



Personal information

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Surname(s)

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Nationality Romanian

Date of birth October 1, 1952

Gender Male

Work experience

Dates 1990-present

Occupation or position held	Head, Department of Enzymology, Institute of Biochemistry of the Romanian Academy, Bucharest
Main activities and responsibilities	Structural and functional studies of enzymes involved in signal transduction; Studies on structure-function relationship in protein tyrosine phosphatases; 3D structure determination of some enzymes;
Name of employer	Institute of Biochemistry of the Romanian Academy; Bucharest, (Romania)
Type of business or sector	Research
Dates	2008-2015
Occupation or position held	Full professor
Main activities and responsibilities	“Recombinant DNA Technology” Course / Director at the Biological Chemistry division
Name of employer	Ecole Normale Superieure Bucharest, Romania
Type of business or sector	Education/ Teaching
Dates	2003-present
Occupation or position held	Full professor
Main activities and responsibilities	“Biochemistry” Course
Name of employer	“Sapientia” University – Miercurea-Ciuc (Romania)
Type of business or sector	Education / Teaching
Dates	1990-1991/ 2005-2006
Occupation or position held	Associate professor
Main activities and responsibilities	“Enzymatic reactions mechanisms” Course, “Recombinant DNA Technology” Course
Name of employer	University of Bucharest (Romania)
Type of business or sector	Education / Teaching
Dates	1994-2007
Occupation or position held	Associate professor
Main activities and responsibilities	”Recombinant DNA technology” Course
Name of employer	Polytechnic University – Bucharest, (Romania)
Type of business or sector	Education / Teaching
Dates	1983-1990
Occupation or position held	Senior Biochemist
Main activities and responsibilities	Protein purification by affinity and hydrophobic chromatography. Theoretical and experimental studies of kinetics and mechanisms of enzymatic-reactions. Studies of enzymatic kinetics for tight-binding inhibitors. New models for enzymatic catalysis analyzed from the point of view of chain reactions.
Name of employer	Institute of Biological Sciences, Biochemistry
Type of business or sector	Department Research

Dates 1979-1983

Occupation or position held Researcher Biochemist

Main activities and responsibilities Biochemical studies realized: new methods for nicotinamide adenine dinucleotide-(NAD)-purification. Process optimization of proteolysis used in the preparation of culture media. Optimization of cultivation of “difficult” microorganism at industrial scale. Improving the composition of culture media for vaccine production. Theoretical and experimental studies concerning bacterial growth. Studies of UV-induced mutagenesis on freeze-dried bacteria.

Name of employer “Pasteur” Institute, Calea Giulești nr. 333, Zip code 060269, Bucharest, România

Type of business or sector Research

Dates 1976-1979

Occupation or position held Chemical Engineer,

Name of employer Sintofarm Pharmaceuticals, Bucharest, Romania

Type of business or sector Drug synthesis and production

Education and training**Dates 1990**

Title of qualification awarded Ph.D. in Biotechnology

Principal subjects “Theoretical and experimental models of enzyme reactions”

Name and type of organisation providing education and training Polytechnic University of Bucharest

Dates 1976-1981

Title of qualification awarded M.S. in Mathematics

Principal subjects “Applications of Markov’s chains theory in the study of enzymatic reactions”

Name and type of organisation providing education and training University of Bucharest, Department of Mathematics and Computer Sciences

Dates 1971-1976

Title of qualification awarded M.S., Diplom engineer

Principal subjects Organic Synthesis

Name and type of organisation providing education and training Polytechnic University of Bucharest, Chemical Engineering Faculty, Section of Organic Compounds Synthesis

National ranking Head of promotion

PERSONAL SKILLS	Understanding				Speaking				Writing	
	Mother language(s): Hungarian, Romanian									
Other language(s) Self-assessment European level (*)		Listening		Reading	Spoken interaction		Spoken production			
English	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
French	A2	Basic user	B1	Independent user	A2	Basic user	A2	Basic user	B1	Independent user
German	B1	Independent user	B1	Independent user	A2	Basic user	A2	Basic user	A2	Basic user

Fellowships and International Grants

- 2022-2024: **Bilateral agreement** between Romanian Academy and Hungarian Academy of Sciences (no: 2886/2021), „Radiolabelling of affibody for tumor diagnostic and theranostic application in the nuclear medicine” for the Romanian Academy - Hungarian Academy of Sciences Joint research project, **Romanian Project Leader**;
- 2022-2023: **Fulbright Visiting Scholar** at MD Anderson Cancer Center/MDACC- University of Texas, Department of Leukemia, Project title: *Biochemical and cellular investigations on the potential use of affibodies in leukemia therapy*, Grant no:779/06.06.2022;
- 2021-2022: **EEA-RO-NO-2018-0535 (no.:34SEE/2021)**; “Next generation of drug targets for schizophrenia”(NEXTDRUG), Professor/Supervisor Team leader;
- 2019-2022: **Bilateral agreement** between Romanian Academy and Hungarian Academy of Sciences (no: 3698/2018), “Novel radiolabeled affibodies for targeted imaging and therapy” application for the Romanian Academy - Hungarian Academy of Sciences Joint research project, **Romanian Project Leader**;
- 2017-2018: **Funding Research between the Company CRU Hungary SRL** and The Biochemistry Institute of Romanian Academy (no.: 327/2017), “Compound for inhibition of certain signaling processes related to the evolution of the cognitive processes”; **Project coordinator**;
- 2007-2010: **Marie Curie Research Training Networks**, Framework Program 6, financed by the European Community; (MRTN-CT-2006-no.: 035830, PTPNET), “Protein Tyrosine Phosphatases: Structure, Regulation and Biological Functions”; **Partner project manager**;
- 2005-2008 **Grant 3-Fokoop-RUM/1028121/08.09.2005 "Alexander von Humboldt Fellowship"** Institute of Biochemistry and Department of Structural Biology, School of Medicine University of Saarland, Germany „Structural insights into three domains of PTP-Basophil-like (PTP-BL) protein tyrosine phosphatase” **Romanian Head of Project**;
- 2005 (4months) **Team member - Marie Curie Excellence**, Technical University Munchen, in the IGGSE (International Graduate School of Science and Engineering, Technical University Munchen); Project Coordinator: Daniel Funeriu;
- 2004-2008: **Grant from the Deutsche Forschungsgemeinschaft (DFG); (no.: 5421388)**, International research cooperation financed by Alexander von Humboldt Foundation” with University of Saarland, School of Medicine, Dept of Structural Biology – Homburg (Germany): “On the structural and kinetic analysis of the functional complex between PTP-SL and ERK2 MAP kinas”, **Romanian Head of Project**;
- 2002-2004: **Grant from the Deutsche Forschungsgemeinschaft (DFG); no.DE02/001**, Max-Planck-Institut für Molekulare Physiologie „Kinetic and structural analysis of potential modulators of PTP-SL”, **Romanian Head of Project**;
- 2001-2004: **“EMBO Fellowship”** at Max-Planck Institut für Molekulare Physiologie, Dortmund (Germany);
- 1998-1999: **“NATO Linkage Grant”** at Max-Planck Institut für Molekulare Physiologie, Dortmund, (Germany), Partner;
- 1996-1997: **Fellowship Max-Planck** Institute of Biophysics, Department of Molecular Biology of Membranes, Frankfurt/Main, Germany;
- 1992-1993: **"Alexander von Humboldt Fellowship"** Institute of Biochemistry, University of Kiel, Germany, Scholarship;
- 1991-1992: **“Post-doctoral fellowship”** at Burnsides Research Laboratory, University of Illinois at Urbana - Champaign, U.S.A.;
- 1988-1989: **FEBS** scholarship at the Center for Molecular Biology CNRS Marseille-France;

National Grants

- 2021-2022 PN-III-P4-ID-PCE-2020-2411 (no: 147/2021) "Identification and characterization of the receptor for neuropathy of CART", **Experienced researcher;**
- 2020-2022 PN-III-P2-2.1-PED-2019-4184 (no: 548/2020, "The Development in Oncology of Novel Radiopharmaceuticals and Nuclear Techniques for Diagnostic Imaging and Personalized Treatment at Molecular Level" (NARAD); **Partner project manager;**
- 2018-2021 PN-III-P1-1.2-PCCDI-2017-0737 (no:35/2018), "Genomic mapping of population from polluted area with radioactivity and heavy metals to increase national security" (ARTEMIS), **Partner project manager;**
- 2018-2021 PN-III-P1-1.2-PCCDI-2017-0769 (no:64/2018), "The Development in Oncology of Novel Radiopharmaceuticals and Nuclear Techniques for Diagnostic Imaging and Personalized Treatment at Molecular Level" (ONCORAD), **Partner project manager;**
- 2012-2016 PNII-ID-PCE-2011-0024, (no:2/2012), „V(D)J Recombination Targeted in Cis by Transcription Induced DNA Supercoiling", **Partner project manager;**
- 2012-2016 PN-II-PT-PCCA-2011-3.1-0688(no:79/2012), „Preclinical model of cell therapy involving the interaction between tyrosine phosphatase proteins and microRNA to optimize neovascularization" (THERION), **Partner project manager;**
- 2011-2016 PN-II-ID-PCE-2011-3-0743 (no:296/2011), "Reconstruction of Ancestor of Receptor Protein Tyrosine Phosphatase Catalytic", **Project coordinator;**
- 2008-2010 Pi-CD-PNII (Investitii), (no:194 CPI/2008), "Laboratory for determining the three-dimensional structure of proteins by X-ray diffraction" (DIPROXAL), **Project coordinator;**
- 2007-2010 PN-II-ID-PCE-2007-877, (no:210/2007), "Determination of threedimensional structure for some interesting proteins by X ray diffraction", **Project coordinator;**
- 2007-2010 PNCDI-II-04-3452, (no:41-038/2007), "Evaluation of the substrate specificity of several protein tyrosine phosphatases involved in diseases" (FOSFOTIR), **Partner;**
- 2007-2010 PN-II-PCCA, (no.: 61-027/.2007, "Redesigning enzymatic specificity by guided evolution: development of a specific serine protease for C-terminal cleavage of phosphotyrosine" (PHOSPHOTYRASE), **Partner project manager;**
- 2006-2009 CNCSIS766, (no:11GR/2006, "Enzymatic characterization and identification of potential native substrates for Eyes absent, protein responsible for Branchio-Oto-Renal syndrome" (BOR), **Project coordinator;**
- 2006-2008 CEEX-M1-C2-2380-2-CEX06-11-no:97/2006, "New mathematical approaches in biology, with applications" (BIOMAT), **Partner project manager;**
- 2006-2008 CEEX P-CD-o61126/2006, "Mathematical analysis of response experiments in chemical and biochemical kinetics, genetics and molecular biology" (RESPONSE), **Partner project manager;**
- 2005-2008 CEEX-BIOTECH-PC-D02-PT1 1248(no:1/2005), "Molecular optimization of a central enzyme in the metabolic pathway of the xylose conversion. Optimized reactor for the enzymatic transformation of the xylose originating from cellulose wastes " (OMEXIL), **Project coordinator;**
- 2005-2008 CEEX-BIOTECH-PC-D02-PT08-985, (no:17/2005, "Key elements in the control strategy of respiratory viruses in pigs by identifying the etiopathogenetic differences associated with circulating viral pathotypes in Romania" (VIRORESP), **Partner project manager;**
- 2004-2006 PED-VIASAN, (no:ASM353/2004), "Molecular analysis of the involvement of protein tyrosine phosphatase PRL-3 in colorectal cancer metastasis" (FOSFOMETACOL), **Project coordinator;**
- 2004-2006 P-CD CEEX BIOTECH, (no:91/2004), "Human fetal liver stemcells - characterization and conditioning for cell transplantation" (HEPSTELLS), **Partner project manager;**
- 2004-2005 CNCSIS, (no:1490/2004), "Mathematical modeling of biological processes", **Participant;**
- 2004-2004 Romanian Academy, (no:60/2004), "Optimization of PRL3 expression in prokaryotic and eukaryotic system and purification of the protein thus obtained", **Project coordinator;**
- 2002-2004 PNCDI-PED -02-02, (no:427/2002), "Gene cloning, expression, purification and characterization of bacterial phosphoketolase. Laboratory plant for its use in the conversion of xylose into compounds of biotechnological importance" (BIOTECH), **Project coordinator;**

International conferences, lectures, invitations, posters

- 2023 Invited speaker in the Program Fulbright Visiting Scholar to Seton Hall University, Department of Chemistry and Biochemistry, South Orange, New Jersey (USA); Oral presentation „Rationally Designed Peptides Improve Cognition in Rats”; 22-26 January
- 2023 Invited speaker in the Program Fulbright Visiting Scholar for Walsh Seminar Series and Chemistry at Clarkson University, NY (USA); two oral presentation: „Molecular Vehicles for targeted diagnostics and Therapy of Cancer” and „Applications of Synthetic Biology: Rationally Designed Peptides and Affibodies for Biomedical Applications”; 20-21 January
- 2022 Participant as „Fall 2022 Cleveland Fulbright Scholar Enrichment Seminar”, Marriott Key Tower Downtown, Cleveland, Ohio (USA); 07-10 december;
- 2022 Participant in the program Fulbright Visiting Scholar to „Eastern Analytical Symposium”, Crowne Plaza Princeton, New Jersey (USA); 14-16 november
- 2019 Symposium in collaboration with: Institute of Biochemistry of the Romanian Academy, Bucharest, Romania; “Hořia Hulubei” National Research and Development Institute for Physics and Nuclear Engineering, Bucharest, Romania; ATOMKI Nuclear Research Institute, Debrecen, Hungary and Riken Institute for Physical and Chemical Research, Japan; Oral presentation: "Molecular vehicles for diagnosis and targeted therapy" Venue: Institute of Biochemistry of the Romanian Academy, Bucharest, Romania;
- 2019 Participation in the inter-academic exchanges with the Hungarian Academy of Sciences, regarding the collaboration stage (joint project, Bilateral agreement no.3698/13.09.2018), Oral presentation: "New radiolabeled affibodies for imaging and targeted therapy", Venue: Nuclear Research Institute (ATOMKI), Debrecen, Hungary, Sept.29 - 05 oct.
- 2018 Participation as guest at the “A.Xth Meeting on neurodegenerative diseases; Biology & Therapy ”, Venue: New York, U.S.A., Organizer: Cold Spring Harbor Laboratory (USA), Nov.28 – Dec.01).
- 2016 Holding a lecture on "New results in the field of STEP inhibitors and synaptic enlargement"; Sept 07-09th; Venue: Proteomics Laboratory of the Institute of Biology at Eötvös Loránd University in Budapest, Hungary;
- 2011 “A universal protein tyrosine dephosphorylating enzyme”; P-CUBE Users Meeting (financed by EC, FP7), September(5), Zürich (Switzerland),
- 2009 ”Interface Analysis of the Complex between ERK2 and PTP-SL”; EMBO Conference “Europhosphatase 2009” on Protein phosphatases in development and disease June 14-19th, Egmond aan Zee, (The Netherlands);
- 2009 “Structural studies on the catalytic domain of protein tyrosine phosphatase-BL” INSTRUCT “Central-Eastern European INSTRUCT Workshop, March 29th – April 1st, Budapest (Hungary);
- 2007 “Structural studies on KIM-containing protein tyrosine phosphatases” – Institute of Enzymology of the Hungarian Academy, September 14th, Budapest (Hungary);
- 2006 “When the complex of proteins with known structures does not crystallize”; Sofia school of protein science – September 27-30th, Sofia (Bulgaria);
- 2003 Organizer/Invited speaker at FEBS Advanced Theoretical and Practical Course: “ Recombinant Technology and Protein Expression”, Bucharest, Romania - September 21-27
- 2003 ”Cloning, expression and preliminary characterization of xylulose 5-phosphate phosphoketolase from *Lactococcus lactis*”, 13th Balkan Biochemical Biophysical Days & Meeting Metabolic, October 12-15th, Kuşadası (Turkey);
- 2001 “Crystal Structure of Protein Tyrosine Phosphatase SL/BR7 and implications in regulation of ERK2 MAP Kinase Regulation”, EMBO Conference on <Protein Phosphorylation and Protein Phosphatases> Marburg -(Germany);
- 2001 Organizer/Invited speaker at FEBS Advanced Theoretical and Practical Course: “Recombinant DNA Technology” Bucharest, Romania- September 2 – 7, 2001
- 1994 Invited speaker at “Kinetics of slow and tight-binding enzyme inhibition”, Satellite Meeting Molecular Mechanisms of Enzyme Action with IUBMB Conference, September 23-25, Bangalore (India);
- 1993 “Enzyme reactions as chain reactions” Biochemistry Institute - “Christian Albrechts” University of Kiel (Germany);
- 1991 Invited speaker: “New aspects in enzyme reaction kinetics” Burnside's Research Laboratory - University of Illinois - Urbana Champaign (USA);

Awards, titles, distinctions

- 2019: "Bercsényi Miklós" Award from “József Wildt” Science Foundation
- 2010: "Top-Cited Paper Award" FEBS Journal for the paper “Protein tyrosine phosphatases: structure-function relationships”; FEBS J. (2008) 275, 867-82
- 2003: "Emanoil Teodorescu" Award of the Romanian Academy "
- 2000: "Medal For scientific merit" - Awarded by the Government of Romania, with the rank of "Knight"

Member of scientific associations:

1997-present member Romanian Society of Biochemistry and Molecular Biology (Member founder and President from 1997 to 1999)

American Association for the Advancement of Science

Romanian Researchers Association "Ad Astra", România

The Scientific Research Society "Sigma Xi" (USA)

Member in scientific organizations:

2023 – present, Member of the National Council for Ethics of Scientific Research, Technological Development and Innovation, Romania

2020-2023: Vicepresident of the National Council for Ethics of Scientific Research, Technological Development and Innovation, Romania

2012-2013: Member of the Biological Security Commission, Romania

2000: External member of the public body of the Hungarian Academy of Sciences

Scientometric indicators:

Hirsch WOS Index (Clarivate Analytics): 14,

Google scholar: 16;

WOS Citations: 800,

Book chapters at international publishers: 3,

National patents: 8, International patent: 1

Editorial boards:

Associate Editor - Journal of Cellular and Molecular Medicine - John Wiley & Sons Ltd Publishing

List of publications- Szedlacsek Ștefan Eugen-

- 1 "Designed Peptide Inhibitors of STEP Phosphatase-GluA2 AMPA Receptor Interaction Enhance the Cognitive Performance in Rats", Szedlacsek HS, Bajusz D, Badea RA, Pop A, Bică CC, Ravasz L, Mittli D, Mátyás D, Necula-Petrăreanu G, Munteanu CVA, Papp I, Juhász G, Hritcu L, Keserű GM, Szedlacsek SE. J Med Chem. 2022 Jan
- 2 "Trojan horse treatment based on PEG-coated extracellular vesicles to deliver doxorubicin to melanoma in vitro and in vivo" Patras L, Ionescu AE, Munteanu C, Hajdu R, Kosa A, Porfire A, Licarete E, Rauca VF, Sesarman A, Luput L, Bulzu P, Chiroi P, Tranca RA, Meszaros MS, Negrea G, Barbu-Tudoran L, Potara M, Szedlacsek S, Banciu M. Cancer Biol Ther. 2021
- 3 „Regulation of TRPM8 Channel activity by Src-mediated Tyrosine Phosphorylation”, Alexandra Manolache, Tudor Selescu, G. Larisa Maier, Mihaela Mentel, Aura Elena Ionescu, Cristian Neacșu, Alexandru Babeș, Ștefan Eugen Szedlacsek. Journal of Cellular Physiology; 2020
- 4 „Analysis of EYA3 phosphorylation by Src kinase identifies residues involved in cell Proliferation”, Aura E. Ionescu, Mihaela Mentel, Cristian V.A. Munteanu, Livia E. Sima, Eliza C. Martin, Georgiana Necula-Petrareanu and Ștefan E. Szedlacsek. International Journal of Molecular Sciences, Volume 20, Issue 24, 6307; 2019
- 5 „Biological and molecular modifications induced by cadmium and arsenic during breast and prostate cancer development” ENVIRONMENTAL RESEARCH; By: Zimta, AA; Schitcu, V; Gurzau, E; Stavaru, C; Manda, G; Szedlacsek, S; Berindan-Neagoe, Volume: 178, Article Number: 108700, DOI: 10.1016/j.envres; 2019;
- 6 “Crystal structure of a xylulose 5-phosphate phosphoketolase. Insights into the substrate specificity for xylulose 5-phosphate”, JOURNAL OF STRUCTURAL BIOLOGY By: Scheidig, AJ; Horvath, D; Szedlacsek, SE, Volume 207, Issue 1, Page 85-102; 2019
- 7 “Collagen regulates the ability of endothelial progenitor cells to protect hypoxic myocardium through a mechanism involving miR-377/VE-PTP axis”, Rosca AM, Mitroi DN, Cismasiu V, Badea R, Necula-Petrareanu G, Preda MB, Nicolite C, Tutuianu R, Szedlacsek S, Burlacu A. J Cell Mol Med. 22, 4700-4708; 2018
- 8 “WDR1 is a novel EYA3 substrate and its dephosphorylation induces modifications of the cellular actin cytoskeleton”, Mentel M, Ionescu AE, Puscăluș-Girtu I, Helm MS, Badea RA, Rizzoli SO, Szedlacsek SE. Sci Rep. 8, 2910; 2018
- 9 “Phosphoketolases from *Lactococcus lactis*, *Leuconostoc mesenteroides* and *Pseudomonas aeruginosa*: dissimilar sequences, similar substrates but distinct enzymatic characteristics”, Petrareanu G, Balasu MC, Vacaru AM, Munteanu CV, Ionescu AE, Matei I, Szedlacsek SE. Appl Microbiol Biotechnol. 98, 7855-67; 2014
- 10 “Protein tyrosine phosphatase structure-function relationships in regulation and pathogenesis”, Böhmer F, Szedlacsek S, Tabernero L, Ostman A, den Hertog J., FEBS J. 280, 413-31; 2013
- 11 “Preliminary X-ray crystallographic analysis of the D-xylulose 5-phosphate phosphoketolase from *Lactococcus lactis*”, Petrareanu, G, Balasu, MC, Zander, U, Scheidig, AJ and Szedlacsek, S.E., Acta Cryst. F66, 805–807; 2010
- 12 “Interface Analysis of the Complex between ERK2 and PTP-SL”. Balasu MC, Spiridon LN, Miron S, Craescu CT, Scheidig AJ, Petrescu AJ, Szedlacsek SE. PLoS One. 4(5), e5432; 2009
- 13 “Analysis of Molecular Determinants of PRL-3” Pascaru M, Tanase C, Vacaru AM, Boeti P, Neagu E, Popescu I, Szedlacsek SE., J Cell Mol Med. 13(9B), 3141-50; 2009
- 14 “Protein tyrosine phosphatases, structure-function relationships”, Tabernero L, Aricescu AR, Jones EY, Szedlacsek SE. FEBS J. 275, 867-82; 2008
- 15 “A microarray strategy for mapping the substrate specificity of protein tyrosine phosphatase”, Köhn M, Gutierrez-Rodriguez M, Jonkheijm P, Wetzel S, Wacker R, Schroeder H, Prinz H, Niemeyer CM, Breinbauer R, Szedlacsek SE, Waldmann H. Angew Chem Int Ed Engl. 46, 7700-3; 2007
- 16 “Functional, fractal nonlinear response with application to rate processes with memory, allometry, and population genetics.” Vlad MO, Morán F, Popa VT, Szedlacsek SE, Ross J. Proc Natl Acad Sci USA., 104, 4798-803; 2007
- 17 “Identification and specificity profiling of protein prenyltransferase inhibitors using new fluorescent phosphoisoprenoids”, Dursina B, Reents R, Delon C, Wu Y, Kulharia M, Thutewohl M, Veligodsky A, Kalinin A, Evstifeev V, Ciobanu D, Szedlacsek SE, Waldmann H, Goody RS, Alexandrov K. J Am Chem Soc. 128, 2822-35; 2006

- 18 "Fisher's theorems for multivariable, time- and space-dependent systems, with applications in population genetics and chemical kinetics", Vlad MO, *Szedlacsek SE*, Pourmand N, Cavalli- Sforza LL, Oefner P, Ross J Proc Natl Acad Sci USA. 102, 9848-53; 2005
- 19 "The MAM (Mepri/A5-protein/PTPmu) Domain Is a Homophilic Binding Site Promoting the Lateral Dimerization of Receptor-like Protein-tyrosine Phosphatase μ ", V.B. Cismasiu, S.A. Denes, H. Reilander, H. Michel, and S.E. Szedlacsek. J. Biol. Chem. 279, 26922-26931; 2004
- 20 "Synthesis and biological applications of a new 1,2,5-oxadiazolo[3,4-c]pyridine fluorescent marker", M.C. Balasu, I. Costea, R. Fratila, A. Popescu, C. Draghici and S.E. Szedlacsek. Rev. Roum. Chim., 49, 309-315; 2004
- 21 "Protein Tyrosine Phosphatase Inhibitors", M.C. Balasu and S.E. Szedlacsek. Rev. Chim. 53, 315- 323; 2002
- 22 "Crystal structure of PTP-SL/BR7 catalytic domain, Implications for MAP kinase regulation", S.E. Szedlacsek, A.R. Aricescu, T.A Fulga, L. Renault, A.J. Scheidig. J. Mol. Biol. 311, 557-568; 2001
- 23 "Intramolecular interactions in protein tyrosine phosphatase RPTP μ , Kinetic evidence", A.R Aricescu, T.A Fulga, V., Cismasiu, R.S. Goody, S.E. Szedlacsek. Biochem. Biophys. Res. Comm. 280, 319-327; 2001
- 24 "Time-dependent control of metabolic systems by external effectors", S.E. Szedlacsek, A.R. Aricescu, B.H. Havsteen; J. theor. Biol. 182, 341-350; 1996
- 25 "pH-dependent hysteretic behaviour of human myeloblastin (leucocyte proteinase 3)", A. Baici, S.E. Szedlacsek, H. Früh, B.A. Michel; Biochem. J., 317, 901-905; 1996
- 26 "Esterification of oxysterols by human plasma lecithin cholesterol acyltransferase", S.E. Szedlacsek, E. Wasowicz, H. Nishida, S.A. Hulea, F. A. Kummerow, T. Nishida, J. Biol. Chem. 270, 11812-11819; 1995
- 27 "Kinetics of slow and tight-binding inhibitors", S.E. Szedlacsek, R.G. Duggleby, Methods Enzymol., 249, 144-180; 1995
- 28 "Steady-state analysis of the reversible closed bicyclic enzyme cascades", VARON, R; HAVSTEEN, BH; SZEDLACSEK, SE; GARCIA MORENO, M; MOLINA ALARCON, M; SANCHEZGRACIA, A; Volume: 90, Issue: 1, Pages: 48-53; 1994
- 29 "Kinetic analysis of reversible closed bicyclic enzyme cascades covering the whole course of the reaction"; R. Varon, B.H. Havsteen, M. Molina-Alarcon, S.E. Szedlacsek, F. Garcia-Canovas; Int. J. Biochem, 26, 787-797; 1994
- 30 "Response coefficients of interconvertible enzyme cascades towards effectors that act on one or both modifier enzymes"; S. E. Szedlacsek, M.-L. Cardenas, A. Cornish-Bowden, Eur. J. Biochem., 204, 807-813; 1992
- 31 "Egg-white avidin purification by affinity elution from CM-cellulose", C. Borza, B. Borza, F. Nitu, S. E. Szedlacsek, Rev. Roum. Biochim., 29, 97-99; 1992
- 32 "Enzyme catalysis as a chain reaction", S. E. Szedlacsek, R. G. Duggleby, M.O.Vlad, Biochem. J., 279, 855-861; 1991
- 33 "Very large response coefficients in interconvertible enzyme cascades", A. Cornish-Bowden, S. E. Szedlacsek; Biomed. Biochim. Acta, 49, 829-837; 1990
- 34 "Progress-curve equations for reversible enzyme-catalysed reactions inhibited by tight-binding inhibitors", S.E. Szedlacsek, V. Ostafe, R.G. Duggleby, M. Serban, M.O. Vlad; Biochem. J., 265, 647-653; 1990
- 35 "Purification of aprotinin from bovine lung extracts" (in Romanian), H.D. Schell, S.E. Szedlacsek and V. Ostafe, Stud. cercet. Biochim. 33, 1-82; 1990
- 36 "Preliminary results concerning the presence of secretory immunoglobulin A (sIgA) in the serum of patients with IgA myeloma", L. Buzila, H.D. Schell, I. Funduc, V. Ostafe, S.E. Szedlacsek; Arch. Roum. Path. Exp. Microbiol. 48, 163-170; 1989
- 37 "Computer-aided simulation of Michaelis-Menten kinetics" (in Romanian), V. Ostafe, S.E. Szedlacsek, Stud. cercet. Biochim. 32, 155-162; 1989
- 38 "Hydrophobic polyvinyl-alcohol derivatives used in hydrophobic interaction chromatography .I. n-alkyl hydrophobic gels", SCHELL, HD; OSTAFE, V; SZEDLACSEK, SE; REVUE ROUMAINE DE BIOCHIMIE; Volume 26; Issue 2, pages 153-158; 1989
- 39 "A study on the interaction of concanavalin a with some affinity adsorbents"; OSTAFE, V; PETRESCU, AD; SZEDLACSEK, SE; SCHELL, HD; REVUE ROUMAINE DE BIOCHIMIE; Volume 25; Issue 1, pages 47-52; 1989
- 40 "A re-evaluation of the kinetic equations for hyperbolic tight-binding inhibition"; S.E. Szedlacsek, V. Ostafe, M. Serban, M.O. Vlad; Biochem. J. 254, 311-312; 1988

- 41 “Non-linear regression analysis of progress-curves using a modified form of the integrated Michaelis-Menten equation”, S.E. Szedlacsek, V. Ostafe; Rev. Roum. Biochim. 24, 347-351; 1987
- 42 “Computer analysis of a modified form of integrated Michaelis-Menten equation, using a non-linear regression method” (in Romanian); , S.E. Szedlacsek, V. Ostafe, M.D. Nicu, D. Ostafe; Studii cercet. Biotehnologie. 19, 71; 1987
- 43 “Biotechnological achievements in Romania”, V. Ostafe, S.E. Szedlacsek, D. Ostafe, H.D. Schell; Studii cercet. Biotehnologie, 19, 77; 1987
- 44 „Non-linear regression-analysis of progress curves using a modified form of the integrated michaelis-menten equation”, SZEDLACSEK, SE; OSTAFE, V; REVUE ROUMAINE DE BIOCHIMIE; Volume 24, Issue 4, pages 347-351; 1987
- 45 “Purification of bovine tripsin by affinity chromatography on affinity support obtained by coupling aprotinin to cross-linked polyvinyl alcohol” (in Romanian), H.D. Schell, V.Ostafe, S.E. Szedlacsek; Stud. cercet. Biochim. 29, 99-204; 1986
- 46 “Guanine+Cytosine content in bacterial DNA – as differentiation criterium for species of Pasteurella haemolytica and Pasteurella multocida” (in Romanian), D. Szedlacsek, S.E. Szedlacsek, Stud. cercet. Biochim. 29, 75-81; 1986
- 47 “Hydrophobic chromatography” (in Romanian); , H.D. Schell, V. Ostafe, S.E. Szedlacsek, Stud. cercet. Biochim. 29, 82-93; 1986
- 48 “Peculiar aspect of a UV fluence-survival curve for Pasteurella multocida, with possible involvements in mutagenesis”, S.E. Szedlacsek, D. Szedlacsek; M.D. Nicu; U. Fierlinger; Photobiochem. Photobiophys., 11, 123-128 ; 1986
- 49 “A kinetic method for the simultaneous determination of iso-enzymes activities in mixture. Application to A2 and A3 horseradish peroxidases”, S.E. Szedlacsek; V. Ostafe; S. Mogos, S.A; Hulea; Biochem. Int., 12, 279-289; 1986
- 50 “Aspects concerning preparation and characteristics od cross-linked amylose as substrate of a amylase” (in Romanian);, V. Ostafe, S.E. Szedlacsek & M.A.Mateescu, Stud. cercet. Biochim. 27, 149-157 ; 1984
- 51 “A model of bacterial-cell growth” SZEDLACSEK, S; REVUE ROUMAINE DE BIOCHIMIE, Volume: 19, Issue: 2, Pages: 151-159; 1982
- 52 “A chemical application of solving the diophantic equations” (in Romanian), S.E. Szedlacsek; Journal of Physics and Chemistry, 12 (1975) and (1976)

Books/chapters

1. Mihaela Mentel, Rodica A. Badea, Georgiana Necula - Petrareanu, Sujay T. Mallikarjuna, Aura E. Ionescu, Stefan E. Szedlacsek . "Expression, Purification, and Kinetic Analysis of PTP Domains", pp 39- 66, Protein Tyrosine Phosphatases, Rafael Pulido, ISBN: 978-1-4939-3744-8, 2016;
2. Book: “Molecular biology, small illustrated dictionary”; by Anton Gabriela; Szedlacsek S; Plesa A; Szedlacsek D; Repanovici R; Ed. Enciclopedica, Bucuresti, 141; ISBN 973-45-0512-2; 2005;
3. Stefan Szedlacsek. "Time-Dependent or Steady-State Control of Metabolic Systems?", pp 251-258, Technological and Medical Implications of Metabolic Control Analysis, A.Cornish-Bowden and M.L.Cardenas, NATO Science Series, 3.High Technology, ISBN: 978-94-011-4072-0, 2000;
4. Stefan Szedlacsek. "Kinetics of slow and tight-binding inhibitors", pp 144-180, Fundamentals of Enzyme Kinetics, Revised edition by Athel Cornish-Bowden, ACADEMIC PRESS INC, 525 B STREET, SUITE 1900, SAN DIEGO, CA 92101-4495, ISBN: 1855780720, 1995;