

**EUROPEAN  
CURRICULUM VITAE  
FORMAT**



**PERSONAL INFORMATION**

Name

**CHRISTOV, LATCHEZAR KOSTADINOV**

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**SOFIA, BULGARIA**

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**(02)9625438**

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**christov@chem.uni-sofia.bg**

Nationality

**BULGARIAN**

Date of birth

**OCTOBER 1, 1961**

**WORK/TEACHING EXPERIENCE**

- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities

ASSOCIATE PROFESSOR – SINCE 2009

SOFIA UNIVERSITY, FACULTY OF CHEMISTRY

POLYMERS, MATHEMATICAL MODELLING

ASSISTANT PROFESSOR (1986); SENIOR ASSIST. PROF. (1990); HEAD ASSIST. PROF. (2006)

TEACHING AND RESEARCH ACTIVITIES

**EDUCATION AND TRAINING**

- Dates (from – to)

-2004

SOFIA UNIVERSITY

MODELLING OF COPOLYMER COMPOSITION AND MOLECULAR WEIGHT DISTRIBUTION

PHD DEGREE

- Dates (from – to)

1981-1986

SOFIA UNIVERSITY, FACULTY OF CHEMISTRY

INORGANIC CHEMISTRY, ANALYTICAL CHEMISTRY

MASTER OF SCIENCES

**PERSONAL SKILLS  
AND COMPETENCES**

*Acquired in the course of life and career but not necessarily covered by formal certificates and diplomas.*

MOTHER TONGUE

OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

- Reading skills
- Writing skills
- Verbal skills

- Reading skills
- Writing skills
- Verbal skills

**SOCIAL SKILLS  
AND COMPETENCES**

*Living and working with other people; in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.*

**ORGANISATIONAL SKILLS  
AND COMPETENCES**

*Coordination and administration of people, projects and budgets; at work; in voluntary work (for example culture and sports) and at home, etc.*

**TECHNICAL SKILLS  
AND COMPETENCES**

*With computers, specific kinds of equipment, machinery, etc.*

**ARTISTIC SKILLS  
AND COMPETENCES**

*Music, writing, design, etc.*

**OTHER SKILLS  
AND COMPETENCES**

*Competences not mentioned above.*

DRIVING LICENCE(S)

BULGARIAN

**RUSSIAN**

EXCELLENT  
GOOD  
GOOD

**ENGLISH**

EXCELLENT  
EXCELLENT  
GOOD

**SPANISH**

GOOD  
FAIR  
FAIR

WORKING IN SCIENTIFIC RESEARCH TEAMS - SOFIA UNIVERSITY AND INSTITUTES OF BULGARIAN ACADEMY OF SCIENCES – BULGARIA

WORKING IN SCIENTIFIC RESEARCH TEAM – USA, GREECE

WORKING IN INTERNATIONAL BUSINESS TEAM – BULGARIAN / AUSTRALIAN

SUPERVISOR OF SCIENTIFIC PROJECTS FUNDED BY SOFIA UNIVERSITY - BULGARIA

PARTICIPANT IN SCIENTIFIC PROJECTS FUNDED BY THE NATIONAL SCIENTIFIC RESEARCH FUND - BULGARIA

SUPERVISOR OF M SCI DIPLOMA THESES - BULGARIA

COMPUTER PROGRAMMING

FOLK DANCING  
FOLK SINGING

MOUNTAINEERING, ROCK CLIMBING

YES

**ADDITIONAL INFORMATION**

PROF. G. S. GEORGIEV – SOFIA UNIVERSITY, BULGARIA

PROF. T. DUDEV – SOFIA UNIVERSITY, BULGARIA

PROF. H. J. HARWOOD – UNIVERSITY OF AKRON, USA

**ANNEXES:**

- 1. List of publications**
- 2. Participation in national and international projects**
- 3. Participation in conferences, congresses etc.**

**ANNEX 1. List of publications**

1. G. Georgiev, **L. Christov**, *Number determination of the copolymer composition dependence on conversion by the Markov chains method*, *Annuaire de l'Universite de Sofia, Faculte de Chimie* **80** (1991) 236.
2. **L. Christov**, G. Georgiev, *An algorithm for determination of the copolymer molecular weight distribution by Markov chain simulation*, *Macromol. Theory Simul.* **4(1)** (1995) 177 {6}
3. G. Georgiev, N. Koseva, **L. Christov**, *Formation and Relative Reactivity of Comonomer H-Complexes in the Radical Copolymerization of Acrylic Acid with 1-Vinyl-2-Pyrrolidone*, *Polym. Intern.*, **36** (1995) 227 {4}
4. G. Georgiev, N. Koseva, **L. Christov**, *H-Complex Formation and Influence on the Radical Copolymerization of Acrylic Acid and 1-Vinyl-2-Pyrrolidone in Tetrahydrofuran*, *Polym. Intern.*, **37** (1995) 277 {1}
5. H. J. Harwood, **L. Christov**, M. Guo, T. V. Holland, A. Y. Huckstep, D. H. Jones, R. E. Medsker, P. L. Rinaldi, T. Saito, D. Tung, *Investigation of Statistical, Block and Graft Copolymerizations Using NMR-Sensitive Initiators and Macroinitiators*, *Die Makromol. Chemie: Macromol. Symp.*, **111** (1996) 25 {3}
6. G. Georgiev, **L. Christov**, N. Koseva, E. Kamenska, E. Vasileva, *A Qualitative Criterion Proving the Participation of Comonomer Complexes in the Chain Propagation of Radical Copolymerization*, *Polym. Intern.*, **45** (1998) 366
7. G. Georgiev, N. Koseva, **L. Christov**, *Dependencies of the First and Second Moments of Copolymer Composition on Conversion – a New Discrimination Tool of Radical Copolymerization Mechanisms*, *Polym. Intern.*, **48** (1999) 366
8. **L. Christov**, G. Georgiev, *Influence of the propagation mechanism on the connection between copolymer composition and microstructure due to the bootstrap effect, 1. Theoretical background*, *Macromol. Theory Simul.*, **9** (2000) 715 {1}
9. Magdalena Christova, **Latchezar Christov**, and Nikolaj Andreev, *Calculation of Shift of Argon Lines by Elastic Collisions Emitter-Neutral Atoms, Spectral Line Shapes in Astrophysics – VI Serbian Conference (VI SCSLSA)*, ed. by L. Č. Popović and M. S. Dimirtijević, American Institute of Physics, (2007) 268
10. V. Djakovich, S. Fakirov, **L. Christov**, *CAFOD – Computer-Aided Fiber Orientation Determination in Composites, Polymer Composites*, Walter de Gruyter & Co., Berlin-New York, (1986) 589
11. G. Georgiev, Г., E. Kamenska, V. Dakov, **Л. Христов**, Iv. Dakova, N. Valova, *Copolyelectrolytes: Synthesis, properties, applications, New materials and technologies - III. Reports, University of Sofia, Sofia* (1989) 60
12. G. Georgiev, **L. Christov**, T. Gancheva, *Kinetic Model of Thermal Dehydrochlorination of Poly(Vinyl Chloride)*, *J. Macromol. Sci. - Chem.*, **A27(8)** (1990) 987 {7}
13. N. Koleva, G. Georgiev, **L. Christov**, *Copolymerization of 1-vinyl-2-pyrrolidone and acrylic acid in chloroform solution*, *Anniversary symposium „100 years Faculty of Chemistry“, University of Sofia, Sofia*, (1990) 21
14. **L. Christov**, G. Georgiev, I. Karayannidou, G. Karayannidis, A. Varvoglis, *Photopolymerization of methyl methacrylate and 2-(dimethylamino) ethyl methacrylate induced by diacetoxiodobenzene in the presence of radical inhibitors*, *Polymer Bulletin*, **26(6)** (1991) 617 {1}
15. G. Georgiev, E. Kamenska, **L. Christov**, I. Sideridou-Karayannidou, G. Karayannidis, A. Varvoglis, *(Diacetoxido)benzene and [bis(trifluoroacetoxy)iodo]benzene as photoinitiators for radical and cationic polymerization*, *Eur. Polym. J.*, **28(3)** (1992) 207 {3}

16. G. Georgiev, N. Koseva, **L. Christov**, V. Koleva, V. Baranovski, *The influence of complexing on the copolymerization of acrylic acid and 1-vinyl-2-pyrrolidone. I. Copolymerization in tetrahydrofuran*, *Annuaire de l'Universite de Sofia, Faculte de Chimie*, **85** (1993) 85
17. Iv. Kostova, **L. Christov**, G. Georgiev, *Copolymerization of methyl metacrylate and methacrylic acid in a mixture of isopropyl alcohol and acetone*, *Annuaire de l'Universite de Sofia, Faculte de Chimie*, **81(1)** (1994) 81
18. G. Georgiev, **L. Christov**, *An algorithm for molecular weight distribution of copolymers*, *Annuaire de l'Universite de Sofia, Faculte de Chimie*, **81(2)** (1994) 79
19. G. S. Georgiev, N. V. Tsarevsky, E. B. Kamenska, **L. K. Christov**, *Hypervalent iodine initiators*, *Polym. Preprints*, **40(2)** (1999) 385 {1}
20. G. S. Georgiev, E. B. Kamenska, N. V. Tsarevsky, **L. K. Christov**, *Radical thermo- and sonopolymerization of methyl methacrylate initiated by iodobenzene 1,1-diacetate*, *Polym. Int.*, **50** (2001) 313
21. E. B. Kamenska, N. V. Tsarevsky, **L. K. Christov**, St. B. Iliev, E. Kamenska, G. S. Georgiev, *Controlled Radical Polymerization for Homo- and Copolymer Production with Controlled Molecular Weight and Molecular Composition Distributions*, *Annuaire de l'Universite de Sofia, Faculte de Chimie*, **92-94** (2001) 259
22. G. Georgiev, E. Kamenska, N. Tsarevsky, **L. Christov**, N. Koseva, D. Proynov, *(Diacetoxyiodo)benzene as Thermoinitiator of "Living" Radical Polymerization*, *Annuaire de l'Universite de Sofia, Faculte de Chimie*, **95** (2002) 27
23. **L. Christov**, *A Method for Calculating the Azeotropic Compositions of Multi-Component Copolymers*, *J. Univ. Chem. Technology and Metallurgy*, **XXXVII**, **3** (2002) 53
24. Khr. Khristov, D. Exerowa, **L. Christov**, A. V. Makievski, and R. Miller, *Foam analyzer: An instrument based on the foam pressure drop technique*, *Review of Scientific Instruments*, **75(11)**, (2004) 4797 {1}
25. **L. Christov**, M. Christova, V. Gagov, I. Koleva, A. Shivarova, *Procedure for Spectroscopy Diagnostics of Nonstationary Discharges at Elevated Pressure*, *J. Technical Physics*, **XL(1)** (1999) 411
27. Magdalena Christova, **Latchezar Christov**, and Milan S. Dimitrijević, *On the Broadening of Spectral Lines in Surface Wave Discharges, Spectral Line Shapes in Astrophysics – VI Serbian Conference (VI SCSLSA)*, ed. by L. Č. Popović and M. S. Dimirtijević, American Institute of Physics, (2007) 229
28. Ivanov, I., Tsacheva, I., Stoyanova, V., Nikolov, M., Tchorbadjieva, M.I., Petrova, S., **Christov, L.**, Georgieva, V., Georgiev, G., *Chaperone-like effect of polyzwitterions on the interaction of C1q with IgG*, *Zeitschrift fur Naturforschung - Section C Journal of Biosciences*, **64(1-2)** (2009), 149
29. M. Christova, **L. Christov**, E. Castaños-Martinez, M. S. Dimitrijević, and M. Moisan, *Using line broadening to determine the electron density in an argon surface-wave discharge at atmospheric pressure*, *AIP Conference Proceedings Volume 1058, SPECTRAL LINE SHAPES: Volume 15–19th International Conference on Spectral Line Shapes, Valladolid (Spain), 15–20 June 2008*, p.3
30. M. Christova, **L. Christov**, M. S. Dimitrijević, and N. Andreev, *Calculation of the shifts of argon spectral lines*, *AIP Conference Proceedings Volume 1058, SPECTRAL LINE SHAPES: Volume 15–19th International Conference on Spectral Line Shapes, Valladolid (Spain), 15–20 June 2008*, p.6
31. I. Ivanov, I. Tsacheva, V. Stoyanova, M. Nikolov, M. I. Tchorbadjieva, S. Petrova, **L. Christov**, V. Georgieva, and G. Georgiev, *Chaperone-Like Effect of Polyzwitterions on the Interaction of C1q with IgG*, *Zeitschrift für Naturforschung C*, **64c(1-2)** (2009), 149-154
32. V. Stoyanova, I. Tsacheva, M. Nikolov, M. I. Tchorbadjieva, S. Petrova, I. Ivanov, **L. Christov**, V. Georgieva, and G. Georgiev, *Analysis of the zwitterionic effect on the interaction between human C1q and IgG*, *Annual of Konstantin Preslavski University of Shumen*, **XIX(B6)** (2009), 14-22

## **ANNEX 2. Participation in national and international projects**

1. Contract 140/2007 – SF Sofia University: Influence of synthetic monomer and polymer zwitterions on the ligand-binding ability of the C1q recognizing component of the complement and its fragments
2. FP7-REGPOT-2008-2 Everest: Evaluation of the research quality and capability of the Faculty of Chemistry, University of Sofia, and defining of an action plan
3. Contract 122/2010 – SF Sofia University: Magic of Science
4. FP7-REGPOT Beyond Everest: Development of the Research Potential of the Faculty of Chemistry, Sofia University, in the Area of Advanced Functional Materials for Successful Participation in World-class Research at EU Level
5. BG051PO001-4.3.04-0033-C0001 - Разработване и провеждане на електронни форми на дистанционно обучение в Химическия факултет при СУ „Св. Климент Охридски”, 2013
6. H2020-TWINN-2015 - Enhancing the scientific capacity of the Faculty of Chemistry and Pharmacy at Sofia University as leading regional research and innovation centre in the area of advanced functional materials
7. BG05M2OP001-2.009-0028 / FSGOP 2017 - For Smart Growth Operational Program, co-funded by the EU via European Structural and Investment Funds: Achieving the optimal environment for training, research, innovation and sustainable human capital development in the chemical sciences: Adapting education today for tomorrow

## **ANNEX 3. Participation in conferences, congresses etc.**

1. **L. Christov**, G. Georgiev, *Algorithms for simulation of copolymer molecular weight distribution*, X<sup>th</sup> Anniversary Symposium with international participation Polymers 89, Varna, Oct.5-7, 1989, p.60
2. **L. Christov**, H. J. Harwood, *Effect of solvent on the initiation step of methyl methacrylate – styrene copolymerization*, 201<sup>st</sup> National Meeting of the American Chemical Society, April 14-19, 1991, Atlanta, Georgia, USA
3. **L. Christov**, H. J. Harwood, *Effect of solvent on the initiation step of methyl methacrylate – styrene copolymerization*, 1991 Gordon Research Conference on Polymers, June 24-28, 1991, Wolfeboro, New Hampshire, USA
4. **L. K. Christov**, G. S. Georgiev, *Influence of the chain transfer to macromonomer in quasiliving carbocationic polymerization*, Eleventh international symposium on cationic polymerization and related ionic processes, July 5-8, 1993, Borovets
5. George S. Georgiev, Nicolay V. Tsarevsky, Elena B. Kamenska, **Latchezar K. Christov**, *Hypervalent iodine iniferters*, 218<sup>th</sup> ACS National Meeting Conference on Controlled Radical Polymerization, August 22-26, 1999, New Orleans, LA, USA
6. G. Georgiev, E. Kamenska, **L. Christov**, N. Tsarevsky, *Polyvalent iodine compounds*, 110 years Chemistry University Education in Bulgaria, University of Sofia, 1999 г.
7. G. Georgiev, E. Kamenska, **L. Christov**, N. Tsarevsky, *Polyvalent iodine compounds*, XIII National Symposium „Polymers-99“, Prof. Dr. Asen Zlatarov University, Sept. 23-25,1999 г., Burgas
8. **L. K. Christov**, G. S. Georgiev, *Influence of the monomer participation in the dormant-activepropagation end equilibrium on the molecular weight distribution with conversion*, Polymers 2012, XVII National Symposium Open to International Participation, May 31 – June 2, 2012, Ribaritsa, Bulgaria
9. G. S. Georgiev, **L. K. Christov**, *Numerical calculation of molecular weight characteristics of polymers produced by atom transfer radical polymerization*, Horizon 2020 Project “Materials Networking”, “Advanced Materials” Workshop, September 11-14 2018, Duni, Bulgaria
10. **Latchezar Christov**, *Azeotropy in Multi-Component Copolymerization: Existence and Stability*, "Chemistry Today for Tomorrow" - A final conference in the framework of the project BG05M2OP001-2.009-0028 funded by operational program "Science and Education for Smart Growth", February 01 2019, Sofia, Bulgaria