#### CURRICULUM VITAE

# PERSONAL INFORMATION Stergios Ganatsios (or Gkanatsios)



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Sex Male | Date of birth 07/06/1958 | Nationality Greek

#### PROFESSIONAL EXPERIENCE

2005 – today Full Professor TEI of Western Macedonia. E5 // 2164 / 05.12.2000 (GG 295 / 12.21.2000, t.N.P.D.D.)

2002 - 2005 Associate Professor TEI of Western Macedonia

2000 - 2001 Professor TEI of Western Macedonia

1993 - 2000 Associated Professor TEI of Western Macedonia. E5 / 1422 /

09.21.1993 (GG 123 / 09.30.1993, t.N.P.D.D.)

1992 - 1994 Trainer IEK Kozani

1991 - 1992 Member of the Scientific Council ELKEPA branch Western Macedonia

1991 - 1993 Design and research private office on environment issues, electronics, information technology, energy, etc. (no. 000 691 statement) (Freelance)

1989 - 1993 Coordinator and / or rapporteur trainer ELKEPA

1986 - 1990 Fellow of the Central Institute of Physics Bucharest (ICEFIZ), linear accelerator tandem laser and materials

1987 - 1989 Temporary Assistant Professor TEI of Thessaloniki

1984 - 1993 Temporary Lecturer, Assistant Professor and full Professor at TEI Kozani

1981 - 1982 Physicist in ICEFIZ (IFA) (Central Institute of Physics Bucharest) in the nuclear technology field

#### ADMINISTRATIVE EXPERIENCE

2002 - 2008 President (Rector) of TEI of Western Macedonia (twice)

1998 - 2002 Vice-president TEI of Western Macedonia

1998 - 2002 Chairman of the Council of Founds for Research Grants

1995 - 1998 Vice chairman of the Council of Founds for Research Grants TEI of Western Macedonia

2005 – now Responsible Graduate Mechatronics Program in collaboration with the UPC of Barcelona

1998 - 2002 Member of the Scientific Advisory Council (EGM) of (CTD) as a researcher - representative of the TEI

1995 - 1998 Head of the Department of Electrical Engineering

1993 - 1995 Head of Sector Low Voltage Electrical Department

2003 - 2004 Member of the Trilateral Secretariat of TEI 's Presidents

2007 - 2008 Member of the Trilateral Secretariat of TEI's Presidents

2006 - 2008 Elected member of the National Council for Lifelong Learning (unpaid)

2005 - 2006 President of the National Central Committee of the final judgment of the research action "Archimedes" for Technology

2008 - 2011 D / Director of the Center for Technological Research of Western Macedonia

2010 - Today President of the Interbalcanic Collaboration Centre in Western Macedonia

1989 - 1993 Member of the Board of the Union of Greek Physicists Western Macedonia

2013 - Today President of the Department of Electrical Engineering of TEI.

2015 – Today President of the districtional consil for research and innovation in district of Western Macedonia , Greece .

2016 Febr. External evaluator from abroad for the position of the general director of the Romanian National Institute for Energy.

#### **EDUCATION AND TRAINING**

1985 - 1990 PhD thesis at the Faculty of Physics of the University of Bucharest

1981 - 1982 Master section of the School of Physics Nuclear. Degree graduate 9.20

1977 - 1981 Faculty of Physics of the University of Bucharest, specialization

Nuclear Physics Degree diploma 9.00

1976 Baccalaureate from Valtadoreio, Kozani

### INDIVIDUAL DEXTERITIES

Native language: Greek

Other languages Understanding Speaking Writing
Oral Written (reading) Contact Spoken
English B2 B2 B2 B2 B2

Romanian C2 C2 C2 C2 Italian A1 A1 A1 A1 Spanish A1 A1 A1 A1

Levels: A1 / 2: Basic user - B1 / 2: Independent user - C1 / 2: Experienced user Common European Framework of Reference for Languages

## Computer skills

deep knowledge of computers and networks (including software and hardware)

#### ADDITIONAL INFORMATION

Recent research projects as a scientific responsible

- 1. FLY ASH RE-UTILIZATION FOR THE PRODUCTS OF GLASS CERAMICS, Archimedes III, 2011 –now
- 2. KnowEn Tech, Nr. MTKI-CT-2005-029758, Development of strategic Academia Industry, FP6, Marie Curie action, KnowEnTech, 2005 2010
- 3. Satellite Assisted Management of Air Quality (SMAQ), LIFE Environment, 2005 2009

Scientific publications / Conferences / Reports

- ¬ 59 articles in international scientific journals
- ¬ 59 articles in international conferences
- ¬ 7 books in foreign languages , 2 in Greek
- ¬ more than 150 scientific citations

Invited Speech and interviews in numerous and various forums and MMs

#### Seminars

Coordinator or lecturer in dozens of seminars consensing t the environment, renewable energy, computing, industrial automation etc., In TEI Western Macedonia, in TEI of Thessaloniki, in ELKEPA Western Macedonia and various other organizations

#### HONORS AND AWARDS HONORARY

¬ November 2005: Excellence Award of the National Institute for Research & Development of Leptomechanics, Romania.

¬ November 2004: Remus Radulet Awards of Excellence from University "Poltehnica of Bucharest for contribution to Higher Education in Romania.

### RESULTS

#### RESULTS DURING MY TERM AS PRESIDENT OF TEL

- ¬ I took over the management as Vice President since '99 responsibility of all the new departments mixed funded (national and EU budget),as well as other actions (mixed funded) as Berau of Students Practice, Students Carrer Office, Greek universities Network,etc., which were all run by the Special Research Funds Account bringing in TEI a lot of billion of drachmas
- $\neg$  I took on a TEI in 10th position as far as the number of students is concerned and by the end of my term it was at the top three positions.
- ¬ I overdoubled the number of the Scientific-Educational Staff of the Institute
- $\neg$  I increased by 50 people the number of managerial staff of the Institute
- $\neg$  I increased by > 300% the annual incoming budget of the Institute when the national average for the TEI's increased by only ~50%
- $\neg$  I increased by over>400 % the Public Investments Program (for Infrastructures) budget of the Institute.
- ¬ When I came to term in 1998 I Took over the TEI of Kozani with 9 departments and in 2008 at the end of my term it operated with 16 departments plus another 4 the operation of which was succeededd during my term.
- I created new Branch in Grevena
- ¬ I brought 25 research programs Archimedes I and II
- $\neg$  I began the operation, by the approval of the ministry of Education, for three master degree Inter-Institutional programs for the first time . One in cooperation with a Greek university and two in cooperation with Universities Abroad
- $\neg$  In 2003 in Grevena 's branch I renovated and I reconfigured a school for the operation of the first department of TEI
- $\neg$  I started building new infrastructure in Florina, Kastoria and Grevena. They finished and operated in Florina and Kastoria and handed in the final stages of completion delivery in Grevena
- $\neg$  In Kozani I doubled the campus size for the needs of the Institute and built a new building from the remaining deductions of various international competitions.
- ¬ During my two terms as president of TEI Western Macedonia I managed and received funding from various organizations, which exceeded the funding that TEI had received throughout the previous 26-year period of operation.
- ¬ In all actions concerning either European or national funding I managed 90-120% absorbances depending on the year
- ¬ During my tenure as director of the Center for Technological Research of Western Macedonia, the submitted approved or in the approval process was over 30 proposals studies in various bodies of around 3.5 million Euros.

#### SAMPLE SCIENCE PROJECT - RESEARCH PROJECTS

- ¬ September 1983, I participated in the Third National Conference of Physics in Kalamata
- ¬ the summer of 1987, I participated in Union Conference of Physicists Annex D. Macedonia with two tasks: 1. Diagrams Feynman 2. Pinch effect
- ¬ August 1987, I presented in the Central Romanian Institute of Physics a work on "Experimental determination of nuclear structure parameters" (Design necessary for mechanical experiment, electrical, electronic systems)
- ¬ September 1987, I was invited by the TEI of Thessaloniki for the installation of a Van der Graaff accelerator and I worked for it until March 1989
- ¬ Since September 1987, also taught in six-month term seminar ENVIRO (environmental issues), organized by the Technological Educational Institute of Thessaloniki in collaboration with AUTH
- ¬ 1987, submission to the Ministry of Education research program relating to the environment, which was adopted the same year by the Ministry of Education, the no. E58072 of 11/24/1987. The program continued later (in monitoring), having connected more with local authorities, local industries and also other higher education institutions (University of Thessaloniki and University Polytechnics from Athens)
- ¬ Since March 1988, to November of the same year I taught Hardware issues in six months seminar for engineers , organized by the TEI Kozani
- ¬ August September 1988, I participated in the "3rd INTERNATIONAL CONFERENCE" by object "TRENDS IN QUANTUM ELECTRONICS" in Bucharest under the auspices of I.URSU Minister of Research and Technology, Professor of the School of Physics at the University of Bucharest and A.M. PROKHOROV (Physics NOBEL)
- ¬1989-1993, Scientific collaborator in the research program entitled "Determination of gaseous pollutants and transportation study in Kozani Ptolemaida Amyntaio valley "
- ¬ 1989-1993, I was Scientific collaborator of the research program entitled "Dispersion of air pollutants from industrial activity in the area of Ptolemaida - Kozani during days with western circulation '
- $\neg$  April 1990, I presented in Atomic Physics Institute the work on "The laser in semiconductor technology"
- $\neg$  1990,I performed a research program entitled "Correlation of measurements of spectrophotometers BREWERS 036 and 041 and study of the boundary layer in the valley Kozani-Ptolemaida"
- ¬ September 1990, participation as invited lecturer in the 6th INTERNATIONAL SCHOOL ON QUANTUM ELECTRONICS on "LASERS PHYSICS and APPLICATIONS", in Varna, Bulgaria on, "DIRECT LASER SYNTHESIS OF SURFACE COMPOUNDS (NITRIDES / OXINITRIDES)"

- $\neg$  In 1990, I assume to realize an environmental study-research for the relocation of the village-community KOMANOS .
- ¬ winter 91-92, I undertook environmental study-research to relocate KLEITOS community and this was the basis upon which the community of KLEITOS was relocated in the ZEP area
- ¬ February 1992,I participated as a representative of the TEI Kozani at a conference on research programs and NATO Fellowships
- $\neg$  1992 1993, Member of the Committee for the technological development of the region of Western Macedonia
- ¬ February 93, I delivered an environmental study for the ZEP area of Kozani, Municipality of Kozani
- ¬ 1996, My proposal for a research project entitled "Study of radioactive bioaccumulation with biological indicators" in which I was the scientific responsible was approved by the City Council of Kozani (Decision approval 1 / 03.26.1996)
- $\neg$  1997: approval of the proposal for a research project entitled 'Construction of portable device XRF "as project leader (Minutes Approval 4 / 06.17.1997)
- ¬ 1997: approval of a proposal from the Hellenic General Secretariat for Research and Technology of a seminar titled "Industrial Automation" funded by the OP, as project leader
- ¬ 1997 approved seminar funded by the EPEAEK entitled "Energy saving technologies"
- $\neg$  1998 seminar approved funded from EPEAEK entitled 'Renewable energy technologies'
- ¬ Since 1998, scientific leader for he program internship "spasmi" EPEAEK
- ¬ From March to June 1999, radioactive isotope transport Discovery due to the war in Yugoslavia. The team in my laboratory at the Technological Educational Institute of Western Macedonia was the first, which measured and proved that in Yugoslavia were used bullets with depleted uranium cover
- ¬ June 1999, Organization of the Workshop on "The war in Serbia and impact on the environment"
- ¬ From 1998 to 2008, Institutional responsibility for European programs Erasmus / Socrates- Extension actions (entrusted the coordination of the Former ICP with 14 participating institutions abroad, for next year 2002-2003)
- ¬ 1998-2002, Scientific Institutional Head in Leonardo da Vinci. student internships abroad. In 1998 a proposal TEI submitted for the above program as national representatives for the Erasmus program in Greece was approved by Brussels.
- ¬ Since September 2000, I become Institutional responsible of TEI of Western Macedonia for the Extension of Higher Education funded by EPEAEK.
- ¬ From October 2000 until 2008, Institutional Chief Network
- ¬ From April 2000 to 2008, Head GUNET TEI Western Macedonia
- ¬ June 2000, approval of college faculty creation program funded by the World Bank at the University of Bucharest concerning the Technical Administration of SMEs
- ¬ 2002, Evaluator of research programs "Archimedes I"
- ¬ In 2004, Evaluator of research programs "Archimedes II"
- ¬ 2005-2006, President of the National Central Committee of the final evaluation of the research action "Archimedes II" on the topic "Technology"

- ¬ October 2006: Chairman of the World Scientific and Engineering Academy Society at the conference International Symposium, Advanced Measurement Methods
- ¬ October 2006: Invited Professor of the World Scientific and Engineering Academy Society at the conference International Symposium, Advanced Measurement Methods
- ¬ 2006-2008, Elected Member of the National Council for Lifelong Learning
- $\neg$  2011: Approval of the research project "fly ash re-utilization for the product of ceramics" under the Archimedes III
- ¬ Reviewer for several scientific journals and have been many times member of international scientific and organizing committees, chairman or visiting professor in international conferences abroad
- ¬ I have been more than four times State 5-member international doctoral boards
- $\neg$  2010 2012: Participated as an expert in the project of the National Romanian Academy of Economic Research Foundation funded the development sector of the EU HR 2007 2013 on 'employment prospects of young science in the Balkans." POSDRU / 89 / 1.5 / S / 62988, 2010 2012
- 2015 Today President of the districtional consil for research and innovation in district of Western Macedonia , Greece .
- 2016 Febr. External evaluator from abroad for the position of the general director of the Romanian National Institute for Energy.

### **ANNEXES**

#### WRITING books and scientific monographs

- 1. C.Cepisca, S. Ganatsios, N. Jula, (2001), "Instrumentatie Industriala," ICPE, Bucuresti, Romania
- 2. C.Cepisca, M. Covrig, S. Ganatsios P.Notinger.L. Ocheana, R.Parlog-Cristian, C.L.Popescu, M.O. Popescu, D. Steflea, M. Perpelea, (2002), Compendiu de Electronica, Rm. Valcea, Bucuresti, Romania
- 3. SERIŢAN, G, CEPIŞCĂ, C, GANATSIOS S, Energia electrică şi măsurarea ei, Ed.ELECTRA, 2004, Bucuresti, 200pag., ISBN 973-7728-09-2
- 4. S.Ganatsios, M.Dobre, E.Nistor, (2005), Physics of rarefiated gases, TEI of Western Macedonia Press, Kozani 2005
- 5. Physics for scientists and engineers / Randal D. Knight, 1st Volume: Engineering, translation Kon / nos Kritsas Joanna Paraskelidi? Edited by Stathis Sideris, Stergios Gkanatsios, Athens: Macedonian Publishing, c 2007
- 6. Physics for scientists and engineers / Randal D. Knight, 2nd Volume: Electricity, translation Kon / nos Kritsas Joanna Paraskelidi? Edited by Stathis Sideris, Stergios Gkanatsios, Athens: Macedonian Publishing, c 2007
- 7. Octavian Dontu, George Charalampides, Stergios Ganatsios, Sotirios Kandrelis,

Bogdan Alexandrescu. Metode si mijloace pentru evaluarea gradului de poluare a aerului si apei marine. Editura Printech, Bucuresti 2009

- 8. Cristina Mihaela Gheorghe, Mircea Covrig, Ganatsios Stergios, Kikis Vasilis, Meghea Aurelia. «Innovation, a solution for SMEs». Publisher John, Marie Curie Actions. 2011
- 9. Mircea Covrig, Ganatsios Stergios editors (coordinators), "Selected Topics in Applied Electrotechnics", ISBN: 978-960-508-052-5, 2012

#### PUBLICATIONS IN JOURNALS WITH SYSTEM OF REVIEWERS

- 1. "Transfer of 121 I and 137 Cs from cow milk to cheese and other products", The Australian Journal of Dairy Technology, vol 44, no 1, May 1989
- 2. "Direct oxinitride synthesis by multipulse excimer laser irradiation of silicon wafers in a nitrogen-containing ambient environment", Journal of Applied Physics, vol 68, issue 5, 1990
- 3. "Synthesis of pure titanium nitride layers by multipulse excimer laser irradiation of titanium foils a nitrogen-containing atmosphere", Journal of Applied Physics, vol. 69, issue 3, 1991
- 4. "Direct nitridation of a silicon surface by multipulse excimer laser irradiation in a nitrogen-containing ambient gas", Journal of Applied Physics, vol. 70, issue 4, 1991
- 5. "Natural 228Ra, 226Ra, 40K, and artificial 137Cs radionuclides distribution in soil in areas of lignite power plants of Western Macedonia", Journal of Trace and Microprobe Techniques, Volume 19, Issue 2, May 2001, pages 259-266
- 6. "Correlation between hardness and structure of carbon-nitride thin films obtained by reactive pulsed laser deposition", Thin Solid Films, Volume 388, pp 93-100, 2001
- 7. "About the power definitions for nonsinusoidal situations", Buletin Stiinţific Universitatea Piteşti, Seria: Metrologie, Sisteme de măsurare şi Ingineria calităţii, nr.2-3, p.24-30, 2002, ISSN 1582-6023, (SCOPUS)
- 8. "Evaluation of the energetic potential of the wind on the seacoast of the Black Sea using Wavelet Transform. Section: Eolian energy evaluation wavelet transform ", Electrotehnica Electronica Automatica, Vol. 49 nr.9-10, Institutul de Cecretare, Bucuresti-Romania, sept.-oct. 2001
- "The mathematical models of the electromechanical convertors with the intermediate magnetic field", Electrotehnica Electronica Automatic Editorial 2001-2002
- 10. "The estimate of the power potential of the wind at the seaside of the Black Sea", Electrotehnica Electronica Automatic Editorial, 2001-1002
- 11. "Effects of thermo-oxydative stresses on water trees initiation", Electrotehnica Electronica Automatica Editorial, 2001-2002
- 12. "Industrial frequency magnetic field pollution in power plant areas" Electrotehnica Electronica Automatica Editorial, 2001-2002
- 13. "Trace elements distribution in soil in areas of lignite power plants of Western Macedonia", Journal of Trace and Microprobe Techniques, Volume 20, Issue 2, May

- 2002, pages 269-282
- 14. "Heavy metals distribution in some lichens, mosses, and trees in the vicinity of lignite power plants from West Macedonia, Greece. "Journal of Trace and Microprobe Techniques, Volume 20, Issue 3, August 2002, pages 395-413
- 15. "Evaluation of the doses of radioactive material and the population protection countermeasures in a nuclear accident", Journal of Environmental Protection and Ecology, Volume 3, No4,989-994, 2002
- 16. "Influence of the thermal stress in the solid active laser medium on the Technological parameters of the laser beam", Academia Romania. Romanian Journal of Technical Sciences. Applied Mechanics. "Proceedings of the International Conference on manufacturing systems ICMaS 2002 (7, pp 451-454, 2002)
- 17. "About the performances of the electronic energy meters", Acta Electrotehnica, vol.44, nr.2, 2003, pp.97-100, ISSN 1841-3323
- 18. "Energy measurement techniques for non-sinusoidal situations", Acta Electrotehnica, vol.44, nr.2, 2003, pp.91-96, ISSN 1841-3323
- 19. "Procese fizico-chimice care apar in fluidele combustibile tratate in camp magnetic", Revista Chimie, vol. 54, nr. 12, 2003, Revista I.S.I.
- 20. "Natural and artificial radionuclides distribution in some lichens, mosses and trees in the vicinity of lignite power plants from West Macedonia, Greece", J. Trace Microprobe Tech., Vol. 21 (3): 543-554
- 21. "Determinari experimentale privind regimul deformant la functionarea lampilor cu vapori de sodiu de inalta presiune", Buletinul Stiintific al Universitatii din Pitesti, Seria Metrologie, Sisteme de masurare si ingineria calitatii, nr.4 / 2003, pag.38-44, Ed .Universitatii Pitesti, ISSN 1582-6023
- 22. "Mesurage de l'energie electrique. Erreurs et compensations», Buletinul Stiintific al Universitatii din Pitesti, Seria Metrologie, Sisteme de masurare si ingineria calitatii, nr.4 / 2003, pag. 84-88, Ed. Universitatii Pitesti, ISSN 1582-6023
- 23. "The measurements of electrical nonsinusoidal signals", Buletinul Stiintific al Universitatii din Pitesti, Seria Metrologie, Sisteme de masurare si ingineria calitatii, nr.1 / 2004, pag.22-26, Ed. Universitatii Pitesti, ISSN 1582-6023
- 24. "Reducerea regimului nesinusoidal in functionarea lampilor cu vapori de sodiu", Buletinul Stiintific al Universitatii din Pitesti, Seria Metrologie, Sisteme de masurare si ingineria calitatii, nr.1 / 2004, pag.82-86, Ed. Universitatii Pitesti, ISSN 1582-6023 25. "Force computation of a PM separator", Rev. Roum. Sci. Techn.- Électrotechn. et Énerg., 49, 4, p., Bucharest, 2004
- 26. "Influence of Thermal Deformation in the Solid Laser Medium on the Emitted Radiation Parameters", Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science August 1, 2005 219: 823-827
- 27. "Increasing pumping efficiency in cavities of the laser generators with active solid medium by optimizing their profile", Romanian Journal of Optoelectronics. Revista I.S.I.2004, v. 12, "issue, January March 2004
- 28. "Procese biofizico chimice in tesuturile umane vii traumatiza tratate cu collagen si asistate ultrasonic", Revista de chimie, Revista ISI 2004
- 29. "Sudarea cu laser CO2 a unor oteluri inoxidabile", Revista de Mecanica Fina Optica si Mecatronica ", Nr. 4, 2004, pag.4
- 30. "Methodes de correction des erreurs dues aux transformateurs de courant au mesurage des energies electriques", Buletinul Institutului Politehnic din Iasi, Tom L (LIV), 2004, Fasc.5B, pag.745-755

- 31. "Method for determination of the equivalent network for reciprocal and symmetrical multipol circuits", Buletinul Stiintific al Universitatii din Pitesti, Seria Metrologie, Sisteme de masurare si ingineria calitatii, nr.1 / 2004, pag.82-86, Ed. Universitatii Pitesti, ISSN 1582-6023
- 32. "Senzor inteligent bazat pe nanotehnologii pentru determinarea concentratiei de monoxid de carbon", Buletinul Stiintific al Universitatii din Pitesti, Seria Metrologie, Sisteme de masurare si ingineria calitatii, nr.1 / 2004, pag.132-140, Ed. Universitatii Pitesti, ISSN 1582-6023
- 33. "Procese fizico-chimice care au loc la interactiunea dintre tesuturile umane vii traumatizate preparate chimice colagenice si ultrasunete", Revista Chimie vol. 56, nr1, 2005
- 34. "Sudarea cu laser a unor oteluri inoxidabile utilizate la instalatiile de process din industria chimica", Revista Chimie, vol. 56, nr 2, 2005
- 35. "Inoxidabile pentru imbunatatirea resiztentei la coroziune", Revista de chimie Vol.56, nr 2, 2005
- 36. "About of new method for Synchronizing control of an stretch-reducing mill" Buletinul Institutului Politehnic Iasi, Tomul LII (LVI), Fasc. 5A, 2006, Electrotehnica, Energetica, Electronica, pp.27-33, ISSN 1223-8139
- 37. "The Sensitivies in Automatic Systems Circuits Using the Relative Values", Military Technical Academy, MTA Review No.2 "Bucharest-Year XVI, 2006 38. "About the linearity of Thermocouples", Session II Sensors Technology and Signals, pp.45-49, Editura Printech, Bucuresti, ISBN (10) 973-718-512-9 ISBN (13) 978-973-718-512-9
- 39. "Performances of a Waste Recycling Separator with Permanent Magnets", Journal of Materials Processing Technology, (ISI), ISSN 0035-4066, Volume 181, Issues 1-3, 1 January 2007, Pages 246-248
- 40. "Utilizari ale instrumentelor cu interfata Ethernet in sistemele de achizitie de date", Electrotehnica EEA 55/2007 (p.36-40)
- 41. "Methods for power measurement in energy meters", The scientific bulletin of electrical engineering faculty, year 8 No.2 (9), Valahia, 2008
- 42. "Data acquisition and assessment of the air pollution at urban background station", The scientific bulletin of Electrical Engineering Faculty. (p.93-97) 2008
- 43. "Passive and active compensations for current transformers", Metrologie, nr.4, 2008, Bucharest, pp. 5-10, ISSN 1220-546-x, (CNCSIS D)
- 44. "Laser mechatronic intelligent systems for measurement and integrated control with applications in industrial and metrological processes", The Romanian Review Precision Mechanics, Optics & Mechatronics 33/2008 (p.105-112)
- 45. "Production alignment of equipment and technology for micro / nanoprocessing at European and worldwide requirements and development tendencies", The Romanian Review Precision Mechanics, Optics & Mechatronics 34/2008
- 46. "Thermal Imaging Utilization for Analysis of Thermal Phenomena in High Voltage Fuse-Links", EEA Electrotehnica, Electronica, Automatica, vol.57, nr.1, ianuarie-martie 2009, pp.11-16, ISSN 1582-5175
- 47. "Integration of rapid prototyping in manufacturing process for mechatronic systems", The Romanian Review Precision Mechanics, Optics & Mechatronics 35/2009 (p.113-118)
- 48. "Methods and means for assessing the degree of air pollution and marine water", PRINTECH, Bucharest, 2009

- 49. "Considerations on treating some fuel fluids in a magnetic field", The Romanian Review Precision Mechanics, Optics & Mechatronics, 2010
- 50. "On the dynamic stability analysis for compliant gripper", The Romanian Review Precision Mechanics, Optics & Mechatronics 40/2011, (p.172-174)
- 51. "CAD Analysis Applied to Self-Centering Compliant Grippers", The Romanian Review Precision Mechanics, Optics & Mechatronics 40/2011 (p.290-293)
- 52. "Porosity-Mechanical Behaviour Correlation in Cranial Implants", The Romanian Review Precision Mechanics, Optics & Mechatronics 39/2011 (p.13-16)
- 53. "Autonomous System of Vibro-Acoustic Monitoring of the Grinding Process to Increase the Quality of the Processed Parts", Control Engineering and applied informatics. Vol. 13, 2011 (p. 14-19)
- 54. "The Material's Temperature Influence on Absorption Degree of Laser Radiation in Technological Processes", The Romanian Review Precision Mechanics, Optics & Mechatronics 39/2011
- 55. "Quantum analysis of microwave mud interaction", Journal of Environmental Protection and Ecology 14, No 1, pages 180 -186, 2013
- 56. "An innovate method for wastewater sludge drying", Journal of Environmental Protection and Ecology 14, No 1, pp 196 -203, 2013
- 57. "CAD Analysis Applied to Self Centering Compliant Grippers", Applied Mechanics and Materials, Vol. 325 326, pp. 305-309, 2013
- 58. "Mechatronics Galaxy" a New Concept for Developing Education in Engineering, Applied Mechanics and Materials, Vol 371, pp.754 758, 2013
- 59. "Strategy of fem modelling of ultrasonic horn for workpiece vibration used at micro-electrical discharge machining", IJPD 5 (2), pp.99 114, 2014

## ARTICLES IN INTERNATIONAL CONFERENCE WITH SYSTEM OF REVIEWERS

- "Surface nitride / oxynitride layers obtained by multipulse excimer laser irradiation of metal and semiconductor samples" SPIE - The International Society for Optical Engineering - First International School on Laser Surface Microprocessing: proceedings: 30 October-3 November 1989, Tashkent, USSR / VI Konov, B.S. Lukyanchuk, I. Boyd, chairs / editors; 1990 (SPIE Vol. 1352), / 113
- 2. "New results in direct nitridation of titanium and silicon by multipulse excimer laser irradiation in a nitrogen or ammonia ambient atmospheres" Lasers: Physics and applications proceedings of the 6th International School on Quantum Electronics, Varna, Bulgaria, September 14-19, 1990 / editor, Peter Atanasov, 1991
- 3. "Direct laser synthesis of surface compounds (nitrides / oxinitrides)", Lasers: Physics and applications proceedings of the 6th International School on Quantum Electronics, Varna, Bulgaria, September 14-19, 1990 / editor, Peter Atanasov, 1991
- 4. "Laser synthesis of Titanium Silicide", International conference: Laser and their applications Lasers 90 (IV conference), Oct.23-26, Plovdiv, Bulgaria, 1990
- 5. "Laser promoted Ti in-diffusion into LiNbO3 single crystalline substrates for preparation of performant optical planar waveguides", CNOE '93 Prima Conferinta Nationala de Optoelectronica, Bucharest, Romania, 1993

- 6. "Specrtophotometric measurements of the total amount of SO2, NO2 and O3 in the Kozani Ptolemais valley", 2nd Panhellenic Conference on Meteorology-Climatology and Atmospheric Physics, Thessaloniki, 29-30 Sept. 1994
- 7. "Analysis Recommendation fly ash with nuclear methods" Conference "Environment measurements and protection. Environment and Education ", Kozani, 8-9 April. 1994
- 8. "Study of accumulation of radioactivity using biological indicators", 3rd General Conference of the Balkan Physical Union (BPU-3), 2-5 September 1997, Cluj-Napoca, Romania, Proc. Suppl. Balkan Physics Letters vol.5 (1997)
- 9. "On the TSP concentrations and their trace elements content in Eordea basin, an industrial area in Western Macedonia, Greece", 3rd General Conference of the Balkan Physical Union (BPU-3), 2-5 September 1997, Cluj-Napoca, Romania, Proc. Suppl.Balkan Physics Letters vol.5 (1997)
- 10. "Concentration levels of atmospheric pollutants in the vicinity of Kozani, Greece", PROTECTION AND RESTORATION OF THE ENVIRONMENT IV, Int. Conf, Proceedings, pg.396-403,1998
- 11. "Evaluation of the doses of radioactive material and the population protection countermeasures in nuclear accident", 2nd Balkan Conference on Industrial Pollution, Sofia-Bulgaria, 19-20 Nov. 1999
- 12. "Radiometric investigations of natural and artificial radioactive elements in Western Macedonia Valley", 3rd International Conference of Balkan Environmental Association (B.EN.A) Transboundary Pollution, Bucharest-Romania, 23-26 Novemb. 2000
- 13. "Investigation of the fly ash trace element pollution of the soil in the vicinity of the coal fired plants of Western Macedonia (Greece)", International Conference for promotion of Sustainable Development on Global Scale in the Context of Forthcoming Earth Summit, Cracow 11 -13/3/2002, pg. 137-150
- 14. "About the performances of the electronic energy meters", International Conference "Metrology & Measurement Systems METSIM'2002", Bucharest, June 27-28, 2002, Section V, CD-ROM, ISBN973-8067-57-x, Ed. ICPE (Electra)
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- 59.'The Influence of Machined Surface Microgeometry on Mechanical Hydraulic Removal Mechanism at Ultrasonically Aided EDM Finishing 'INNOVATIVE MANUFACTURING ENGINEERING & ENERGY INTERNATIONAL CONFERENCE ImanE2 2016 September 23-25, 2016 Kallithea Chalkidiki, Greece

### WRITING NOTES IN TEACHING COURSES

- -- Physics | Theory
- ¬ Physics II (Exercises)
- Microprocessors (Hardware) Theory
- ¬ Electrotechnics (Exercises)

## RESEARCH WORK FOR TITLES ACQUISITION

- ¬ Graduation, research thesis entitled "Spectroscopy high SPIN statements in 69As, 70As"
- ¬ Graduate (master), research thesis entitled "High SPIN statements Study 70As"
- ¬ «Experimental definition of nuclear structure parameters"
- "The laser in semiconductor technology"
- ¬ Doctoral thesis titled «Direct laser synthesis of metal and semiconductors nitrides with appropriate properties for applications in VLSI microelectronics»

## **PROJECTS**

- -- Air Pollution Assessment Study in the Komanos, Ptolemais, December 90
- $\neg$  Pollution Study of the candidate for the installation of the inhabitants of Kleitos region (despite the ZEP), 1992
- ¬ Measurement of suspended particles, radioactivity and noise pollution in Kleitos

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