abdominal adipose tissue improves tissue viability *in vitro*. IFATS Conference on Adipose-Derived Stem Cells for Tissue Engineering and Regenerative Medicine Applications, Baton Rouge, October 2006.
202. Rozenhek, I., Traitel, T., Goldbart, R., Fried, I., Kost, J. Low Frequency Ultrasound Enhanced Gene Therapy Using pDMAEMA Polyplexes. The 42<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Tel-Aviv, November 2006.
203. Kost, J., Ultrasound Enhanced Permeability. 7<sup>th</sup> Stadler Symposium on Mesoscale Organization, Beer-Sheva, April,2007.
204. Azaguri, A., Wolloch, L., Kost, J. Ultrasound effect on biological membranes, 7<sup>th</sup> Stadler Symposium on Mesoscale Organization, Beer-Sheva, April,2007.
205. Kost, J., Quaternized Polysaccharides, Non-Viral Carriers for Gene Delivery, 7<sup>th</sup> Inrenational Symposium on Frontiers in Biomedical Polymers, Ghent, June 2007, **(invited lecture)**.
206. Azaguri A., Wolloch, L., Kost, J. Ultrasound Effect on Biological Membranes,. The 6<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Advances In Drug Delivery, New Carriers, Devices and Therapies, Caesarea, September 2007 p.84.
207. Shemesh, M., Traitel, T., and Kost, J. Synthesis and Application of CdS Nanoparticles for Gene Therapy. The 6<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Advances In Drug Delivery, New Carriers, Devices and Therapies, Caesarea, September 2007, p.83.
208. Rozenhek, I., Traitel, T., and Kost, J. Low Frequency Ultrasound Effect on PDMAEMA Polyplexes. The 6<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Advances In Drug Delivery, New Carriers, Devices and Therapies Caesarea, September 2007, p.95.
209. Shroeder, A., Kost, J., and Barenholz, Y. Controlled Release of Drugs from Liposomes by Low- Frequency Ultrasound. The 6<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Advances In Drug Delivery, New Carriers, Devices and Therapies Caesarea, September 2007, p.98.
210. Kost, J., Clinical Applications of Ultrasound Enhanced Transport through Biological Membranes, Workshop “Biological and Technical Membranes” to the Honour of Professor Ora Kedem, Twente, November, 2007, **(invited lecture)**.
211. Kost, J., Ultrasound Enhanced Transport Processes, 21<sup>st</sup> Annual Meeting of the Israeli Association for Aerosol Research, Beer-Sheva 2007, p.1 **(invited plenary lecture)**.

212. Kachko, I., Traitel, T., Jelinek, R., Rudich, A., and Kost, J. PEI-PEP3 Complex Interaction with Biomimetic Liposomes Predict Induction of Insulin Actions in Cell, UK-Israel Symposium and Workshop on Cellular and Molecular Bioengineering and Biophysics, Tel-Aviv July 2008.
213. Kachko, I., Traitel, T., Jelinek, R., Rudich, A., and Kost, J. Polymeric Carrier-Mediated Intracellular Delivery of Phosphatidylinositol Trisphosphate to Overcome Insulin Resistance. The 44<sup>th</sup> Annual Conference of the Israel Institute of Chemical Engineers, November Tel-Aviv, 2008. (*Selected by the Israeli Institute of Chemical Engineering (IChE) to represent the Society in the annual meeting of the American Institute of Chemical Engineering in Philadelphia* )
214. Perets, E., Goldbart, R., Laster, B., and Kost, J. Development of a Pt-Porphyrin Controlled Delivery System for a combined Treatment for Breast Cancer with Brachytherapy. The 44<sup>th</sup> Annual Conference of the Israel Institute of Chemical Engineers, November Tel-Aviv, 2008.
215. Kachko, I., Traitel, T., Jelinek, R., Rudich, A., and Kost, J. Polymeric Carrier-Mediated Intracellular Delivery of Phosphatidylinositol Trisphosphate to Overcome Insulin Resistance. Centennial Annual meeting of the American Institute of Chemical Engineers (AIChE), Philadelphia, November 2008.
216. Wolloch, L., Azaguri, A., Traitel, T., Goldbart, R., Shmilovitch, D., Hallak, M and Kost, J. Ultrasound for Non-Invasive Detection of Amniotic Fluid. The 44<sup>th</sup> Annual Conference of the Israel Institute of Chemical Engineers, November Tel-Aviv, 2008.
217. Shemesh, M., Traitel, T and Kost, J. CdS Nanoparticles as a Gene Delivery System,, The 44<sup>th</sup> Annual Conference of the Israel Institute of Chemical Engineers, November Tel-Aviv, 2008.
218. Azaguri, R., Wolloch, L., Traitel, T., Goldbart, R., Shmilovitch, D., Hallak, M., and Kost, J. Chemical Enhancers for Non-Invasive Detection of Amniotic Fluid, The 44<sup>th</sup> Annual Conference of the Israel Institute of Chemical Engineers, November Tel-Aviv, 2008.
219. Rosenhek, I., Traitel, T., Goldbart, T., Wolfson, M., and Kost, J. Low Frequency Ultrasound Effects on PDMAEMA/Plasmid Polyplexes Stability for Gene Therapy, The 44<sup>th</sup> Annual Conference of the Israel Institute of Chemical Engineers, November Tel-Aviv, 2008.
220. Schroeder A., Honen R., Brandl M., Gabizon A., Barenholz Y. and J. Kost, Ultrasound: An Effective Tool for Controlling the Release of Drugs from Pegylated Liposomes, 35<sup>th</sup> Controlled Release Society Meeting New York July 2008.
221. Schroeder, A., Kost, J., and Barenholz, Y. Controlled Release of Drugs from Liposomes by Low-Frequency Ultrasound, Effect of PEGylation, 2<sup>nd</sup> Midnight Sun Meeting on Drug Transport & Delivery, University of Tromsø, Norway, June 2008.
222. Azaguri, R., Wolloch, L., Traitel, T., Goldbart, R., Shmilovitch, D., Hallak, M., and Kost, J. Chemical Enhancers and ultrasound for Non-Invasive Detection of Amniotic Fluid, Transaction of the 36<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Copenhagen, July, 2009.

223. Kachko, I., Traitel, T., Jelinek, R., Rudich, A., Kost, J. Testing efficient carriers for intracellular PIP3 delivery to induce insulin actions using biomimetic liposomes and cellular model systems. Annual Meeting of the European Association for the study of Diabetes, Rome, September, 2008
224. Wolloch, L., Azaguri, R., Traitel, T., Goldbart, R., Shmilovitch, D., Hallak, M., and Kost, J. Ultrasound for Non-Invasive Detection of Amniotic Fluid. Transaction of the 36<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Copenhagen, July, 2009.
225. Kachko, I., Traitel, T., Jelinek, R., Rudich, A., and Kost J. Polyethylene as Effective Carrier for Intracellular PIP3 Delivery to Overcome Insulin Resistance.. PAT 2009, The 10<sup>th</sup> International Symposium on Polymers for Advanced Technologies, Jerusalem October, 2009.
226. Kost, J., Natural Polymers in Gene Therapy Applications, 2009 Materials Research Society Fall Meeting, Boston, December, 2009 (**invited lecture**).
227. Kost, J., New Therapies from the Integration of Polymers and Biological Systems, Israel Polymer and Plastic Society Meeting on Basic and Applied Research in Polymers Towards Advanced Applications, Beer-Sheva, June, 2010 (**invited lecture**).
228. Haberman, N., and Kost, J., Ultrasound Triggered Polymer Degradation, an Approach for Ultrasound Triggered Inferior Vena Cava Filter Resorption, The 46<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Haifa, June 2010.
229. Azaguri, A., Wolloch, L., Traitel, T., Goldbart R., Shmilovitch D., Hallak M, and Kost, J. Use of Chemical Enhancers and Ultrasound for Non-Invasive Detection of Amniotic Fluid. The 46<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Haifa, June 2010.
230. Lang, S.B., Tofail, S.A.M., Gandhi, A., Gregor, M., Wolf-Brandstetter, C., Clyens, S., Theilgaard, N., Kost, J., Bauer, S., and Wang, Y. Hydroxyapatite – A New Pyroelectric Material, AMF-AMEC 2010 JEJU, Korea 28 June-1 July 2010
231. Amar, E., and Kost, J. The effects of ultrasound on siRNA-starch complexes delivery as a treatment for ovarian cancer. The 46<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Haifa, June 2010.
232. Perets, E., Rudich, A., Kost, J. Development of a Controlled Delivery System for an Anti-Cancer Drug Nelfinavir, ESB2010, Tampere, Finland, September, 2010.
233. Kost, J., Nano-Based Targeted Therapies , The 2<sup>nd</sup> International Nanotechnology Conference & Exhibition, Tel-Aviv November 2010 (**invited lecture**).
234. Perets, E., Rudich, A., and Kost, J. Controlled Delivery Systems to Elicit Anti-Cancer Effects of HIV Protease Inhibitor Nelfinavir, The 7<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Haifa, October 2010, p. 65.
235. Azaguri, A., Wolloch, L., Goldbart, R., Traitel, T., Hallak M, and Kost, J. Effect of Ultrasound and Chemical Enhancers on Transport Phenomena of the Chorion Amnion Membrane, , The 7<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Haifa, October 2010, p. 89.
236. Haberman, N., Goldbart, R., Traitel, T, and Kost, J, Ultrasound Triggered Polymer Degradation, an Approach for Ultrasound Triggered Inferior Vena Cava Filter

- Resorption, , The 7<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Haifa, October 2010, p. 90.
237. Kost, J., Ultrasound for Targeted Liposomal Drug Delivery Systems., Liposomes Jerusalem, Jerusalem 2011, p.116. **(invited Lecture)**.
238. Azaguri, A., Apel,R.,Traitel T., Goldbart R., Shmilovitch D., Hallak N., and Kost J. Non Invasive Approaches for Sampling Amniotic Fluid Using Chemical Enhancers Encapsulated in Nano Sized Particles and Ultrasound. The 47<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Ramat-Gan, June 2011.
239. Haberman, N., and Kost, J. Ultrasound Triggered Polymer Degradation, an Approach for Noninvasive Resorption of the Inferior Vena Cava Filter. . The 47<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Ramat-Gan, June 2011.
240. Perets, E., Rudich, A., and Kost, J. Controlled Delivery System to Elicit Anti-Cancer Effects of HIV Protease Inhibitor Nelfinavir. . The 47<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Ramat-Gan, June 2011.
241. Edri, S., Azaguri, A., and Kost, J. The Effect of Ultrasound on Fluorescent Marker Release Profile from PLGA Nanospheres. . The 47<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Ramat-Gan, June 2011.
242. Amar, E., Goldbart, R., Traitel, T., Peer, D., and Kost, J. Gene Silencing Facilitated by Modified Starch/siRNA Nanocomplexes as a Treatment for Ovarian Cancer. The 47<sup>nd</sup> Annual Conference of the Israel Institute of Chemical Engineers, Ramat-Gan, June 2011.
243. Kost, J., Drug delivery platforms and preclinical results of ultrasound mediated drug delivery, Nano-poration, Spring School, Haifa Israel March 2011.
244. Perets, E., Rudich, A., and Kost, J. Development of a controlled delivery system for an anti-cancer drug Nelfinavir. Transaction of the 38<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Maryland, US, July 2011.
245. Azaguri A.,, Apel R.,. Traitel T.,Goldbart R., Shmilovitch D., Hallak M., and Kost J. Applying Chemical Penetration Enhancers as a Novel Method for Non-Invasive Detection of Amniotic Fluid. Transaction of the 38<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Maryland, US, July 2011.
246. LinShu Liu, Joseph Kost, Fan Yan, Robert C. Spiro, Arland Hotchkiss, Keith L. Yam. Hydrogels from Biopolymers as Carriers for the Controlled Release of Biologically Active Substances. The 3<sup>rd</sup> International Congress on Biohydrogels Gould Institute, Florence, Italy, November 2011,
247. Kost, J., Nanotechnology Based Targeted Therapies, The 1<sup>st</sup> Israeli-French Conference on the Application of Nanotechnology in Life Sciences, Tel-Aviv, Israel, November 2011 **(invited lecture)**.
248. Kost, J., Nano-based Therapies in Cancer and Diabetes, 124<sup>th</sup> ICB Seminar, 1<sup>st</sup> Polish-Israel Seminar on Biomedical Engineering Approaches in Chronic Diseases, Warsaw, Poland, September 2012 lecture notes 103-105.
249. Kost, J., Chemical and Physical Stimuli in Drug and Gene Delivery Applications, Materials Science and Engineering Conference (MSE 2012), Darmstadt, Germany, September, 2012, **(keynote lecture)**.
250. Khoury, L., Kost, J., and Enden, G. Numerical Simulation of Thermosensitive Liposomes Delivery to Tumors Using High Intensity Focused Ultrasound, The 9<sup>th</sup>

- Annual Meeting of the Israeli Chapter of the Controlled Release Society, Malot Tarshiha, September 2012.
251. Haberman, N, and Kost, J. Ultrasound-Triggered Polymer Degradation, an Approach for Noninvasive Reabsorption of Inferior Vena Cava, The 9<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Maalot Tarshiha, September 2012.
  252. Azaguri, A., Adato, Y., and Kost, J. The mechanism of Ultrasound Effect on Chorioamionion Membrane Mass Transport, The 9<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Maalot Tarshiha, September 2012.
  253. Kost, J. Bio-inspired Nano-carriers for Sub-Cellular Targeted Therapeutics, 245<sup>th</sup> ACS National Meeting, New Orleans, LA, US, April, 2013 (**invited lecture**).
  254. Kost, J. Stimuli Responsive Delivery of Therapeutics, New Biomaterials for Therapy, ICS Symposium in Honor of the 2013 Wolf prize Laureate Robert Langer, Beer-Shiva, May 2013 (**invited lecture**).
  255. Kost, J. Targeted and Focal Drug Therapy, Workshop on Biodegradable Polymers in Medicine, The Hebrew University of Jerusalem, September, 2013 (**invited lecture**).
  256. Kost, J. Nano-Scale Systems for Targeted Delivery of Drugs and Nucleotides, The 7<sup>th</sup> Congress of the Federation of the Israel Societies for Experimental Biology, (FISEB) Ilanit 2014 February, 2014 (**invited lectures**).
  257. Lifshiz, R., Traitel, T., Goldbart, R. and Kost, J. Developing Nano Delivery System for RNAi Based on Modified Starch and Ultrasound Application for Topical Treatment of Psoriasis, NanoIsrael 2014, The 4<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel-Aviv, March 2014.
  258. Amar-Lewis, E., Goldbart, R., Traitel, T., Landesman-Milo, D., Peer, D and Kost, J. Development and Characterization of Q-Starch Based Nanoparticles for siRNA Therapeutic Application, NanoIsrael 2014, The 4<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel-Aviv, March 2014.
  259. Buaron, N., Goldbart, R., Traitel, T. and Kost, J. Development of Pectin Based Nano-Systems for Gene Therapy, NanoIsrael 2014, The 4<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel-Aviv, March 2014.
  260. Kost, J. Bio-Inspired Nano-Carriers for Sub-Cellular Targeted Therapeutics, NanoIsrael 2014, The 4<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel-Aviv, March 2014 (**invited lectures**).
  261. Khoury, L., Goldbart, R., Traitel, T., Kost, J. and Enden, G. A Novel Approach to Detection of Low Concentration Biomarkers, Biomedical Engineering Society Annual Conference 2014, Haifa, February, 2014.
  262. Shrensky, M., Amar-Lewis, E., and Kost, J. Development of Quaternized Starch as a Carrier for Gene Therapy Applications, Biomedical Engineering New Trends Symposium, Tel-Aviv, May 2014.
  263. Kost, J., Nano-scale Systems for Targeted Therapies, Summer School on Nanomedicine and Innovation, Tel-Aviv, June 2014 (**invited lectures**).
  264. Khoury, L., Goldbart, R., Traitel, T., Kost, J. and Enden, G. A Novel Approach to Detection of Low Concentration Biomarkers, Transaction of the 41<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Chicago, US, July 2014.

265. Lifshiz, R., Lerman, G., Goldbart, R., Traitel, T., Avni, D., Sidi, Y., and Kost, J. Targeted miRNA Delivery for Psoriasis Treatment based on Modified Starch and Ultrasound Application, Transaction of the 41<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Chicago, US, July 2014.
266. Amar-Lewis, E., Goldbart, R., Traitel, T., Landesman-Milo, D., Peer, D., and Kost, J. Overcoming Transport Barriers Using Modified Starch Based Nanoparticles and Ultrasound Application for Gene Silencing, Transaction of the 41<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Chicago, US, July 2014.
267. Buaron, N., Chintacunta, R., Goldbart, R., Traitel, T., Brem, H., and Kost, J. Development of Modified Pectic Galactan Nano-System for Targeted Gene Therapy, Transaction of the 41<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Chicago, US, July 2014.
268. Marely, N., Vodonos, T., Goldbart, R., Traitel, T., Rudich, A., and Kost, J. Development of Modified Starch Based Complexes for PI3P Delivery in Order to Overcome Insulin Resistance, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
269. Khoury, L., Goldbart, R., Traitel, T., Kost, J., and Enden, G. Harvesting Low Molecular Weight Biomarkers Using Gold Nanoparticles, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
270. Lifshiz, R., Lerman, G., Goldbart, R., Traitel T., Avni, D., Sidi, Y., and Kost, J. Psoriasis Topical Treatment Based on Modified Starch and Ultrasound Application as a Delivery System for RNAi, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
271. Gat, S., Amar-Lewis, E., and Kost, J. Modified Starch Based Carrier and Ultrasound Application for siRNA Delivery, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
272. Hollander, E., Lifshiz, R., and Kost, J. Ultrasound Application for Psoriasis Treatment Based on Topically Delivered miRNA, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
273. Amar-Lewis, E., Goldbart, R., Traitel, T., Landersman-Milo, D., Peer, D., and Kost, J. Modified Starch Based Complexes and Ultrasound Application to Overcome siRNA Transport Barriers, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
274. Chntakunta, R., Goldbart, R., Traitel, T., and Kost, J. Chemical Modifications of Polysaccharides; Quaternization of the Various Polysaccharides, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
275. Kost, J. Stimuli Responsive Systems in Drug and Gene Delivery Applications, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014. **(invited lecture)**.
276. Khoury, L., Kost, J., and Enden, G. Searching for Low Molecular Weight Biomarkers in Blood Using Gold Nanoparticles, Biomedical Engineering Society Annual Conference 2015, Haifa, February, 2015.

277. Attias, S., Goldbart, R., Traitel, T., and Kost, J. Characterization of thyroglobulin loaded PLGA nanoparticles as drug delivery system, The 50th Annual Conference of the Israel Institute of Chemical Engineers, Tel Aviv, February 2015.
278. Gat, S., Chintakunta, R., Jopp, J., Goldbart, R., Traitel, T., Kost, J. Modified Starch based Carrier for Nucleus-Targeted pDNA Delivery, The 50th Annual Conference of the Israel Institute of Chemical Engineers, Tel Aviv, February 2015. (best poster)
279. Marely, N., Vodonos, T., Chintakunta, R., Goldbart, R., Traitel, T., Rudich, A., and Kost, J. Overcoming Hepatic Insulin Resistance Using Modified Starch for Exogenous PI3P Delivery, The 50th Annual Conference of the Israel Institute of Chemical Engineers, Tel Aviv, February 2015.
280. Amar-Lewis, E., Chintakunta, R., Cohen, L., Goldbart, R., Traitel, R., Gheber, L., and Kost, J. Uptake Kinetic and Mechanism Study of Q-starch based siRNA, Complexes in Human Ovarian Cancer Cells, The 50th Annual Conference of the Israel Institute of Chemical Engineers, Tel Aviv, February 2015.
281. Chintakunta, R., Goldbart, R., Traitel, T., and Kost, J. Synthesis and Characterization of Quaternized Starch and its Fluorescent Labeling with Various Fluorophores for In Vitro and In Vivo Visualization, The 50th Annual Conference of the Israel Institute of Chemical Engineers, Tel Aviv, February 2015.
282. Lifshiz, R., Lerman, G., Goldbart, R., Traitel T., Avni, D., Sidi, Y., and Kost, J. Topical treatment based on ultrasound and modified starch as a carrier for RNAi to treat psoriasis disease, The 50th Annual Conference of the Israel Institute of Chemical Engineers, Tel Aviv, February 2015. (best poster)
283. Buaron, N., Chintacunta, R., Goldbart, R., Traitel, T., Brem, H., and Kost, J., *In-vitro* Study Examining Modified Pectic Galactan/DNA Complexes as a New Nano-System for Treating Brain Cancer in a Targeted Manner, The 50th Annual Conference of the Israel Institute of Chemical Engineers, February 2015. Tel-Aviv.
284. Kost, J. The advancement of polymeric drug delivery research from macro to nano, The 43<sup>rd</sup> Annual Meeting of The Israel Polymer and Plastic Society, Carmiel, March 2015. (**invited plenary lecture**)
285. Kost, J. Non-Invasive Extraction of Clinically Relevant Analytes Using Ultrasound and Chemical Enhancers, Negev Global Issues 2015, Impact on Energy, Environment, Health and Water, Beer-Sheva May, 2015 (**invited Keynote Lecture**).
286. Kost, J. Novel Polysaccharide Based Platforms for Targeted Gene Therapy, Innovative Technologies in Drug Delivery and Targeted Theranostics, 2<sup>nd</sup> Bilateral Israel-Italy conference on “Drug Delivery and Targeted Theranostics” Tel-Aviv, May 2015 (invited lectures).
287. Cohen, L., Lewis, E., Kost, J., Gheber, L. Intracellular Delivery of Q-Starch based RNAi Therapeutics for Reducing Drug Resistance in Ovarian Cancer Cells, 7<sup>th</sup> International Conference on Tumor Microenvironment, Tel-Aviv, October 2015.
288. Kost, J. Nano-Technological Strategies for Targeted Therapies, The 51<sup>st</sup> Annual Meeting of The Israel Institute of Chemical Engineers (IICHE) Tel-Aviv, June 2016 (invited lectures).

- 289 Marely, N., Vodonos, T., Goldbart, R., Traitel, T., Rudich, A., and Kost, J., Up-Regulating Autophagy in Order to Overcome Insulin Resistance Using Quaternized Starch as PI3P Carrier., Transaction of the 42<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Edenborough, July 2015.
- 290 Lifshiz, R., Lerman, G., Goldbart, R., Traitel T., Avni, D., Sidi, Y., and Kost, J. RNAi Psoriasis Topical Treatment Based on Modified Starch Carrier and Ultrasound Application, Transaction of the 42<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Edenborough, July 2015.
- 291 Attias, S., Goldbart, R., Traitel, T., Kingma, P., Whitsett, J., and Kost, SP-D Loaded PLGA Nanoparticles as Drug Delivery System for Premature Infant's Lung Diseases, Transaction of the 42<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Edenborough, July 2015.
- 292 Khoury, L., Kost, J., and Enden, G. Looking into Blood Trash: Searching for Low Molecular Weight Biomarkers Using Polyacrylic Acid Coated Gold Nanoparticles, Transaction of the 42<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Edenborough, July 2015.
- 293 Kost, J. Nanotechnology for Targeted Therapies, The Annual Conference of the Israel Society for Medical and Biological Engineering (ISMBE), Biomedical Engineering 2016, Haifa, February, 2016 (Plenary Lecture).
- 294 Gat, S., Chintacunta, R., Goldbart, R., Traitel, T., Aranovich, D., Bernheim, A., Kost, J. Targeted Delivery of Plasmid DNA to Cells' Nucleous via Nuclear Localization Signal Peptide Conjugated to Modified Starch Based Carrier, The Annual Conference of the Israel Society for Medical and Biological Engineering (ISMBE), Biomedical Engineering 2016, Program & Abstracts p. 76, Haifa, February, 2016.
- 295 Hollander, E., Chintacunta, R., Traitel, T., Goldbart, R., Rudich, A., and Kost, J. Modified Starch Based Nanoparticles as PIP3 Delivery System for Wound Healing, The Annual Conference of the Israel Society for Medical and Biological Engineering (ISMBE), Biomedical Engineering 2016, Program & Abstracts p. 76 Haifa, February, 2016
- 296 Buaron, N., Chintacunta, R, Goldbart, R., Traitel, T., Brem, H., and Kost, J. Modified Pectin-Based Carrier for Gene Therapy; The Effect of Ultrasound on Plasmid DNA Delivery into the Nucleolus of Glioma Cells in Vitro, The Annual Conference of the Israel Society for Medical and Biological Engineering (ISMBE), Biomedical Engineering 2016, Program & Abstracts p. 74 Haifa, February, 2016
- 297 Lifshiz, R., Lerman, G., Elharrar, E., Meningher, T., Chintakunta, R., Goldbart, R., Traitel T., Avni, D., Sidi, Y., and Kost, J. Ultrasound and Modified Starch as a Topical Delivery System of miRNA to Treat Psoriasis, The Annual Conference of the Israel Society for Medical and Biological Engineering (ISMBE), Biomedical Engineering 2016, Program & Abstracts p. 75 Haifa, February, 2016
- 298 Amar-Lewis, E., Goldbart, R., Traitel, T., and Kost, J. Overcoming siRNA Delivery Barriers Mediated by Combination of Q-Starch based Complexes and Application of Low Frequency Ultrasound, The 16<sup>th</sup> International Symposium on Therapeutic Ultrasound, (ISTU), Tel-Aviv, March, 2016

- 299 Buaron, N., Mangraviti, A., Wang, Y., Liu, A., Pedone, P., Sankey, E., Chintacunta, R., Goldbart, R., Traitel, T., Brem, H., Tyler, B., and Kost, J. The Effect of Ultrasound and Modified Pectic Galactan/DNA Complexes: New Approach for Treating Brain Cancer in Vivo, The 16<sup>th</sup> International Symposium on Therapeutic Ultrasound, (ISTU), Tel-Aviv, March, 2016
- 300 Lifshiz, R., Lerman, G., Elharrar, E., Meningher, T., Chintakunta, R., Goldbart, R., Traitel T., Avni, D., Sidi, Y., and Kost, J. Topical Delivery System Based on Low Frequency Ultrasound Combined with Modified Starch as miRNAi Carrier to Treat Skin Disorders, The 16<sup>th</sup> International Symposium on Therapeutic Ultrasound, (ISTU), Tel-Aviv, March, 2016
- 301 Hollander, E., Chintacunta, R., Traitel, T., Goldbart, R., Rudich, A., and Kost, Modified Starch Based Nanoparticles as PIP<sub>3</sub> Delivery System for Wound Healing, Nano Israel, the 5<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel Aviv, Israel, February, 2016
- 302 Goldbart, R., Traitel, T., Aranovich, D., Bernheim, A., Kost, Self-assembled complexes of plasmid DNA and modified starch for active delivery into the nucleus, Nano Israel, the 5<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel Aviv, Israel, February, 2016.
- 303 Marely, N., Vodonos, T., Chintakunta, R., Goldbart, R., Traitel, T., Rudich, A., and Kost, J., Quaternized starch nanoparticles for exogenous PI3P delivery, Nano Israel, the 5<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel Aviv, Israel, February, 2016.
- 304 Lifshiz, R., Lerman, G., Elharrar, E., Meningher, T., Goldbart, R., Traitel T., Avni, D., Sidi, Y., and Kost, J., Topical Treatment of Psoriasis by miRNA Delivery Based on Ultrasound and Modified Starch, Nano Israel, the 5<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel Aviv, Israel, February, 2016.
- 305 Amar-Lewis, E., Cohen, L., Chintakunta, R., Goldbart, R., Traitel, T., Gheber, L., and Kost, J. Exploring the Transport Mechanism of RNAi and Quaternized-Starch Based Nanoparticles for Reducing Multidrug Resistance in Ovarian Cancer Cells, Nano Israel, the 5<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel Aviv, Israel, February, 2016.
- 306 Buaron, N., Chintacunta, R., Goldbart, R., Traitel, T., Brem, H., and Kost, J. Modified Pectic Galactan Carrier for Gene Therapy Demonstrated Significant Cellular Uptake *in Vitro*. Nano Israel, the 5<sup>th</sup> International Nanotechnology Conference & Exhibition, Tel Aviv, Israel, February, 2016.
- 307 Buaron, N., Mangraviti, A., Wang, Y., Liu, A., Pedone, M., Sankey, E., Chintacunta, R., Traitel, T., Goldbart, R., Brem, H., Tyler, B., Kost, J. *In vivo* Safety Study Assessing the Effect of Ultrasound and Modified Pectic Galactan/DNA Complexes as a New Approach for Treating Brain Cancer. The 83rd AANS Annual Scientific Meeting, Washington D.C, May 2-6, 2015.
- 308 Attias, S., Goldbart, R., Traitel, T., Kingma, P., Whitsett, J., and Kost, Protein Loaded PLGA Nanoparticles as Drug Delivery System, Workshop on Nanoparticles at the interface between biology and the materials world, Rehovot, Israel, July, 2015.
- 309 Buaron N., Chintacunta R, Goldbart R, Traitel T, Brem H, Kost J. Investigating the

- transfection cellular path of modified pectic galactan/plasmid DNA complexes *in vitro*. Workshop on Nanoparticles at the interface between biology and the materials world, Rehovot, Israel, July, 2015.
- 310 Lifshiz, R., Lerman, G., Elharrar, E., Meningher, T., Goldbart, R., Traitel T., Avni, D., Sidi, Y., and Kost, J., Topical Treatment of Psoriasis by miRNA Delivery Based on Ultrasound and Modified Starch, Workshop on Nanoparticles at the interface between biology and the materials world, Rehovot, Israel, July, 2015
- 311 Gat, S., Bar, D., Aranovich, D., Chintacunta, R., Jopp, J., Goldbart, R., Traitel, T., Bernheim, A., Kost, J. Modified Starch Based Carrier for Targeting Therapeutic Plasmid/DNA to the Nucleus, Workshop on Nanoparticles at the interface between biology and the materials world, Rehovot, Israel, July, 2015.
- 312 Mareilly, N., Vodonos, T., Cohen, L., Chintakunta, R., Goldbart, R., Traitel, T., Gheber, L., Rudich, A., and Kost, J., Development and Characterization of Targeted Delivery System Based on PI3P and Modified Starch to Overcome Insulin Resistance, Workshop on Nanoparticles at the interface between biology and the materials world, Rehovot, Israel, July, 2015.
- 313 Amar-Lewis, E., Chintacunta, R., Cohen, L., Goldbart, R., Traitel, T., Gheber, L., and Kost, J. Uptake Study of Q-Starch Based siRNA Complexes in Human Ovarian Cancer Cells, Workshop on Nanoparticles at the interface between biology and the materials world, Rehovot, Israel, July, 2015.
- 314 Kost, J. Nanotechnology for Targeted Drug and Gene Therapies, The XLIII Congress of The European Society for Artificial Organs, September, Warsaw Poland 2016 , The International Journal of Artificial Organs, 39, 7, p. 353, 2016
- 315 Kost, J. Targeted Delivery of Therapeutics with Ultrasound, The 10<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September, 2016 (**invited lecture**)
- 316 Buaron, N., Mangraviti, A., Volpin, F., Wang Y., Liu A., Mariangela Pedone M., Sankey E., Chintacunta R., Goldbart R., Traitel T., Brem H., Tyler B., and Kost J. The Effect of Ultrasound on Modified Pectic Galactan/DNA Complexes Distribution Through 9L Gliosarcoma Tumor Model in Vivo, The 10<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September, 2016
- 317 Gat, S., Chintacunta, R., Goldbart, R., Traitel, T., Aranovich, D., Bernheim, A., Kost, J. Development and Characterization of Gene Therapy Systems Based on Modified Starch for Optimizing Plasmid DNA Delivery to The Nucleus, The 10<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September, 2016
- 318 Amar-Lewis, E., Cohen, L., Goldbart, R., Traitel, T., Gheber, L., and Kost, J. Elucidating the Mechanism of Cellular Uptake and Intracellular Path of Quaternized-Starch based nanoparticles for siRNA delivery, The 10<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September, 2016
- 319 Buaron, N., Gat, S., Mosseri, E., Cohen, S., Khoury, L., Lifshitz, R., Chintacunta, R., Natan, M., Banin, E., Goldbart, R., Traitel, T. and Kost, J. Modified Starch as a Potential Antimicrobial Additive for Food Packaging, The 45th Annual Meeting of The Israel Polymers & Plastics Society (IPPS), Ramat-Gan January 2017

- 320 Buaron, N., Gat, S., Goldbart, Traitel, and Kost, J. PLGA Particles as a Potential Controlled Migration System of Antifog Additives for Food Packaging, The 45<sup>th</sup> Annual Meeting of The Israel Polymers & Plastics Society (IPPS), Ramat-Gan January 2017
- 321 Kost, J. Functional Biopolymers: Design, Synthesis and Applications, The 45<sup>th</sup> Annual Meeting of The Israel Polymers & Plastics Society (IPPS), Ramat-Gan January 2017 (**invited presentation**)
- 322 Kost, J., Nanotechnology and Ultrasound for Targeted Delivery of Drugs and Nucleotides, BraMat 2017, 10<sup>th</sup> International Conference on Materials Science & Engineering, Book of Abstracts p.12, Brasov, Romania, March 2017 (**Plenary Lecture**)
- 323 Kost, J., Nano-Scale Systems for Targeted Delivery of Therapeutics, Bio-X, Book of Abstracts p. 28, Natanya June 2017 (**Keynote Lecture**)
- 324 Lifshiz, R., Galya Lerman, G., Meningher, T., Elharrar, E., Masalha, M., Goldbart, R., Tamar Traitel, T., Avni, D., Yechezkel Sidi, Y., and Kost, J., Topical Treatment with miRNA-197 by Modified Starch and Ultrasound lessens psoriatic severity, Transaction of the 44<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Boston, July 2017
- 325 Buaron, N., Shachar Gat, S., Goldbart, R., Traitel, T., and Kost, J., Controlled Migration System of Antifog Additives Based on PLGA-GMO Particles for Food Packaging, Transaction of the 44<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Boston, July 2017
- 326 Amar-Lewis, E., Goldbart, R., Traitel, T., and Kost, J. RNAi Therapeutics Combining Q-starch Based Complexes and Application of Low Frequency Ultrasound to Overcome Delivery Barriers, Transaction of the 44<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Boston, July 2017
- 327 Buaron, N., Mangraviti, A., Volpin, F., Wang, Y., Liu, A., Pedone, M., Mastorakos, P., Sankey, E., Chintacunta, R., Goldbart, R., Traitel, T., Hanes, J., Brem, H., Betty Tyler, B., and Kost, J., Ultrasound for Overcoming 9L Gliosarcoma Tumor Biological Barriers for Pectin-based Gene Therapy, Transaction of the 44<sup>th</sup> Annual Meeting and Exposition of the Controlled Release Society, Boston, July 2017
- 328 Kost, J., Nanotechnology and Ultrasound for Targeted Delivery of Drugs and Nucleotides, First International Conference on Chemical, Environmental & Translational Medicine (ICCEBETM 2017, Xiamen December, 2017 (**Keynote Lecture**))

### **Conference Sessions Chaired**

1. 12<sup>th</sup> International Symposium on Controlled Release of Bioactive Materials, Session Chairman, Fundamentals and Modeling of Matrix Systems, Geneva, July 9, 1985.
2. 23<sup>rd</sup> Annual Meeting of the Israel Institute of Chemical Engineers, Organizing Committee and Session Chairman, Biotechnology, Beer Sheva, April, 1987.
3. IUPAC International Symposium on Polymers for Advanced Technologies, Session Chairman, Polymers in Biosystems, Jerusalem, August, 1987.

4. International Conference on Pharmaceutical Sciences and Clinical Pharmacology, International Advisory Board and Session Chairman, Drug Delivery Systems, Jerusalem, May, 1988.
5. 3<sup>rd</sup> World Biomaterials Congress, Session Chairperson, Blood Compatibility, Kyoto, April, 1988.
6. 15<sup>th</sup> International Symposium on Controlled Release of Bioactive Materials, Session Chairman, Fundamentals, Basel, August, 1988.
7. Israel-Italy Binational Conference on Biomedical Polymers and Composites, Trento, May 17-19, 1989.
8. 16<sup>th</sup> International Symposium on Controlled Release of Bioactive Materials, Session Chairman, Analytical/ Modeling, Chicago, August 8, 1989.
9. Symposium of the Israel Polymer and Plastics Society and Israel Society for Medical and Biological Engineers on Medical Applications of Polymers, Herzlia, June, 1990.
10. Annual Scientific Meeting of the Israel Society for Medical & Biological Engineering, Jerusalem, November 6, 1991.
11. ACS Symposium on Polymers for Medical Applications in honor of Prof. Robert Langer, San Francisco, April, 1992.
12. 28<sup>th</sup> Annual Meeting of the Israel Institute of Chemical Engineers, Session Chairman, Biotechnology, Haifa, April, 1992.
13. 20<sup>th</sup> International Symposium on Controlled Release of Bioactive Materials, Session Chairman, Modulated Drug Delivery, WA. D.C., July 26, 1993.
14. Nato Advanced Studies Institute, Targeting Of Drugs: Advances in System Constructs, Session Chairman, Technology, Cape Sounion, Greece, July 3, 1993.
15. 21<sup>th</sup> International Symposium on Controlled Release of Bioactive Materials, Session Chairman, Modulated Drug Delivery, Nice, France, June 27 - 30, 1994.
16. 23<sup>rd</sup> Symposium of the Israel Polymers and Plastic Society, Session Chairman, Tel-Aviv, December, 1994.
17. 22<sup>th</sup> International Symposium on Controlled Release of Bioactive Materials, Session Chairman, Temporal Controlled Delivery, Seattle, US, July 30 - August 4, 1995.
18. VII Mediteranean Conference on Medical & Biological Engineering, Session Chairman, Biomaterials, Jerusalem, September 17-21, 1995.
19. 23<sup>rd</sup> Symposium of the Israel Polymers and Plastic Society, Session Chairman, Functional Polymers, Tel-Aviv, December 1995.
20. First Meeting of the Israel Society for Controlled Delivery of Bioactive Materials and The Controlled Release Society Israel Local Chapter, Chairman, Tel-Aviv, June, 1996.
21. 6<sup>th</sup> International Symposium on Polymers for Advanced Technologies, Plenary Lecture Chair, Eilat, Israel September, 2001.
22. Fifth International Symposium on Frontiers in Biomedical Polymers, Session Chair, Ischia, September, 2003.
23. The 3<sup>rd</sup> Bi-National France-Israel Workshop on Biosensors, Biochips and Nanotechnology, Session Chairman, Eilat, December, 2003.
24. The 5<sup>th</sup> Annual Meeting of the Israeli Chapter of Controlled Release Society, Session Chairman, Haifa, September, 2004.

25. The 6<sup>th</sup> Annual Meeting of the Israeli Chapter of Controlled Release Society, Session Chairman, Caesarea, September, 2007.
26. The 43<sup>th</sup> Annual Meeting of the Israel Institute of Chemical Engineers, Session Chairman, Tel-Aviv, November, 2007.
27. The 44<sup>th</sup> Annual Meeting of the Israel Institute of Chemical Engineers, Plenary Session Chairman, Tel-Aviv, November, 2008.
28. PAT 2009, The 10<sup>th</sup> International Symposium on Polymers for Advanced Technologies, Session Chairman, Jerusalem, October, 2009.
29. 2009 MRS Fall Meeting, Session Chairman, Boston, December 2009.
30. The 45<sup>th</sup> Annual Meeting of the Israel Institute of Chemical Engineers, Plenary Session Chairman, Tel-Aviv, November, 2009.
31. 124<sup>th</sup> ICB Seminar, 1<sup>st</sup> Polish-Israel Seminar on Biomedical Engineering Approaches in Chronic Diseases, Warsaw, Poland, September 2012.
32. New Biomaterials for Therapy, ICS Symposium in Honor of the 2013 Wolf prize Laureate Robert Langer, Beer-Shiva, May 2013.
33. Workshop on Biodegradable Polymers in Medicine, Session Chairman, The Hebrew University of Jerusalem, September, 2013.
34. Innovative Delivery Vehicles, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
35. Biotechnology and Pharma, The 50<sup>th</sup> Annual Conference of the Israel Institute of Chemical Engineers, Tel Aviv, February 2015.
36. Negev Global Issues, Impact on Energy, Environment, Health and Water, Beer-Sheva May, 2015.
39. Artificial pancreas and Diabetes Treatment, Session Chairman, The XLIII Congress of The European Society for Artificial Organs, September, Warsaw Poland 2016
40. Biopolymers Session Chairman The 45<sup>th</sup> Annual Meeting of The Israel Polymers & Plastics Society (IPPS), Ramat-Gan January 2017

### **Invited Lectures**

1. Glucose Sensitive Polymeric Membranes, Department of Applied Biological Sciences, Massachusetts Institute of Technology (MIT), September 1982.
2. Controlled Release Systems: Recent Advances. Biotechnology General, Rehovot, May 1984.
3. Modulated Drug Delivery, Dept. of Chemical Engineering, Ben Gurion University of the Negev, May 1984.
4. Controlled Drug Delivery in Response to Physiological Needs, Department of Materials Research, The Weizmann Institute of Science, Rehovot, March 1985.
5. Controlled Drug Delivery, Casaly Institute for Applied Chemistry, The Hebrew University, Jerusalem, March 1985.
6. Controlled Delivery of Bioactive Agents, ABIC Ltd., Chemical and Pharmaceutical Industries, April 1985.

7. Polymeric Materials in Medicine, 15<sup>th</sup> Annual Meeting of the Israel Plastics Society on Advanced Technologies in Polymers and Plastics, Haifa, December 1985.
8. Drug Delivery in Response to Physiological Needs, Research and Development Authority, Ben-Gurion University of the Negev, May 1985.
9. Drug Delivery in Response to Physiological Needs, Chemistry Division Research Laboratories, Eastman Kodak Company, Rochester, New York, September 1985.
10. Controlled Drug Delivery. Dept. of Interdisciplinary Studies, Biomedical Engineering Program, Faculty of Engineering, Tel Aviv University, January 1986.
11. Self-Regulated Drug Delivery Systems. Faculty of Health Sciences, Ben Gurion University of the Negev, January 1986.
12. Self and Externally Controlled Polymeric Drug Delivery Systems. Lipid Dept., Hadasa Medical Center, Dec. 1986.
13. Self and Externally Controlled Polymeric Drug Delivery Systems. Dept. of Polymer Science and Engineering, University of Massachusetts, February 1987.
14. Externally Regulated Drug Delivery, Depts. of Pharmacology and Physiology, Soroka Hospital, Beer Sheva, March 1987.
15. Controlled Drug Delivery Systems. Biotechnology General, Rehovot, March 1988.
16. Implantable Therapeutic Systems. Third International Conference of Chronopharmacology, Nice, March 1988.
17. Effect of Ultrasound on Transdermal Drug delivery. Cygnus Research Corporation, Redwood City, CA, July 1989.
18. Externally Modulated Insulin Delivery Systems. Proceedings of the 15<sup>th</sup> International Symposium on Controlled Release of Bioactive Materials, pp 162-163, Basel, August 1988.
19. Polymeric Controlled Drug Delivery Systems. Fourth Israel Materials Engineering Conference, Abstracts p.173, Beer-Sheva, December 1988.
20. Controlled Drug Delivery Systems. IEEE International Conference on Control and Application, Jerusalem, April 1989.
21. Self and Externally Modulated Drug Delivery Systems. Binational Israel - Italy Conference on Biomedical Polymers and Composites, Trento, May 1989.
22. Starch as a Polymeric Matrix for Controlled Drug Delivery. Binational Israel - Italy Conference on Biomedical Polymers and Composites, Trento, May 1989.
23. Starches and Ultrasound in Controlled Drug Delivery. Massachusetts Institute of Technology (MIT), September 1989.
24. Starches in Controlled Drug Delivery. Enzytech Inc., Cambridge, MA, September 1989.
25. Natural Polysaccharides for Enzymatically Controlled Drug Delivery, American Chemical Society National Meeting, (Polymers as Biomaterials), Boston, April 22-27, 1990.
26. Chemically-Modified Starches for Targeted Drug Delivery, American Chemical Society National Meeting, (Polymers for Cosmetic and Pharmaceutical Applications) Washington, D.C., August 26-31, 1990.
27. Polymers in Controlled and Responsive Drug Delivery Systems, Soreq Nuclear Research Center, Yavne, June 1990.
28. Polymers in Controlled Drug Delivery, Workshop on Medical Applications of Polymers, Herzlia, June 11, 1990.

29. Application of Ultrasound in Controlled Drug Delivery, Nova Pharmaceutical Corporation, Baltimore, MD, August 24, 1990.
30. Application of Plastic Materials in Medicine, Conference on Chemistry in Medicine, Tel-Aviv, December 6, 1990.
31. Ultrasound for Controlled Delivery of Therapeutics, International Conference on Biomedical Polymers, From Molecular Design to Clinical Applications, Jerusalem, June 10-12, 1991.
32. Controlled Drug Delivery, Soroka Hospital, Beer Sheva, March 1991.
33. Polymers in Controlled Delivery Systems, Workshop on Composite fluids, Polymers and Microstructure, Technion, Haifa, May, 1991.
34. Controlled Drug Delivery, Department of Chemistry, Ben Gurion University, January, 1991.
35. Self and Externally Regulated Drug Delivery, Genetics Institute, Andover, MA, Sept 16, 1991.
36. Ultrasound Induced Delivery of Peptides, Second European Symposium on Control Drug Delivery, Noordwijk Aan Zee, April 1-3, 1992.
37. Glucose Responsive Hydrogels for Medical Applications, ACS Symposium on Polymers for Medical Applications in honor of Prof. Robert Langer, San Francisco, April, 1992.
38. Responsive Polymeric Drug Delivery Systems, 2nd Jerusalem Conference on Pharmaceutical Sciences and Clinical Pharmacology, Jerusalem, May 24-29, 1992.
39. Effect of Ultrasound on Biomedical Polymers, Gordon Conference on Polymers for Biosystems, Oxnard, CA Feb. 24-28, 1992.
40. Drug Delivery Systems, Program for Biotechnology, Ben Gurion University of the Negev, December 1992.
41. Polymeric Systems for Controlled Drug Delivery, First National Symposium on Peptides & Drug Delivery, Jerusalem, March 11, 1993.
42. Intelligent Polymeric Systems for Drug Release, Faculty of Chemical Engineering, Technion, Haifa, March, 1993.
43. Responsive Polymer Systems for the Controlled Delivery of Drugs, Nato Advanced Studies Institute, Targeting of Drugs: Advances in System Constructs, Cape Sounion, Greece, June 25, 1993.
44. Technology of Responsive Polymer Systems, Nato Advanced Studies Institute, Targeting of Drugs: Advances in System Constructs, Cape Sounion, Greece, July 2, 1993.
45. Polymeric Drug Delivery Systems, Dept of Biomedical Engineering, School of Engineering, Tel Aviv University, June, 1994.
46. Responsive Delivery Systems, Interpharm, Rehovot, May, 1994
47. Biosensors Based on Intelligent Polymeric Systems, XI Congress of the International Society for Artificial, Cells, Blood Substitutes and Immobilization Biotechnology, Boston, July, 1994.
48. Responsive Polymer Systems for Controlled Delivery of Therapeutics, 1<sup>st</sup> National Symposium on Biomedical Science & Technology and Satellite Workshop of INFA on Tissue Engineering, Ankara Turkey, September 1994.
49. Polymeric Controlled Drug Delivery Systems, VII Mediteranean Conference on Medical & Biological Engineering, Jerusalem, September 1995.

50. Artificial Organs, Kfar Kasem, April 1995.
51. Polymeric Systems for Controlled Drug Delivery, Workshop, Dept. of Biomedical Engineering, Technion, Haifa, October 1996.
52. Ultrasound Enhanced Transdermal Drug Delivery, Bio'97, International Biotechnology Meeting & Exhibition, Houston, June 1997.
53. Responsive and Injectable Drug Delivery Systems, Dept. of Chemical Engineering, Massachusetts Institute of Technology (MIT), Cambridge, September 1997.
53. Ultrasound to Enhance Delivery of Proteins and Peptides, IBC's International Conference on Transdermal Drug Delivery, Coronado, December 1997.
54. Sonophoresis, Sixth International Conference on Perspectives in Percutaneous Penetration, Leiden, September 1998.
55. Ultrasound induced transcutaneous transport for drug delivery and diagnostics. 16<sup>th</sup> International Congress on Acoustics and 135<sup>th</sup> Meeting Acoustical Society of America, Seattle, June 1998.
56. Ultrasound Induced Transdermal Transport for Non-Invasive Diagnostics, The First France-Israel Bi-National Workshop on Biosensors & Biochips, Beer-Sheva, October, 1998.
57. Ultrasound Enhanced Transdermal Transport for Drug Delivery and Diagnostics, Tri-National American-Turkish Israeli Conference, Haifa, March 1999.
58. Ultrasound Enhanced Transdermal Transport for Drug Delivery and Diagnostics, 5<sup>th</sup> us-Japan Symposium on Drug Delivery Systems, Hawaii, December 1999.
59. Ultrasound Induced Transdermal Transport, Department of Mechanical Engineering, Ben-Gurion University, Beer-Sheva, December 1999.
60. Biodegradable Polymers as Carriers for Drug Delivery, Sixth World Biomaterials Congress, Hawaii, May, 2000.
61. Ultrasound Enhanced Transdermal Transport for Diagnostics and Drug Delivery, MIT, Cambridge, May, 2000.
62. Ultrasound Enhanced Membrane Transport for Drug Delivery and Diagnostics, Euromembrane 2000, Jerusalem, September, 2000.
63. Noninvasive Transdermal Glucose Monitoring Through Ultrasound-Treated Forearm Skin, Advanced Technology Applications to Combat Casualty Care Conference ATACCC 2000, Ft. Walton Beach, FL, September, 2000.
64. Transdermal Monitoring and Drug Delivery Through Ultrasound Treated Skin. The 2<sup>nd</sup> International Symposium on Sonodynamic Therapy-From Basic Research to Clinical Applications. Yokohama, Japan, March, 2001.
65. Intelligent Drug Delivery Systems. 6<sup>th</sup> International Symposium on Polymers for Advanced Technologies, Eilat, Israel, September, 2001.
66. Controlled Drug Delivery Systems for Efficient and Convenient Administration 1<sup>st</sup> conference of the Israeli Association for Medicinal Chemistry, Jerusalem, March 2002.
67. Transdermal Drug Delivery, ACS Prospectives Conference on Drug Delivery, Boston, October 2002.
68. SonoPrep Skin Permeation System for Diagnostics and Drug Delivery, 7<sup>th</sup> International Drug Delivery Technologies & Deal-Making Summit, Princeton, July 2002.

69. Recent Developments in the Israeli Bio-Tech Industry, Palmer &Dodge, Government of Israel Economic Office in New England and American Associates, Ben-Gurion University of the Negev. 2002.
70. Smart Systems for Controlled Delivery of Drugs, Faculty of Biotechnology, Israel Institute of Technology, Haifa, June 2002.
71. Smart Systems for Controlled Delivery of Drugs, Chemistry Department, Nuclear Research Center, Dimona, June 2002.
72. Ultrasound for transdermal diagnostics and Drug Delivery, BioAcademy Conference 2003, Tel-Aviv, January 2003.
73. Ultrasound based system for transdermal diagnostics and drug delivery Biomedical Physics Seminar, Physics Department, Ben-Gurion University, Beer-Sheva, November 2002.
74. Smart Polymers for insulin delivery, 69<sup>th</sup> Seminar of the ICB on "Technical, biological and bio-technical approaches of the diabetes treatment. Recent developments and perspectives", Warsaw, May 2003.
75. Ultrasound for closed loop Transdermal Insulin Delivery, 69<sup>th</sup> Seminar of the ICB on "Technical, biological and bio-technical approaches of the diabetes treatment. Recent developments and perspectives", Warsaw, May 2003.
76. Clinical Applications of Ultrasound in Transdermal Drug Delivery and Diagnostics, Biomaterials and Medical Devices, Tel-Aviv, June 2003.
77. Ultrasound to Overcome Biological Barriers, Fifth International Symposium on Frontiers in Biomedical Polymers, Abstracts IL 15, Ischia, September 2003.
78. Applications of Ultrasound in Transdermal Drug Delivery and Non-Invasive Diagnostics. The 4<sup>th</sup> Annual Meeting of the Israeli Chapter of the Controlled Release Society, Haifa, September 2003.
79. Continuous Non-invasive Glucose Monitoring Through Ultrasonically Permeated Skin. The 3<sup>rd</sup> Bi-National France-Israel Workshop on Biosensors, Biochips and Nanotechnology, Eilat, December 2003.
80. Applications of Ultrasound in Transdermal Drug Delivery and Diagnostics, School of Chemistry, Tel Aviv University, March 2004.
81. Polymeric Drug Delivery Systems, Dept. of Biomedical Engineering, Tel-Aviv University March 2004.
82. Ultrasound for Transdermal Drug Delivery and Non-Invasive Diagnostics" 9th Meeting of the European Society of Sonochemisrty, Badajoz, April, 2004
83. Non-Viral Gene Therapy, Sackler Faculty of Medicine, Graduate School, Tel-Aviv University, May 2004.
84. Polysaccharide Carriers for Non-Viral gene Delivery Applications" 228<sup>th</sup> ACS National Meeting, Philadelphia, PA, August 2004.
85. Ultrasound for Controlled Drug Delivery and Non-Invasive Diagnostics, From Idea to Biotechnological Start-Up, Meeting of the Israel Institute of Chemical Engineers, Tel-Aviv, June 2004.
86. Clinical Applications of Ultrasound in Transdermal Drug Delivery and Diagnostics" Dept of Clinical Biochemistry, School of Medicine, Ben-Gurion University, Beer-Sheva, June 2004.

87. Ultrasound for Controlled Drug Delivery and Non-Invasive Diagnostics, From Idea to "Start-Up" Department of Bio-Medical Engineering, Ben-Gurion University, Beer-Sheva, November 2004.
88. Ultrasound for Controlled Drug Delivery and Non-Invasive Diagnostics, From Idea to FDA Approval, Department of Bio-Medical Engineering, Tel-Aviv University, Tel-Aviv, November 2004.
89. Breaking the Skin barrier, No Pain, More gain, Meeting of the Israeli Society for Medical and Biological Engineering, Tel-Aviv, February 2005 (Guest Lecture).
90. Ultrasound for Transdermal Transport, from Idea to FDA Approved Medical Device, Department of Chemical Engineering, Ben-Gurion University, Beer-Sheva, November 2005.
91. Breaking the Skin Barrier; No Pain, More Gain, International Seminar in Pharmaceutical Sciences Lucknow, India, February 2006.
92. Ultrasound in Drug Delivery and Diagnostics, Conference Celebrating Thirty Years of Robert Langer's Science Cambridge, US, July 2006.
93. Ultrasound Enhanced Permeability. 7<sup>th</sup> Stadler Symposium on Mesoscale Organization, Beer-Sheva, April, 2007.
94. Quaternized Polysaccharides, Non-Viral Carriers for Gene Delivery, 7<sup>th</sup> International Symposium on Frontiers in Biomedical Polymers, Ghent, June 2007.
95. Ultrasound in Drug Delivery and Diagnostics, NIH, Bethesda, October 2007.
96. Development of Innovative Products, Panel of the American Associates, Ben-Gurion University of the Negev and The Government of Israel Economic Mission, Los Angeles on Business and Investment Opportunities, Ben-Gurion University of the Negev - An Oasis of Invention. Beverly Hills , October 2007.
97. Clinical Applications of Ultrasound Enhanced Transport through Biological Membranes, Workshop "Biological and Technical Membranes" to the Honour of Professor Ora Kedem, Twente, November, 2007.
98. Ultrasound Enhanced Transport Processes, 21<sup>st</sup> Annual Meeting of the Israeli Association for Aerosol Research, Beer-Sheva 2007, p.1.
99. Ultrasound Applications in Controlled Drug/gene Delivery and Non-Invasive Diagnostics, Teva Corp, Kfar-Saba January, 2008.
100. Ultrasound for Transdermal Drug Delivery, from Idea to FDA Approved Medical Device, Ort Braude College, Carmiel, March 2008.
101. Responsive Systems for Controlled Delivery of Drugs and Genes, TevaTech Lecture, Beer-Sheva, July, 2008.
102. Smart Polymeric Systems for Drug and Gene Delivery, Bar-Ilan University, Ramat-Gan, December, 2008.
103. From Idea to FDA Approved Medical Device, International; Entrepreneurship Week, The Bengis Center for Entrepreneurship & Hi-tech Managements, Ben-Gurion University, Beer-Shiva, November 2009.
104. Natural Polymers in Gene Therapy Applications, 2009 Materials Research Society Fall Meeting, Boston, December, 2009.
105. New therapies from the integration of polymers and biological systems, Israel Polymer and Plastic Society Meeting on Basic and applied research in polymers towards advanced applications, Beer-Sheva, June, 2010.

106. Nano-Based Targeted Therapies , The 2<sup>nd</sup> International Nanotechnology Conference & Exhibition, Tel-Aviv November 2010.
107. Nano-Based Targeted Therapies, School of Pharmacy, Hebrew University, Jerusalem, November, 2010.
108. Ultrasound for Targeted Liposomal Drug Delivery Systems., Liposomes Jerusalem, Jerusalem 2011
109. Nanotechnology Based Targeted Therapies, The 1<sup>st</sup> Israeli-French Conference on the Application of Nanotechnology in Life Sciences, Tel-Aviv, Israel, November 2011
110. Chemical and Physical Stimuli in Drug and Gene Delivery Applications, Materials Science and Engineering Conference (MSE 2012), Darmstadt, Germany, September, 2012
111. Nano-based Therapies in Cancer and Diabetes, 124<sup>th</sup> ICB Seminar, 1<sup>st</sup> Polish-Israel Seminar on Biomedical Engineering Approaches in Chronic Diseases, Warsaw, Poland, September 2012
112. Bio-inspired Nano-carriers for Sub-Cellular Targeted Therapeutics, 245<sup>th</sup> ACS National Meeting, New Orleans, LA, April, 2013.
113. Nano-based Targeted Therapies, US Department of Agriculture, ARS, Eastern Regional Research Center, Wyndmoor, PA, April 2013.
114. Stimuli Responsive Delivery of Therapeutics, New Biomaterials for Therapy, ICS Symposium in Honor of the 2013 Wolf prize Laureate Robert Langer, Beer-Sheva, May 2013
115. Workshop on Biodegradable Polymers in Medicine, The Hebrew University of Jerusalem, September, 2013.
116. Nano-Scale Systems for Targeted Delivery of Drugs and Nucleotides, The 7<sup>th</sup> Congress of the Federation of the Israel Societies for Experimental Biology, (FISEB) Ilanit 2014 February, 2014.
117. Nano-scale Systems for Targeted Therapies, Summer School on Nanomedicine and Innovation, Tel-Aviv, June 2014
118. Stimuli Responsive Systems in Drug and Gene Delivery Applications, The 9<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September 2014.
119. The advancement of polymeric drug delivery research from macro to nano, The 43<sup>rd</sup> Annual Meeting of The Israel Polymer and Plastic Society, Carmiel, March 2015.
120. Non-Invasive Extraction of Clinically Relevant Analytes Using Ultrasound and Chemical Enhancers, Negev Global Issues 2015, Impact on Energy, Environment, Health and Water, Beer-Sheva May, 2015.
121. Polysaccharide Based Platforms for Targeted Gene Therapy, Innovative Technologies in Drug Delivery and Targeted Theranostics, 2<sup>nd</sup> Bilateral Israel-Italy conference on “Drug Delivery and Targeted Theranostics”, Tel-Aviv, May 2015.
122. Nano-Scale Systems for Targeted Delivery of Drugs and Neucleotides, Faculty of Pharmacology, Institut Galien, University Paris-Sud, Châtenay-Malabry, September, 2015.

123. Nanotechnology for Targeted Therapies, The Annual Conference of the Israel Society for Medical and Biological Engineering (ISMBE), Biomedical Engineering 2016, Haifa, February, 2016.
124. Targeted Delivery of Therapeutics with Ultrasound, The 10<sup>th</sup> Biennial Meeting of The Israeli Chapter of The Controlled Release Society, Maalot, September, 2016
125. Nanotechnological Strategies for Subcellular Targeted Delivery of Drugs and Nucleotides, Cancer Research Club Seminar, Weizmann Institute of Science, April 11, 2016
126. Functional Biopolymers: Design, Synthesis and Applications, The 45<sup>th</sup> Annual Meeting of The Israel Polymers & Plastics Society (IPPS), Ramat-Gan January 2017
127. Nano-Scale Systems for Targeted Therapies, Huaqiao University, College of Chemical Engineering, Xiamen China, March 2017
128. Nanotechnology and Ultrasound for Targeted Delivery of Drugs and Nucleotides, BraMat 2017, 10<sup>th</sup> International Conference on Materials Science & Engineering, Brasov, Romania, March 2017
129. Nano-Scale Systems for Targeted Delivery of Therapeutics, Bio-X, Natanya, June 2017
130. Nanoscale Strategies for Targeted Therapies, Medical School, Temple University, Philadelphia, October 2017