

RESUME
Prof. Dan Givoli
Lawrence and Marie Feldman Chair in Engineering

Department of Aerospace Engineering
Technion—Israel Institute of Technology
Haifa 32000, Israel

Place and Date of Birth: Israel, Nov. 27, 1956

Marital Status: Married, three children

ACADEMIC DEGREES

- B.Sc. in Mechanical Engineering — Tel Aviv University, 1979–83, conferred June 1984 (Magna Cum Laude)
- M.Sc. in Mechanical Engineering — Tel Aviv University, 1983–85, conferred June 1985 (Magna Cum Laude)
- Ph.D. in Mechanical Engineering — Stanford University, 1985–88, conferred June 1988

ACADEMIC APPOINTMENTS

2004 – present	Professor, Lawrence and Marie Feldman Chair in Engineering, Dept. of Aerospace Engineering, Technion
March–Sept. 2016	Visiting Professor, Dept. of Civil Engineering & Geosciences, Technical University of Delft, Delft, The Netherlands (sabbatical)
Oct. 2010 – Feb. 2011, Oct. 2015 – Feb. 2016	Visiting Professor, Dept. of Applied Mathematics, Tel-Aviv University (sabbatical)
2004 – 05	Dean, Dept. of Aerospace Engineering, Technion
2001 – 04	Professor, Dept. of Aerospace Engineering, Technion
Aug. 2001 – Aug. 2002	Visiting Professor, Dept. of Applied Mathematics, Naval Postgraduate School, Monterey (sabbatical)
1995 – 2000	Associate Professor, Dept. of Aerospace Engineering, Technion
Sept. 1995 – Aug. 1996	Visiting Associate Professor, Dept. of Computer Science, Rensselaer Polytechnic Institute (sabbatical)
1990 – 1995	Senior Lecturer, Dept. of Aerospace Engineering, Technion (with tenure since 1993)
1989 – 1990	Lecturer, Dept. of Aerospace Engineering, Technion
1988 – 1989	Postdoctoral Fellow, Dept. of Aerospace Engineering, Technion
1985 – 1988	Research Assistant, Div. of Applied Mechanics, Stanford University
1982 – 1985	Research and Teaching Assistant, Dept. of Mechanics, Materials and Structures, Tel Aviv University

PROFESSIONAL EXPERIENCE

- Short-term consulting: Motorola, 2014, composite materials; Israel ONR, 2014, underwater acoustics; RAFAEL, 2013, underwater acoustics; Aero Magnesium, 2012, finite element analysis; Superfine, 2007, aeroacoustics; Olive Engineering, 2007, structural analysis; Flight Science Branch, IAF, 2007, vibration analysis; Israel Aircraft Industries (IAI), 2006, structural analysis; Semi Conductor Devices (SCD), 2003, finite element analysis; Wales Ltd., 2001, finite element analysis; IAI, 2001, finite element analysis and fracture; El Al Israel Airlines, 1999, finite element analysis.
- Consulting to Shamir Optical Industries, 1991, 1997–99, finite element analysis (leading to the production of nearly-optimal and optimal progressive lenses).
- Joint work with Alliance (Israeli tire maker), 1997–98, finite element analysis of tire production processes.
- Consulting to BERCOM (the Israeli branch of SASI, the ANSYS code company), 1995, finite element analysis and structural optimization, on a project of the Israel Electric Corporation.
- Participation in the investigation group of the 1992 El Al Israel Airlines Boeing 747 accident in Amsterdam, 1993, finite element analysis and structural mechanics (including meetings with the Boeing investigation group, and consulting to El Al).
- IMI, 1983–85 (two years), finite element stress analysis and composite materials (Stress Analysis Department).
- Israel Aircraft Industries (IAI), Summer 1982 (4 months), finite element stress analysis (Stress Analysis Department).

RESEARCH INTERESTS AND EXPERIENCE

- Technion, research in the area of computational mechanics. Particular interests: numerical methods for wave problems, finite element methods for solid mechanics, structures, acoustics and heat transfer, and combined analytic-numerical methods in continuum mechanics.
- Stanford University, CA, Research Assistant of Prof. T.J.R. Hughes (1985–86) and Research Assistant of Prof. J.B. Keller (1986–88), at the Division of Applied Mechanics, subject—finite element methods in acoustics and solid mechanics.
- Tel Aviv University, M.Sc. thesis research, advisers—Prof. M.A. Brull and Dr. I. Levit, 1983–85.
- Tel Aviv University, Research Assistant of Dr. M. Fuchs at the Department of Mechanics, Materials and Structures, subject—optimization and structural design, 1982–84.

TEACHING EXPERIENCE

Technion:

- Seminar in Structures (Undergrad.), Wint. 1989
- Mechanics of Solids (1) (Undergrad.), Wint. 1996
- Mechanics of Solids (2) (Undergrad.), Spr. 1990, Wint. 1990, Spr. 1993, Spr. 1999, Wint. 1999, Spr. 2001, Wint. 2002–Wint. 2006
- Fundamentals of Aeronautical Structures (Undergrad.), Spr. 1991–Wint. 1992, Spr. 1997–Wint. 1998, Spr. 2000, Wint. 2000, Wint. 2012–Wint. 2014
- Analysis of Structures & Computer Applications, Spr. 2007, Wint. 2007, Spr. 2008, Wint. 2008, Spr. 2009, Wint. 2009, Spr. 2010, Spr. 2011
- Finite Elements in Aeronautical Engineering (Grad. and Undergrad.), Wint. 1988, Wint. 1989, Spr. 1991, Wint. 1992, Spr. 1994, Wint. 1994, Spr. 1995, Wint. 1996, Wint. 1997, Wint. 1998, Wint. 1999, Spr. 2001, Wint. 2002, Spr. 2006, Wint. 2007, Wint. 2008, Spr. 2011, Spr. 2012, Wint. 2013, Wint. 2014
- The Finite Element Method for Initial and Boundary Value Problems (Grad.), Spr. 1989, Spr. 1990, Wint. 1991, Spr. 1993, Spr. 1997, Spr. 1999, Wint. 2000, Spr. 2003, Spr. 2007, Wint. 2011, Wint. 2012, Spr. 2015
- Theory of Aeronautical Structures (1) (Grad., guided reading), Spr. 1998

- Applied Mathematics (2) (Grad.), Wint. 1990, Spr. 1992, Wint. 1993, Spr. 1998, Spr. 2000, Wint. 2003, Spr. 2008, Spr. 2012
- Selected Topics in Applied Mathematics: Elasticity (Grad.), Wint. 2009

Other:

- Tel Aviv University, Visiting Lecturer at the Department of Mechanics, Materials and Structures, graduate level course: “Variational Methods and Finite Elements I,” Wint. 1988.
- Tel Aviv University, Teaching Assistant at the Department of Mechanics, Materials and Structures, courses: “Mechanics (1),” “Theory of Machines,” “Mechanics of Solids (2),” 1983–85.

TECHNION ACTIVITIES

- Chairman of Technion’s Professional Committees for Promotion and Tenure, 2007–2015.
- Elected Senate Member, 2006–2015.
- Member of the Technion’s Applied Mathematics Committee, 2006–2015.
- Member of Search Committee for Technion-Level Deans, 2008–11.
- Member of the Committee for Nomination of Distinguished Professors, 2009, 2012, 2013–15.
- Member of the Harvey-Prize Council, 2007–08.
- Member of the Technion’s Prep. Nominations & Promotions Committee, 2003.
- Chairman of the Technion’s Academic Court for Students, 2002–2003.
- Chairman of the Technion’s Computational Mechanics Committee, 1999–2001.
- Member of the Technion’s Senate Committee for Development and Steering of Computing, 1998–2000.
- Judge in the Technion’s Academic Court for Students, 2000–01.
- Judge in the Technion’s Academic Court for Faculty, 1997–2001.
- Member of the Asher Space Research Center, 1998–present.
- Member of the Technion’s Applied Mathematics Committee, 1997–2001.
- Member of the Technion’s Computing Committee, 1997–98.
- Department Representative in the Technion’s Senate, 1995.
- Interviewer/Examiner in the Technion Excellence Program, 1994, 95, 97–2001.
- Departmental posts: Head of Dept. Office for Graduate Studies (2013–2015, three years), Member of Dept. Development Committee (2010–12), Member of Dept. Search Committee for New Faculty (2010–12), Dean (2004–05), Chairman of Dept. Computing Committee (1997–2001), Head of Dept. Office for Undergraduate Studies (1993–95), Member of Dept. Undergraduate Curriculum Committee (1990–95), Organizer of the Dept. Seminar on Aerospace Engineering (1991–92).

PUBLIC PROFESSIONAL ACTIVITIES

Member of an Editorial Board:

- Associate Editor, *Wave Motion*, since 2003.
- Associate Editor, *Journal of Computational Acoustics*, since 2007 (Member of Editorial Board since 1999).
- Member of the Editorial Advisory Board, *Computer Methods in Applied Mechanics and Engineering*, since 2011.
- Member of the Advisory Board, *International Journal for Numerical Methods in Engineering*, since 2003.

- Member of the Editorial Advisory Board, *Advanced Modeling and Simulation in Engineering Sciences*, since 2012.
- Member of the Advisory Board, *International Journal for Multiscale Computational Engineering*, since 2003.
- Member of the Editorial Board, *Computer Modeling in Engineering and Sciences*, since 1999.
- Member of the Editorial Board, *International Journal of Numerical Methods for Heat and Fluid Flow*, since 1991.

Editor of Journal Issues, Books and Newsletters:

- Guest editor of a special issue of Wave Motion, on *Advanced Modelling of Wave Propagation in Solids* (with J. Engelbrecht, T. Hagstrom and G. Maugin), Vol. 50, No. 7, Nov. 2013.
- Guest editor of a special issue of the Journal of Computational Acoustics (JCA), on *Advanced Computational Methods for Wave Motion in Complex Media* (with G. Seriani), Vol. 20, No. 2, June 2012.
- Guest editor of a double special issue of the journal Int. J. for Multiscale Computational Engineering, on *Multiscale Computational Engineering in Israel* (with S. Krylov), Vol. 6, Nos. 5–6, Dec. 2008.
- Editor of the book *A Celebration of Mathematical Modeling; The Joseph B. Keller Anniversary Volume* (with M. Grote and G. Papanicolaou), Kluwer, Dordrecht, The Netherlands, 2004.
- Guest editor of a special issue of the journal Wave Motion, on *New Computational Methods for Wave Propagation* (with I. Harari), Vol. 39, No. 4, April 2004.
- Editor of the book *Advances in the Mechanics of Plates and Shells; The Avinoam Libai Anniversary Volume* (with D. Durban and J.G. Simmonds), Kluwer, Dordrecht, The Netherlands, 2001.
- Guest editor of a special issue of the Journal of Computational Acoustics (JCA), on *Finite Elements for Wave Propagation* (with J. Astley, K. Gerdes and I. Harari), Vol. 8, No. 1, March 2000.
- Guest editor of a special issue of the journal Computer Methods in Applied Mechanics and Engineering (CMAME), on *Exterior Problems of Wave Propagation* (with I. Harari), Vol. 164, Nos. 1–2, Oct. 1998.
- Editor of the Israel Association for Computational Methods in Mechanics (IACMM) Newsletter, 2000–2015.

Refereeing:

- Serving as a referee for the following international journals, publishers and associations:

Journals; frequently: Computer Methods in Applied Mechanics and Engineering, J. Computational Physics, Int. J. Numerical Methods in Engineering, Int. J. Numerical Methods for Heat and Fluid Flow, Wave Motion, Applied Numerical Mathematics, Communications in Numerical Methods in Engineering, J. Computational Acoustics, Advances in Engineering Software, Computational Mechanics, Computer Modeling in Engineering & Sciences.

Journals; infrequently: AIAA J., Int. J. Solids & Structures, Composites Engineering, AIChE Journal, J. Sound and Vibration, Mathematical and Computer Modelling, SIAM J. Numerical Analysis, Numerical Methods for Partial Differential Equations, Proceedings A of the Royal Society, Int. J. Numerical Methods in Fluids, SIAM J. Scientific Computing, Numerische Mathematik, J. Crystal Growth, Computers and Structures, Physical Review, J. Acoustical Society of America, SIAM J. Applied Mathematics, Mathematics of Computation, Applied Mechanics Reviews, Structural Engineering & Mechanics, Int. J. of Mathematics & Mathematical Sciences, J. Marine Science & Technology, IMA J. of Numerical Analysis, J. Engineering Mechanics, J. Geophysical Research, Int. J. of Non-Linear Mechanics, ASME J. Applied Mechanics, Mathematics and Computer in Simulations, Int. J. Computational Methods, J. Computational & Applied Mathematics, Int. J. Heat and Mass Transfer, J. of Zhejiang University, Scientific Computing, Acta Acoustica, Engineering Structures, J. Geophysics & Engineering, Finite Elements in Analysis and Design, Int. J. Numerical Methods in Biomedical Engineering, Mathematical Modelling & Numerical Analysis.

Publishers, Associations, Funding Agencies and Conferences; frequently: Israel Science Foundation, US-Israel Binational Science Foundation (BSF), Emerald PhD Thesis Competition, Fulbright grants.

Publishers, Associations, Funding Agencies and Conferences; infrequently: Elsevier Science Publications, Int. Science Foundation, US National Science Foundation (NSF), Israel Ministry of Science and Arts, Prentice-Hall Publishers, New Zealand Marsden Fund, Royal Society of New Zealand, National Research Council of Chile, UK Engineering Research Council, UK Leverhulme Research Trust, Wiley, UK Royal Academy of Engineering, Int. Symp. on Symbolic & Algebraic Computation, Literati Club, World Scientific Publications, ASME Conf. on Eng. System Des. & Anal., Dutch National Technology Foundation, French National Research Agency.

Organization and Chairing in Conferences:

- 6th ECCOMAS Conference on Computational Dynamics (COMPDYN-2017), June 2017, Rhodes, Greece: Member of the Scientific Committee.
- 4th Int. Conf. on Computational Methods for Thermal Problems (ThermaComp-2016), July 2016, Atlanta, USA: member of the Int. Advisory Committee.
- 12th World Congress on Computational Mechanics (WCCM-2016), July 2016, Seoul, Korea: Member of the Int. Scientific Committee.
- European Congress on Computational Methods (ECCOMAS-2016), June 2016, Crete: Member of the Scientific Committee.
- 5th Workshop of the Israel Structural Integrity Group (ISIG), Jan. 2016, Tel Aviv: Member of the judge panel for student competition.
- 39th Israel Symposium on Computational Mechanics (ISCM-39), Technion, Nov. 2015: Chairman of a session.
- 13th Int. Conf. on Computational Structures Technology (CST-2015), Sept. 2015, Prague, Czech Rep.: Member of the Editorial Board.
- 12th Int. Conf. on Mathematical and Numerical Aspects of Wave Propagation (WAVES-2015), July 2015, Karlsruhe, Germany: Member of the Scientific Committee, organizer of a 2-session mini-symposium, chairman of another session.
- 5th ECCOMAS Conference on Computational Dynamics (COMPDYN-2015), May 2015, Crete, Greece: Member of the Scientific Committee, organizer of a 2-session mini-symposium, chairman of another session.
- 33rd Israel Conf. on Mechanical Engineering (ICME-2015), March 2015, Tel Aviv: chairman of a session.
- 55th Israel Annual Conf. on Aerospace Sciences, Feb. 2015, Tel Aviv & Haifa: Member of the Program Committee and Organizing Committee.
- 11th European Conf. on Non-Destructive Testing (NDT-2014), Oct. 2014, Prague, Czech Republic: member of the Scientific Committee.
- 12th Int. Conf. on Computational Structures Technology (CST-2014), Sept. 2014, Naples, Italy: Member of the Editorial Board.
- 11th World Congress on Computational Mechanics (WCCM-2014), July 2014, Barcelona, Spain: Member of the Scientific Committee, organizer of a 4-session mini-symposium.
- 3rd Int. Conf. on Computational Methods for Thermal Problems (ThermaComp-2014), June 2014, Slovenia: member of the Int. Advisory Committee.
- 11th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), March 2014, College Station, Texas: Member of the Technical Committee.
- 54th Israel Annual Conf. on Aerospace Sciences, Feb. 2014, Tel Aviv & Haifa: Member of the Program Committee and Organizing Committee; chairman of a session.

- Conference on Mathematical Modelling, in honor of the 90th birthday of Joseph B. Keller (JBK90), Aug. 2013, Lausanne, Switzerland: one of the organizers.
- 4th ECCOMAS Conference on Computational Dynamics (COMPDYN-2013), June 2013, Kos, Greece: Member of the Scientific Committee, organizer of a 3-session mini-symposium, chairman of an additional session.
- 53rd Israel Annual Conf. on Aerospace Sciences, Feb. 2013, Tel Aviv & Haifa: Member of the Program Committee and Organizing Committee.
- 11th Int. Conf. on Mathematical and Numerical Aspects of Wave Propagation (WAVES-2013), June 2013, Tunis: Member of the Scientific Committee.
- EUROMECH Colloquium on Advanced Modelling of Wave Propagation in Solids, Oct. 2012, Prague: Member of the Scientific Committee, chairman of a session.
- European Congress on Computational Methods (ECCOMAS-2012), Sept. 2012, Vienna: Member of the Scientific Committee, organizer of a 4-session mini-symposium, chairman of another session.
- 11th Int. Conf. on Computational Structures Technology (CST-2012), Sept. 2012, Dubrovnik, Croatia: Member of the Editorial Board.
- 10th World Congress on Computational Mechanics (WCCM-10), July 2012, Sao Paulo, Brazil: Member of the International Scientific Committee.
- Workshop on Wave Propagation in Complex Media, May 2012, Heraklion, Greece: Chairman of a session.
- 52nd Israel Annual Conf. on Aerospace Sciences, Feb. 2012, Tel Aviv & Haifa: Chairman of the Organizing Committee.
- 2nd Int. Conf. on Computational Methods for Thermal Problems, Sept. 2011, Dalian, China: Member of the International Advisory Committee.
- 11th US National Congress on Computational Mechanics (USNCCM-11), July 2011, Minneapolis, USA: member of the Int. Scientific Committee.
- 7th GRACM Int. Congress on Computational Mechanics, June 2011, Athens: Member of the Scientific Committee.
- 10th Int. Conf. on Mathematical and Numerical Aspects of Wave Propagation (WAVES-2011), July 2011, Vancouver: Member of the Scientific Committee.
- 3rd ECCOMAS Conference on Computational Dynamics (COMPDYN-2011), May 2011, Corfu, Greece: Member of the Scientific Committee, organizer of a 3-session mini-symposium.
- 10th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), April 2011, Taipei, Taiwan: Member of the Technical Committee, organizer of a 3-session mini-symposium.
- 51st Israel Annual Conf. on Aerospace Sciences, Feb. 2011, Tel Aviv & Haifa: Member of the Program Committee.
- 29th Israel Symposium on Computational Mechanics (ISCM-29), Technion, Oct. 2010: Co-organizer.
- 10th Int. Conf. on Computational Structures Technology (CST-2010), Sept. 2010, Valencia, Spain: Member of the Editorial Board.
- 9th World Congress on Computational Mechanics (WCCM-9), July 2010, Sidney, Australia: Member of the International Scientific Committee, organizer of a 2-session mini-symposium.
- 4th European Conf. on Computational Mechanics (ECCM-2010), May 2010, Paris: Member of the Scientific Committee, organizer of a 3-session mini-symposium.
- 50th Israel Annual Conf. on Aerospace Sciences, Feb. 2010, Tel Aviv: Chairman of the Niv-Ya Award Session.
- 9th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), Sept. 2009, Dresden, Germany: Member of the Technical Committee, organizer of a 4-session mini-symposium.

- 1st Int. Conf. on Computational Methods for Thermal Problems, Sept. 2009, Naples, Italy: Member of the Int. Advisory Committee.
- 9th Int. Conf. on Mathematical and Numerical Aspects of Wave Propagation (WAVES-09), June 2009, Pau, France: Member of the Scientific Committee; Chairman of a session.
- 2nd South East European Conf. on Computational Mechanics (SEECCM-09) and 2nd ECCOMAS Conference on Computational Dynamics (COMPdyn-09), June 2009, Rhodes, Greece: Member of the Int. Advisory Board; Organizer of a 2-session mini-symposium.
- Computational Structures Technology 2008 Conf. (CST-2008), Spet. 2008, Athens, Greece: Member of the Editorial Board.
- 8th World Congress on Computational Mechanics (WCCM-8) and ECCOMAS-2008, June 2008, Venice, Italy: Member of the International Advisory Board, organizer of a 4-session mini-symposium.
- 18th International Conference on Domain Decomposition Methods (DD18), Jan. 2008, Jerusalem: Member of the Organizing Committee.
- 3rd Asian-Pacific Congress on Computational Mechanics (APCOM'07), Dec. 2007, Kyoto, Japan: Member of the Scientific Advisory Board.
- 23rd Israel Symposium on Computational Mechanics (ISCM-23), Weizmann Institute of Science, Oct. 2007: co-organizer.
- 9th US National Congress on Computational Mechanics, July 2007, San Francisco, CA: Organizer of a mini-symposium (2 sessions).
- 8th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), July 2007, Heraklion, Crete: Member of the Technical Committee, organizer of a 3-session mini-symposium.
- ECCOMAS Conference on Computational Dynamics (COMPdyn), July 2007, Rethymno, Crete: Organizer of two mini-symposia (one-session each).
- 22nd Israel Symposium on Computational Mechanics (ISCM-22), Technion, March 2007: Organizer (with P. Bar-Yoseph).
- 8th Int. Conf. on Computational Structures Technology, Sept. 2006, Gran Canaria, Spain: Member of the Editorial Board.
- 7th World Congress on Computational Mechanics, July 2006, Los Angeles, CA: Member of the Advisory Board, organizer of a mini-symposium, chairman of a session.
- Int. Symp. on Mechanical Waves in Solids, May 2006, Hangzhou, China: Member of the Scientific Advisory Committee.
- 46th Israel Annual Conf. on Aerospace Sciences, Feb. 2006, Tel Aviv & Haifa: Member of the Organizing Committee.
- 7th Int. Conf. on Theoretical & Computational Acoustics, Sept. 2005, Hangzhou, China: Member of the Technical Committee.
- 8th US National Congress on Computational Mechanics, July 2005, Austin, TX: Chairman of a session.
- 7th Int. Conference on Mathematical and Numerical Aspects of Wave Propagation, June 2005, Brown University: Member of the Scientific Committee.
- 45th Israel Annual Conf. on Aerospace Sciences, Feb. 2005, Tel Aviv & Haifa: Member of the Organizing Committee; Chairman of a session.
- 7th Int. Conf. on Computational Structures Technology, Sept. 2004, Lisbon, Portugal: Member of the Conference Editorial Board.
- The 2004 Congress of European Community on Computational Methods in Applied Sciences (ECCOMAS), July 2004, Jyväskylä, Finland: Member of the Computational Mathematics and Numerical Methods Committee.

- 16th Israel Symposium on Computational Mechanics (ISCM-16), CRI, U. of Haifa, March 2004: Organizer.
- 44th Israel Annual Conf. on Aerospace Sciences, Feb. 2004, Tel Aviv & Haifa: Member of the Organizing Committee; Chairman of 2 sessions.
- 7th US National Congress on Computational Mechanics, July 2003, Albuquerque, NM: Organizer of a mini-symposium (Computational Methods for Wave Propagation, 4 sessions).
- 14th Israel Symposium on Computational Mechanics (ISCM-14), Technion, Haifa, April 2003: Organizer (with P. Bar-Yoseph).
- 6th US National Congress on Computational Mechanics, Aug. 2001, Dearborn, MI: Organizer of a mini-symposium (Finite Elements for Wave Problems, 2 sessions).
- ICES'01 Int. Conf. on Computational Engineering Sciences, Aug. 2001, Puerto Vallarta, Mexico: Member of the Scientific Advisory Committee.
- The 5th Int. Conf. on Theoretical & Computational Acoustics, May 2001, Beijing, China: Member of the Scientific Committee.
- 41st Israel Annual Conf. on Aerospace Sciences, Feb. 2001, Tel Aviv & Haifa: Member of the Paper Committee.
- 9th Israel Symposium on Computational Mechanics (ISCM-9), Technion, Haifa, Oct. 2000: Organizer (with P. Bar-Yoseph).
- The 2000 Congress of European Community on Computational Methods in Applied Sciences (ECCOMAS), Sept. 2000, Barcelona, Spain: Member of the International Correspondents Committee; Organizer of mini-symposium (Finite Element Schemes for Wave Problems, 1 session).
- The 2nd Int. Conf. on Engineering Computational Technology, Sept. 2000, Leuven, Belgium: Member of the Editorial Board.
- 40th Israel Annual Conf. on Aerospace Sciences, Feb. 2000, Tel Aviv & Haifa: Chairman of the Paper Committee.
- The 1999 Conf. on The Mathematics of Finite Elements and Applications (MAFELAP), June 1999, Brunel University, England: Organizer of a mini-symposium (Finite and Infinite Elements for Exterior Problems, 2 sessions); Chairman of 2 other sessions.
- 4th Int. Conf. on Theoretical and Computational Acoustics, May 1999, Trieste, Italy: Member of the Scientific Committee; Organizer of a mini-symposium (Finite Element Methods for Wave Propagation, 4 sessions); Chairman of a session; Panelist in a discussion panel.
- 39th Israel Annual Conf. on Aerospace Sciences, Feb. 1999, Tel Aviv & Haifa: Member of the Paper Committee; and Chairman of a session.
- 6th Israel Symposium on Computational Mechanics (ISCM-6), Technion, October 1998: the Organizer.
- 4th Int. Conf. on Spectral and High Order Methods, June 1998, Hertzelia, Israel: Member of the Local Organizing Committee; and Chairman of 2 sessions.
- 5th Israel Symposium on Computational Mechanics (ISCM-5), Tel Aviv University, Tel Aviv, April 1998: Organizer.
- 38th Israel Annual Conf. on Aerospace Sciences, Feb. 1998, Tel Aviv & Haifa: Member of the Paper Committee.
- A Workshop on High Performance Computing and the Research Programs of the European Union, Nov. 1997, Technion, Haifa: the Organizer.
- 4th US National Congress on Computational Mechanics, Aug. 1997, San Francisco, CA: Member of the International Advisory Committee; and Organizer of 2 mini-symposia (Exterior Problems of Wave Propagation, 4 sessions; Numerical Methods for Crystal Growth Processes, 3 sessions).

- IUTAM Symposium on Computational Methods for Unbounded Domains, July 1997, Boulder, CO: Member of the International Advisory Committee; and Chairman of a session.
- IUTAM Symposium on Nonlinear Singularities in Deformation and Flow, March 1997, Haifa, Israel: Member of the Local Organizing Committee; and Organizer of the IACM Mini-symposium on Numerical Treatment of Singularities and Interfacial Phenomena.
- 3rd Israel Symposium on Computational Mechanics (ISCM-3), Technion, Haifa, April 1997: Organizer (with P. Bar-Yoseph).
- 35th Israel Annual Conf. on Aerospace Sciences, Feb. 1995, Tel Aviv & Haifa: Member of the Paper Committee; and Chairman of a session.
- Int. Conf. on Theoretical and Computational Acoustics, July 1993, Yale University, Connecticut: Organizer of a session.
- 18th Int. Congress of Theoretical and Applied Mechanics (ICTAM), August 1992, Haifa, Israel: Member of the Local Organizing Committee.
- 1990 SIAM Annual Meeting, July 1990, Chicago, Illinois: Organizer and Chairman of the minisymposium on “Numerical Methods for Wave Problems in Unbounded Domains.”
- 1988 SIAM Annual Meeting, July 1988, Minneapolis, Minnesota: Chairman of a session.

Activity and Membership in Professional Societies:

- President (2007–2015), Israel Association for Computational Methods in Mechanics (IACMM): one of the founders and member of the Executive Council, 1994–present.
- The Israel Society of Aeronautics and Astronautics, Member & Coordinator of the von Karman Lecture Committee (for IACAS), 2010-2018.
- International Association for Computational Mechanics (IACM): member of the IACM General Council, 1994–2015 (elected member till 2009, ad officio as president of IACMM 2010–2015).
- European Community Association of Computational Methods in Applied Sciences (ECCOMAS), Committee Member (and member of core group) of the Computational, Solid and Structural Mechanics Committee (ECCSM), 2001–present.
- International Association for Mathematics and Computers in Simulation (IMACS), Member of the Technical Committee on Computational Acoustics, 2001–present.
- International Society for Computational Engineering and Sciences (ISCES), a Founding Member, 1999–present.
- Society of Industrial and Applied Mathematics (SIAM): member
- Israel Society of Aeronautics and Astronautics (ISAA): member
- The Israel Society for Theoretical and Applied Mechanics (ISTAM): member
- Israel Structure Integrity Group (ISIG): member, from 2012.

Activity in National Committees:

- Member of the Judging Committee, Fulbright post-doctoral fellowships in Science & Engineering, 2013–2014.
- Israeli Coordinator of the Theodore von-Kármán Lecture Committee, Israel Society of Aeronautics and Astronautics, 2010–2018.
- Member of the Judging Committee, Landau Foundation for Scientific Research, Mifal Hapayis, 2009.
- Member of the US-Israel Binational Science Foundation (BSF) Committee on Applied Mathematics, infrequently.

- Member of the Israeli Academy of Sciences Committee on Mechanics, every few years.
- Member of the Scientific Committee of the National Inter-University High Performance Computing Unit (HPCU), 2003.
- Member of the Israel Ministry of Science Committee on Applied Mathematics, 1999.

HONORS

- Yanai Prize for Excellence in Academic Education, 2014 (awarded 2015).
- Fellow of the International Association for Computational Mechanics (IACM), since 2008.
- The Lawrence and Marie Feldman Chair in Engineering, since 2004.
- 2001 Conf. on Soft Computing (WSC6) Best Paper Award (with L. Manevitz and A. Bitar).
- 1996–97, 1997–98, 1999–2000, 2000–01, 2002–03 (top 5%), 2006, 2007–08 (top 4%), 2008–2009, 2009–2010, 2011–2012, 2012–2013 (top 4%), 2013–14, 2014–2015 (top 4%): Technion Award for Distinguished Teaching.
- 1999 Academic Press Reviewer Award (for review in J. Computational Physics).
- 1998 Technion's Taub Award for Distinction in Research.
- Literati Club's 1998 Award of Excellence for the 1997 Outstanding Paper in the International Journal of Numerical Methods for Heat and Fluid Flow (for paper [46] in the Publ. List).
- Award: M.S. Geltman Memorial Academic Lectureship in Aerospace Engineering, 1990–93.
- Stanford University scholarship, 1985–88.
- Fulbright Ph.D. student (awarded by U.S.-Israel Educational Foundation, Aug. 1985).

GRADUATE STUDENTS

(PA=Primary Adviser, AA=Additional Adviser)

Completed Theses:

- 1991, Yossef Janashvilli (MSc), Dept. of Aero. Eng., PA: D.G. (Former adviser: I. Elishakoff).
- 1992, Leonid Rivkin (MSc), Dept. of Aero. Eng.
- 1993, Mattityahu Sabag (PhD), Dept. of Aero. Eng., PA: A. Rosen, AA: D.G.
- 1994, Gil Ben-Porat (MSc), Applied Mathematics Prog.
- 1995, Micha Margi (MSc), Dept. of Math. and Computer Science, U. of Haifa, PA: L. Manevitz, AA: D.G.
- 1995, Ilia Doukhovni (PhD), Dept. of Aero. Eng.
- 1996, Malek Yousef (MSc), Dept. of Math. and Computer Science, U. of Haifa, PA: L. Manevitz, AA: D.G.
- 1998, Lydia Peres (PhD), Applied Mathematics Prog., PA: Y. Rubinstein, AA: D.G. (PA during 1993–94.)
- 1999, Tatyana Demchenko (MSc), Applied Mathematics Prog.
- 1999, Fiana S. Yaacobson (PhD), Applied Mathematics Prog.
- 2000, Leonid Rivkin (PhD), Dept. of Aero. Eng.
- 2000, Nechemya Cohen (MSc), Dept. of Aero. Eng.
- 2001, Dafna Zelig (MSc), Applied Mathematics Prog., PA: S. Haber, AA: D.G.

- 2001, Vladislav Shenfeld (MSc), Applied Mathematics Prog., PA: D.G., AA: S. Vigdergauz.
- 2001, Ron Zusman (MSc), Dept. of Aero. Eng., PA: D.G., AA: A. Berkowitz.
- 2002, Akram Bitar (MSc), Dept. of Math. and Computer Science, U. of Haifa, PA: L. Manevitz, AA: D.G.
- 2003, Assaf Mar-Or (MSc), Cambridge U.-Technion Rotschild Fellowship, Applied Mathematics Prog.
- 2003, Vincent van Joolen (PhD), Dept. of Applied Math., Naval Postgraduate School, Monterey, CA, PA: B. Neta, AA: D.G.
- 2007, Assaf Mar-Or (PhD), Applied Mathematics Prog.
- 2008, Alex Kalvanov (ME), Dept. of Aero. Eng.
- 2008, Daniel Rabinovich (PhD), Dept. of Aero. Eng., PA: D.G., AA: S. Vigdergauz.
- 2009, Shaul Tayeb (MSc), Applied Mathematics Prog.
- 2010, Yoav Ofir (MSc), Dept. of Aero. Eng., PA: D.G., AA: A. Libai.
- 2010, Roman Reitbort (MSc), Dept. of Aero. Eng.
- 2010, Daniel Baffet (MSc), Applied Mathematics Prog., passed to PhD Direct Track.
- 2011, Ido Gur (MSc), Dept. of Aero. Eng.
- 2012, Clara Sussmann (MSc), Dept. of Aero. Eng., PA: D.G., AA: Y. Benveniste.
- 2013, Daniel Baffet (PhD), Applied Mathematics Prog.
- 2013, Izhak Levi (MSc), Dept. of Applied Mathematics, Tel-Aviv University, PA: Eli Turkel, AA: D.G.
- 2015, Israel Tuval (MSc), Dept. of Aero. Eng., PA: D.G., AA: E. Behar.

Theses in Progress:

- Yoav Ofir (PhD), Applied Mathematics Prog.
- Alexander Minkin (PhD), Dept. of Applied Mathematics, Tel-Aviv University, PA: Eli Turkel, AA: D.G.
- Yohan Kamun (MSc), Dept. of Aero. Eng.
- Eyal Amitt (MSc), Dept. of Aero. Eng., passed to the PhD Direct Track, March 2016.
- Hanan Amar (MSc), Dept. of Aero. Eng.

POST-DOCTORAL RESEARCH ASSOCIATES

- Igor Patlashenko, 1995–96.
- Abigail Wachter (Lady Davis Fellowship), 2006–07.
- Dina Tsemach, 2007.
- Daniel Rabinovich, 2009–10.
- Leonid Kucherov, 2010.

RESEARCH GRANTS

- Israel Science Foundation (ISF) Grant, 2015–19, \$263,000.
- US-Israel Binational Science Foundation (BSF) Grant, 2013–2017, \$107,000 (with J. Bielak, Carnegie Mellon, and T. Hagstrom, Southern Methodist University).
- MoD (MAFAT) Grant, 2015–16: \$22,000; 2014–15: \$18,000; 2013–14: \$10,000.
- Israel Science Foundation (ISF) Grant, 2011–15, \$230,000.

- US-Israel Binational Science Foundation (BSF) Grant, 2009–2013, \$80,000 (with J. Bielak, Carnegie Mellon, and T. Hagstrom, Southern Methodist University).
- MoD (MAFAT) Grant, 2006–11, \$43,000 per year on average.
- Israel Science Foundation (ISF) Grant, 2006–10, \$180,000.
- US-Israel Binational Science Foundation (BSF) Grant, 2003–2007, \$80,000 (with T. Hagstrom, U. of New Mexico).
- US-Israel Binational Science Foundation (BSF) Grant, 1998–2001, \$60,000 (with P. Barbone, Boston U.).
- Grant from the Adler Foundation for Space Research, managed by the Israeli Academy of Sciences, 1997–2000, \$62,000 (with O. Rand).
- Grant from the ESPRIT program of the European Community on High Performance Computing, 1997–98, Euro 15,000.
- Grant from the U. of Haifa-Technion Foundation for Joint Research, 1997–98, \$5000 (with L. Manevitz).
- US-Israel Binational Science Foundation (BSF) Grant, 1993–96, \$54,000 (with J.B. Keller, Stanford U.).
- Grant from the U. of Haifa-Technion Foundation for Joint Research, 1992–93, \$4000 (with L. Manevitz).
- Grant from the Adler Foundation for Space Research, managed by the Israeli Academy of Sciences, 1991–93, \$30,000 (with O. Rand).
- Grant from the U. of Haifa-Technion Foundation for Joint Research, 1990–91, \$4000 (with L. Manevitz).
- Technion Research Grants: Asher Space Research Fund (2011, 2014), Lena & Ben Fohrman Structures Research Fund (2011), The B.M. Gordon Center for Systems Engineering Grant (2006), R.&M. Rosenthal Aerospace Eng. Research Fund (2003, 08), Aeronautical Eng. Research Fund (1997, 98), Seniel Ostrow Research Fund (1997, 2006, 2010, 2013), Albert Fund for R&D in Aerospace Eng. (1997), J.&J. Gringorten Aeronautical Research Fund (1995, 2009), Fund for the Promotion of Research (1993–95, 97–99, 2004–09), K. Haber Applied Aerospace Research Fund (1990), L. Kraus Research Fund (1989–93, 98).

VISITING GRANTS

- INRIA Travel Grant, POEMS group for wave research, Paris, 2012.
- Senior Research Associateship at the Naval Postgraduate School, Monterey, CA (for one year), from the US National Academy of Sciences, 2001–02.
- Invited Summer Guest of the Institute of Mathematics (FIM) at ETH, Zurich, 2000.
- Israel-Greece Exchange Scientist Travel Grant, from the Israeli Ministry of Science and Technology and the Greek Government, 1993.
- Travel Grant from U.S. Office of Naval Research (ONR) under the Visiting Scientist Program, 1990.

LECTURES

(Given by D.G. unless indicated differently)

Invited Conference Lectures:

- 5th Workshop of the Israel Structural Integrity Group (ISIG), Tel-Aviv, Israel, Jan. 2016. • 5th ECCOMAS Conference on Computational Dynamics (COMPDYN-2015), Crete, Greece, May 2015.
- Workshop on Structural Health Monitoring, IAI, Lod, Israel, Oct. 2014.
- 11th Word Congress on Computational Mechanics (WCCM-2014), Barcelona, Spain, July 2014.
- 11th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), College Station, Texas, March 2014.
- 5th Int. Conf. on Coupled Problems (Coupled-2013), Ibiza, Spain, June 2013 (Speaker: Y. Ofir).
- 3rd Workshop on Underwater Acoustics, Tel Aviv, June 2013.

- 4th ECCOMAS Conference on Computational Dynamics (COMPDYN-2013), Kos, Greece, June 2013 (Semi-plenary).
- EUROMECH Colloquium on Advanced Modelling of Wave Propagation in Solids, Prague, 2012.
- ECCOMAS-2012 Congress, Vienna, 2012 (Keynote).
- 8th European Solid Mechanics Conference (ESMC-2012), Graz, Austria, 2012 (Keynote).
- Workshop on Wave Propagation in Complex Media, Heraklion, Greece, 2012.
- XFEM-2011, Cardiff, UK, 2011 (Keynote).
- The 2012 Seminar for Leading Teachers of Computer Science, Technion, Haifa, 2012.
- The Moshe Israeli Memorial Symposium, Technion, Haifa, 2012.
- 3rd ECCOMAS Conference on Computational Dynamics (COMPDYN-2011), Corfu, Greece, 2011 (Keynote).
- 2nd ECCOMAS Conference on Computational Dynamics (COMPDYN-09), Rhodes, Greece, 2009 (Semi-plenary).
- 9th Int. Conf. on Mathematical and Numerical Aspects of Wave Propagation (WAVES-09), Pau, France, 2009.
- Caesarea Rotschild Institute (CRI) Review Day, Haifa, 2008.
- 4th Int. Conf. of Applied Mathematics and Computing, Plovdiv, Bulgaria, 2007.
- 9th US National Congress on Computational Mechanics, San Francisco, CA, 2007.
- 8th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), Heraklion, Crete, July 2007.
- ECCOMAS Conference on Computational Dynamics (COMPDYN), Rethymno, Crete, July 2007 (speaker: D. Rabinovich).
- 14th Int. Conf. on Finite Elements in Flow Problems (FEF-2007), Santa Fe, New Mexico, US, March 2007 (speaker: T. Hagstrom).
- 8th Int. Conf. on Computational Structures Technology, Gran Canaria, Spain, Sept. 2006 (Keynote).
- 7th World Congress on Computational Mechanics, Los Angeles, July 2006.
- 5th Israeli Applied Math Workshop, Technion, June 2006.
- 7th Int. Conf. on Theoretical & Computational Acoustics (ICTCA-7), Hangzhou, China, Sept. 2005 (Opening Plenary).
- 8th US National Congress on Computational Mechanics (USNCCM8), Austin, Texas, July 2005 (Keynote).
- SPICE, Special Research and Training EU Workshop on Geophysical Waves, Venice, Sept. 2004 (Plenary).
- ECCOMAS-04 Conf. on Numerical Methods in Engineering, Jyväskylä, Finland, July 2004 (Speaker: A. Mar-Or).
- 12th Int. Conference on Computational Engineering & Sciences (ICCES-04), Madeira, Portugal, July 2004 (Keynote).
- 12th Int. Conference on Computational Engineering & Sciences (ICCES-04), Madeira, Portugal, July 2004.
- 6th Int. Conference on Spectral and High-Order Methods (ICOSAHOM-04), Brown University, Providence, RI, June, 2004 (Speaker: V. van Joolen).
- 6th Int. Conference on Mathematical and Numerical Aspects of Wave Propagation (WAVES-03), Jyväskylä, Finland, June 2003 (Plenary).
- Joint France-Israel Workshop in Applied Mathematics & Scientific Computing, Jerusalem, Feb. 2003.
- 28th Israel Conference on Mechanical Engineering, Beer-Sheba, June 2000 (Keynote).
- IUTAM Symp. on Computational Methods for Unbounded Domains, Boulder, CO, USA, July 1997.

- 2nd Israel Symposium on Computational Mechanics (ISCM-2), Tel Aviv University, Tel Aviv, Oct. 1996 (Keynote).
- 1996 SIAM Annual Meeting, Kansas City, MO, USA, July 1996.
- Workshop on Numerical Boundary Treatment, Tel-Aviv University, Nov. 1993.
- Workshop in Geophysical Fluid Dynamics, Woods Hole Oceanographic Institute, MA, USA, July 1990.

Contributed Conference Lectures:

- 7th Annual Applied Mechanics Affiliates Meeting, Stanford University, California, April 1987.
- 8th Annual Applied Mechanics Affiliates Meeting, Stanford University, California, May 1988.
- 17th Congress of Theoretical and Applied Mechanics, IUTAM, Grenoble, France, August 1988.
- 1988 SIAM Annual Meeting, Minneapolis, Minnesota, July 1988.
- 30th Israel Conf. on Aviation and Astronautics, Haifa, Israel, Feb. 1989.
- 23rd Israel Conf. on Mechanical Engineering, Haifa, May 1990.
- 1990 SIAM Annual Meeting, Chicago, Illinois, July 1990.
- 2nd World Congress on Computational Mechanics, Stuttgart, Germany, Aug. 1990.
- 17th ICAS Congress, Stockholm, Sweden, Sept. 1990, speaker: O. Rand.
- 6th Int. Conf. on Applications of Statistics and Probabilities in Civil Engineering, Mexico City, Mexico, June 1991, speaker: I. Elishakoff.
- 1991 ASME Winter Annual Meeting, Atlanta, Georgia, Dec. 1991, speaker: I. Elishakoff.
- 1st Int. Conf. on Mathematical and Numerical Aspects of Wave Propagation Phenomena, Strasbourg, France, April 1991.
- 32nd Israel Conf. on Aviation and Astronautics, Haifa, Feb. 1992.
- 1992 SIAM Annual Meeting, Los Angeles, CA, July 1992. (two lectures).
- 18th Congress of Theoretical and Applied Mechanics, IUTAM, Haifa, Israel, August 1992.
- 18th ICAS Congress, Beijing, China, Sept. 1992, speaker: O. Rand.
- Symp. on Foundations of Artif. Intell. (BISFAI-93), Israel, June 1993, speaker: L. Manevitz.
- 1st Int. Conf. on Theoretical and Computational Acoustics, Mystic, CT, July 1993.
- 25th Israel Conf. on Mechanical Engineering, Haifa, May 1994, speakers: D.G. and I. Doukhovni (two lectures).
- 3rd World Congress on Computational Mechanics, Chiba, Japan, Aug. 1994 (two lectures).
- 3rd Int. Conf. on Mathematical and Numerical Aspects of Wave Propagation Phenomena, Mandelieu, France, April 1995.
- 2nd Int. Conf. on Theoretical and Computational Acoustics, Honolulu, Hawaii, Aug. 1995, speaker: I. Patlashenko.
- Symp. on Foundations of Artif. Intell. (BISFAI-95), Israel, June 1995, speaker: M. Yousef.
- 2nd ECCOMAS Conf. on Numerical Methods in Engineering, Paris, Sept. 1996.
- 12th Israeli Symposium on Artificial Intelligence, Computer Vision and Neural Networks, Tel Aviv, Feb. 1996, speaker: M. Yousef.
- 10th American Conf. on Crystal Growth, Vail, CO, Aug. 1996.
- 2nd Int. Workshop on Modelling in Crystal Growth, Durbuy, Belgium, Oct. 1996.

- 1997 ASME Winter Annual Meeting, Dallas, Texas, Nov. 1997, speaker: O. Rand.
- 4th US National Congress on Computational Mechanics, San Francisco, CA, Aug. 1997. (two lectures) and S. Adjerid (one lecture).
- 1997 AIChE Annual Meeting, Los Angeles, CA, Nov. 1997, speaker: J.E. Flaherty.
- 1998 Int. Symposium on Mathematics and Artificial Intelligence, Fort Lauderdale, Jan. 1998, speaker: L. Manevitz.
- 38th Israel Annual Conf. on Aerospace Sciences (IACAS-1998), Tel Aviv, Feb. 1998.
- 4th Int. Conf. on Spectral and High Order Methods, Hertzelia, June 1998.
- 4th World Congress on Computational Mechanics, Buenos Aires, July 1998. (two lectures).
- 12th Int. Conf. on Crystal Growth, Jerusalem, July 1998.
- 7th Israel Symposium on Computational Mechanics, Ben-Gurion University, Beer Sheba, April 1999, speaker: T. Demchenko.
- 4th Int. Conf. on Theoretical and Computational Acoustics, Trieste, Italy, May 1999.
- Annual Meeting of the Israel Mathematical Union (IMU), Haifa, May 1999.
- The 1999 Conf. on The Mathematics of Finite Elements and Applications (MAFELAP), Brunel University, England, June 1999.
- 40th Israel Annual Conf. on Aerospace Sciences (IACAS-2000), Haifa, Feb. 2000, speaker: L. Rivkin.
- 22nd ICAS Congress, Harrogate, UK, Aug. 2000.
- ECCOMAS-2000: Conf. on Numerical Methods in Engineering, Barcelona, Sept. 2000.
- Symp. on Foundations of Artif. Intell. (BISFAI-01), Israel, June 2001, speaker: A. Bitar.
- 6th US National Congress on Computational Mechanics, Dearborn, MI, Aug. 2001.
- US National Research Council (NRC) Associates Meeting, Monterey, CA, Oct. 2001.
- 1st Int. Conf. on Computational & Mathematical Methods in Sciences and Engineering, Alicante, Spain, Sept. 2002, speaker: B. Neta.
- Annual Meeting of the the Israel Society for Theoretical and Applied Mechanics, Tel-Aviv, Dec. 2002.
- 43rd Israel Annual Conf. on Aerospace Sciences (IACAS-2003), Haifa, Feb. 2003, speaker: R. Zusman.
- 6th Int. Conf. Coastal Engineering, Cadiz, Spain, June 2003, speaker: B. Neta.
- Int. Conf. on Structural Membranes, Barcelona, Spain, June 2003, speaker: A. Libai.
- 7th US National Congress on Computational Mechanics, Albuquerque, NM, July 2003.
- 15th Israel Symposium on Computational Mechanics (ISCM-2003), Tel-Aviv U., Oct. 2003.
- Annual Meeting of the the Israel Society for Theoretical and Applied Mechanics, Tel-Aviv, Dec. 2003, speaker: A. Libai.
- 4th Joint Faculty Air-Force Symp. on Flight Sciences, Dept. of Aerospace Eng., Technion, April 2004.
- 17th Israel Symposium on Computational Mechanics (ISCM-2004), Ben-Gurion U., Oct. 2004, speaker: A. Mar-Or.
- 21st Israel Symposium on Computational Mechanics (ISCM-2006), Ben-Gurion U., Oct. 2006.
- 47th Israel Annual Conf. on Aerospace Sciences (IACAS-2007), Haifa, Feb. 2007, speaker: D. Rabinovich.
- 22nd Israel Symposium on Computational Mechanics (ISCM-2007), Technion, Haifa, March 2007.
- 6th Int. Congress on Industrial & Applied Mathematics, Zurich, Switzerland, July 2007, speaker: A. Wachter.

- 8th Int. Conf. on Mathematical & Numerical Aspects of Waves (WAVES-07), Reading, UK, July 2007, speaker: A. Mar-Or.
- 8th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), Heraklion, Crete, July 2007, speaker: D. Rabinovich.
- 18th Int. Conf. on Domain Decomposition Methods (DD18), Jerusalem, Jan. 2008, speaker: A. Mar-Or.
- 2nd Symposium on Systems Engineering, Technion, Jan. 2008.
- 48th Israel Annual Conf. on Aerospace Sciences (IACAS-2008), Tel Aviv, Feb. 2008, two lectures, speakers: I. Gur, D. Givoli.
- 8th World Congress on Computational Mechanics (WCCM-8) and ECCOMAS-2008, Venice, Italy, June 2008.
- 2008 ASME Int. Conf. on Eng. Systems Design and Analysis (ESDA-2008), Haifa, July 2008, speaker: D. Rabinovich.
- 25th Israel Symp. on Comput. Mech. (ISCM-2008), Beer Sheva, Oct. 2008, speakers: I. Gur, D. Rabinovich.
- 9th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), Dresden, Germany, Sept. 2009.
- 2nd ECCOMAS Conference on Computational Dynamics (COMPDYN-09), Rhodes, Greece, June 2009.
- 8th Int. Conf. on Spectral and High-order Methods (ICOSAHOM-09), Trondheim, Norway, June 2009, speaker: T. Hagstrom.
- 4th European Conf. on Computational Mechanics (ECCM-2010), Paris, France, May 2010.
- 9th World Congress on Computational Mechanics (WCCM-9), Sydney, Australia, July 2010, speaker: J. Bielak.
- 10th Int. Conf. on Computational Structures Technology (CST-2010), Valencia, Spain, Sept. 2010, speaker: C. Sussmann.
- 51st Israel Annual Conf. on Aerospace Sciences (IACAS-2011), Tel Aviv, Feb. 2011, two lectures, speakers: I. Gur, C. Sussmann.
- 10th Int. Conf. on Theoretical & Computational Acoustics (ICTCA), Taipei, Taiwan, April 2011, speaker: G. Seriani.
- Joint Faculty Air-Force Symp. on Flight Sciences, Dept. of Aerospace Eng., Technion, May 2011.
- Symposium on Space Research of the Asher Institute, Technion, Dec. 2011.
- 52nd Israel Annual Conf. on Aerospace Sciences (IACAS-2012), Tel Aviv, Feb. 2012, speaker: C. Sussmann.
- 34th Israel Symp. on Comput. Mech. (ISCM-34), Tel Aviv, April 2013.
- 33rd Int. Conf. on Aeronautical Fatigue (ICAF-2013), Jerusalem, June 2013.
- 4th ECCOMAS Conference on Computational Dynamics (COMPDYN-2013), Kos, Greece, June 2013.
- Conf. on Mathematical Modeling (JBK90), Lausanne, Switzerland, Aug. 2013.
- 35th Israel Symp. on Comput. Mech. (ISCM-35), Beer Sheva, Oct. 2013, speaker: Y. Ofir.
- 54th Israel Annual Conf. on Aerospace Sciences (IACAS-2014), Haifa, Feb. 2014, speaker: Y. Ofir.
- 3rd Int. Conf. on Computational Methods for Thermal Problems (ThermaComp-2014), Slovenia, June 2014, speaker: I. Tuval.
- 12th Int. Conf. on Computational Structures Technology (CST-2014), Naples, Italy, Sept. 2014, speaker: Y. Ofir.
- Symposium on Space Structures and Materials, Asher Institute, Technion, Feb. 2015, speaker: I. Tuval.
- 55th Israel Annual Conf. on Aerospace Sciences (IACAS-2015), Tel Aviv, Feb. 2015, speaker: Y. Kamoun.

- 33rd Israel Conf. on Mechanical Engineering (ICME-2015), Tel Aviv, March 2015, two lectures, speakers: I. Tuval, Y. Ofir.
- 6th Int. Conf. on Coupled Problems (Coupled-2015), Venice, Italy, May 2015, Speaker: Y. Ofir.
- 12th Int. Conf. on Mathematical and Numerical Aspects of Wave Propagation (WAVES-2015), Karlsruhe, Germany, July 2015.

Selected Guest Lectures:

- Stanford University, Div. of Applied Mechanics, “Matching Analytic and Numerical Solutions of Large Domain Problems,” April 1988.
- Stanford University, Dept. of Mathematics, “Numerical Methods for Infinite and Singular Domains,” Oct. 1994.
- Rensselaer Polytechnic Institute, Dept. of Computer Science, “DtN Methods for Infinite and Singular Domains,” Sept. 1995.
- Boston University, Dept. of Aerospace and Mechanical Engineering, “Numerical Methods for Unbounded and Singular Domains,” March 1996.
- Chicago University, Dept. of Physics, “Advances in Numerical Methods for Unbounded and Singular Domains,” April 1996.
- U. of Illinois at Chicago, Dept. of Civil and Materials Engineering, “Advances in Numerical Methods for Unbounded and Singular Domains,” April 1996.
- Naval Postgraduate School, Monterey, CA, Dept. of Applied Mathematics, “High Accuracy Computations in Infinite Domains,” Oct. 2001.
- Navy Research Lab (NRL), Monterey, CA, “How to Prevent the Boundary from Making Waves,” Oct. 2001.
- University of California, Santa Cruz, Dept. of Applied Mathematics, “High-Accuracy Computations in Infinite and Singular Domains,” Nov. 2001.
- Stanford University, Div. of Mechanics and Computation, “Models of Limited Domain in Computational Mechanics,” March 2002.
- U. of California, Berkeley, Dept. of Civil Engineering, “Models of Limited Domain in Computational Mechanics,” March 2002.
- Naval Postgraduate School, Monterey, CA, Dept. of Mechanical Engineering, “Models of Limited Domain (MOLDS),” May 2002.
- Sandia National Laboratories, New Mexico, “Absorbing and Open Boundaries,” Aug. 2007.
- Technion’s Math Club, “Computational Mechanics and the Finite Element Method,” April 2008.
- Cardiff University, Dept. of Applied Mathematics, Wales, UK, “Optimal Model Reduction of Dynamic Subsystems — Recent Advances,” Sept. 2011.
- U. of Michigan, Dept. of Aerospace Engineering, Ann Arbor, “Inverse Wave Problems and Identifying Flaws in Aerospace Structures,” April 2013.
- Politecnico di Torino, Dept. of Applied Mathematics, Torino, Italy, “Time Reversal: Basics, and Flaw Identification,” Sept. 2013.
- Warren Memorial Lecture, U. of Minnesota, Dept. of Civil, Envir. & Geo. Eng., Minneapolis, “Inverse Wave Problems, Time Reversal and Identifying Structural Damage,” April 2015.
- U. of Stuttgart, Dept. of Mechanical Eng., Stuttgart, Germany, “Inverse Wave Problems, Time Reversal and Identifying Structural Damage,” July 2015.
- Stanford U., Seminar in Applied Mathematics, “How to Do Nothing at the Boundary, and Very Accurately So,” Oct. 2015.

- Stanford U., Seminar in Mechanics & Computation, “Inverse Problems, Time Reversal and Damage Identification,” Oct. 2015.

PUBLICATIONS

1. Theses

- “A Finite Element Method for Dynamic Moving Boundary Problems,” M.Sc. Thesis, Department of Mechanics, Materials and Structures, School of Engineering, Tel Aviv University, 1985.
- “A Finite Element Method for Large Domain Problems,” Ph.D. Thesis, Division of Applied Mechanics, Stanford University, 1988.

2. Book

D. Givoli, *Numerical Methods for Problems in Infinite Domains*, published by Elsevier Science Publishers, Amsterdam, 300 p., 1992.

3. Research Journal Papers, Published or Accepted for Publication

- [1] D. Givoli and I. Levit, “A solution of One-Dimensional Moving Boundaries Problems by the Finite Element Method,” *Computers and Structures*, Vol. 24, No. 2, pp. 273–280, 1986.
- [2] D. Givoli, “Non-Local and Semi-Local Weighting Functions For Symmetric Problems Involving a Small Parameter,” *Int. J. for Numerical Methods in Engineering*, Vol. 26, pp. 1281–1298, 1988.
- [3] J.B. Keller and D. Givoli, “Exact Non-Reflecting Boundary Conditions,” *J. of Computational Physics*, Vol. 82, No. 1, pp. 172–192, 1989.
- [4] D. Givoli and J.B. Keller, “A Finite Element Method for Large Domains,” *Computer Methods in Applied Mechanics and Engineering*, Vol. 76, pp. 41–66, 1989.
- [5] D. Givoli, “A Combined Analytic-Finite Element Method for Elastic Shells,” *Int. J. of Solids and Structures*, Vol. 26, pp. 185–198, 1990.
- [6] D. Givoli, “Stresses in an Ablating Cylinder,” *J. of Thermal Stresses*, Vol. 13, No. 3, pp. 263–279, 1990.
- [7] D. Givoli, “Finite Element Analysis of Long Cylindrical Shells,” *AIAA Journal*, Vol. 28, pp. 1331–1333, 1990.
- [8] O. Rand and D. Givoli, “A Finite Element Spectral Method with Application to the Thermoelastic Analysis of Space Structures,” *Int. J. for Numerical Methods in Engineering*, Vol. 30, pp. 291–306, 1990.
- [9] D. Givoli and J.B. Keller, “Non-Reflecting Boundary Conditions for Elastic Waves,” *Wave Motion*, Vol. 12, pp. 261–279, 1990.
- [10] D. Givoli and O. Rand, “Thermoelastic Analysis of Space Structures in Periodic Motion,” *AIAA J. Spacecraft and Rockets*, Vol. 28, pp. 457–464, 1991.
- [11] D. Givoli and L. Rivkin, “A Finite Element Scheme Based on the Simplified Reissner Equations for shells of Revolution,” *Computer Methods in Applied Mechanics and Engineering*, Vol. 93, pp. 111–124, 1991.
- [12] D. Givoli and I. Elishakoff, “Stress Concentration at a Nearly Circular Hole With Uncertain Irregularities,” *ASME J. of Applied Mechanics*, Vol. 59, pp. S65–S71, 1992.
- [13] D. Givoli, I. Elishakoff and Y. Stavsky, “A Boundary-Perturbation Finite-Element Method for Plane Elasticity Problems,” *Computer Methods in Applied Mechanics and Engineering*, Vol. 96, pp. 45–63, 1992.
- [14] D. Givoli, “A Spatially Exact Non-Reflecting Boundary Condition for Time Dependent Problems,” *Computer Methods in Applied Mechanics and Engineering*, Vol. 95, pp. 97–113, 1992.

- [15] O. Rand and D. Givoli, “Thermal Analysis of Space Structures Including Three-Dimensional Effects,” *Int. J. of Numerical Methods for Heat and Fluid Flow*, Vol. 2, pp. 115–125, 1992.
- [16] D. Givoli, “A Numerical Solution Procedure for Exterior Wave Problems,” *Computers and Structures*, Vol. 43, pp. 77–84, 1992.
- [17] D. Givoli, L. Rivkin and J.B. Keller, “A Finite Element Method for Domains With Corners,” *Int. J. for Numerical Methods in Engineering*, Vol. 35, pp. 1329–1345, 1992.
- [18] D. Givoli and O. Rand, “Harmonic Finite Element Thermoelastic Analysis of Space Frames and Trusses,” *J. of Thermal Stresses*, Vol. 16, pp. 233–248, 1993.
- [19] D. Givoli and I. Henigsberg, “A Simple Time-Step Control Scheme,” *Communications in Numerical Methods in Engineering*, Vol. 9, pp. 873–881, 1993.
- [20] D. Givoli, “Use of the Kirchhoff Transformation in Finite Element Analysis,” *Int. J. of Numerical Methods for Heat and Fluid Flow*, Vol. 3, pp. 473–479, 1993.
- [21] L. Manevitz, D. Givoli and M. Margi, “Heuristic Finite Element Node Numbering,” *Computing Systems in Engineering*, Vol. 4, pp. 159–167, 1993.
- [22] D. Givoli and S. Vigdergauz, “Artificial Boundary Conditions for 2D Problems in Geophysics,” *Computer Methods in Applied Mechanics and Engineering*, Vol. 110, pp. 87–101, 1993.
- [23] D. Givoli and L. Rivkin, “The DtN Finite Element Method for Elastic Domains with Cracks and Reentrant Corners,” *Computers and Structures*, Vol. 49, pp. 663–642, 1993.
- [24] D. Givoli and S. Vigdergauz, “Finite Element Analysis of Wave Scattering from Singularities,” *Wave Motion*, Vol. 20, pp. 165–176, 1994.
- [25] D. Givoli and J.B. Keller, “Special Finite Elements for use with High-order Boundary Conditions,” *Computer Methods in Applied Mechanics and Engineering*, Vol. 119, pp. 199–213, 1994.
- [26] O. Rand and D. Givoli, “Reduction of the Periodic Thermoelastic Deformation in Truss Structures by Design Refinements and Active Loads,” *Computers and Structures*, Vol. 54, pp. 757–765, 1995.
- [27] D. Givoli and D. Cohen, “Non-reflecting Boundary Conditions Based on Kirchhoff-type Formulae,” *J. of Computational Physics*, Vol. 117, pp. 102–113, 1995.
- [28] D. Givoli and O. Rand, “Dynamic Thermoelastic Coupling Effects in a Rod,” *AIAA Journal*, Vol. 33, pp. 776–778, 1995.
- [29] A. Libai and D. Givoli, “Incremental Stresses in Loaded Orthotropic Circular Membrane Tubes. I: Theory,” *Int. J. Solids and Structures*, Vol. 32, pp. 1907–1925, 1995.
- [30] D. Givoli and A. Libai, “Incremental Stresses in Loaded Orthotropic Circular Membrane Tubes. II: Numerical Solution,” *Int. J. Solids and Structures*, Vol. 32, pp. 1927–1947, 1995.
- [31] G. Ben-Porat and D. Givoli, “Solution of Unbounded Domain Problems Using Elliptic Artificial Boundaries,” *Communications in Numerical Methods in Engineering*, Vol. 11, pp. 735–741, 1995.
- [32] D. Givoli and O. Rand, “Minimization of the Thermoelastic Deformation in Space Structures Undergoing Periodic Motion,” *AIAA J. of Spacecraft and Rockets*, Vol. 32, pp. 662–669, 1995.
- [33] I. Patlashenko and D. Givoli, “Nonlocal and Local Artificial Boundary Conditions for Two-dimensional Flow in an Infinite Channel,” *Int. J. Numerical Methods for Heat and Fluid Flow*, Vol. 6, pp. 47–62, 1996.
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8. Other Publications

On a routine basis:

- Author of a periodical *Book Review* column in IACM Expressions (magazine of the Int. Association for Computational Mechanics), 2009–present.
- Author of a periodical column in IACM Expressions (see above) on The Israel Association for Computational Methods in Mechanics, 2003–2015.

Special items:

[1] D. Givoli, Infinite Elements (by P. Bettess): Book Review, Computer Methods in Applied Mechanics and Engineering, Vol. 105, pp. 435–436, 1993.

[2] D. Givoli, “Reflections on Good Teaching” (in Hebrew), Cathedron, No. 1, pp. 7–9, 1994.

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- [14] D. Givoli, “Incorporating Analytical Information in Computational Schemes,” IACM Expressions, No. 23, Int. Assoc. Computational Mechanics, 2008.
- [15] D. Givoli, “Methods and Communities,” IACM Expressions, No. 24, Int. Assoc. Computational Mechanics, 2009.
- [16] D. Givoli, “The CM Questions of the Month,” IACM Expressions, No. 31, Int. Assoc. Computational Mechanics, 2012.
- [17] D. Givoli, “More CM Questions of the Month,” IACM Expressions, No. 33, Int. Assoc. Computational Mechanics, 2013.
- [18] D. Givoli, Artificial Boundary Method (by H. Han and X. Wu): Book Review, SIAM Rev., Vol. 56, pp. 714–716, 2014.

9. Patent

- US Patent No. 10/657,210, “Apparatus and Method for Efficient Adaptation of Finite Element Meshes for Numerical Solutions,” with L. Manevitz and A. Bitar, approved July 2007.

10. Reports

- 22 TAE, TAU, IMI, RPI, NPS and BU reports.
- “The 1992 Boeing 747 Amsterdam accident: analysis” (with A.J. McEvily, P. Pinsky and A. Bercovitz), report for El Al Israel Airlines by the accident investigation team, 1993.