

Victor Gankin

SUMMARY:	Specialist in Organic/Theoretical Chemistry and Industrial Technology of Alcohols, Aldehydes, Ketones, Acids, Esters, Styrene, Phenol, Dimethildioksan, Isoprene.
PROFESSIONAL EXPERIENCE:	
1993-2010	President Institute of Theoretical Chemistry, Shrewsbury, USA
1991-1993	Consultant
1968-1991	Principle Chemist Research Institute of Petrochemical Processes, Leningrad, USSR
1960-1968	Senior Research Chemist Research Institute of Petrochemical Processes, Leningrad, USSR
1959-1960	Chemist Research Institute of Petrochemical Processes, Leningrad, USSR
EDUCATION:	
1969	Dr. of Science in Technology of Organic Synthesis Institute of Petrochemical Synthesis, Moscow, Russia
1964	Ph. D. in Organic Chemistry and Technology of Oxosynthesis Process Leningrad State University, USSR
1953-1959	M. S. in Pharmaceutical Chemistry синтез и изучение тиадиазолов Chemical-Pharmaceutical Institute, Leningrad, USSR
THEORETICAL RESEARCH:	Investigation of the mechanisms of hydroformylation reaction and formation and decomposition of cobalt carbonyls. Discovery and describing of the new type of the chain reactions of the complex compounds ("conens" chain reactions). Development of the novel general approach to the theory of chemical bonding, kinetics and catalysis. Объяснение физического смысла периодического закона, правил Льюиса и правил резонанса. Новая теория электропроводности Выяснение механизма действия механических законов в

	<p>рамках электродинамики. Новые подходы в разработке единой теории поля.</p>
<p>MAJOR CHEMICAL ENGINEERING AND MANUFACTURING ACHIEVEMENTS:</p>	
1988-1991	<p>Discovery, investigation and full development of the isoprene and dimethyl vinyl carbinol production via methyl butandiol with decreasing of the manufacturing costs of the both products by 24%. Total production 10,000 ton/year (pilot scale). Economical effect: 1,000,000 doll USA/year. Patents are closed for public by the USSR government.</p>
1984-1988	<p>Discovery, investigation and testing on a pilot scale of the novel process of methylethyl ketone production from isobutiric aldehyde. Process allows to obtain 2-ethylhexanol and methylethyl ketone from propylene by oxosynthesis without byproducts. Patents are closed for public by the USSR government.</p>
1980-1984	<p>Discovery and investigation of the novel process of high (>C₁₅) normal dicarbonic acids production from unsaturated carbon acids. Patent are closed for public by the USSR government. Publications are available upon request.</p>
1978-1980	<p>Discovery and investigation of the process of the styrol production from toluene allowing to save the methyl group in toluene. Selected patents: NN 4,192,961(USA); 1,538,670(UK).</p>
1973-1978	<p>Discovery, investigation and full development of the isoprene production from formaldehyde and isobutylene via dimethyldioxane with full catalyst recycle. Total production volume: 300,000 ton/year (3 plants). Economical effect 15,000,000 USA doll./year and solution of the important environmental problem. Selected patents: NN 2,490,642(France); 2,078,712B(UK); 79,892(Romania).</p>
1971-1974	<p>Discovery, investigation and testing on a pilot scale of the novel process of α-branched acids production from olefines. Process allows to obtain individual α-acids higher than C₉ able to form stable esters. Expected economical effect: 10,000,000 USA doll./year. Selected patents: NN 3,884,948(USA), 330,740(USSR); 664956(USSR); 1,524,775(UK); 1,353,677(UK).</p>
	<p>Investigation and testing on a pilot scale of the novel process of esters production by oxosynthesis using the cobalt catalyst modified by piridins. Process allows to decrease the amount of</p>

1970-1972	byproducts by 50% and increase the yield of normal alcohols by 20%.
1966-1970	Discovery, investigation and full development of the oxosynthesis process of C ₄ aldehyde using novel naphteno-evaporative scheme. Total production volume: 200,000 ton/year (2 plants). Economical effect: 20,000,000 USA doll./year. Selected patents: NN 661,724 (Italy); 100,2691(UK), 1,315,589 (France); 169,103; 178,814; 245,759(USSR)
1959-1963	Discovery, investigation and full development of the oxosynthesis processes of C ₄ and C ₆ -C ₈ aldehydes formation with low cobalt concentration (0.01%). Total production volume: C ₄ - 40,000 ton/year; C ₆ -C ₈ - 8,000 ton/year. Economical effect 2,000,000 doll USA/year.
PUBLICATIONS:	6 Monographs:
	- Technology of Oxosynthesis. Khimia, 1981, USSR (in Russian);
	The New Theory of Chemical Bonding, Chemical Kinetics and Catalys, "Asta", 1990, USSR (in Russian)
	- The New Theory of Chemical Bonding and Chemical Kinetics. "Asta", 1991, USSR (in English).
	-How Chemical Bonds Form and Chemical Reaction Proceed. "ITC", 1998 , USA (in English)
	How Chemical Bonds Form and Chemical Reaction Proceed. "Granitsa", 2007 , USSR (in Russian)
	Twenty First Century General Chemistry ITC Boston 2007
	- 152 papers in Soviet and international journals (available upon request);
	- 103 patents in the USSR;
	- 26 patents in the USA, UK, France and other countries.
	46 reports on ACS National Meeting