

CURRICULUM VITAE

1. Name: MIRELA VOICULESCU
2. Nationality: ROMANIA
3. Civil status MARRIED
4. **Degree(s) and /or diploma(s) obtained:**

Institution	Degree(s) and /or diploma(s)
University of Oulu, Finland	PhD in physics (Excellent)
“Al.I.Cuza” University, Iasi, Romania, 2003	PhD in physics (Magna cum Laude)
“Dunarea de Jos” University, Galati, Romania, 2002	Postgraduate studies “Waves and vibrations”
“Dunarea de Jos” University, Galati, Romania, 2002	Postgraduate course: Long distance learning
Faculty of Physics, University of Bucharest, Romania, 1989	Graduate studies (Bachelor)

5. Present position:

Assoc.Prof, Department of Chemistry, Physics and Environment, “Dunarea de Jos”, University, Galati, Romania (**UDJG**)

Description: High education, Research, Teaching, Coordination of graduate and undergraduate degree programmes

6. Professional experience:

Dates	Place	Company	Position	Description
2008 - present	Galati, Romania	“Dunarea de Jos” University	Associate Professor Physics Department	High education, Research, Teaching, Coordinator of graduate and undergraduate programs
1999 – 2008	Galati, Romania	“Dunarea de Jos” University	Lecturer Physics Department	High education, Research, Teaching, Coordinator of graduate program
1992 – 1999	Galati, Romania	“Dunarea de Jos” University	Assistant; Physics Department	High education, Teaching
1989 – 1992	Curtea de Arges, Romania	Elementary School, Highschool	Physics teacher (school and high school)	Teaching

7. Language skills: Indicate competence on a scale of 1-5 (**1 = excellent, 5 = basic**)

Language	Reading	Speaking	Writing
ENGLISH	1	1	1
FRENCH	1	1	1
GERMAN	4	4	4

8. Key qualifications:

- Researcher: physics of atmosphere and upper atmosphere, solar-terrestrial relationships/climate issues, space physics;
- Experience in management and curriculae of undergraduate and graduate programs - see **11.2**
- National and international projects: management, participation and evaluation – see **9.** and **13.2**
- High education (courses) Atmospheric Physics, General Physics, Climatology and Meteorology, Climate Variability
- Training: Summer school for Ionospheric and Magnetospheric Research, Sinaia jun 2007.

9. Expertise and membership of professional bodies:

- Expert – member in the National Council for Certification of Titles, Diplomas and Certificates (Earth Sciences): mar 2011 – sep 2012.
- Panel
- Expert – member of National Research Council (Earth Sciences Working Group) (2011 -)
- Expert evaluator for NSF (USA) programs (2011-)
- Expert evaluator for EU-FP7 (Marie Curie) programs (2010-)
- Expert evaluator for National University Research Council/ National Research Council (2007 –)
- Expert evaluator for the National Programme for Research and Development (2007 –)
- Member of the Council of the Faculty of Sciences, Dunarea de Jos University, Galati (2005 – 2011)
- Member of the Romanian/European Society of Physics, 2008-2009
- Member of AGU (American Geophysical Union), 2008-2009, 2012-
- Member of EGU (European Geophysical Union), 2008-present
- Member of research organizations: Ad Astra, Sigma Xi

10. Other skills:

Computer and data analysis	▪ MS Windows, MS Office, LATEX, MATLAB programming (advanced), FORTRAN (basic) ▪ Experience in statistical correlation and spectral analysis ▪ Development and model validation using data acquisition (model validation using radar and tomographic results)
Leadership, creativity, management	▪ Launching/opening and development of research directions ▪ Initiation and/or development of undergraduate and graduate programs in environmental sciences ▪ Experience in developing inter-disciplinary and trans-disciplinary curricula for undergraduate and graduate programs, based on Bologna requirements ▪ Extensive experimental and theoretical work in environmental, atmospheric and space physics
Interpersonal and multicultural abilities	▪ Participation in multi national research projects ▪ Adaptation to various working environments
Teaching, presentation	▪ Excellent experience of teaching at all levels, individual training ▪ Supervision and coordination of research work

11. SCIENTIFIC REFEREE, GRADUATE AND UNDERGRADUATE PROGRAMS, SCIENTIFIC AND ORGANIZING COMMITTEES

Scientific referee (reviewer):

- Geophysical Research Letters
- Journal of Atmospheric and Solar-Terrestrial Sciences,
- Advances in Space Research,
- Earth, Planets and Space Letters,
- Journal of Geophysical Research,
- Annales Geophysicae
- National Conference of Physics, Iasi, 23-24 sep 2010
- Member of the editorial board of the Annals of “Dunarea de Jos” University of Galati, fascicle II (Mathematics, Physics, Theoretical mechanics)

11.2. Coordination:

- Coordinator for undergraduate program (BA degree) in Environmental Sciences, 2009-present

- Coordinator for graduate program (MSc degree) in Physico-chemical Analysis for Environment and Science of Materials, 2007-present
- Member of coordinating committee for graduate program (MA degree) in Environmental Sciences, 2008-present
- Scientific Coordinator for the ECEE (European Center of Excellence for the Environment), "Dunarea de Jos, University, Galati, Romania, Phare RO 9706.01.02, 2006-present

11.3. Scientific and organizing committees

- Co-convener of EGU 2009, 2010, 2011, Space Weather Session
- Member of the Scientific Committee of B.EN.A International Conference, Galati, Romania, 26-28.05.2010
- Member of the Organizing and Scientific Committees of the International Symposium of Applied Physics, Galati, Romania, 28-29 nov 2009.
- Member of the Organizing and Scientific Committees of the National Conference of Applied Physics, Galati, Romania, 2005, 2006, 2007, 2008.
- Member of the Organizing Committee, 2-nd International Symposium on Space Climate, Sinaia, sep 2006

12. CITATIONS: > 135 ISI citations (self citations excluded), h = 7

13. PROJECTS, GRANTS, INVITED SCIENTIST

13.1. Invited lectures, seminars:

- Ionospheric perturbations induced by interplanetary and solar forcing, *Bucharest, Romania, International Conference SOLAR AND HELIOSPERIC INFLUENCES ON THE GEOSPACE*, Oct 1- 5, 2012, invited lecture
- Ionosphere-magnetosphere coupling and link to Earth phenomena, *Institute of Geodynamics, Bucharest, Romania*, 25 nov 2011, invited seminar
- Characteristics of ionospheric troughs observed in the premidnight sector; relationship with inner magnetosphere and interplanetary conditions, *Institute of Space Aeronomy, Solar-Terrestrial Research Center, Brussels, Belgium*, 10 dec 2010, invited seminar
- A new type of subauroral ion drifts: eastward flowing jets, *University of Oulu, Finland*, 22 oct 2008, invited seminar
- Ionospheric signatures of particular magnetospheric configurations: ASADs, *Institute of Space Aeronomy, Solar-Terrestrial Research Center, Brussels, Belgium*, 16 sep 2008, invited seminar
- Invited expert: Debate on Causes of Global Warming, *British Council, Bucharest*, 8 Mar 2008
- Sporadic E layers and planetary waves, *Max-Planck Institute for Aeronomy, Lindau, Germany*, 15 sep 1999, invited seminar

13.2. Projects, grants

	PROJECT	Place	Role	Years (period)
<i>International grants, fellowships</i>				
1.	Formation, development and mechanism of the pre-midnight F region trough	University of Oulu, Finland	Grant holder	2009, 2011 (1 month)
2.	Study of the F region trough – International S & T cooperation, post-doc fellowship	Institute of Aeronomie, Bruxelles, Belgium	Grant holder	2007 (9 months)

3.	Sporadic E-layer at mid and high latitudes –Marie Curie fellowship	University of Oulu, Finland	Grant holder	2001-2002 (6 months)
International projects – Principal Investigator, Co-Investigator				
4.	COST ES1005 "Towards a more complete assessment of the impact of solar variability on the Earth's climate",		National Representative, Management Committee Member	2011 - 2015
National projects – Principal Investigator, Co-investigator, UDJG project manager				
1.	SOLar Activity and Clouds: causal or casual Effect? SOLACE, Principal investigator: Mirela Voiculescu, UDJG	Dunarea de Jos" University, Galati, Romania (1170000RON)	Principal Investigator, Project Manager	Oct 2011 – sep 2014
2.	Eco-technologies for rehabilitation and ecological reconstruction of contaminated land in urban and industrial waste, ECORES, Coordinator USAMV Bucharest, prof. S. Cimpeanu	Dunarea de Jos" University, Galati, Romania (250.000 RON)	Co-Investigator UDJG, Project Manager	Sep 2008- sep 2011
3.	Researches for optimal processes and parameters for improving the remediation level of contaminated land,TERESOL, Coordinator UPB Bucharest, prof. T. Apostol	Dunarea de Jos" University, Galati, Romania (50.000 RON)	Co-Investigator UDJG, Project Manager	Sep 2008- sep 2011
4.	Boundary layers and spatial charge structures in circumplanetary plasmas, SAFIR, contract PN2 nr. 81009/2007, Coordinator ISS-Bucharest, dr. Marius Echim,	"Dunarea de Jos" University, Galati, Romania (500.000 RON)	Co-Investigator UDJG, Project Manager	Sep 2007 – sep 2010
Guest scientist (Visiting researcher)				
1.	Study of Es layers (Germany) (K. Shlegel)	Max-Planck Institute fur Aeronomie, Lindau, Germany	Guest scientist	Sep 1999
2.	Modelling planetary wave effects on midlatitude E region ionospheric plasma (Greece) (C. Haldoupis)	University of Crete, Iraklion, Greece	Guest scientist	Mar 1999
3.	Long-term variations of coherent backscatter echoes obtained with SESCAT (Greece) (C. Haldoupis)	University of Crete, Iraklion, Greece	Guest scientist	Oct-Nov 1998
International and European projects – expert/member				
1.	TEMPUS IV: Modernisation of Post-Graduate Studies in Chemistry and Chemistry Related Programmes, U2398,	University of Belgrad, Serbia	Expert	Nov 2010 – nov 2012

	511044-Tempus-1-2010-1-UK-Tempus-JPCR Coordinator: University of Greenwich			
2.	EISCAT project (prof. T. Nygrén)	University of Oulu, Finland	Expert	Iul-Nov 2006
3.	Long term solar-terrestrial relations: Global changes, Academy of Sciences, Vaissala Foundation, Finland (I. Usoskin)	University of Oulu, Finland	Expert	Iun 2006
4.	Sun, heliosphere and Earth: Long-term relations, Academy of Sciences, Vaissala Foundation, Finland (I. Usoskin)	University of Oulu, Finland	Expert	Aug-Sep 2005
5.	Space weather effects ANTARES/SWAP project. (Finland) (prof. T. Nygrén)	University of Oulu, Finland	Expert	May-Sep 2004
European social funds projects– expert, member				
5.	Quality and continuity of training during doctoral programs, TOP ACADEMIC, SOP HRD, 2010-2013, Manager: prof. L. P. Georgescu	“Dunarea de Jos” University, Galati, Romania	Assistant manager, Expert	Oct 2010 – sep 2013
6.	Efficiency improvement of doctoral activity EFICIENT, SOP HRD, 2009-2012 (Manager: prof. L. P. Georgescu)	“Dunarea de Jos” University, Galati, Romania	Assistant manager, Expert	oct 2009 - sep 2012
7.	Quality improvement in reasearcher training based on improved doctoral programs parteneriat (PhD EXPERT) Manager: prof. M. Vlad	“Dunarea de Jos” University, Galati, Romania	Member of the target group	Oct 2009 – sep 2010
8.	Management system of Doctoral fellowships (SIMBAD), POS DRU Manager: prof.. L. P. Georgescu	Dunarea de Jos” University, Galati, Romania	Expert Audit, Quality assurance	Sep 2008-sep 2011
National projects – expert, member				
9.	High-sensitivity techniques applied in environmental pollution bio-monitoring (TIPSARMER), Coordinator: Valahia University, Târgoviște, Prof. Ion. V. Popescu	“Dunarea de Jos” University, Galati, Romania	Expert	Sep 2008-sep 2011
10.	Study and research for establishing the content of risk maps content. Digital modelling of land for rsk management in the Low Danube area, RISKGAL, contract PNCDI2, 31070/2007 Director: prof. dr. M. Praisler	“Dunarea de Jos” University, Galati, Romania	Expert	sep.2007 - sep.2010
11.	Regional centre for environment research and monitoring, CEEX modul IV; CREDENTIAL, ANSC-RENAR Director prof. dr. ing. L. P. Georgescu	“Dunarea de Jos” University, Galati, Romania	Expert	2006-2008
12.	Study of nonlinear phenomena in complex systems outside the	“Al I Cuza” University, Iasi,	Expert	2002-2004

	thermodynamical equilibrium, Contract CNCSIS, nr. 582/2002-2004 Director : prof. dr. M. IGNAT	Romania		
13.	Theory of multichannel diffusion. Application at the study of acoustic diffusion on mechanical targets and absorbants, Cod CNCSIS 410. Director conf. dr. E. Danila	“Dunarea de Jos” University, Galati, Romania	Expert	1999-2001
14.	Theoretical and experimental research of luminescent discharge instabilities, nr. 7007/1997, CNCSU-273 Director: conf. dr. V. Sahlean	“Dunarea de Jos” University, Galati, Romania	Expert	1997

14. LIST OF PUBLICATIONS, BOOKS, SCIENTIFIC CONTRIBUTIONS

PEER – REVIEWED/THOMSON ISI JOURNALS

1. T. Nygrén, J. Markkanen, A. Aikio, and **M. Voiculescu**, High-precision measurement of satellite velocity using the EISCAT radar, *Annales Geophysicae*, in print
2. **M. Voiculescu**, and I. G. Usoskin, Persistent solar signatures in cloud cover: spatial and temporal analysis, *Environ. Res. Lett.* 7 (2012) 044004 (11pp), doi:10.1088/1748-9326/7/4/044004, 2012
3. P. Popa, M. Timofti, **M. Voiculescu**, S. Dragan, C. Trif, L. P. Georgescu, Study of physico-chemical characteristics of wastewater in an urban agglomeration in Romania, *The ScientificWorld Journal*, 549028, 10 pages, doi:10.1100/2012/549028, 2012
4. T. Nygrén; Aikio, A., **M. Voiculescu**, Kuula, R, Statistical evaluation of electric field and neutral wind results from beam-swing incoherent scatter measurements, *J. Geophys. Res.*, Vol. 117, No. A5, A04319, doi:10.1029/2011JA017307, 2012
5. C. M. Dragomir, W. Klaassen, **M. Voiculescu**, L. P. Georgescu, and S. van der Laan, Estimating Annual CO2 Flux for Lutjewad Station Using Three Different Gap-Filling Techniques, *The ScientificWorld Journal*, Vol. 2012, Article ID 842893, doi:10.1100/2012/842893, 2012
6. V. Pierrard, and **M. Voiculescu**, The 3D model of the plasmasphere coupled to the ionosphere, *Geophys. Res. Lett.*, Vol. 38, No. 12, L12104, 2011
7. T. Nygrén; Aikio, A., Kuula, R, **M. Voiculescu**, Electric fields and neutral winds from monostatic incoherent scatter measurements by means of stochastic inversion, *J. Geophys. Res.*, Vol. 116, No. A5, A05305, doi:10.1029/2010JA016347, 2011
8. **M. Voiculescu**, L. P. Georgescu, S. Dragan, M. Timofti, A. Caldararu, Study of anthropogenic effects on the quality of Lower Prut River, *Journal of Env. Protection and Ecology*, nr.1, 16-24, 2011
9. **M. Voiculescu**, L. P. Georgescu, C. Dragomir, Analysis of stability and continuity of pollution datasets, *Journal of Env. Protection and Ecology*, nr. 2., 401 – 406, 2011
10. **M. Voiculescu**; Nygrén, T.; Aikio, A.; Kuula, R, An olden but golden EISCAT observation of a quiet-time ionospheric trough , *J. Geophys. Res.*, Vol. 115, No. A10, A10315, doi:10.1029/2010JA015557, 2010
11. L. P. Georgescu, **M. Voiculescu**, S. Dragan, M. Timofti, A. Caldararu, Study of spatial and temporal variations of some physico – chemical parameters of Lower Siret River, *Journal of Env. Protection and Ecology*, vol.11, nr.3, 986 – 994, 2010
12. L. P. Georgescu, **M. Voiculescu**, S. Dragan, M. Timofti, A. Caldararu, Study of spatial and temporal variations of some chemical pollutants of Lower Siret River, *Journal of Env. Protection and Ecology*, nr.3, 837 - 845, 2010
13. V. Olaru, **M. Voiculescu**, L. P. Georgescu, A. Caldararu, Integrated management and control system for water resources, *Env. Eng. and Manag. Journal*, vol. 9, no3, 423- 428, 2010
14. **M. Voiculescu**, I. Usoskin, L. P. Georgescu, Are some clouds obscured in satellite view?, *Rom. Journ. Phys.*, Vol. 54, Nos. 1–2, P. 225–233, Bucharest, 2009
15. C. Gasparotti, L. P. Georgescu, **M. Voiculescu**, Implementing a sea pollution and safety management system in the navigation companies, *Environmental Engineering and Management Journal*, November/December 2008, Vol.7, No.6
16. T. Nygrén, **M. Voiculescu**, and A. Aikio, The role of electric field and neutral wind in the generation of polar cap sporadic E, *Annales Geophysicae*, 26, 3757–3763, 2008
17. **M. Voiculescu**, ,Wind-shear effect on the instabilities in the mid-latitude E region plasma, *Rom. Rep. Phys.*, Vol. 60, No. 4, P. 1033–1039, 2008, ISSN 1221-1451

18. **M. Voiculescu**, and M. Roth, Eastward subauroral ion drifts or ASAD, *Annales Geophysicae*, 26, 1955–1963, 2008
19. **M. Voiculescu** and T. Nygrén, Radar observations of plasma depletions in the ionosphere, *Rom. Journal Phys.*, 53, Nos. 1-2, 7-13, 2008, ISSN 1221-146X.
20. **M. Voiculescu** and T. Nygrén Extraterrestrial magnetic field effect on the F region trough, *Rom. Journal Phys*, 53, Nos. 1-2, 15-22, 2008, ISSN 1221-146X.
21. **M. Voiculescu**, I. G. Usoskin, and K. Mursula, Effect of ENSO and volcanic events on the Sun-cloud link, *Advances in Space Research*, 40, 1140–1145, 2007
22. **M. Voiculescu**, T. Nygrén, IMF effect on ionospheric trough occurrence at equinoxes, *Advances in Space Research* 40 1935–1940, 2007
23. **M. Voiculescu**, I. G. Usoskin, and K. Mursula, Different response of clouds to solar input, *Geophysical Research Letters*, 33, L21802, doi:10.1029/2006GL027820, 2006, (ISSN: 0094-8276).
24. I.G. Usoskin, **M. Voiculescu**, G.A. Kovaltsov, K. Mursula, Correlation between clouds at different altitudes and solar activity: Fact or Artifact?, *Journal of Atmospheric and Solar-Terrestrial Physics*, 68 2164–2172, 2006.
25. **M. Voiculescu**, A. Aikio, T. Nygrén and M. Ruohoniemi; IMF effect on sporadic E layers at two northern polar cap sites: part I, Statistical study, *Annales Geophysicae*, 24, 887-900, 2006 (ISSN: 0992-7689).
26. T. Nygrén, A. Aikio, **M. Voiculescu**, M. Ruohoniemi, IMF effect on sporadic E layers at two northern polar cap sites: part II, Electric field, *Annales Geophysicae*, 24, 901-913, 2006, (ISSN: 0992-7689)
27. **M. Voiculescu**, I. Virtanen, T. Nygrén, The F region ionospheric trough: seasonal dependence and relation to IMF, *Annales Geophysicae*, 24, 1, 173-185, 2006, (ISSN: 0992-7689)
28. **M. Voiculescu** and M. Ignat: Total wind role in the vertical dynamics of ions in the E region at high latitudes, *Annales Geophysicae*, 23, 4, pp. 1191-1197, 2005, (ISSN: 0992-7689)
29. **M. Voiculescu**, and M. Ignat: Vertical motion of ionisation induced by the linear interaction of tides with planetary waves, *Annales Geophysicae*, 21, 1521-1529, 2003, (ISSN: 0992-7689).
30. **M. Voiculescu**, C. Haldoupis, D. Pancheva, M. Ignat, K. Schlegel, and S. Shalimov: “More evidence for a planetary wave link with midlatitude E region coherent backscatter and sporadic E layers”, *Annales Geophysicae*, 18, 1182-1196, 2000, (ISSN: 0992-7689).
31. S. Shalimov, C. Haldoupis, **M. Voiculescu**, K. Schlegel: “Midlatitude E region plasma accumulation driven by planetary wave horizontal wind shears”, *Journal of Geophysical Research*, 104, 28207, 1999, (ISSN: 0148-0227).
32. **M. Voiculescu**, C. Haldoupis, K. Schlegel: “Evidence of planetary wave effects on midlatitude backscatter and sporadic E layer occurrence”, *Geophysical Research Letters*, VOL. 26, NO. 8, PP. 1105-1108, doi:10.1029/1999GL000172, 1999, (ISSN: 0094-8276).

NATIONAL (ROMANIAN) JOURNALS

1. D.E. Constantin, **M. Voiculescu**, L.P. Georgescu, Platforms for passive doas method in atmospheric research: present and future, *Annals of Univ. “Dunărea de Jos”*, Galați, II, Annals of Univ. “Dunărea de Jos”, Galați, II, XXXIV, (2), 228 - 234, 2011
2. C. M. Dragomir, **M. Voiculescu**, L. P. Georgescu, W. Klaassen, Comparison between gap-filled and measured CO2 flux, *Annals of Univ. “Dunărea de Jos”*, Galați, II, Annals of Univ. “Dunărea de Jos”, Galați, II, XXXIV, (2), 235 - 240, 2011
3. C M. Dragomir, **M. Voiculescu**, W. Klaassen, L. P. Georgescu, Statistical analysis of eddy-covariance heat fluxes measured from a tall tower, *Annals of Univ. “Dunărea de Jos”*, Galați, II, Annals of Univ. “Dunărea de Jos”, Galați, II, XXXIV, (2), 241 – 246, 2011
4. C. Trif, S. Drăgan, P. Popa, M. Timofti, **M. Voiculescu**, L. P. Georgescu, Study of soil contamination with petroleum products, *Annals of Univ. “Dunărea de Jos”*, Galați, II, XXXIV, (2), 247 – 250, 2011
5. G. Murariu, M. Voiculescu, The energy momentum tensor software assessment in curved space-time, *Annals of University of Timisoara*, vol LIV, 105-110, 2010
6. C. Dragomir, M. Voiculescu, L. P. Georgescu, Air pollution trend and meteorological parameters in Braila county, *Annals of Univ. “Dunărea de Jos”*, Galați, II, XXXIII, (2), 251-257, 2010
7. **M. Voiculescu**, E. Danila, T. Nygrén, T. Raita, Plasma density troughs in the F-region and top ionosphere, *Annals of Univ. “Dunărea de Jos”*, Galați, II, XXXIII, (2), 273 – 279, 2010
8. S. Drăgan, C. Trif, M. Timofti, **M. Voiculescu**, L. P. Georgescu, Ecological study on soil quality, *Annals of Univ. “Dunărea de Jos”*, Galați, II, XXXIII, (2), 242 – 250, 2010
9. M. Timofti, **M. Voiculescu**, L. P. Georgescu, S. Dragan, A. Caldararu, Comparison between anthropogenic effects of some chemical pollutants of Lower Siret River and Prut River, *Annals of Univ. “Dunărea de Jos”*, Galați, II, XXXII, p.102-109, 2009
10. A. Căldăraru, L. P. Georgescu, **M. Voiculescu**, An introduction to monitoring aquatic ecosystems, *Annals of Univ. “Dunărea de Jos”*, Galați, II, XXXII, p.110 – 117, 2009

11. S. Dragan, **M. Voiculescu**, L. P. Georgescu, M. Timofti, A. Caldararu, Comparison between anthropogenic effects on some physico – chemical parameters of Lower Siret River and Prut River, *Annals of Univ. "Dunărea de Jos"*, Galați, II, XXXII, p.126 - 134, 2009
12. C. Dragomir, **M. Voiculescu**, L. P. Georgescu, Study of air pollution dataset, *Annals of Univ. "Dunărea de Jos"*, Galați, II, XXXII, p.135-140, 2009
13. **M. Voiculescu** and T. Nygrén, Relationship between IMF and density gradients at the edges of the F region trough, *Annals of "Dunarea de Jos" University*, Special issue, XXX, 153-156, 2007
14. **M. Voiculescu**, Planetary Wave Effects on the mid-Latitude E Region Plasma, *Rom. Journal Phys.*, vol. 51, 7-8, pp. 839-844, 2006. (http://www.nipne.ro/rjp/2006_51_7-8/0839_0845.pdf)
15. **M. Voiculescu**, I. Virtanen, T. Nygrén, Images of ionospheric F region using satellite tomography, *Bull. Polytechnic Inst.Iasi*, vol. LI (LV), 1-2, p. 121-127, 2006
16. **M. Voiculescu**, I. Virtanen, T. Nygrén, Satellite tomography contribution to the survey of the F region trough, *Annals of "Dunarea de Jos" University*, Special issue,II, XXIII, 2005.
17. **M. Voiculescu**, and M. Ignat, Wind effect on the plasma instabilities operating in the mid-latitude ionospheric E region, *Rom. Rep. Phys.*, vol. 57, no. 4, p. 773-790, 2005
18. D. Voiculescu and **M. Voiculescu**, Dispersion relationship for small scale field aligned instabilities including the wind shear, *Annals of Univ. "Dunărea de Jos"*, Galați, II, XXI (XXVI) 2003.
19. **M. Voiculescu** and M. Ignat, Effect of background wind and turbulent diffusion on sporadic E layers formation at high latitudes, *Annals of Univ. "Al. I. Cuza"*, Iași, XLVII-XLVIII, 139-145, 2003.
20. **M. Voiculescu** and M. Ignat, Mean wind effect on ion convergence conditions in the E region at high latitudes, *Annals of Univ. "Dunărea de Jos"*, Galați, II, XX (XXV) 2002.
21. **M. Voiculescu**: „ Ion velocity nulls resulting from wind and electric field action in the E region at high latitudes, *Annals of Univ. "Dunărea de Jos"*, Galați, II, XIX, 2001.
22. **M. Voiculescu**: "Dynamics and electrodynamics of the E region", *Annals of Univ. "Dunărea de Jos"*, II, XVI, 1998;

PROCEEDINGS

1. D. E. Constantin, A. Merlaud, C. Fayt, **M. Voiculescu**, M. van Roozendaal, I. Balin and L. P. Georgescu, "Measurements of tropospheric NO₂ in a Romanian region using a mobile DOAS system". *Optoelectronic Techniques and Environmental Monitoring*, ISSN 20066-865, pag. 41-48, 2011.
2. I. Virtanen, **M. Voiculescu**, T. Nygrén, „Radiotomographic imaging of the ionosphere”, *The XXXVI Proceedings of the Scientific Symposium of the Military Equipment and Technologies Research Agency*, Bucharest, Romania, 26-27.05.2005.
3. S. Shalimov, C. Haldoupis, **M. Voiculescu** and K. Schlegel, “A new mechanism for midlatitude plasma accumulation driven by planetary waves horizontal wind shears”, *Proceedings of The 10-th International Symposium on Equatorial Aeronomy*, Antalya, Turkey, 17-23.05. 2000; C
4. C. Haldoupis, **M. Voiculescu**, D. Pancheva and S. Shalimov: “Long period variations in midlatitude E region coherent backscatter and sporadic E layers. Evidence for a relation with planetary waves”, *Proceedings of The 10-th International Symposium on Equatorial Aeronomy*, Antalya, Turkey, 17-23.05. 2000.
5. C. Haldoupis, **M. Voiculescu**, K. Schlegel, and D. Pancheva: “ Long-term variations in midlatitude E-region coherent backscatter and a relation to planetary wave activity in the lower thermosphere, *Proceedings of URSI XXXVI General Assembly*, Toronto, Canada, 13-21.08.1999.

BOOKS

1. **M. Voiculescu** Ionospheric structures: sporadic E layers and F region trough (editie revăzută și adăugită a lucrării IMF effects on sporadic E layers and F region trough), Galați University Press, 2008, ISBN 978-973-88711-7-5, 70 pag.
2. **M. Voiculescu**: Introducere in fizica atmosferei, Galați University Press, 2008
3. **M. Voiculescu**: IMF effects on sporadic E layers and F region trough, University of Oulu, Finland, Report Series in Physical Sciences (40), 2006
4. L. Moraru, **M. Voiculescu**, Physics, in Romanian, (Fizica), Editura Fundației Universitare „Dunărea de Jos” Galați, 2004.
5. **M. Voiculescu**, C. Tudose, L. Moraru, N. Țigău, G. Murariu: Laboratory work for physics, in Romanian (Lucrări pentru laboratorul de fizică), Editura Fundației Universitare „Dunărea de Jos” Galați, 2002.
6. D. Toma, G. Murariu, **M. Voiculescu**: Laboratory work for molecular physics, in Romanian (Laborator de fizică moleculară și căldură), Ed. Fundației Univ. „Dunărea de Jos”, Galați, 2002M.
7. V. Sahlean, **M. Voiculescu**: Physics I, in Romanian (Fizică I), Editura Fundației Universitare „Dunărea de Jos” Galați, 2000.

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