AVRAAM I. ISAYEV (ISAEV)

Address:	Home:	852 Cricket Circle Akron, OH 44333	Work: Institute of Polymer Engineering The University of Akron Akron, OH 44325-0301
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Personal: US Citizen, Married, Wife - Lubov, Daughter - Daniela.

Education:

M.Sc. in Chemical Engineering	- 1964, Azerbaijan Institute of Oil and Chemistry, Baku, USSR.
M.Sc. in Applied Mathematics	- 1975, Moscow, Institute of Electronic Machine Building, Moscow, USSR.
Ph.D. in Polymer Engineering and Science	- 1970, Institute of Petrochemical Synthesis of the USSR Academy of Sciences, Moscow, USSR.

Employment:

Distinguished Professor	-	Institute of Polymer Engineering and Department of Polymer Engineering, University of Akron, Akron, Ohio, U.S.A., 2001-
Professor	-	Institute of Polymer Engineering and Department of Polymer Engineering, University of Akron, Akron, Ohio, U.S.A., 1987-2001. (Tenure granted in 1988).
Director	-	Molding Technology Research and Development Center (MOLDTECH), 1990 to present.
Associate Professor	-	Polymer Engineering Center and Department of Polymer Engineering, University of Akron, Akron, Ohio U.S.A. 1983 to 1987.
Senior Research Associate	-	Sibley School of Mechanical and Aerospace Engineering, Cornell University, Ithaca, N.Y., U.S.A., 1979 - 1983.
Senior Research Fellow	-	Israel Institute of Technology (Technion)

		Department of Materials Engineering, Haifa, Israel, 1977 - 1979.
Research Associate	-	Institute of Petrochemical Synthesis of the USSR Academy of Sciences, Moscow, 1970 - 1976.
Doctoral Candidate	-	Institute of Petrochemical Synthesis of the USSR Academy of Sciences, Moscow, 1967 - 1969.
Research Associate	-	State Research Institute of Nitrogenic Industry, Laboratory of Processes and Apparatus, Severodonetsk, Ukraine, USSR, 1965 - 1966.
Lecturer	-	University of Technical Progress, Severodonetsk, Ukraine, USSR, 1965 - 1966.

Professional Societies

Society of Plastics Engineers, Member 1981-1983, Senior Member 1984 -
Society of Rheology, Member 1981 -
Rubber Division of the ACS, Member 1985-1999, Life Member 2000-
Polymer Processing Society, Member 1984 -
American Chemical Society, Member 1988 -
American Ceramic Society, Member 1986 - 1994
Tire Society, Member 1987 - 1993
New York Academy of Sciences, Elected Member 1994-1999

Awards and Honors

Laureate of Conference of Young Scientists of Moscow on Theoretical Problems of Physical Chemistry, 1970.
Guest Professor, Special Research Program on Polymers, University of Aachen, West Germany, May - June 1986.
Guest Professor, University of Linz, Austria, September 1993 to January 1994.
Guest Professor, Kyoto Institute of Technology, January 1996.
Guest Professor, Institut fur Polymerforschung, University of Dresden, May - June 1997.
Guest Professor, Universidade Federal de Sao Carlos, Sao Carlos, Brasil, October 1997.
NASA Faculty Research Fellow, Summer 1985.
Outstanding Achievement Awards, The University of Akron Board of Trustees, 1987/88, 1992/93.
ANTEC'93 Best Technical Paper, Engineering Properties & Structure Division.
Certificate of Recognition from the SPE for Significant Contributions to the Society and to the Plastics Industry, 1994.
Distinguished Corporate Inventor, American Society of Patent Holders, selected by the University of Akron, 1995.
Outstanding Researcher Award, The University of Akron Alumni Association, 1996.
Silver Medal, The Institute of Materials, London, England, 1997.
The Melvin Mooney Distinguished Technology Award, Rubber Division, American Chemical

Society, 1999.
The OMNOVA Solutions Signature University Award, The OMNOVA Solutions Foundation, Akron, 2000, 2002.
Vinogradov Prize, G. V. Vinogradov Society of Rheology, Moscow, 2000.
Certificate of Recognition for Exemplary Service from Mortar Board and Omicron Delta Kappa, University of Akron, 2003.

Biography Listed: Who's Who of American Inventors, Hooper Publishing Company, Baton Rouge, Louisiana, 1990/91, 1992/93, 1994/95, 1996/97.
Who's Who in Technology, 7th Edition, Gale Research Inc., Detroit, Michigan, 1995.
Who's Who in Science and Engineering, Marquis Who's Who, New Providence, New Jersey, 3rd Ed., 1996-1997; 4th Ed., 1998-1999; 5th Ed., 2000-2001; 6th Ed., 2002-2003; 7th Ed., 2003-2004; 8th Ed, 2005-2006.
Who's Who in America, Marquis Who's Who, New Providence, New Jersey, 51st Ed., 1997; 52nd Ed., 1998; 53rd Ed., 1999; 54th Ed., 2000; 55th Ed., 2001; 56th Ed., 2002; 57th Ed., 2003; 58th Ed., 2004; 59th Ed., 2005; 60th Ed., 2006.
Who's Who in Finance and Industry, Marquis Who's Who. New Providence, New Jersey, 30th Ed., 1998-1999; 31st Ed., 2000-2001; 32nd Ed, 2001-2002, 34th Ed, 2004-2005; 35th Ed., 2006-2007.
Who's Who in the World, Marquis Who's Who, New Providence, New Jersey, 15th Ed., 1998; 16th Ed., 1999; 17th Ed., 2000; 18th Ed., 2001; 19th Ed. 2002; 20th Ed., 2003; 21st Ed., 2004; 22nd Ed., 2005; 23rd Ed., 2006.
American Men & Women of Science, R. R. Bowker, Oldsmar, Florida, 20th Ed.1998; Thomson Gale, Detroit, MI, 21st Ed., 2003; 22nd Ed., 2005.
Who's Who in American Education, Marquis Who's Who, New Providence, New Jersey, 6th Ed., 2004-2005; 7th ed., 2006-2007.
Dictionary of International Biography, International Biographical Centre, Cambridge, England, 26th Ed., 1998; 27th Ed., 1999; 28th Ed., 2000; 29th Ed., 2001; 30th Ed., 2003; 31st Ed., 2004; 32nd Ed., 2005.
Five Hundred Leaders of Influence, American Biographical Institute, Raleigh, North Carolina, 7th Edition, 1999; 8th Edition, 2000; 2003.
2000 Outstanding Scientists of the 20th Century, International Biographical Centre, Cambridge, England, 1st Ed., 2000; 2nd Ed., 2004.
Outstanding People of the 20th Century, International Biographical Centre, Cambridge, England, 1999.
Who's Who in Plastics & Polymers, Technomic, Lancaster, Pennsylvania, 1st Edition, 2000.
2000 Outstanding Scientist of the 21st Century, International Biographical Centre, Cambridge, England, 1st Ed., 2002; 2nd Ed., 2004.
Who's Who in the 21st Century, International Biographical Centre, Cambridge, England, 1st Ed., 2001; 2nd Ed., 2003.
Great Minds of the 21st Century, American Biographical Institute, Raleigh, North Carolina, Premier Ed, 2002.
2000 Eminent Scientists of Today, International Biographical Centre, Cambridge, England, 1st Ed., 2003.

Empire Who's Who Among Executives and Professionals, Mineola, New York, Registry 2002; Honors Ed. 2004/2005.
American Biography, American Biographical Institute, Raleigh, North Carolina, Premier Ed, 2003.
Rifacimento International, New Dehli. India, 2003
Strathmores's Who's Who, Strathmore Directories Ltd, Westbury, New York, 2003-2004 Ed..
United Who's Who Registry, Delray Beach, Florida, 2004; 2005.
Madison Who's Who, Inc., Long Island City, New York, 2004.

Service to the University of Akron

Faculty Observer, Board of Trustees, 1991/92
Advisory Committee to the President, 1989/90, 1991/92
University Council, 1988-1992
Advisory Committee to the Provost, 1990/91, 1994/95
Ad Hoc Committee: Mechanisms to Enhance Faculty Status, 1985-1987
Library Committee, 1989-1991
Chairman of Faculty Search Committee, Department of Polym. Eng., 1985-1990, 1998/99
Search Committee for Dean of the College of Polym. Sci. and Polym. Eng.,1988
Graduate Admission Committee, Department of Polymer Engineering, Member, 1994-1998; 2000-2004; Chairman, 2004 to present
Chairman of Appeal Committee, 1995 to present
Search Committee for the Harold Morton Distinguished Visiting Professor, Co-Chairman, 1990/91; Chairman, 1991-2002
Faculty Senate, 1996-2003
Campus Facilities and Planning Committee, 1996-2001
Planning and Budget Committee, 1996/97
Promotion and Tenure Committee, College of PS and PE, 2002-2003.

Service to Profession

Reviewer Polymer Engineering Science, Polymer Composites, Polymer, Rheologica Acta, Journal of Rheology, AIChE Journal, Rubber Chemistry and Technology, American Ceramic Society, Marcel Dekker Publishers, Gordon and Breach Publishers, Hanser Publishers, Chemical Engineering Communications, National Science Foundation, International Science Foundation, Applied Mechanics Reviews, Journal of Applied Polymer Science, Journal of International Polymer Processing, Journal of Polymer Science, Journal of Non - Newtonian Fluid Mechanics, Journal of Elastomers and Plastics, Kluwer Academic Publishers, Research Council of Canada, Taylor & Francis Publishers, Accounts of Chemical Research, Plastics, Rubber and Composite Processing and Applications, University of California Berkeley, University of Oulu, Finland.

Editorial or Advisory Boards

Encyclopedia of Polymer Science and Technology, Wiley, 2005-
Advances in Polymer Technology 1989, 1990
Journal of Elastomers and Plastics, 1992 to present

Progress in Polymer Processing Series, 1993 to present
Journal of Applied Polymer Science, 1995 to present
Journal of Polymer Engineering, 1997 to present
Elastomers, Korea, 2003 to present

Other Services

Consulting Service to Various Companies
Symposium Organizer and Session Chairman of Many Conferences
Organizing Committee of Polymer Processing Society
Program Chairman of the North American Meeting of Polymer Processing Society, Buffalo, New York, 1987
Program Chairman of Akron Molding '89 Conference, Akron, Ohio, 1989
Chairman of Symposium on Progress in Rubber Science, Akron, Ohio, 1990
Treasurer of Polymer Processing Society, 1989 - 1991
Technical Program Committee (TPC), Engineering Properties and Structure Division (EPSDIV), Society of Plastics Engineers, 1991 - 1994
Secretary, TPC EPSDIV, Society of Plastics Engineers, 1991/92
Chairman-Elect, TPC EPSDIV, Society of Plastics Engineers, 1992/93
Chairman, TPC EPSDIV, Society of Plastics Engineers, 1993/94
Nominating Committee of Polymer Processing Society, 1992
Symposium Organizer, 8th Annual Meeting of the Polymer Processing Society, New Delhi, India, March 1992
Technical Program Chairman, RETEC, Society of Plastics Engineers, Akron, Ohio, October 1993
Technical Program Committee for SPE ANTEC, 1994 - 1997
Coordinator and Lecturer, Short Course on Advanced Rubber Molding Technology, University Wisconsin, Milwaukee, November 1992; November 1994; November 1995; November 1996; November 1997; November 1998
Co-Chairman, 10th Annual Meeting of the Polymer Processing Society, Akron, Ohio, April 1994;
Co-Chairman, 20th Annual Meeting of the Polymer Processing Society, Akron, Ohio, April 2004
Symposium Chairman at the ACS National Meeting, Anaheim, California, April 1995
Technical and Scientific Committee and Symposium Organizer of NUMIFORM'95, Ithaca, New York, June 1995; NUMIFORM’98, Enschede, The Netherlands, June 1998.
U.S. Army Research Office Panel of Experts on Molding, Aberdeen Proving Ground Summer 1991.
NSF Review Panel, Directorate of Engineering, Division of Design and Manufacturing, 1991, 1994, 2000, 2001, 2003.
Expert on Polymer Processing for United Nation, SIRIM, Malaysia, 1994/95.
Organizer and Lecturer, Short Courses on Extrusion, Blow, Compression and Injection Molding, SIRIM Malaysia, 1994/95.
Board of Directors and Chairman of the Society Awards, EPSDIV of the Society of Plastics Engineers, 1995-1997.
Polymer Processing Hall of Fame Committee, 1988 to present.
Chairman, Polymer Processing of Hall of Fame Symposia, Akron, Ohio: Reactive Processing, 1995; Two-Component Molding, 1999; Carbon Fibers and Materials, 2001; Thermoplastics Injection Molding, 2003.
Lecturer, Short Course on Mixing and Processing of Rubber, Akron, Ohio, May 1995.
Lecturer, Short Course on Rubber Recycling, Akron, Ohio, May and November 1996; May 1997; May 1998, May 1999.

Symposium Organizer, PPS-12, Sorrento, Italy, May 1996; PPS-17, Montreal, Canada 2001.
Symposium Organizer, First Joint Topical Conference on Processing, Structure and Properties of Polymeric Materials, AIChE Annual Meeting, Chicago, November 1996.
International Advisory Committee, International Conference on Rubbers, Calcutta, India, December 1997; PPS Europe/Africa Regional Meeting, August 2000.
International Organizing Committee, XX Symposium on Rheology, Moscow, Russia, May 2000.
Symposium Organizer, PPS-17, Montreal, Canada, May 2001; PPS-19, Sydney, Australia, 2003.
Symposium Organizer, PPS Asia/Australia regional Meeting, Taiwan, 2002.
Invited Speaker at K-Plast 2001, Dusseldorf, Germany.
Expert Witness: U.S. House of Representatives, Armed Service Committee, Readiness Subcommittee, Washington, DC, September 28, 1988.

Research Interests

Polymer processing, rheo-optics, rheology of polymers, oil products and disperse systems; the injection, co-injection, transfer, compression and gas-assisted injection molding of polymers; LCP based self-reinforced or in-situ composites; continuous decrosslinking of thermosets and rubbers and copolymerization of polymer blends with the aid of high power ultrasound; high temperature and high performance nanocomposites; constitutive equations and process modeling.

Research Featured

Business Week Magazine, September 27, 1993, p. 111; Popular Science, v. 245, 62(4), October 1994; Environmental Remediation Technology, 1, 63, 1993; Vibrations, The Newsletter of Ultrasonic Industry Association, v. 4, #2, 1994; Tire Business, July 4, 1995; Tokyo New Technology Exhibition in 1995 by Nihon Unipolymer Trading Company of Japan; Technical Insights Newsletter, Wiley, v. 14, #12, p. 9, December 1997; Rubber and Plastics News, April 19, 1999, p. 10; Chemical Engineering, August 1999, pp. 26-27; NSF Science News, June 26, 2000; AAAS Science Update, August 3, 2000, http://www.scienceupdate.com/august00.html#000803; Plastics Technology, November 2001, p. 23; Boston Globe, June 25, 2002 and other publications and newspapers around the world.

Research Funding

Brought to the University of Akron over $5.7 million as a Principal Investigator and over $1.7 million as a Co-Principal Investigator.

Research Advisor

32 PhD and 35 MS Students

Publications, Patents and Presentations

Wrote 1 monograph, edited 4 books and issued 23 patents.
Published 190 papers in referred journal, 26 papers in books, 5 papers in encyclopedias, 104 in referred conference proceedings.
Publications received over 2500 citations according to the Science Citation Index.
Patents received over 200 US patent citations according to the IBM Patent Server.
Presented 225 papers at the national and international conferences, including plenary, keynote and invited lectures, and 109 seminars over the world.

List of Publications

Monographs

1. “Rheology: Conceptions, Methods, Applications”, A. Ya. Malkin and A. I. Isayev, ChemTec Publishing, Toronto, August 2006, 474 pp .

Books Edited

1. "Injection and Compression Molding Fundamentals", Edited by A. I. Isayev, Marcel Dekker, Inc., New York, 1987, 703 pp.

2. "Modeling of Polymer Processing - Recent Developments", Edited by A. I. Isayev, Hanser Publishers, Munich, 1991, 312 pp.

3. "Liquid Crystalline Polymer Systems: Technological Advances", Edited by A. I. Isayev, T. Kyu and S. Z. D. Cheng, ACS Symposium Series No. 632, Washington D.C., 1996, 418 pp.

4. “Recycling of Rubbers”, Edited by S. K. De, A. I. Isayev and K. Khait, CRC Press, Boca Raton, 2005, 514 pp.

5. “Injection Molding”, Edited by M. R. Kamal, A. I. Isayev and S.-J. Liu, Hanser, Munich (in preparation).

Papers in Books

1. G. V. Vinogradov, Yu. G. Yanovsky and A. I. Isayev, "Action of Vibrations on Polymers", in Book Progress in Polymer Rheology, Edited by G. V. Vinogradov, Khimiya, Moscow, USSR, 1970, p. 79-97.

2. A. I. Isayev, "Generalized Presentation of Viscoelastic Properties of Polymeric Systems", in Book Relaxation Processes in Polymers, Baku, USSR, 1972.

3. A. I. Isayev and E. V. Katsyutsevitch, "Large-Amplitude Cyclic Deformation of Polymers in High-Elastic State", in Book Rheology of Polymeric and Disperse Systems and Rheophysics, Edited by G. V. Vinogradov and Z. P. Shulman, Minsk, USSR, v. 1, 23-34, 1975.

4. Yu. Ya. Podolsky, V. I. Brizitsky and A. I. Isayev, "Polarization-Optical Studies of the Flow of Linear Polymers", in Book Rheology of Polymeric and Disperse Systems and Rheophysics, Edited by G. V. Vinogradov and Z. P. Shulman, Minsk, USSR, v. 1, 3-12, 1975.

5. A. I. Isayev, A. K. Kulapov and G. V. Vinogradov, "Apparatus for Measurement of Viscoelastic Properties of Polymers", in Book Vibrational Viscometry, Edited by S. Kutateladze, Novosibirsk, USSR, 1976, pp. 91-106.

6. A. I. Isayev and E. V. Katsyutsevich, "Rubbers and Thermoplastics at High Shear Stresses",

in Book Machines and Technology of Rubber Processing, v. 1, Yaroslavl, USSR, 1977, pp. 27-35.

7. A. I. Isayev, "Injection Molding of Rubber Compounds", in Book Injection and Compression Molding Fundamentals, Edited by A. I. Isayev, Marcel Dekker, Inc., New York, 435-479 (1987).

8. A. I. Isayev and R. K. Upadhyay, "Flow of Polymeric Melts in Juncture Regions of Injection Molding", in Book Injection and Compression Molding Fundamentals, Edited by A. I. Isayev, Marcel Dekker, Inc., New York, 137-225 (1987).

9. A. I. Isayev, "Orientation, Residual Stresses and Volumetric Effects in Injection Molding", in Book Injection and Compression Molding Fundamentals, Edited by A. I. Isayev, Marcel Dekker, Inc., New York, 227-328 (1987).

10. A. I. Isayev, "Rheology and Injection Molding of Ceramic-Filled Materials", in Advance in Ceramics, Edited by G. L. Messing, K. S. Mazdiyasni, J. C. McCauley and R. A. Haber, American Ceramic Society, Inc., Westerville, Ohio, v. 21, 601-613 (1987).

11. A. I. Isayev, "Injection Molding of Rubbers" in Comprehensive Polymer Science, Edited by S. L. Aggarwal, Pergamon Press, Oxford, v. 7, Chapter 11, pp. 355-387, 1989.

12. A. I. Isayev, "A Brief Overview of Modeling of Polymer Processing", in Book Modeling of Polymer Processing - Recent Developments", Edited by A. I. Isayev, Hanser Publishers, 1-18 (1991).

13. M. Sobhanie and A. I. Isayev, "Simulation of Injection Molding of Rubber Compounds", in Book "Modeling of Polymer Processing - Recent Developments", Edited by A. I. Isayev, Hanser Publishers, 205-246 (1991).

14. N. Famili and A. I. Isayev, "Viscoelastic Modeling of Injection Molding", Book "Modeling of Polymer Processing - Recent Developments", Edited by A. I. Isayev, Hanser Publishers, 247-276 (1991).

15. A. I. Isayev and H. Y. Huang, "Planar Contraction or Expansion Flow of a Viscoelastic Plastic Medium: Experimentation and Simulation", in Recent Advances in Non-Newtonian Flows, Edited by D. A. Siginer, ASME, New York, 113-128 (1992).

16. A. I. Isayev, J. Chen and S. P. Yushanov, "Ultrasonic Devulcanization of Waste Rubbers: Experimentation and Modeling", in Book Simulation of Materials Processing: Theory, Methods and Applications, Edited by S. F. Shen and P. Dawson, Balkema Publishers, Rotterdam, 77-85 (1995).

17. A. I. Isayev and T. R. Varma, "Blends of Polyamide Imides and Liquid Crystalline Polymer", in Book Liquid Crystalline Polymer Systems: Technological Advances, Edited by A. I. Isayev, T. Kyu and D. Cheng, ACS Symposium Series, Washington D.C., No. 632, 142-180

(1996).

18. A. I. Isayev, "Self-Reinforced Composites Involving LCP: Overview of Development and Applications", in Book Liquid Crystalline Polymer Systems: Technological Advances, Edited by A. I. Isayev, T. Kyu and D. Cheng, ACS Symposium Series, Washington D. C., No. 632, 1-20 (1996).

19. C. Zook, Y. Zhang and A. I. Isayev, "Effect of Moving Boundary on Channel Flow of Polymeric Melts", in Book Simulation of Materials Processing: Theory, Methods and Applications, Edited by J. Huetink and F. P. T. Baaijens, Balkema Publishers, Rotterdam, 429-434 (1998).

20. A. I. Isayev, Y. Zhang and C Zook, "Flow of Polymeric Melts in Channels with Moving Boundaries" in Book Advances in the Flow and Rheology of Non-Newtonian Fluids, Edited by D. A. Siginer, D. DeKee and R. P. Chhabra, Elsevier Science, Amsterdam, 1011-1067 (1999).

21. A. I. Isayev, "Molding Processes" in Book Handbook of Industrial Automation, Edited by R. L. Shell and E. L. Hall, Marcel Dekker, New York, Chapter 6-8, pp. 573-606, 2000.

22. A. I. Isayev, "Rubber Recycling", in Book Rubber Technologist's Handbook, Eds. J. R. White and S. K. De, RAPRA Technology Ltd., UK, Chapter 15, pp. 511-547, 2001.

23. A. I. Isayev, K. H. Kim and K. Kwon, "Modeling of Crystallization, Birefringence and Anizotropic Shrinkage in Injection Molding of Thermoplastics", in Book Simulation of Materials Processing and Design: Modeling, Simulation and Applications, Edited by S. Ghosh, J. M. Castro and J. K. Lee, American Institute of Physics, Melville, New York, pp. 216-221, 2004.

24. A. I. Isayev and Sayata Ghose, "Ultrasonic Devulcanization of Used Tires and Waste Rubbers", in book Rubber Recycling, S. K. De, A. I. Isayev and K. Khait, eds., CRC Press, Boca Raton, Chapter 9, pp. 311-384, 2005.

25. A. I. Isayev, "Recycling of Rubber", in book Science and Technology of Rubber, Ed. J. E. Mark, B. Erman and F. R. Eirich, 3rd Ed., Academic Press, New York, Chapter 15, pp. 663-701, 2005.

26. A. I. Isayev and J. S. Oh, "Tire Materials: Recovery and Re-use", in book The Pneumatic Tire, Eds. A. N. Gent and J. D. Walter, NHTSA U.S. Department of Transportation, Washington, DC, Chapter 18, pp. 670-691, 2005.

27. A. I. Isayev and K. Kwon, "Volumetric and Anisotropic Shrinkage in Injection Moldings of Thermoplastics", in book Injection Molding, Eds. M. R. Kamal, A. I. Isayev and Liu, Hanser, Munich, 2006 (submitted).

Papers in Encyclopedias

1. A. I. Isayev, "Thermal Stresses" in Encyclopedia of Polymer Science and Engineering, John Wiley & Sons, New York, v. 16, pp. 747-767, 1989.

2. A. I. Isayev and T. Limtasiri," Liquid Crystalline Polymers", The International Encyclopedia of Composites, Edited by S. M. Lee, VCH Publishers, New York, v. 3, 55-78 (1990).

3. A. I. Isayev, "Thermal Stresses", in Concise Encyclopedia of Polymer Science and Engineering, Ed. by J. I. Kroschowitz, John Wiley & Sons, New York, pp. 1187-1188 (1990).

4. A. I. Isayev and T. Limtasiri, "Liquid-Crystalline Composites", in Concise Encyclopedia of Composite Materials, Edited by S. M. Lee VCH Publishers, New York (1992).

5. A. I. Isayev, “Recycling of Elastomers” in Encyclopedia of Materials: Science and Technology, Edited by K. H. J. Buschow, Elsevier, Amsterdam, v. 3, pp. 2474-2477 (2001).

Papers in Referred Journals:

1969

1. G. V. Vinogradov, Yu. G. Yanovsky, A. I. Isayev, and V. A. Kargin, "Effect of Vibrations on Viscoelastic Behavior of Amorphous Polymers", Proceedings of the Academy of Sciences of the USSR, Phys. Chem. Sect. v. 197, 1075-1078, 1969.

1970

2. G. V. Vinogradov, Yu. G. Yanovsky, and A. I. Isayev, "Viscoelastic Behavior of an Amorphous Polymer under Oscillations of Large Amplitude", J. Polymer Sci., A-2, v. 8, 1239-60, 1970.

3. A. I. Isayev and Yu. G. Yanovsky, "Vibrorheometer Having Coaxial Cylinders", Industrial Laboratory, v. 36, No. 12, 1950-54, 1970.

4. G. V. Vinogradov, Yu. G. Yanovsky and A. I. Isayev, "Influence of Vibrations (Cyclic Deformations with Large Amplitudes) upon Viscoelastic Properties of a Polypropylene Melt", J. Eng. Phys., v. 19., No. 3, 1053-58, 1970.

5. A. I. Isayev, Yu. G. Yanovsky, G. V. Vinogradov, and L. A. Gordievsky, "Mechanical Parameters of Dispersed Systems under Cyclic Deformation with Various Amplitudes", J. Eng. Phys., v. 18, No. 6, 675-78, 1970.

1971

6. G. V. Vinogradov, Yu. G. Yanovsky, A. I. Isayev, V. P. Shatalov and V. G. Shalganova, "Effect of Vibration on the Viscoelastic Behavior of Monodisperse Polybutadienes", Intern. J. Polymeric Materials, v. 1, No. 1, 17-30, 1971; Intern. Chem. Eng., v. 12, No. 2, 234-239, 1972; J. Eng. Physics, v. 20, No. 3, 273-279, 1971; Rubber Chem. Technol., v. 45, No. 4, 1082-1093, 1972.

7. G. V. Vinogradov, Yu. G. Yanovsky, V. N. Pokrovsky, V. P. Shatalov, E. K. Borisenkova, V. G. Shalganova, V. V. Barancheeva, A. I. Isayev and V. A. Grechanowsky, "Critical Conditions of Deformation and Viscoelastic Properties of Linear Polymers in the Fluid State", Soviet Plastics, No. 5, 11-19, 1971.

1972

8. A. I. Isayev, "Universal Relaxation Characteristics of Polymeric Systems", J. Eng. Physics, v. 23, No. 5, 1406-12, 1972.

1973

9. A. I. Isayev, G. V. Berezhnaya and A. Ya. Malkin, "Universal Super-Elasticity Characteristics of Polymeric Systems", J. Eng. Phys., v. 24, No. 1, 69-73, 1973.

10. A. I. Isayev, "General Characterization of Relaxation Properties and High Elasticity of Polymer Systems", J. Polym. Sci., Phys. Ed., v. 11, No. 11, 2123-2133, 1973.

11. G. P. Andrianova and A. I. Isayev, "Viscoelastic Properties of Polypropylene Melts Modified by Small Additions", Polym. Sci. USSR, v. 15, No. 8, 2086-90, 1973.

1974

12. A. I. Isayev, K. D. Vachagin and A. M. Neberezhnov, "Engineering Method for Calculating the Flow of Polymers in Noncircular Channels", J. Eng. Phys., v. 27, No. 2, 998-1002, 1974.

1975

13. A. I. Isayev, V. A. Zolotarev and G. V. Vinogradov, "Viscoelastic Properties of Bitumens under Continuous and Cyclic Deformations", Rheol. Acta, v. 14, No. 2, 135-144, 1975.

14. Nguen Vin Chii, A. I. Isayev, A. Ya. Malkin, G. V. Vinogradov and I. Yu. Kirchevskaya, "The Viscosity and Viscoelastic Properties of Mixtures and Block Copolymers of the Polybutadiene with Polyisoprene", Polym. Sci. USSR, v. 17, No. 4, 983-989, 1975.

15. V. I. Brizitsky, G. V. Vinogradov, A. I. Isayev and Yu. Ya, Podolsky, "Birefringence Measurement of Normal and Tangential Stresses in Polymer Flows", J. Eng. Phys, v, 29, No. 6, 1479-84, 1975.

16. A. Ya. Malkin, A. I. Isayev and G. V. Vinogradov, "Power Estimate of the Effectiveness of

Vibrational Thinning of Polymer and Filled Systems", Polymer Mechanics, v. 11, No. 3, 349-444, 1975.

17. V. A. Zolotarev, A. I. Isayev and G. V. Vinogradov, "Viscoelastic Properties of Bitumens in Continuous and Cyclic Deformations", J. Eng. Phys. V. 29, No. 2, 1055-1061, 1975.

1976

18. V. I. Brizitsky, C. V. Vinogradov, A. I. Isayev and Yu. Ya. Podolsky, "Polarization Optical Investigation of Normal and Shear Stresses in Flow of Polymers", J. Appl. Polymer Sci., v. 20, No. 1, 25-40, 1976.

19. A. I. Isayev, A. A. Konstantinov, A. K. Kulapov, B. A. Rogov, A. B. Bystrov and A. A. Shakhrai, "VR-72 Vibrorheometer for Determining the Viscoelastic Properties of Polymers", Polymer Mechanics, No. 3, 502-506, 1976.

1977

20. V. Z. Volkov, V. P. Fikhman, G. V. Vinogradov and A. I. Isayev, "The Entrance Effects in Viscoelastic Fluid Flow in Cylindrical Nozzles", J. Eng. Physics, v. 32, No. 1, 51-55, 1977.

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9841:427 Introduction to Molding Technology

9841:631 Engineering Properties of Solid Polymers

9841:622 Analysis and Design of Polymer Processing Operations

9841:650 Introduction to Polymer Engineering

9841:712 Rheo-Optics of Polymers

9841:722 Advanced Modelling of Polymer Processing

9841:651 Polymer Engineering Laboratory

9841:727 Advanced Polymer Rheology

9841:797 Injection and Compression Molding

9841:621 Rheology and Polymer Processing

9841:601 Seminar: Polymer Engineering

Courses 427, 631, 621, 622, 650, 712, 722, 727 and 797 are developed

University of Technical Progress, USSR:

Processes and Apparatuses of Chemical Technology (1965)

Design of Chemical Apparatuses (1966)