

PERSONAL DATA

Name: Florin - Gheorghe FILIP

Born: 1947, Bucharest, Romania

Education: "Politehnica" University of Bucharest, Dept. Control Engineering

and Computer Science, M. Sc (1970), PhD (1982).

Scientific Titles: Senior scientific researcher 1st degree (since 1990),

Member of the Romanian Academy (elected in 1991).

Affiliation: Romanian Academy (<u>www.academiaromana.ro</u>)

Current position: Head of the "Information Science and Technology" section

(https://acad.ro/sectii/sectia14_informatica/sti_membri.htm) of the Romanian Academy (elected in 2009, reelected in 2015, and 2019).

Previous positions: Director-general of the Academy Library(BAR) (January 2009-

October 2017) (www.biblacad.ro).

Vice-president of the Romanian Academy (March 2000-April 2010)

(www.acad.ro),

Managing director of the National Institute for Informatics (ICI) (www.ici.ro) (1991-1997), president of the Scientific Council of ICI (1995-2003), head of scientific research laboratory (1985-1991),

scientific researcher (1970—1984).

Professional Address: Romanian Academy, 125, Calea Victoriei, 71102 BUCHAREST-1,

Romania, E-mail: ffilip@acad.ro

Expertise Sectors: Large-scale complex systems,

Decision Support Systems-DSS,

Information and Knowledge-based Society,

IT applications in libraries and cultural institutions,

Technology management,

Foresight in science and technology.

Scientific activity: Author/coauthor of over 400 papers published in international

journals (IFAC J Automatica, IFAC J Control Engineering Practice, Annual Reviews in Control, Computers in Industry, System Analysis Modeling Simulation, Large Scale Systems, Technological and Economic Development of Economy, and so on) and contributed to volumes printed by international publishing houses (Pergamon Press, North Holland, Springer, Elsevier, Kluwer, Chapman & Hall, and so on).

Author/coauthor of 13 monographs and editor/coeditor of 32 contributed volumes and conference proceedings published in Romanian, English, and French by the Romanian Academy Publishing House-EAR, Editura Tehnică, Expert Publishers, Springer, J. Wiley & Sons, Hermes Lavoisier, Springer, Elsevier, American Inst. of Physics and so on.

IPC member of more then 60 international conferences held in Europe, USA, South America, Asia, and Africa.

Associate Professor at the "Politehnica" University of Bucharest lecturing postgraduate courses on *Applied informatics* and supervising PhD studies (1993-2017).

Full Professor at the "Valahia" University of Târgovişte lecturing on *AI*, *DSS*, *Enterprise reengineering* (1997-2014).

Invited speaker to hold plenary talks at international conferences and seminars in universities and R&D organizations in Austria, Brazil, Chile, China, Czech Republic, England, France, Germany, Kuwait, Lithuania, Republic of Moldova, Poland, Portugal, Spain, Sweden, and Tunisia.

Adjunct professor at the Management School of the University of the Chinese Academy of Sciences (CAS) (2013-2016).

Member in Advisory Board of the Graduate School of Management of Technology, Hoseo University, Asan, Republic of Korea (2016).

Other information:

Visiting scientist in Sweden (1974), Germany (1995, 1997) and France (2007, 2008, 2009, 2010, and 2011).

Coordinator of the National R & D Program in Informatics (1993 - 1994)

Member of the Romanian *National Advisory Council for Science and Technology* (1993-2010) and Secretary-general of the Council (1998-2010).

Evaluator for EC-PECO (European Commission-Pays de l'Europe Centrale et Orientale) (1992), COPERNICUS (1996), FP5 (Framework Programme 5) (2001), IST (Information Society Technologies) (2000-2013).

Member of the Evaluation Committee for *IST Prize* of the *European Council of Academies of Applied Sciences Technologies and Engineering-Euro Case*: https://www.euro-case.org/) (1997-2007).

Founder and Editor-in-Chief (EiC) of the international journal *Studies in Informatics and Control* (SIC) (since 1991; http://sic.ici.ro) and co-founder and co-EiC (Editor in Chief) of the *International Journal of Computers, Communications, and Control* (IJCCC) (since 2006; http://journal.univagora.ro/)..

Teaching:

Executive president of the Romanian Forum for the Information Society (1997-2022).

National representative in EC FP5 IST TC (Technical Committee) (1999-2001).

Associate member in NATO TC "Science for Peace", "Computer Networking" panel (2000, 2001).

President of IFAC (International Federation of Automatic Control) TC (Technical Committee) 5.4 SML (Large Scale Systems) (2002-2008)

Member of three IFAC technical committees: TC 4.5 (HMS), TC 5.2 (MMC) and TC5.4 (LSS).

Member of IFIP WG 5.12 (Enterprise Integration).

Member of the EU ISTAG (Information Society Technologies Advisory Group) (2001).

Member of the Honorary Committee of PITCH (Association for the Promotion of International Technological Co-operation for Humanistic Ends) (http://www.pitchworld.org/honorary-committee.htm).

Member of the Scientific Council of IDSI (Information Society Development Institute), Chişinău, Republic of Moldova (https://idsi.md/en/home).

Academic advisor at Key Laboratory of Big Data Mining and Knowledge Management and Research Center on Fictitious Economy and Data Science, Beijing of Chinese Academy of Sciences (CAS) (2018-2021), and member of the Expert Committee of Tianfu Institute of International Big Data Strategy and Technology, Chengdu, P.R. China (2019-2021)

Languages:

Romanian (native), English, French, Russian (W, R, S – proficient); Spanish, German, Swedish, Italian (W, R, S - some).

Recognition and Awards

Honorary Magister of the University "Dunărea de Jos", Galați, (2003).

Recipient of the prize "COPY RO" awarded for the best Romanian book in IT of the year 2002: "Computer Aided Decision Making".

Doctor Honoris Causa from:

- "Lucian Blaga" University of Sibiu (2000),
- "Valahia" University, Târgovişte (2007),
- "Ovidius" University, Constanța (2007)
- École Centrale de Lille (France) (2007),
- "Traian Vuia" Technical University, Timisoara (2009),
- "Agora" University, Oradea (2012),
- Academy of Economic Studies (ASE), Bucharest (2014),
- "Petroleum-Gas" University, Ploiești (2017)

- University of Pitești (2017),
- "Aurel Vlaicu" University of Arad (2018).

Recipient of the Romanian National Order "Serviciu Credincios" ("Faithful Service"), rank of "Grand Cross" (awarded by the President of Romania in 2000),

Recipient of the "Grigore Moisil" Prize and the Medal "Man of the Year 1999" from the Association for Economic Informatics - INFOREC.

Honorary member of the *Academy of Sciences of Republic of Moldova* (since 2007) (http://www.asm.md/),

Honorary member of the Academy of Technical Sciences of Romania (ASTR) (since 2007) (http://www.astr.ro/acad-florin-filip/),

Founding member of the International; Academy for IT and Quantitative Management-IAITQM (Omaha, 2012) (http://www.iaitqm.org/),

Recipient of the medal "Prof. Marin Drinov with Golden Ribbon" from the Bulgarian Academy of Sciences, Sofia (2007).

Recipient of the "W. Scott Jr. for IT Award" from the International Academy of IT and Quantitative Management (IAITQM) (2013), (http://www.iaitqm.org/honorhall.html),

Recipient of the "Stefan Odobleja Prize" from the Academy of Romanian Scientists-AOSR (2015).

Recipient of the Romanian National Order "Steaua Romaniei" ("The Star of Romania "), rank of "Knight" (awarded by the President of Romania in 2015),

Recipient of the "Nicolaie Milescu Spătaru" medal from the Academy of Sciences of Republic of Moldova (2017)

Recipient of the "Vasile Cătuneanu" Prize from *Academy of the Technical Sciences of Romania-ASTR* for the monograph "Optimisation en science de l'ingénieur; méthaheuristiques, méthods stochastiques et aide à la décision", published in 2014 by Hermes Lavoisier, Paris (2017),

Distinguished scholar award from Purdue University's PRISM Center (https://engineering.purdue.edu/~prism/), USA (2021)

Fellow of the *International Academy of IT and Quantitative Management -IAITQM* (http://www.iaitqm.org/fellows.html) since 2022

Recipient of the "Dimitrie Cantemir" medal from the Academy of Sciences of Republic of Moldova (2022).

SELECTED PAPERS

- **Filip, F.G.,** Leiviskä K.(2023) Infrastructure and Complex Systems Automation. In: Nof, S.Y. (eds) *Springer Handbook of Automation*. Springer Handbooks. Springer, Cham, pp 617-637 (https://doi.org/10.1007/978-3-030-96729-1 27).
- **Filip, F.G.** (2022) Collaborative decision-making: concepts and supporting information and communication technology tools and systems. *International Journal of Computers Communications & Control*, 17 (2) DOI: https://doi.org/10.15837/ijccc.2022.2.4732).
- **Filip. F.G.**(2021) Automation and computers and their contribution to human well-being and resilience. *Studies in Informatics and Control*, *30* (4), pp 5-18 (https://doi.org/10.24846/v30i4y202101).
- **Filip, F.G.** (2020) DSS A class of evolving information systems. In: Dzemyda G., Bernatavičienė J., Kacprzyk J. (eds). *Studies in Computational Intelligence*, vol 869. Springer, Cham, pp 253-277 (https://link.springer.com/chapter/10.1007/978-3-030-39250-5_14).
- **Filip, F.G.**, Zamfirescu, C.B., Ciurea, C. (2017) *Computer-Supported Collaborative Decision-Making*. Springer International Publishing. Print ISBN 978-3-319-47219- (http://link.springer.com/book/10.1007/978-3-319-47221-8).
- **Filip, F.G.**, Ciurea, C., Dragomirescu, H., Ivan, I. (2015). Cultural heritage and modern information and communication technologies. *Technological and Economic Development of Economy*, 21(3) (Taylor & Francis): 441-459.
- **Filip, F.G.**, Herrera-Viedma, E. (2014) Big Data in the European Union. *The Bridge*, Winter 44(4): 33-37 (https://www.nae.edu/File.aspx?id=128774).
- Borne, P., Popescu, D., **Filip, F.G.**, Ștefănoiu, D. (2012) *Optimisation en Sciences de l'ingénieur. Methodes Exactes*. Hermès-Lavoisier, Paris,ISBN 978-2-77462-3897.
- **Filip, F.G.**, Leiviskä, K. (2009). Large-scale complex systems. In: *Springer Handbook of Automation* (S.Y.Nof, eds.), Springer, Dordrecht, pp. 619-638 (http://www.springerlink.com/content/127860616pw53775/).
- **Filip, F.G. (2008)** Decision support and control for large-scale complex systems. *Annual Reviews in Control*, 32 (1) pp 61-70 (https://www.sciencedirect.com/science/article/abs/pii/S1367578808000072).
- **Filip, F.G.**, Dumitrache, I., Iliescu, S.S. (eds.) (2002) *Large Scale Systems: Theory and Applications* 2001 (LSS'01). Elsevier Science Ltd. (Pergamon), Oxford, ISBN: 0-08-043691 9.
- Nof, S.Y., Morel, G., Monostori, L., Molina A., **Filip, F**. (2006) From plant and logistics control to multi-enterprise collaboration. *Annual Reviews in Control*, *30* (1), pp 55-68.
- **Filip, F.G.** (2004) *Decision Support Systems* (Sisteme suport pentru decizii). Technical Publishers, Bucharest, ISBN 973-31-2232-7 (in Romanian) (2nd edition in 2007).
- **Filip, F.G.** (2002) Computer Aided Decision-Making: Decisions, Decision Makers and Basic Methods and Tools. Publishers & Expert Publishers, Bucharest, ISBN 973-31-2105-3 (in Romanian) (2nd edition in 2005),.
- **Filip F. G.**, Dumitrache I., Iliescu S. S. (eds.) (2002) *Large Scale Systems: Theory and Applications* 2001 (LSS'01). Elsevier Science Ltd. (Pergamon), Oxford, ISBN: 0—08-043691 9.
- **Filip F.G.,** Moisil, I. (1999) Decision support for environmental management (thematic level article). In: A. Sidow (ed.) *Enciclopedia of Life Sciences-EOLSS, Environmental Systems*. (http://www.eolss.net/outlinecomponents/Environmental-Systems.aspx).
- **Filip, F.G.** (1998) Optimization models with sparse matrices and relatively constant parameters. *Systems Analysis Modelling and Simulation, 33* (Gordon and Breach Scie. Publishers): 407-430. (https://www.researchgate.net/publication/366836428 FGFilip 1998 Optimization Models with Sparce Matrices).
- **Filip, F. G.**, Alexandru A., Socol I. (1997) Technology management and international cooperation: several success stories. *J. Human Systems Management, 16*, pp. 223-229.

- **Filip, F.G.** (1995) IT culture dissemination in Romania: experiments and achievements. In: Inzelt A. and Coenen R. (eds.) *Knowledge Technology Transfer and Forecasting*, Kluwer Academic, Dordrecht, pp. 149-160.
- **Filip F. G**. (1995) Towards more humanized DSS. In: L. M. Camarinha Matos and H. Afsarmanesh (eds.) *Balanced Automation Systems: Architectures and Design Methods*. Chapman & Hall, London, pp. 230 240.
- **Filip F. G.**, Neagu G. (1993) CIM in continuous and discrete manufacturing: object-oriented generic modeling. *IFAC J. Control Eng. Practice*, 1(5), pp. 815 825.
- **Filip, F.G.** (1992) System analysis and expert systems techniques for operative decision making. In: Sydow A. (ed.) *Computational Systems Analysis: Topics and Trends*, Elsevier, pp. 285 304.
- **Filip, F.G.**, Donciulescu, D., Gaspar, R., Muratcea, M., Orășanu, L. (1985). Multilevel optimisation algorithms in computer aided production control in the process industries. *Computers in Industry*, *6*(1), pp 47-57.
- **Filip F. G.**, Neagu G., Donciulescu D. (1983) Jobshop scheduling optimisation in real time production control. *Computers in Industry*, 4 (4), pp. 395 403 (https://doi.org/10.1016/0166-3615(83)90006-4).
- **Filip, F.G.**, Donciulescu, D. A. (1983) On on-line direct dynamic coordination method in process industry. *IFAC J Automatica*, 19 (1): 317 320.
- **Filip, F.G.**, Donciulescu, D., Muratcea, M., Orășanu, L., Predoiu, D. (1980). Hierarchical control of large-scale chemical and metallurgical systems. In: Titli A. and Singh M.G. (eds.) *Large Scale Systems: Theory and Applications*. Pergamon Press, Oxford, pp. 563-575.
- Guran M., **Filip, F.G.**, Donciulescu, D., Orășanu, L., Petrescu, C. (1979). Computer aided design of data transmission network for a large real time computer system. *Problems in Automatic Control*, 10, pp 221-235.
- **Filip, F.G.**, Donciulescu, D. (1976). Proiectarea liniilor multipunct (The design of multi-point lines) **AMC**, 22, pp 165-179 (In Romanian)

NOTE. A complete list of publications can be found at: https://acad.ro/cv/FilipF/FGF-Publicatii.pdf

"To whom it may concern

... Dr. Filip has shown himself to be a very innovative and productive researcher, whose papers are equivalent in quality and cutting-edge findings to those from the best research organizations of the world. Witness his publications in Automatica, Computers in Industry and other leading journals in the field. The establishment of Dr. Filip's stature, as an internationally recognized researcher in his field, and the acceptance of his work is shown by the large number of international conferences where he has served as session chairman and/or program committee member and many invited seminars he has presented in other countries ..."

Prof. Theodore J. Williams,

Professor of Engineering and Director, Purdue Lab. for Applied Industrial Control, Purdue University;

Past President of Instrument Society of America;

Past President of the American Federation of Information Processing Societies;

Chairman of IFAC/IFIP Task Force on "Architecture for Enterprise Integration" (August 1994).
