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Wikipedia: http://en.wikipedia.org/wiki/Georgiy_B._Shul%27pin

Biographical Sketch

G. B. Shul'pin was born in Moscow (Russia). He is married (wife Lidia S. Shul'pina, research scientist, Nesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, Moscow) and has two sons, Svyatoslav and Pavel. He graduated with a M. S. degree in chemistry from the Chemistry Department of Moscow State University in 1969. During 1969–1972 he was a postgraduate student in Institute of Organoelement Compounds (Academy of Sciences of the USSR, Moscow) under the direction of Prof. A. N. Nesmeyanov and received his Ph. D. in organometallic chemistry in 1975 (topic: "The chemistry of ferrocene and some other cyclopentadienyl and olefin complexes"). Since 1978 G. B. Shul'pin has been working at N. N. Semenov Institute of Chemical Physics (Russian Academy of Sciences, Moscow). He is currently a Leading Scientific Researcher. Shul'pin is a Foreign Corresponding Member of the Academy of Sciences of Lisbon (Portugal).

His research activities concern metal complex catalysis, oxidation of hydrocarbons, activation of C–H bond in saturated and aromatic hydrocarbons, organometallic chemistry. Other interests include photocatalysis, biomimetic oxidations and ecological chemistry.

Main scientific achievements of G. B. Shul'pin are the following: cyanoethylation of ferrocene (1971), formation of inclusion adducts of thiourea with ferrocene and some other complexes (1972), diastereotopy in complexes of vinylferrocenes (1974), the synthesis of macrocyclic ferrocenophanes (1975), the platination reaction of arenes by hexachloroplatinate (1979), the first example of photoelectrophilic substitution in arenes: photoplatination (1983), photodehydrogenation of alkanes by hexachloroplatinate (1983), a new method of synthesis of pi-olefin complexes of platinum(II) by the reaction of olefins with hexachloroplatinate under light irradiation (1983), thermal and photochemical methylation of platinum complexes by methyl derivatives of Sn and Ge (1984), electrophilic platination of arenes under gamma-irradiation (1984), oxidation of alkanes by Cr(VI) oxo complexes under light irradiation (1986), oxidation of alkanes (including methane) by a system "hydrogen peroxide – vanadium complex – pyrazinecarboxylic acid" (1992–2016), a chromatographic method for determination of alkyl hydroperoxides (1992–2016), photooxidation of alkanes to alkyl hydroperoxides by a system "oxygen – quinone – copper acetate" (1995), aerobic photooxidation of alkanes catalyzed by various oxo, chloride and cyclopentadienyl complexes of transition metals (1988–1999, 2009), photochemical degradation of phenols in aqueous solutions promoted by various metal complexes (1997, 2009), stereoselective oxygenation of alkanes, olefins, alcohols and sulfides by hydrogen peroxide in the presence of a carboxylic acid catalyzed by a binuclear Mn(IV) complex (1998–2016), hydrogen peroxide oxidations of hydrocarbons and alcohols catalyzed by heterogeneous metal complexes (for example, titanosilicalite TS-1, alumina, montmorillonites) (2006–2014), oxidations of hydrocarbons and alcohols by systems $\text{H}_2\text{O}_2/\text{NaVO}_3/\text{H}_2\text{SO}_4$, $\text{H}_2\text{O}_2/\text{NaVO}_3/\text{oxalic acid}$, and $\text{H}_2\text{O}_2/\text{osmium complex/pyridine}$ (2009–2016).

Works by Shul'pin have been presented at International conferences, some of them: Conference on Catalysis, Sofia, Bulgaria, 1980. XII Mendeleev Congress, Baku, 1981. Symposium of Socialist Countries on Homogeneous Catalysis, Budapest, Hungary, 1982. 6th International Symposium on Homogeneous Catalysis, Leningrad, 1984. II International Summer School on Organometallic Catalysis, Neubrandenburg, GDR, 1984; IV European Conference on Organometallic Chemistry, Riga, 1985. Symposium of Socialist Countries on Homogeneous Catalysis, Leningrad, 1988. 7th International Symposium on Homogeneous Catalysis, Lyon, France, 1990. 8th International Symposium on Homogeneous Catalysis, Amsterdam, The Netherlands, 1992. Congress of the American Chemical Society, Anaheim (Los Angeles), USA, 1999. International Summer School, Champéry, Switzerland, 2001. International Conference CONCOORD-GECOM, Paris, France, 2002. International Conference

DFG-Berichtskolloquium zum SPP 1118, Aachen, Germany, 2002. 13th International Congress on Catalysis, Paris, France, 2004. 14th International Symposium on Homogeneous Catalysis, Munich, Germany, 2004. XX Ibero-American Symposium on Catalysis, Gramado, Brazil, 2006. 3rd International Conference on Green and Sustainable Chemistry, Delft, The Netherlands, 2007. 3rd International Conference “Catalysis: fundamentals and application”, 2007, Novosibirsk, Russia. 14th International Congress on Catalysis, Seoul, Korea, 2008. 16th International Symposium on Homogeneous Catalysis, Florence, Italy, 2008. 21st Ibero-American Symposium of Catalysis, Málaga, Spain, 2008. 6th World Congress on Oxidation Catalysis, Lille, France, 2009. International Conference EuropaCat IX “Catalysis for a Sustainable World”, Salamanca, Spain, 2009. 22nd Ibero-American Congress on Catalysis, Vina del mar, Chile, 2010. 4th International IUPAC Conference on Green Chemistry, Foz do Iguacu/PR, Brazil, 2012. 15th International Congress on Catalysis, Munich, Germany, 2012. XXV International Conference on Organometallic Chemistry, Lisbon, Portugal, 2012. 7th World Congress on Oxidation Catalysis, Saint Louis, USA, 2013. XIth European Congress on Catalysis EuropaCat XI, Lyon, France, 2013. 4st International Conference on Coordination Chemistry, Singapore, Invited lecture July 24, 2014.

He visited with lectures and worked as a visiting scientist in **Brazil** (with Prof. Dr. U. Schuchardt, University of Campinas, 1996, 2002; Prof. Dr. E. R. Lachter, Federal University of Rio de Janeiro, 2001; Prof. Dr. D. Mandelli, Pontific Catholic University, Campinas, 2003, 2007–2009, 2014; Prof. A. Batista, Federal University of São Carlos, 2007; Prof. E. V. Gusevskaya, Departamento de Química, Universidade Federal de Minas Gerais, Belo Horizonte), **Czech Republic** (with Dr. P. Lederer, Institute of Inorganic Chemistry, Prague, 1983, 1986, 1990), **France** (with Prof. B. Chaudret, Laboratoire de Chimie de Coordination, CNRS, Toulouse, 1990, 1994; Prof. J. Muzart, Université de Reims, 1991; Prof. J.-M. Bregeault, Université Pierre et Marie Curie, Paris, 2002; Prof. J.-M. Basset, Laboratoire de Chimie Organometallique de Surface, CNRS, Lyon, 2003; “ATOFINA”, “Total”, Lyon, 2003), **Germany** (“Bayer AG”, Leverkusen, 2001; with Prof. Dr. C. Bolm, Institut fuer Organische Chemie der RWTH, Aachen, 2002; with Prof. Dr. A. Berkessel, Universität zu Köln, 2002; with Prof. Dr. K. Wieghardt, Max Planck Institute for Bioinorganic Chemistry, Mülheim an der Ruhr, 2002; with Prof. Dr. H. Schwarz, Technische Universität Berlin, Institut für Chemie, 2002), **India** (with Prof. Anil Kumar, Indian Institute of Technology, Kanpur, 2008), **Italy** (with Dr. D. Attanasio, Istituto di Teoria e Struttura Elettronica, CNR, Rome, 1991), **Japan** (with Prof. Yasutaka Ishii, Kansai University, Osaka, 1998; Tokyo University, 1998; chemical companies in Kawasaki and Himeji, 1998), **Portugal** (with Prof. Dr. A. J. L. Pombeiro, Instituto Superior Técnico, Lisbon, Portugal, 2006–2013), **Spain** (with Prof. J. Vicente, Universidad de Murcia, 1993), **Switzerland** (with Prof. Dr. G. Süss-Fink, Université de Neuchâtel, 1993–2006; Dr. D. Veghini, “Organic Fine Chemicals, Lonza AG”, Visp, 2000–2006; Prof. F. Fischer, Institute of Life Technologies, HES-SO Valais, University of Applied Sciences Western Switzerland, Sion; 2004), **Thailand** (with Prof. D. Thanaboripat and Dr. T. Sooknoi, King Mongkut’s Institute of Technology Ladkrabang, Bangkok, 2004), **UK** (with Prof. J. R. Lindsay Smith, University of York, 1997), **USA** (with Prof. R. S. Drago, University of Florida, Gainesville, 1995, Dr. A. Kitaygorodskiy, Clemson University, SC, 1995; “Catalytica, Inc.”, Silicon Valley, California, 1998). Shul’pin was a supervisor and co-supervisor of M. S., Ph. D. and postdoc works. He was a reviewer for Ph. D. defenses. He is a member of Editorial Boards of journals “*Journal of Organometallic Chemistry*”, “*Catalysis Communications*”, “*Catalysts*”, “*Advances in Chemical Engineering and Science*”, “*Current Organocatalysis*”, “*American Chemical Science Journal*”, “*Journal of Engineering*”, “*The Scientific World Journal (Organic Chemistry)*”, “*Advances in Chemical Engineering*”, “*International Journal of Advanced Chemistry Engineering Research*”, “*Modern Chemistry*”, and was a member of local Organizing Committees of international Conferences on Organometallic Chemistry, Coordination Chemistry, Homogeneous Catalysis.

G. B. Shul’pin has published more than 250 papers in refereed international and Russian chemical journals resulting in about 6000 citations (the most cited publication by Shul’pin has been cited about 1800 times), his Hirsch index is 47. He is the author (coauthor) of monographs published in Russian and English: S. P. Gubin, G. B. Shul’pin “*The Chemistry of Complexes Containing Metal-carbon Bonds*”, Nauka, Novosibirsk, 1984 (280 pp.); G. B. Shul’pin “*Organic Reactions Catalyzed by Metal Complexes*”, Nauka, Moscow, 1988 (285 pp.); A. E. Shilov, G. B. Shul’pin “*Activation and Catalytic Reactions of Hydrocarbons*”, Nauka, Moscow, 1995 (400 pp.); A. E. Shilov, G. B. Shul’pin, “*Activation and Catalytic Reactions of Saturated Hydrocarbons in the Presence of Metal Complexes*”, Kluwer Academic Publishers, Dordrecht/Boston/London, 2000, (548 pp.), G. B. Shul’pin, “Oxidations of C–H Compounds Catalyzed by Metal Complexes”, in: “*Transition Metals for Organic Synthesis*”, Eds. M. Beller, C. Bolm, Second Edition, WILEY-VCH Verlag, Weinheim, 2004, Vol. 2, Chapter 2.2, pp. 215–241, G. B. Shul’pin, Chapter 4 “Selectivity in C–H functionalizations”, in: “*Comprehensive Inorganic Chemistry II*”, Vol. 6, Eds. J. Reedijk, K. Poepelmeier, L. Casella, Elsevier, 2013, pp. 79–104, G. B. Shul’pin, “Organometallic Complexes as Catalysts in Oxidation of C–H Compounds”, in *Advances in Organometallic Chemistry and Catalysis*, Ed. A. J. L. Pombeiro, Wiley, 2014, Chapter 1, ISBN 978-1-118-51014-8 - John Wiley & Sons. He holds patents of Europe, USA, UK, Germany, Japan, France and USSR. He has also written numerous

books on popular science (translated into a few foreign languages, for example, G. B. Shul'pin, *Engrossing Chemistry*, Moscow, Khimiya, 1984 (and published also in 2011, 2013 and 2016, publisher URSS), 184 pp, in Russian; G. B. Shul'pin, *The World of Unusual Molecules: Organometallic Complexes*, Moscow, Nauka, 1986, 176 pp, in Russian; G. B. Shul'pin, *Chemistry for Everyone*, Moscow, Znanie, 1987, 144 pp, in Russian; G. B. Shul'pin, *Engrossing Chemistry*, Sofia, Narodna Prosveta, 1988, 168 pp, in Bulgarian; C. Shulpin, *Que es la quimica organica*, Ediciones Quinto Sol, Mexico, 1988, 272 pp., in Spanish; G. B. Shul'pin, *Learning About Chemistry*, Moscow, Mir Publishers, 1989, 232 pp., in English; G. B. Sulpin, *Okouzljuci chemie*, Polytechnicka kniznice SNTL, Praha 1989, 158 pp. in Czech; G. B. Shulpin, *Quimica para todos*, Moscu, Editorial Mir, 1990, 264 pp., in Spanish) and articles in popular scientific journals. He was a reviewer of many scientific journals (for example, *J. Am. Chem. Soc.*, *Inorg. Chem.*, *J. Org. Chem.*, *Organometallics*, *J. Phys. Chem. B*, *Angew. Chem.*, *Chem. Eur. J.*, *Eur. J. Inorg. Chem.*, *Dalton Trans.*, *J. Catal.*, *Appl. Catal. A: General*, *J. Mol. Catal. A: Chem.*, *Catal. Commun.*, *Catal. Today*, *J. Membrane Sci.*, *Catal. Lett.*, *Adv. Synth. Catal.*, *Russ. Chem. Rev.*, *Coord. Chem. Rev.*, *Ind. Eng. Chem. Res.*, *Int. J. Chem. Kinet.*, *Adv. Chem. Eng. Sci.*, etc.).

Shul'pin is a medalist of the Government for the honored citizens of Moscow (1997), and the winner of the International Academic Publishing Company "Nauka/Interperiodica" (Pleiades Publishing, Inc.) Award for the best publications of 2008 as well as of the prize of the Society "Znanie" ("Knowledge") for the popular book "Chemistry for Everyone" and the "Journal of Catalysis Certificate of Excellence to the Most Cited Authors in recognition of an outstanding contribution to the quality of the journal, 2011".
