

## Prof. Stoyan Kolev STOYANOV, D.Sc.



Prof. Stoyan Stoyanov was born on October 31, 1938, in Vlahovtzi, Bulgaria. His research area of scientific interests is Process Systems Engineering, Process Modelling and Optimization, Multicriteria Decision Making; Global Optimization, Heuristic Optimization; Optimization under Uncertainties, Experimental Design; Expert Systems; Environmental Health, Energy Conservation through Process Integration, Environmental Protection; Computer Simulation of Pollutants Dissemination and Environmental Impact Assessment and Auditing.

### Education and qualifications

- 1963 Diploma in Control Engineering, Technical University, Sofia, Bulgaria  
1975 Ph.D., University of Chemical Technology and Metallurgy (UCTM), Sofia, Bulgaria  
Thesis: "Multicriteria Decision Making"  
1990 D.Sc., UCTM, Sofia, Bulgaria  
Thesis: "Optimization Methods and Algorithms with Accelerated Convergence"

### Academic positions

- 1963 – 1969 Lecturer at UCTM, Sofia, Dept. of Chemical Engineering  
1970 – present Lecturer at UCTM, Sofia, Dept. of Automation of Industry  
1977 – 1990 Associate Professor at UCTM, Sofia  
1990 – present Full Professor at the UCTM, Sofia  
2003 – present Professor at the Technical University, Gabrovo

### Previous and current administrative responsibilities

- 1979 – 1983 Vice-Dean on Education of a Faculty at UCTM, Sofia  
1989 – 1992 Vice-Rector on International Co-operation and Postgraduate Study, UCTM, Sofia  
1995 – 2005 Head of Ecology Centre at UCTM  
1991 – present Director of the European M.Sc. course in "Environmental Protection and Sustainable Development"

### Academic visitor

- Imperial College, Dept. of Chemical Engineering & Chemical Technology, London, UK (1978, 1980/81)

**Invited lecturer**

- Kitami Institute of Technology, Kitami, Hokkaido, Japan (1982, 1986)
- Technical Universities in: Merseburg, Leipzig, Hamburg-Harburg, Siegen, Berlin, Germany (1982, 1984, 1991, 1994, 1995, 1996, 1997, 1998, 1999, 2001, 2002, 2006);
- Moscow Institute of Chemical Technology, Russia (1982)
- Prague Institute of Chemical Technology, Czechoslovakia (1982)
- Helsinki University of Technology, Finland (1988)
- National Technical University of Athens, Greece (1989)
- University of Massachusetts at Amherst, USA (1990)
- Massachusetts Institute of Technology, Boston, USA (1990);
- University College Swansea, Great Britain (1991)
- Technical University of Denmark, Lyngby, Denmark (1992)
- Universitat Politecnica de Catalunya, Barcelona, Spain (1997)
- University of Durban-Westville, Durban, Republic of South Africa (2000)
- University of Natal, Durban, Republic of South Africa (2000)
- University of Split, Croatia, (2006, 2008)
- University of Limerick, Ireland (2009)

**International projects participation (selected)****\*Education**

1991 – 1993	Director of European M.Sc. course in <i>Environmental Monitoring, Control and Health</i> (UK, Belgium, Greece, Italy and Bulgaria)
1994 – present	Director of European M.Sc. course in <i>Environmental Protection and Sustainable Development</i> (UK, Belgium, Greece, Italy and Bulgaria)
1991 – 1997	Project Coordinator in <i>CAD Systems in Process Engineering</i> (UK, Germany, Greece Denmark and Bulgaria)
1995 – 1998	Project Coordinator in <i>Energy Conservation through Process Integration</i> (UK, Germany, Spain and Bulgaria)
2006 – 2008	Project Coordinator of the International LdV Project SK/06/B/F/PP-177443 in Vocational Education and Training for Quality of Life through E-Healthcare and Well-being (Finland, Sweden, Spain, Greece, Italy, Slovakia, Czech Republic, Romania and Bulgaria)

**\*Research**

1994 – 1996	International Project on <i>Optimization of Ferrite Production by Fuzzy Iterative Dynamic Programming</i> (D and BG)
1995	International Project in <i>Environmental Impact Assessment of MDK Pirdop Copper Smelter</i> , Pirdop, Bulgaria
2003 – 2004	Project Coordinator of the International Project in <i>Environmental Management of Port Areas</i> , EMPA - BUL/017/02 (B and BG)
2003 – 2005	International Project in <i>Awareness Raising about Environmental Health among Non-expert Advisers</i> ” AREHNA, (B, GR, F, BG)
2005 – 2007	International project on <i>Reconstruction of Steel Industry in Bulgaria, Rumania, Croatia and Turkey</i> , (UK, E)

### Leader of national projects (selected)

1974	Intensification of Dimethyl Terephthalate Production, Yambol, Bulgaria
1979	Optimization on Nonwoven Textile, Gabrovo, Bulgaria
1984 – 1985	Computer Control System Development for High Pressure Polyethylene Production in “NEFTOCHIM” Ltd., Burgas, Bulgaria
1985	Optimization of Sulphur Carbon Production, Vratza, Bulgaria
1986	Optimization and Control of Urea Production, Vratza, Bulgaria
1987	Development of Expert System for Process Optimization, Sofia, Bulgaria
1996	Environmental Impact Assessment of a <i>Plant No 3</i> for Solid and Liquid Waste Incineration at Refinery “NEFTOCHIM” Ltd. Bourgas, Bulgaria
1999	Environmental Impact Assessment of a <i>Plant No 1</i> for Solid and Liquid Waste Incineration at Refinery “NEFTOCHIM” Ltd. Bourgas, Bulgaria
1999	Environmental Impact Assessment of a Plant for Solid Waste Incineration at Haskovo Town and Selection of the Building Site, Bulgaria
2004	Environmental Impact Assessment of “Umicor Med” Lim. Pirdop, Bulgaria

### Licences

1996 – present	Expert in Environmental Impact Assessment and Auditing at the Ministry of Environment and Waters, Sofia, Bulgaria
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### Awards

1974	National award and silver medal for efficient research, Sofia, Bulgaria
1979	Bronze medal for software product development, Moscow, Russia
1993	Silver medal of the National Technical University of Athens, Greece

### Membership

1982 – present	Member of the Union for Automation and Informatics, Bulgaria
1986 – present	Member of the Union of Scientists in Bulgaria
1985 – present	Member of the Scientific Council in Control Engineering
1999 – present	Member of the National Council for Industrial Energy Efficiency
1999 – present	Member of the Balkan Environmental Association (B.En.A)
1999 – present	Member of the National Society of Environment Experts

### Publications:

- **27 books** (20 in Bulgarian, 5 in English and 2 in Russian language); **257 papers** and other publications in Bulgarian, Russian, English and German languages.
- **More significant books:**
  - **S. Stoyanov**, Optimization Methods and Algorithms. Sofia, Technica, 1990, (in Bulgarian)
  - **S. Stoyanov**, Customer Satisfaction and Decision Making in Healthcare Organizations, UCTM, Sofia, 2008. (in English)

**S. Stoyanov**, Process Optimization. Sofia, Technica, 1983 and 1993, (Bulgarian)  
L. N. Skopalik, **S. Stoyanov**, E. Skopalik. Satisfaction Management, V. Aprilov, Gabrovo, 2004, (in English)  
I. Vuchkov, **S. Stoyanov**, V. Tzochev, N. Kozarev, Statistical methods, Novi Znaniya, Sofia, 2002, (in Bulgarian)

• **Books editor:**

B. Nath, Y. Pelovski, **S. K. Stoyanov** (Eds.), Sustainable Solid Waste Management in the Southern Black Sea Region, NATO Science Series, Vol. 75, Kluwer Academic Publishers, 2000, (in English)

L. Hens, **S. Stoyanov**, Ch. Boyadjiev (Eds.), Environmental Management for Port Areas, BUL/017/02, Sofia, 2004, (in English)

• **Chapters in books:**

**S. Stoyanov**, E. Terlemezian, *Mobility and Health in Bulgaria*, **Chapter in the book** “*Environmental Health Impacts of Transport and Mobility*”, Ed. P. Nicolopoulou – Stamati, L. Hens, C. V. Howard, Springer, 21, 2005, 179-198.

**S. Stoyanov**, E. Terlemesian, *Environment and Reproductive Health in Bulgaria*, **Chapter in the book** “*Reproductive Health and the Environment*”, Ed. P. Nicolopoulou – Stamati, L. Hens, C. V. Howard, Springer, 22, 2007, 353-372.

E. Terlemesian, **S. Stoyanov**, *Congenital Anomalies in Bulgaria*, **Chapter in the book** “*Reproductive Health and the Environment*”, Ed. P. Nicolopoulou – Stamati, L. Hens, C. V. Howard, Springer, 23, 2007, 340-357.

The scientific and research activities of Prof. S. Stoyanov confirms him as a leading scientist in the area of process modeling and optimization.

Let wish him health and creative power for new achievements.

**Editorial board of *Int. J. Bioautomation***