

## curriculum vitae

### Personal information



Surname(s) / First name **AGACHI PAUL SERBAN**  
Address 1 Mihail Kogalniceanu Str, 400084, Cluj-Napoca, Romania  
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E-mail(s) serban.agachi@ubbcluj.ro  
Nationality Romanian  
Date of birth 21 October 1947  
Gender Male

### Occupational field **University professor**

#### Work experience

Dates	1970-1972
Occupation or position held	Design Engineer
Main activities and responsibilities	Projects for Chemical and Process Industry
Name and address of employer	<b>IROSIN</b> Bucuresti, Piata C.A. Rosetti nr.2, Bucuresti, Romania
Type of business or sector	Chemical Industry
Dates	1972-1973
Occupation or position held	System Analyst
Main activities and responsibilities	Projects for computer controlled plants in the Chemical and Process Industry
Name and address of employer	<b>MICH, Computer Center</b> , Splaiul Independentei nr. 202, Bucuresti, Romania
Type of business or sector	Chemical Industry
Dates	1973-1980
Occupation or position held	Researcher
Main activities and responsibilities	Fuel cells, Electrochemical Processes, Projects for Chemical and Process Industry
Name and address of employer	<b>Babes-Bolyai University</b> , Cluj-Napoca, Str. M. Kogalniceanu nr.1, Romania
Type of business or sector	Scientific research
Dates	1980-1990
Occupation or position held	Lecturer
Main activities and responsibilities	Teaching Chemical Process Control, Optimization, Projects for Chemical and Process Industry
Name and address of employer	<b>Babes-Bolyai University</b> , Cluj-Napoca, Str. M. Kogalniceanu nr.1, Romania

Type of business or sector	Education and Scientific research
Dates	1990-1994
Occupation or position held	Associate Professor
Main activities and responsibilities	Teaching Chemical Process Control, Optimization, Projects for Chemical and Process Industry
Name and address of employer	<b>Babes-Bolyai University</b> , Cluj-Napoca, Str. M. Kogalniceanu nr.1, Romania
Type of business or sector	Education and Scientific research
Dates	1994- present
Occupation or position held	Professor
Main activities and responsibilities	Teaching Chemical Process Control, Optimization, Artificial Intelligence, Mathematical modelling and Simulation, Projects for Chemical and Process Industry
Name and address of employer	<b>Babes-Bolyai University</b> , Cluj-Napoca, Str. M. Kogalniceanu nr.1, Romania
Type of business or sector	Education and Scientific Research
Dates	1991-1992
Occupation or position held	Visiting Associate
Main activities and responsibilities	Research in Modelling, Simulation and Advanced Control Projects for Process Industries
Name and address of employer	<b>California Institute of Technology</b> , Pasadena, CA, USA
Type of business or sector	Education and Scientific Research Member of the <b>American Institute of Chemical Engineers</b>
Dates	April-May 1994
Occupation or position held	Visiting professor
Main activities and responsibilities	Teaching
Name and address of employer	<b>Eötvös Lorand University</b> , Budapest, Hungary
Type of business or sector	Education
Dates	1996-2001
Occupation or position held	General Chancellor
Main activities and responsibilities	Strategic Planning, Management, Structure, Reform, Charter of the University Member of the National Commission of Quality Assurance in Higher Education
Name and address of employer	<b>Babes-Bolyai University</b> , Cluj-Napoca, Str. M. Kogalniceanu nr.1, Romania
Type of business or sector	Education
Dates	2001- 2007
Occupation or position held	Vice rector
Main activities and responsibilities	Strategic Planning, Management, Reform, Quality Assurance, Research of the University
Name and address of employer	<b>Babes-Bolyai University</b> , Cluj-Napoca, Str. M. Kogalniceanu nr.1, Romania
Type of business or sector	Education
Dates	August 2000 - September 2003
Occupation or position held	<b>Higher Education consultant</b>
Main activities and responsibilities	<b>Reform of the Higher Education in Northern Iraq</b>
Name and address of employer	<b>UNESCO</b> Baghdad, program Oil for Food
Type of business or sector	Higher Education Management

Dates	2004
Occupation or position held	Member of the project "Design of the Methodology of Drawing the Romanian Strategy of Research 2007-2013"
Main activities and responsibilities	Design a methodology for assessment and design a strategy of Romanian research sector
Name and address of the employer	<b>UEFISCDI (Executive Unit for Funding HE and Scientific Research)</b> Bucharest
Dates	2005 - 2006
Occupation or position held	Coordinator of the Working Group WP2 – "Diagnosis of the RDI system in Romania", in the project "Romanian RDI Strategy 2007-2013" Member of the Working Group WP4 – "Strategy of RDI system in Romania", in the project "Romanian RDI Strategy 2007-2013"
Name and address of the employer	<b>UEFISCDI (Executive Unit for Funding HE and Scientific Research)</b> Bucharest
Occupation or position held	HE expert for education policy in Moldova
Main activities and responsibilities	HE policy
Name and address of the employer	<b>Institute for Public Policies (IPP)</b> Chisinau
Dates	2007 – 2011
Occupation or position held	President of the Academic Council of Babes-Bolyai University
Main activities and responsibilities	Strategies and policy of the university
Name and address of employer	<b>Universitatea Babes-Bolyai</b> Cluj Napoca
Occupation or position held	Appointed member of the <b>Advisory Board of Romanian Agency for Quality Assurance in Higher Education (ARACIS)</b> (2007-2010) Elected member of the <b>Romanian Agency for Quality Assurance in Higher Education (ARACIS) Council</b> (2010). Higher Education Management, Evaluation and Accreditation
Main activities and responsibilities	Evaluation and accreditation of study programs and universities
Name and address of employer	<b>ARACIS</b> Bucharest
Dates	2009 - 2011
Occupation or position held	Coordinator of the WP3 and expert – "Methodology of differentiate/ classify the universities in Romania" in the strategic project "Quality and leadership" Coordinator of the WP3 and expert – "Program of Research Excellence in the universities in Romania" in the strategic project "Doctorates in Schools of Excellence" Coordinator Regional Center of Competence in University Management and expert POSDRU project "IMU(Improvement of the University Management)"
Main activities and responsibilities	Romanian Strategy for Higher Education. Strategic POSDRU programs
Name and address of employer	<b>UEFISCDI</b> Bucharest

## Education and training

Dates	1996 – present
Title of qualifications awarded	University manager
Principal subjects/Occupational skills covered	Academic management, financial management, human resource management, research management, strategic planning, operational planning
Name and type of organization providing organization and training	Program of Reform of Higher Education in Romania, PHARE program, 1997 – 2000 Program Building Bridges for Higher Education (USA - Association of Colleges of the South – Association of Carpathian Region Universities), 1997 EUA program of evaluation of universities, 2003 – 2004 MATRA program for quality assurance, 2000-2003 EUA program Quality Culture in Higher Education Institutions– Metropolitan University of Leeds
Dates	1976-1984
Title of qualification awarded	PhD
Principal subjects/Occupational skills covered	Thesis: Modelling and control of the fuel cells with petrochemical combustibles / chemical engineering
Name and type of organisation providing organisation and training	University for Petroleum and Gas, Ploiesti, Romania
Level in national or international classification	ISCED 6
Dates	1970-1965
Title of qualification awarded	Bachelor of Control Engineering
Principal subjects/Occupational skills covered	- measurement and control techniques
Name and type of organisation providing organisation and training	University Politehnica Bucuresti, Faculty of Automatic Control, Romania
Level in national or international classification	ISCED 5
Dates	1965-1961
Title of qualification awarded	Baccalaureate
Principal subjects/Occupational skills covered	General education
Name and type of organisation providing organisation and training	National College Sfantu Sava, Bucuresti, Romania
Level in national or international classification	ISCED 3

## Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

*Self-assessment*

*European level (\*)*

**English**

**German**

**French**

**Russian**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2
B2	B1	B2	B2	B2
C1	C1	C2	B2	B1
A2	A2	A2	A1	A2

(\*) Common European Framework of Reference (CEF) level

Social skills and competences	Teamwork, interpersonal skills, communication, responsibility, intercultural skills, conflict management, negotiations.
Organisational skills and competences	Systemic thinking, problem identification, problem solving, research and development project evaluation, planning skills, foresight planning, resources management, time management.
Technical skills and competences	- System theory, computer aided design, process control, modelling, simulation, applied artificial intelligence, programming;
Computer skills and competences	Microsoft Office, Internet, MatLab, Simulink, Primavera
Artistic skills and competences	History of music, history of fine arts, writing
Other skills and competences	Sports: national champion in yachting in 1973, skiing, football, skating, basketball, hiking and climbing, good orientation in space.
Driving licence(s)	B category

## Additional information

Publications: 188 scientific papers (60 ISI indexed, 28 in the field of university management and education management), 8 invention patents, 80 conferences, 11 books (4 in the field of university and research management), 3 student textbooks, 2 monographs (list available on [http://chem.ubbcluj.ro/romana/ANEX/inginerie/cv/cv\\_agachi.php?afisare=publications](http://chem.ubbcluj.ro/romana/ANEX/inginerie/cv/cv_agachi.php?afisare=publications))  
28 country and international papers on University management, Evaluation, Assessment, Ranking, Multicultural aspects and organization (list available on [http://chem.ubbcluj.ro/romana/ANEX/inginerie/cv/cv\\_agachi.php?afisare=publications](http://chem.ubbcluj.ro/romana/ANEX/inginerie/cv/cv_agachi.php?afisare=publications));

Correspondent Member of the **Academy of Technical Sciences of Romania** (since 2005)  
Member of the Technical Committee Chemical Process Control of **International Federation of Automatic Control (IFAC)** (since 2006)  
Member of WP Computer Aided process Engineering of the **European Federation of Chemical Engineering** (since 2008)  
Visiting professor at **Universidad Mayor de San Marcos de Lima, Universidad Nacional de Ingenieria Lima, Universidad San Antonio Abad, Cuzco**, Peru (2007)

Member of the **Council for Quality Assurance** of the Ministry of Education (1998-2000)  
Member of **International Ranking Expert Group (IREG)** of the universities (since 2006) and of its **Observatory** (since 2008)  
President of the **Association of Carpathian Region Universities (ACRU)** (since 2009)

Awarded with National Order for Merit (Pentru Merit) in rank of Comandor (2000) and Mare Ofiter (2008)  
Member of the Council of Honour of the National Order "Pentru Merit" (2005-2008)  
Awarded with Diploma of Honour and "Emilian Bratu" Medal of Romanian Society of Chemistry (2007) for contributions to the development of Chemical Engineering in Romania  
Awarded with the Romanian Academy Prize, Section Technical Sciences, for the book "Model Based Control. Case Studies in Process Engineering", Wiley-VCH (2008)

Multicultural organization of Babes-Bolyai University of Cluj-Napoca, Romania, 1997;  
Member of the parity commission for the negotiations of the multicultural structure of the university;  
Coordinator of the Charter of the University, 2000, 2003; 2011  
Coordinator of the Strategic Plan of Babes-Bolyai University of Cluj-Napoca 1999, 2004; 2008  
Panel member for evaluation of the universities in Kazakhstan

Invited speaker at ARWU, IREG, UNICA, ESMU, DEAN, EUA, Malaysia Forum for Autonomy and Governance, Santander Group conferences

2 UNESCO papers on Higher Education on Iraqi Kurdistan in the program Oil for Food (2001, 2002)  
1 UNESCO paper on Rapid Needs Assessment on Iraqi Higher Education, 2003  
1 UNESCO Experts Report – "Education development and cooperation in Europe, What prospects for UNESCO", UNESCO Division for Strategies Building, 2008, ED/EPS/ 2008/PI/ 1

Symphonic music seminars for students (1975-1985);  
Romanian National Champion in sailing (1973) and several times vice champion

## Annexes

### Selected publications

1. **BOOK:** P.Ş. Agachi, Z. K. Nagy, M.V. Cristea, A. Imre-Lucaci, Model Based Control, Case Studies in Process Engineering, Editura Wiley-VCH, ISBN 3-527-31545-4, Weinheim, 2006.
2. Cormos Ana Maria, Agachi Paul Serban, Cormos Calin-Cristian, Modeling and simulation of carbonation process of ammoniacal brine solution in soda ash plant, Revista de chimie, 57(2), 2006, p.130 – 137.
3. Cristea Vasile Mircea, Agachi Paul Serban, Toma Letitia, Simulation and Model Predictive Control of the Fluid Catalytic Cracking Unit Using Artificial Neural Networks, REVUE ROUMAINE DE CHIMIE, 52(12), 2007, P.1157 – 1166..
4. Mircea Vasile Cristea, Paul Şerban Agachi, Comparison Between Different Control Approaches of the UOP Fluid Catalytic Cracking Unit, Revista de Chimie, 58, (4), 2007, p.406-409..

5. Ani Elisabeta Cristina, Agachi Paul Serban, Hydrogen-Oxygen PEM Fuel Cells simplified model based behaviour prediction, *REVUE ROUMAINE DE CHIMIE*, 53(5) , 2008, P.357 – 362.
6. Botar-Jid Claudiu Cristian, Agachi Paul Serban, Fissore Davide, Comparison of Reverse Flow and Counter-current Reactors in the Case of Selective Catalytic Reduction of NOx, *COMPUTERS & CHEMICAL ENGINEERING*, Volume 33, (3), 2009, P.782-787.
7. Nagy Zoltan Kalman, Roman Raluca, Cristea Vasile Mircea, Agachi Paul Serban, Dynamic Modelling and Nonlinear Model Predictive Control of a Fluid Catalytic Cracking Unit, *COMPUTERS & CHEMICAL ENGINEERING*, 33 , 2009, P.605 – 617.
8. Avramenko Yury, Ani Elisabeta Cristina, Kraslawski Andrzej, Agachi Paul Serban, Mining of Graphics for Identification of Mechanisms of Processes, *COMPUTERS & CHEMICAL ENGINEERING*, 33,3 , 2009, P.618 – 627, IF= 2.072.
9. Barabas Reka, Agachi Paul Serban, Pop Alexandru, Bogya Erzsebet Sara, Dejeu Valentina Roxana, Kinetic studies for the transformation process of beta-whitlockite in hydroxyapatite, *REVISTA DE CHIMIE*, 12, 2009, P.1251 – 1253.
10. Barabas Reka, Agachi Paul Serban, Pop Alexandru, Bogya Erzsebet Sara, Dejeu Valentina Roxana, Mathematical Modeling for the Crystallization Process of Hydroxyapatite Obtained by Precipitation in Aqueous Solution, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, 3, 2009, P.61 – 69.
11. Jara-Morante Eliana, Morar Mihaela Hilda, Agachi Paul Serban, Jara-Morante Eliana, Heat integration of an industrial fluid catalytic cracking plant, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, LIV, 1, 2009, P.69 – 80.
12. Cristea Vasile Mircea, Roman Raluca, Agachi Paul Serban, Simulation of the Reactor-Regenerator-Main Fractionator Fluid Catalytic Cracking Unit Using Artificial Neural Networks, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, Vol. nr.1, 2009, P.125 – 132.
13. Cormos Calin-Cristian, Agachi Paul Serban, Gasification process – A practical way for solid fossil fuels decarbonisation, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, LIV, 2009, P.81 – 91.
14. Mihet Maria, Cristea Vasile Mircea, Agachi Paul Serban, FCCU simulation based on first principle and artificial neural network models, *ASIA-PACIFIC JOURNAL OF CHEMICAL ENGINEERING*, Vol4, nr.6 , 2009, P.878 – 885.
15. Ani Elisabeta Cristina, Wallis Steve G., Kraslawski Andrzej, Agachi Paul Serban, Development, calibration and evaluation of two mathematical models for pollutant transport in a small river , *ENVIRONMENTAL MODELLING & SOFTWARE*, 24, 10 , 2009, P.1139 – 1152.
16. Cristea Vasile Mircea, Imre-Lucaci Arpad, Sipos Anca, Bratfalean Dorina, Agachi Paul Serban, Artificial Neural Networks Used for the Simulation of the Batch Fermentation Bioreactor, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, 4, 2009, P.87 – 95.
17. Morar Mihaela Hilda, Agachi Paul Serban, The development of a MPC controller for a heat integrated fluid catalytic cracking plant, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, LIV, 4, 2009, P.43 – 54.
18. Cristea Vasile Mircea, Roman Raluca, Agachi Paul Serban, Simulation of the Reactor-Regenerator-Main Fractionator Fluid Catalytic Cracking Unit Using Artificial Neural Networks, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, Vol. nr.1, 2009, P.125 – 132.
19. Ani Elisabeta Cristina, Avramenko Yury, Kraslawski Andrzej, Agachi Paul Serban, Identification of pollution sources in Romanian Somes River using graphical analysis of concentration profiles, *ASIAN JOURNAL OF CHEMICAL ENGINEERING*, in press, 2010, P.1 – 12.
20. Botar-Jid Claudiu Cristian, Agachi Paul Serban, Avramenko Yury, Kraslawski Andrzej, Case-based selection of a model of a reverse flow reactor , *CHEMICAL ENGINEERING AND PROCESSING*, 49(1), 2010, P.782 – 787.
21. Morar Mihaela Hilda, Agachi Paul Serban, Review: Important contributions in development and improvement of the heat integration techniques, *COMPUTERS & CHEMICAL ENGINEERING*, 34, 8, 2010, P.1171 – 1179.
22. Ani Elisabeta Cristina, Hutchins Michael G., Kraslawski Andrzej, Agachi Paul Serban, Assessment of pollutant transport and river water quality using mathematical models, *REVUE ROUMAINE DE CHIMIE*, 55(4) , 2010, P.285 – 291.
23. Ani Elisabeta Cristina, Hutchins Michael G., Kraslawski Andrzej, Agachi Paul Serban, Mathematical model to identify nitrogen variability in large rivers, *RIVER RESEARCH AND APPLICATIONS*, 26, 2010, P.1 – 21.
24. Bratfalean Dorina, Cristea Vasile Mircea, Agachi Paul Serban, Artificial Neural Networks Used for Investigation of Fatty Acid Content of Romanian Sunflower Oilseeds Genotypes, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, XLV, 2, Tom II, 2010, P.245 – 254.
25. Dejeu Valentina Roxana, Agachi Paul Serban, Barabas Reka, Cormos Ana Maria, Bogya Erzsebet Sara, Growth rate of hydroxyapatite obtained by precipitation, *STUDIA*

- UNIVERSITATIS BABES-BOLYAI CHEMIA, 2, 2010, P.179 – 188.
26. Goia(cas. Maxim) Victoria, Cormos Calin-Cristian, Agachi Paul Serban, Mathematical modeling and simulation of coal co-gasification with waste/biomass in an entrained-flow gasifier, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, XLV 2, 2010, P.51 – 63.
  27. Padurean Anamaria, Agachi Paul Serban, Cormos Calin-Cristian, Cormos Ana Maria, Technical assessment of CO<sub>2</sub> capture using alkanolamines solutions, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, LV, 1, 2010, P.55 – 63.
  28. Ani Elisabeta Cristina, Cristea Vasile Mircea, Agachi Paul Serban, Kraslawski Andrzej, Dynamic Simulation of Someș River Pollution Using MATLAB and COMSOL Models, *REVISTA DE CHIMIE*, 61, 2010, P.1108 – 1112.
  29. Cristea Vasile Mircea, Nagy Zoltan Kalman, Agachi Paul Serban, Simulation of an industrial complex FCCU. Part I: Building the model and validation, *Studia Universitatis Babeș-Bolyai Chemia*, 2007, P.31-39.
  30. Cristea Vasile Mircea, Nagy Zoltan Kalman, Agachi Paul Serban, Simulation of an Industrial Complex FCCU. Part II: Study of the process dynamic behavior, *Studia Universitatis Babeș-Bolyai Chemia*, nr.2, 2007, P.39-47.
  31. Cristea Vasile Mircea, Nagy Zoltan Kalman, Agachi Paul Serban, Model Predictive Control (Linear and Nonlinear) of a Complex FCCU, *Studia Universitatis Babeș-Bolyai Chemia*, nr 2, 2007, P.85-93.