

CURRICULUM VITAE

Funcția în cadrul proiectului: director.

1. Numele: **SAJIN**
2. Prenumele: **GHEORGHE IOAN**
3. Data și locul nașterii: **19 decembrie 1948, mun. Făgăraș, jud. Brașov**
4. Cetățenie: **română;**
5. Starea civilă: **casătorit, doi copii;**
6. Studii:

Instituația	Universitatea "Politehnica" – București, Facultatea de Electronică și Telecomunicații	
Perioada: de la (luna, anul) până la (luna, anul)	Octombrie 1967 – Iulie 1972	
Grade sau diplome obținute	Diploma de inginer electronist	

7. Titlul științific: **Doctor în electronică din anul 1990, specialitatea Radiotehnică și Radiocomunicații**

8. Experiența profesională:

Perioada: de la (luna, anul) până la (luna, anul)	Septembrie 1972 -- -- Noiembrie 1996	Noiembrie 1996 -- -- prezent	
Locul:	Lab. de Componente pt. Microunde	Lab de Dispozitive și Structuri Microprocesate pentru microunde	
Instituația:	ICCE - București	IMT - București	
Funcția:	Succesiv de la inginer stagiar până la cercet.st.princ.gr1	Cercetător Științific Principal gr.1	
Descriere:	a) Cercetare, realizare și omologare de componente pasive de microunde cu specializare în componente nereciproce cu ferită. b) Studiul efectelor biologice ale microundelor și a microdispozitivelor de microunde dedicate aplicațiilor biomedicale.	a) Cercetare componente de microunde microprelucrate cu ferită. b) Studiul microdispozitivelor de microunde dedicate aplicațiilor biomedicale, a cercetărilor poluării electromagnetice și a efectelor biologice ale acestora	

9. Locul de muncă actual și funcția: **Institutul Național de Cercetare-Dezvoltare pentru Microtehnologie – IMT, București; cercetător științific principal gr.1**

10. Vechime la locul de muncă actual: **32 de ani;**

11. Brevete și invenții: **două;**

12. Lucrări elaborate și/sau publicate:

- **Peste 100 lucrări științifice și articole și în reviste de specialitate dintre care 54 la conferințe și reviste internaționale de prestigiu.**
Se anexează lista cu lucrările din domeniul Programului.
- **Coautor a cinci cărți din domeniul efectelor biologice ale microundelor. Vezi lista anexată.**
- **Peste 110 de rapoarte de cercetare științifică.**

13. Membru al asociatiilor profesionale: **membru IEEE din anul 1995 cu numarul 40112360.**
14. Limbi straine cunoscute: **engleza (bine), franceza (bine);**
15. Alte competente:
- a) **Specialist in domeniul efectelor biologice ale radiatiilor electromagnetice si aplicarii microundelor in medicina si biologie;**
 - b) **Competent in utilizarea tehnicii de calcul (Office, Microwave Office, alte programe dedicate, etc.);**
16. Specializari / calificari (relevante in cadrul proiectului):
- a) **Doctorat cu tema: “Contributii la studiul componentelor de microunde in configuratie microstrip pe substrat de ferita polarizata magnetic”.**
 - b) **Specializare in domeniul propagarii nelineare a undelor electromagnetice (colaborare bilaterala cu CNR, M²T - Microwave Microsystem Technology, Roma, Italy);**
 - c) **Specializare in proiectarea si realizarea dispozitivelor cu unde acustice de suprafata SAW (codirector al Proiectului NATO SfP 974130 ”Ceramic Substrate with Controlled Piezoelectric Properties for Surface Acoustic Wave Applications”).**
17. Experienta acumulata in alte programe nationale/internationale: (relevante in cadrul proiectului)

Programul/Proiectul	Functia	Perioada: de la... (luna, anul) pana la... (luna, anul)
Circuite pasive pentru microunde. Circulatoare microstrip	Responsabil de proiect	1978-1982
Cercetari privind efectele biologice ale microundelor in investigare si tratament medical	Responsabil de proiect	1990 - 1994
Cercetari in vederea stabilirii unor metode de masura ale intensitatilor campurilor electromagnetice in medii cu risc de iradiere.	Responsabil de proiect	1993 - 1995
Studiul ratei specifice de absorbtie (SAR) a radiatiilor electromagnetice de catre structurile biologice.	Responsabil de proiect	1995 - 1998
Studiul propagarii neliniare a microundelor prin medii ferite polarizate magnetic. Grant MCT	Responsabil de grant	1997 – 1998
Propagarea solitonica in filme subtiri magnetice pe membrane dielectrice microprelucrate	Responsabil de proiect	1999 – 2001
Microtehnologie pentru aplicatori si retele de aplicatori destinati aplicatiilor biomedicale.	Responsabil de proiect	1997 - 1998
Aplicatori microprocesati pentru inducerea hipertermiei in aplicatii biomedicale. Grant ANSTI:	Responsabil de proiect	1999 - 2001
Proiect international NATO SfP 974130 - Acoustic Waves-- ”Ceramic Substrate with Controlled Piezoelectric Properties for Surface Acoustic Wave Applications”	Co-director	2000 - prezent
Colaborare internationala bilaterala cu Italia, Consiglio Nazionale delle Ricerche, Microwave Microsystems Technology cu tema: Dispozitive microprocesate de microunde cu unde magnetostatice	Responsabil de proiect	2000 - prezent
Dispozitive cu unde acustice de suprafata si de volum pentru aplicatii in biomedicina si monitorizarea poluarii mediului MATNANTECH	Responsabil de proiect	2004 - 2006
Dispozitive de microunde si unde milimetrice pe medii cu banda de frecventa interzisa (PBG) microprelucrate in ceramici semiconductoare: Grant CNCSIS	Responsabil proiect	2005 - 2007

18. Alte mentiuni:

- **10 omologari de produse dintre care doua din familia a dispozitivelor neregiproce de microunde;**
- **Profesor asociat la Universitatea “Politehnica” – Bucuresti;**
- **Profesor asociat la Universitatea “Valahia” – Targoviste;**
- **Membru din partea Romaniei in Comitetul International de Organizare a Conferintei Internationale asupra Feritelor de Microunde – ICMF;**
- **Conducator (chairman) al mai multor sectiuni stiintifice la diferite conferinte internationale.**

Declar pe proprie raspundere ca datele prezentate sunt in conformitate cu realitatea.

Data: 15 Iunie 2005,

Semnatura:

A handwritten signature in black ink, consisting of a stylized 'S' followed by a horizontal line and a diagonal stroke.

LISTA LUCRARILOR STIINTIFICE.

Dr. ing. SAJIN GHEORGHE IOAN

(selectie: lucrari internationale si carti din domeniul proiectului propus)

A. CARTI PUBLICATE

1. ZAMFIRESCU G., SAJIN G., RUSU I., SAJIN MARIA, KOVACS EUGENIA.: *Efecte biologice ale radiatiilor electromagnetice de radiofrecventa si microunde.* --- Editura Medicala, ISBN 973-39-0426-0, Bucuresti, 2000.
2. GHEORGHE SAJIN, GHEORGHE GAVRILOAIA, MARIA SAJIN, ION RUSU: *Absorbția campului electromagnetic in zona capului uman* --- Editura Academiei Tehnice Militare, ISBN 973-8290-33-3, Bucuresti, 2002.
3. GHEORGHE SAJIN, MARIA SAJIN, GHEORGHE GAVRILOAIA: *Absorbția si efectele undelor milimetrice in mediile biologice* --- Editura Academiei Tehnice Militare, ISBN 973-8290-59-7, Bucuresti, 2002.
4. GHEORGHE SAJIN, MARIA SAJIN, ION MOGOS, MIHAI MOGOS: *Termografia Clinica si experimentală. Vol.1: Absorbția termica si atermica a energiei electromagnetice in corpul uman* --- Editura GENEZE, ISBN 973-9099-09-2, Bucuresti, 2002.
5. GHEORGHE SAJIN, MARIA SAJIN, GHEORGHE GAVRILOAIA: *Aplicatii biologice ale radiatiilor electromagnetice* --- Editura Academiei Tehnice Militare, ISBN 973-640010-7, Bucuresti, 2003.

B. ARTICOLE PUBLICATE IN REVISTE INTERNATIONALE SI COMUNICARI LA CONFERINTE INTERNATIONALE SAU CU PARTICIPARE INTERNATIONALA.

1. SAJIN G.: *The analysis of the circulator frequency shift with the temperature variation.* --- 10th European Microwave Conference - Eu.M.C., Warszawa, Poland, 1980, pag. 403.
2. SAJIN G., RAU SVETLANA, CHIRIAC H., NEAGU MARIA: *An 8.3 GHz microstrip circulator.* --- 6 - th International Conference on Microwave Ferrites - I.C.M.F., Varna, Bulgaria, 1982, pag. 182.
3. SAJIN G.: *Equation sets for microstrip circulator mask designing.* --- 7th International Conference on Microwave Ferrites - I.C.M.F., Smolenice. Cehoslovacia, 1984, pag. 267.
4. DRAGOMAN M., SAJIN G.: *The transient state of microstrip antenna.* --- 15th European Microwave Conference. - EuMC, Paris, France, 1985.
5. SAJIN G., DRAGOMAN M., CATOIU M., CORICI A.: *Scanning microstrip antenna on ferrite substrate* --- 8th International Conference on Microwave Ferrites - I.C.M.F., Ilmenau, Germany, 1986.
6. SAJIN G., DRAGOMAN M.: *A new method for the synthesis of series fed microstrip arrays.* -- - URSI International Symposium on Electromagnetic Theory, Budapest, Hungary, 1986.
7. DRAGOMAN M., SAJIN G.: *A time domain technique for transient radiation of arbitrarily shaped microstrip antennas.* --- URSI International Symposium on Electromagnetic Theory, Budapest, Hungary, 1986
8. SAJIN G., DRAGOMAN M., CATOIU M., CORICI A.: *A scanning microstrip antenna on ferrite substrate and its application as diathermy applicator.* --- 16-th European Microwave Conference - EuMC, Dublin, Ireland, 1986.
9. SAJIN G.: *The study of hybrid microstrip couplers on magnetised ferrite substrates.* --- 10th International Conference on Microwave Ferrites - I.C.M.F., Sczyrk, Poland, 1990. pag. 386 – 390.
10. SAJIN G.: *Effects of the magnetic polarisation on microwave components in microstrip configuration on ferrite substrate.* --- R.F. Expo. West, Santa Clara, California, USA, Febr.1991.

11. KOVACS EUGENIA, POLOGEA R., DINU AL., SAVOPOL T., SAJIN G.: *Effect of microwave electromagnetic field on erythrocytic membrane of human blood*. --- XIVth Congress of the European Society of Pathology, Innsbruck, Austria, Sept. 1993. pag. 802.
12. SAJIN GH., SAVOPOL T., POLOGEA ROXANA DINU AL., KOVACS EUGENIA: *Microwave applicator with circular aperture used in biological experiments*. CAS - ICCE, Sinaia, 12 - 16 octombrie 1993, p. 105 – 108.
13. SAJIN G., DINU AL., KOVACS EUGENIA, POLOGEA R., SAVOPOL T.: *Corrugated flange applicator used in the study of effects of microwaves on the human red cell membrane*. --- Mediteranean Electrotechnical Conference -- MELECON'94, Antalya, Turkey, 12 - 14 April 1994.
14. SAJIN G., DINU AL., KOVACS EUGENIA, POLOGEA R., SAVOPOL T.: *Effects of low power microwave radiation on human blood red cell*. --- International Microwave Symposium - 1994 IEEE MTT - S, San Diego, California SUA, May 1994, pag. 543.
15. SAVOPOL T., MORARU R., DINU AL., KOVACS EUGENIA, SAJIN G.: *The effect of low power microwaves on human erythrocytes*. --- 1994 International Symposium on Charge and Field Effects in Biosystems. Virginia Commonwealth University, Richmond, Virginia, SUA, June 1994, pag. 320.
16. SAJIN G., DINU ALEXANDRU, KOVACS EUGENIA, POLOGEA ROXANA, SAVOPOL T.: *Microwave power window effect on human blood haemolysis*. --- The Xth Microwave Conference MIKON'94, Ksiaz, Poland, June 1994.
17. SAJIN G., DINU AL., KOVACS EUGENIA, POLOGEA R., SAVOPOL T., SAJIN MARIA: *Low power microwave radiation effects on human erythrocytes*. --- 2nd General Conference of the Balkan Physical Union -- BPU-2, Izmir, Turkey, 12 - 14 Sept. 1994.
18. SAJIN G., DINU AL., SAVOPOL T., MORARU ROXANA, KOVACS EUGENIA: *2.45 GHz Microwave Radiation Effects in Nonthermal Damaging of the Human Erythrocyte Membrane*. --- 25th European Microwave Conference - EuMC, Bologna, Italy, 04 - 08 Sept. 1995, p. 845 – 848, ISBN 1 899919 15 5.
19. SAVOPOL T., MORARU R., DINU AL., KOVACS EUGENIA, SAJIN G. *Membrane damage of human red blood cells induced by low power microwave irradiation*. Electro--and Magnetobiology, 14(2), 1995, pp. 99 – 105.
20. SAJIN G., SAJIN MARIA, DINU AL., KOVACS EUGENIA, POLOGEA ROXANA, SAVOPOL T.: *Hemoglobin release from human erythrocyte during irradiation with low power electromagnetic field*. --- VIII Meeting of the European Association of Hematopathology - E.A.H.P., Paris, Franta, 22 - 25 aprilie 1996, p. 99.
21. SAJIN GH., RUSU I., BERCEA ADRIANA, EPURE ELENA, DINU AL., SAVOPOL T.: *Factori de risc indusi de radiatiile de microunde de joasa putere asupra sistemelor biologice*. --- Al 10-lea Simpozion de Teoria si Tehnica Microundelor -- TTM '96 -- Academia Tehnica Militara, Bucuresti, 6 – 8 noiembrie 1996, pp. 110 – 113.
22. SAJIN G., KOVACS E., SAVOPOL T., DINU AL., SAJIN MARIA, RUSU I., (1997), *Low power microwave effects on erythrocytes membranes*, Ierusalim, Israel, 27th European Microwave Conference (Eu.M.C.), 08 -- 12 Sept. 1997, pp. 596 – 599/Vol.1, ISBN 0-7803-4202-X (Microfiche).
23. DRAGOMAN M., MARCELLI R., SAJIN G., (1997), *Propagation of "dark solitons" in ferritic monocrystalline film at microwave frequencies*, Sinaia, Romania, 20th International Semiconductor Conference, CAS, 07 – 11 oct. 1997, p. 365 – 368/Vol.2, ISBN 0-7803-3804-9 si ISBN 0-7803-3805-7.
24. MARCELLI R., SIMION S., SAJIN G., DRAGOMAN M., (1997), *Spectral and time domain characteristics of nonlinear magnetostatic surface waves in pulsed regime* 20th International Semiconductor Conference, CAS, Sinaia, Romania, 07 – 11 oct. 1997, p. 369 – 372/Vol.2, ISBN 0-7803-3804-9 si ISBN 0-7803-3805-7.
25. MATEI ELENA, SAJIN G., AVRAMESCU V., DRAGOMAN M., MARCELLI R., (1998), *Magnetostatic wave transducers on silicon wafers and on silicon membranes*, Sinaia,

- Romania, 21st International Semicond. Conf., CAS, 06 – 10 oct. 1998, p.635 – 638/Vol.2, ISBN 0-7803-4432-4 si ISBN 0-7803-4433-2.
26. **SAJIN G., DRAGOMAN M., MARCELLI R., MATEI ELENA,** (1998), *Microwave "dark" soliton effect: compression of pulses and signal to noise enhancement*, Amsterdam, The Netherlands, 28th European Microwave Conference - Eu.M.C., 05 - 09 Oct. 1998, pp. 250 - 254/Vol.2, ISBN 086213 1413.
 27. **MATEI ELENA, SAJIN GH.,** (1999), *S parameters for magnetostatic wave transducers on silicon microstructures*, Antalya, Turkey, The 3rd International Conference on Low Dimensional Structures and Devices -- LDS, 15 - 17 Sept. 1999.
 28. **SAJIN G., MATEI ELENA, DRAGOMAN M.,** (1999), *Microwave straight edge rezonator (SER) on silicon membrane*, Sinaia, Romania, 22nd International Semiconductor Conference, CAS, 09 - 05 Oct., 1999; pp. 283 - 286/Vol.1, ISBN 0-7803-5139-8 si ISBN 0-7803-5140-1.
 29. **MATEI ELENA, GEORGE SAJIN,** (2000), *S parameters for magnetostatic wave transducers on silicon microstructures* --- Microelectronic Engineering, 51-52(2000), pp. 479 -483, ISSN 0167-9317/00/\$.
 30. **SAJIN G., SANDULESCU T., MORARU VICTORIA:** *Effects of microwave radiation on wistar rats with Walker tumors.* --- World Congress on Medical Physics and Biomedical Engineering, Chicago, July 2000.
 31. **SAJIN G., MATEI ELENA, MARCELLI R.,** (2000), *Tunable microwave SER on silicon membrane*, Sinaia, Romania, 23rd International Semiconductor Conference, CAS, Oct. 2000, pp. 241 - 244/Vol.2, ISBN 0-7803-5885-6.
 32. **SAJIN G., MATEI ELENA, MARCELLI R.:** *Microwave tunable straight edge resonator on silicon membrane.* --- 30th European Microwave Conference - EuMC, Paris, France, 02 – 06 Oct. 2000, pp. 121 – 124.
 33. **SAJIN G., KOVACS EUGENIA, MORARU POLOGEA ROXANA, SAVOPOL T., SAJIN MARIA,** (2000), *Cell membrane permeabilization of human erythrocytes by athermal 2450 MHz microwave radiation*, IEEE Transactions on MTT, Vol MTT 48 (2000), November 2000, pp. 2072 - 2075, ISSN 0018-9480.
 34. **ROXANA POLOGEA - MORARU, KARINA ILIESCU, VIOLETA CALOTA, EUGENIA KOVACS, GHEORGHE SAJIN:** *Microwaves induced changes in membrane fluidity of photoreceptor cells.* --- 12th Biochemical Biophysical Balkan Days, 10 - 13 May, 2001, Bucharest, Romania.
 35. **GEORGE SAJIN, ROMOLO MARCELLI:** *Tunable SER on Microprocessed Silicon Membrane and on Silicon Bulk* --- 12th MicroMechanics Europe Workshop, MME 2001, Cork, Ireland, 16 – 18 Sept. 2001, pp. 203 – 206.
 36. **GEORGE SAJIN, ROMOLO MARCELLI,** (2001), *Micromachined Magnetostatic Wave Resonators*, London, England, 31st European Microwave Conference – Eu.M.C., 26 - 28 Sept. 2001, pp. 5 - 8, ISBN 0 86213 148 0.
 37. **GEORGE SAJIN, ROMOLO MARCELLI, ALINA CISMARU,** (2001), *MSW resonators on silicon bulk and on micromachined silicon membrane: a comparison*, Sinaia, Romania, 24th International Semiconductor Conference, CAS, 09 – 13 Oct. 2001, pp. 155 – 158, ISBN 0-7803-6666-2.
 38. **GEORGE SAJIN, ROMOLO MARCELLI,** (2001), *Magnetostatic straight edge resonators on micromachined silicon membrane*, San Francisco, USA, SPIE's 2001 Symposium on Micromachining and Microfabrication, Conference 4559 – MEMS Components and Applications for Industry, Automobiles, Aerospace and Communications, 22 – 23 Oct. 2001, pp. 178 - 181, ISBN 0-8194-4287-9, ISSN 0277-786X.
 39. **SAJIN GEORGE, SANDULESCU TEODOR, MORARU VICTORIA, SAJIN MARIA:** *Tumour Remission in Rats by Irradiation with Non-Thermal Power Levels Microwaves.* --- 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society 25 - 28 October 2001, Istanbul, Turkey.

40. ROMOLO MARCELLI, **GEORGE SAJIN**, ALINA CISMARU: *Micromachined magnetostatic wave band-pass rezonators*. --- INTERMAG 2002, 28 April – 03 May 2002, Amsterdam, The Netherlands.
41. ROXANA POLOGEA-MORARU, EUGENIA KOVACS, KARINA ROXANA ILIESCU, VIOLETA CALOTA, **GHEORGHE SAJIN**, (2002), *The effect of low level microwaves on the fluidity of photoreceptor cell membrane* --- Bioelectrochemistry 56(2002), pp. 223 - 225, ISSN 1567-5394/02/\$.
42. **GEORGE SAJIN**, ROMOLO MARCELLI, FLOREA CRACIUNOIU, ALINA CISMARU, (2002), *Tunable band-stop resonator on silicon micromachined membrane*, Milano, Italy, 32nd European Microwave Conference - Eu.M.C., 23 - 27 Sept. 2002, pp 151 – 154, 0 86213 208 8.
43. **GEORGE SAJIN**, FLOREA CRACIUNOIU, ROMOLO MARCELLI, ALINA CISMARU, (2002), *High Q Band Stop MSW resonators on Micromachined Silicon Membrane*, Sinaia, Romania, 13th MicroMechanics Europe Workshop, MME 2002, 06 – 07 Oct. 2002, pp. 315 – 318, ISBN 973-0-02472-3.
44. **GEORGE SAJIN**, FLOREA CRACIUNOIU, ROMOLO MARCELLI, ALINA CISMARU, (2002), *Micromachined magnetostatic wave band - Stop resonator*, Sinaia, Romania, 25th International Semiconductor Conference, CAS, 08 – 12 Oct., 2002, pp. 37 – 40, ISBN 0-7803-7440-1.
45. TEODOR SANDULESCU, ION TERBEA, VICTORIA MORARU, **GEORGE SAJIN**: *Effects of athermic microwaves on malignant ascitic cells* --- 2nd European Medical & Biological Engineering Conference, December 04 – 08, 2002, Vienna, Austria.
46. ROMOLO MARCELLI, **GEORGE SAJIN**, FLOREA CRACIUNOIU, ALINA CISMARU: *Band - stop magnetostatic wave resonators on micromachined silicon membrane* --- SPIE's 2003 Symposium on Micromachining and Microfabrication, Conference 4981 – MEMS Components and Applications for Industry, Automobiles, Aerospace and Communication II, San Jose, CA, USA, 28 – 29 Ianuarie 2003.
47. **GEORGE SAJIN**, ROMOLO MARCELLI, FLOREA CRACIUNOIU, ALINA CISMARU: *MSW resonators on micromachined silicon membrane* --- IEEE MTT-S International Microwave Symposium, Philadelphia, Pennsylvania, USA, June 8 – 13, 2003, pp. 1271 - 1274.
48. **GEORGE SAJIN**, ROMOLO MARCELLI, ALINA CISMARU, FLOREA CRACIUNOIU: *Cascaded band stop MSW resonators on micromachined silicon membrane* --- 26th International Semiconductor Conference, CAS, Sinaia, Romania, 28 Sept. – 02 Oct., 2003, pp.117 - 120, ISBN 0-7803-7821-0.
49. ALINA CISMARU, ROMOLO MARCELLI, **GEORGE SAJIN**, FLOREA CRACIUNOIU: *Modelling of matched microstrip lines on bulk and micromachined silicon substrates*,--- 26th International Semiconductor Conference, CAS, Sinaia, Romania, 28 Sept. – 02 Oct., 2003, pp. 121 - 124, ISBN 0-7803-7821-0.
50. **GEORGE SAJIN**, ROMOLO MARCELLI, ALINA CISMARU, FLOREA CRACIUNOIU: *Double YIG band-stop rezonators on silicon membrane* --- 33rd European Microwave Conference - Eu.M.C., Munchen, Germany, 06 - 10 Oct. 2003, pp. 135 - 138, ISBN 1-58053-839-8.
51. ALINA CISMARU, ROMOLO MARCELLI, **GEORGE SAJIN**, FLOREA CRACIUNOIU: *Modeling of microstrip lines on micromachined silicon substrates* --- SPIE's 2004 Conference 5455 on MEMS, MOEMS and Micromachining, 29 – 30 April 2004, Strassbourg, France.
52. ROMOLO MARCELLI, **GEORGE SAJIN**, ALINA CISMARU, FLOREA CRACIUNOIU: *Band-stop magnetostatic waves micromachined resonators* --- Applied Physics Letters, March 29, 2004, Vol.84, Issue 13, pp.2445 - 2447.

53. ROMOLO MARCELLI, **GEORGE SAJIN**, ALINA CISMARU, FLOREA CRACIUNOIU: ***Band-stop magnetostatic waves micromachined resonators*** --- Virtual Journal of Nanoscale Science & Technology, March 29, 2004, Vol. 9, Issue 12.
54. ROMOLO MARCELLI, **GEORGE SAJIN**, ALINA CISMARU: ***Band-pass magnetostatic wave resonators on micromachined silicon substrate*** --- Review of Scientific Instruments, April 01, 2004 .
55. **GEORGE SAJIN**, TUDOR SAVOPOL, EUGENIA KOVACS, IRINA MIRON: ***Effects of 1800 GSM radiation on human monocytes and trombocytes membrane anisotropy.*** 27th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, IEEE - EMB, 01 - 04 September 2005, Shanghai, China.
56. **GEORGE SAJIN**, TUDOR SAVOPOL, EUGENIA KOVACS, IRINA MIRON: ***Human blood monocytes membrane anisotropy decrease following microwave radiation.*** 3rd European Medical & Biological Engineering Conference, November 20 - 25, 2005, Praga, Czech Republic

C. CITARI RECENTE

- 1) T. SAVOPOL, R. MORARU, A. DINU, E. KOVÁCS, **G. SAJIN**: *Membrane damage of human red blood cells induced by low power microwaves irradiation.* --- Electro- and Magnetobiology, **14**, 1995, 99 – 106, **cited by:** A Hategan, D Martin, A Popescu, et al.: “Accelerated electrons and microwave irradiation effects on the human erythrocyte membranes”, Czech J. Phys **49**: 541-545 Part 1 Suppl. 1 1999
- 2) T. SAVOPOL, R. MORARU, A. DINU, E. KOVÁCS, **G. SAJIN**: *Membrane damage of human red blood cells induced by low power microwaves irradiation.* --- Electro- and Magnetobiology, **14**, 1995, 99 – 106, **cited by:** GJ Hyland: “Physics and biology of mobile telephony”, Lancet **356**, 2000, 1833-1836
- 3) SAVOPOL T, MORARU R, DINU A, KOVACS E, **SAJIN G**: *Membrane damage of human red-blood-cells induced by low-power microwave irradiation* --- Electro- and Magnetobiology **14** (2), 99-105, 1995 **cited by:** Baciu C, Salus HP, Berg H.: „Electromagnetic permeabilization of yeast cell membranes yielding enhanced photodynamic action:A synergism“, **Electro- and Magnetobiology**, **20** (3), 363-369, 2001.
- 4) SAVOPOL T, MORARU R, DINU A, KOVACS E, **SAJIN G**: *Membrane damage of human red-blood-cells induced by low-power microwave irradiation* --- Electro- and Magnetobiology **14** (2), 99-105, 1995 **citat de:** European Parliament, Directorate General for Research, Directorate A, Division Industry, Research and Energy, STOA, Scientific and Technological Options Assessment: “The Physiological and Environmental Effects of Non-Ionising Electromagnetic Radiation - Final Study”.
- 5) SAVOPOL T, MORARU R, DINU A, KOVACS E, **SAJIN G**: *Membrane damage of human red-blood-cells induced by low-power microwave irradiation* --- Electro- and Magnetobiology **14** (2), 99-105, 1995 **cited by:** Roxana Pologea-Moraru et.al.: The effects of low level microwaves on the fluidity of photoreceptors cell membrane”, **Bioelectrochemistry** **56**, (2002) 223 – 225.

MEMORIU DE ACTIVITATE

Date personale

Subsemnatul **Gheorghe Ioan Sajin**, nascut pe data de 19 decembrie 1948, in Fagaras, jud. Brasov, fiul lui Vasile si al Eugeniei, domiciliat in Bucuresti, Str. Ion Berindei nr. 11, Bl.1-2, Sc.C, Et.8, Ap. 89, Sect. 2.

Absolvent al Universitatii Politehnice Bucuresti, Fac. de Electronica si Telecomunicatii, in anul 1972. Angajat la Institutul de Cercetari pentru Componente Electronice (ICCE), Bucuresti. Din decembrie 1996 lucrez la Institutul National de Cercetare-Dezvoltare pentru Microtehnologie

Sunt doctor in electronica, din 19 iunie 1990, specialitatea *Radiotehnica si Radiocomunicatii* si cercetator stiintific principal gradul 1 din anul 1995.

Cunosc bine limba franceza si satisfacator limba engleza.

Activitati profesionale si stiintifice internationale

Participant la Colaborarile internationale:

1. XII Protocollo di Cooperazione Scientifica e Tecnologica Romania - Italia, Project no. 9: *Propagation in magnetic films*.
2. XIII Protocollo di Cooperazione Scientifica e Tecnologica, Project no. 29: *Soliton propagation in magnetic films*.
3. XIV Protocollo di Cooperazione Scientifica e Tecnologica, Project no. 24: *Linear and nonlinear microwave signal processing by means of micromachined magnetostatic wave devices*
4. Project NATO SfP 974130 - Acoustic Waves: *Ceramic Substrate with Controlled Piezoelectric Properties for Surface Acoustic Waves Applications*. 2000 - 2004

Sunt:

- **Autor** a 57 lucrari stiintifice la conferinte si articole in reviste internationale de specialitate.
- **Referent stiintific** la revistele internationale IEEE Trans. On MTT, Archives on Physiology and Biochemistry, Journal of Photochemistry and Photobiology.
- **Reprezentant al** Grupului 8 de state (Bulgaria, Republica Ceha, Slovacia, Ungaria, Romania) in Adunarea Generala a Asociatiei Europene de Microunde (EuMA) .
- **Membru in** International Advisory Committee al European Medical & Biological Engineering Conference (EMBEC).
- **Citari** in literatura de specialitate: vezi lista de lucrari atasata la CV.
Am indeplinit functia de:
- **Reprezentant al Romaniei** in Comitetul International de Organizare al Conferintei Internationale asupra Feritelor de Microunde (I.C.M.F.);
- **Chairman** al Sesiunii EuMC42 "Application of EM Theory" de la Conferinta Europeana de Microunde, Paris, 2005.
- **Membru** I.E.E.E – MTT din anul 1995, numarul 40112360.

Specializare in:

- a) proiectarea, realizarea si caracterizarea dispozitivelor pasive de de microunde;
- b) proiectarea, realizarea si caracterizarea componentelor de microunde nereciproce cu ferita;
- c) studierea efectelor biologice ale radiatiilor electromagnetice;
- d) aplicatii bio-medicale ale microundelor;
- e) dispozitive cu unde acustice de suprafata.

Activitati didactice

Sunt profesor asociat la Universitatea Politehnica Bucuresti din anul 1991 si la Universitatea "Valahia" din Targoviste din anul 2002.

15 iunie 2005

Gheorghe Ioan Sajin

