Senior Researcher Dr. DENISA-GEORGETA POPESCU
(March 18, 1932 – November 26, 2003)

IN MEMORIAM

With immense sadness, the colleagues announce that Mrs. Denisa-Georgeta Popescu has passed into eternity. She was an excellent person and an eminent researcher in science, as she had opened many ways in plasma physics and laser spectroscopy.

Mrs. Denisa-Georgeta Popescu was born in Braila, Romania, on March 18-th, 1932. On August 10-th, 1963 she married Ioan-Iovitz Popescu, professor at the Bucharest Faculty of Physics.

In 1951 she graduated, at the University of Bucharest, the Faculty of Mathematics and Physics. From February 1968 to March 1969 she attended the post-graduation studies in Atomic and Plasma Spectroscopy at the Institut für Experimentalphysik der Christian Albrecht Universität Kiel, Germany, with Professors Walter Lochte-Holtgreven and Johannes Richter.

Mrs. Denisa-Georgeta Popescu sustained, in December 1970, her Ph.D. in Physics with the thesis "Contributions to the investigation of the Cesium Plasma in Thermionic Converters" under the supervision of Acad. Prof. Eugen Badareu at the Bucharest Institute of Physics of the Romanian Academy.

From November 1972 to March 1973, and also from May to September 1975, she worked in the field of Atomic and Molecular Multiphoton Spectroscopy in the framework of a USA-Romanian research project, at the Faculty of Physics of the University of Texas in Dallas, with Prof. Carl B. Collins.

From 1959 to 1984 she worked at the Bucharest Institute of Physics of the Romanian Academy and Institute of Physics and Technology of Radiation Devices (the actual National Institute for Laser Physics, Plasma and Radiations), as a researcher (1959-1971), senior researcher and chief of the Laboratory of Laser Spectroscopy (1971-1984). She retired, for medical reasons, in 1984.

Main Scientific Achievements

• 46 scientific publications on the topics of gas discharges, plasma and laser spectroscopy, among which 16 papers in foreign international journals and quoted in about 560 other publications.
• Original contributions in the physics of thermionic plasmas (1967) and absorption spectroscopy of excited atoms (1969).
• Introduction of the optogalvanic effect as a new principle for laser spectroscopy by thermionic detection (1973), and radio-frequency detection (1980).
• First experimental evidence of multiphoton spectra of free atoms and molecules with tunable lasers (1973, 1974).
• Discovery of hybrid resonances and state-selective laser photolysis of molecules (1974). This two-photon process involving hybrid molecular-atomic resonances appears to be the most efficient for the production of highly excited Rydberg atoms.
• Introduction of photolytic spectroscopy (1980) capable to investigate in detail the predissociation of neutral molecules, the form of the repulsive potential curves and the atomic dissociation states.
• First demonstrations of the real possibilities of multiphoton spectroscopy (1973-1981) which initiated the development of laser spectroscopy by Excited-State Spectroscopy, Rydberg Spectroscopy, Two-Photon Doppler-Free Spectroscopy, Multiphoton Ionization Spectroscopy and Photolytic Spectroscopy.

Prizes and Honors:

• Third Olimpic Romanian Prize for Mathematics (1951).

• Physics Prize "C. Miculescu" of the Romanian Academy (1976) for her researches in atomic and molecular multiphoton spectroscopy.

• Four times nominated for the Nobel Prize in Physics (in 1981, 1995, 1996, and 1997) for her experimental discovery of atomic multiphoton spectra. The seminal paper in which the first atomic two-photon absorption spectrum (Doppler-broadened) was reported is (see position 06 on the paper list below): Multiphoton Excitation and Ionization of Atomic Cesium with a Tunable Dye Laser, by Denisa Popescu, C.B.Collins, B.W.Johnson, and I.-Iovitz Popescu, Physical Review A, vol. 9, 1182-1187 (received 16 April 1973, published March 1974). As it often happens, this original discovery was eclipsed in a matter of months by the report on Doppler-free two-photon absorption spectra, a dramatic improvement in resolution, using two counter-propagating laser beams, reported in letter-type journals. However, if the receipt dates of the publications should be compared, it could be seen that the former discovery preceded the widely respected improvement by almost a year, as it results from the following chronology of the competing articles:
(i) D. Pritchard, J. Apt, and T. W. Ducas, Fine structure of Na 4d 2D using high-resolution two-photon spectroscopy, Phys. Rev. Lett., vol. 32, 641-642 (received 23 January 1974, published 25 March 1974);
(ii) F.Biraben, B.Cagnac, and G.Grynberg, Experimental evidence of two-photon transition without Doppler broadening, Phys. Rev. Lett., vol.32, 643-645 (received 28 January 1974, published 25 March 1974);

(iii) M.D.Levenson and N. Bloembergen (1981 Nobel Laureate for laser spectroscopy), Observation of two-photon absorption without Doppler broadening on the 3S-5S transition of sodium vapor, Phys. Rev. Lett., vol.32, 645-648 (received 4 February 1974, published 25 March 1974);
(iv) T.W.Hänsch, K.C.Harvey, G.Meisel, and A. L. Schawlow (1981 Nobel Laureate for laser spectroscopy), Two-photon spectroscopy of Na 3S-4D without Doppler broadening using a cw dye laser, Opt. Commun., vol.11, 50-53 (received 26 February 1974, published May 1974);
(v) T.W.Hänsch, A.L.Schawlow (1981 Nobel Laureate for laser spectroscopy), Cooling of gases by laser radiation, Opt. Commun., vol. 13, 68-69 (received 20 October 1974, published January 1975).

► PAPERS IN FOREIGN INTERNATIONAL JOURNALS (16 articles)

01. INVESTIGATIONS ON THE CAESIUM THERMIONIC CONVERTER WITH AN AUXILIARY DISCHARGE, E.Badareu, G.Musa, and Denisa Popescu, British Journal of Applied Physics, 16, 845-850 (1965).
02. ON THE LOW VOLTAGE ARC IN CESIUM VAPORS, I.-Iovitz Popescu and Denisa Popescu, Annalen der Physik (Leipzig), 19, 50-63 (1967)- **5 citations**.
03. BSORPTIONSSPEKTROSKOPIE ANGEREGTER CÄSIUM-ATOME (ABSORPTION SPECTROSCOPY OF EXCITED CESIUM ATOM), Denisa Popescu, I.-Iovitz Popescu, and J.Richter, Zeitschrift für Physik, 226, 160-174 (1969)- **31 citations**.
04. USE OF SPACE CHARGE AMPLIFICATION TECHNIQUES IN THE ABSORPTION SPECTROSCOPY OF Cs and Cs2 , Denisa Popescu, M.L.Pascu, C.B.Collins, B.W.Johnson, and I.-Iovitz Popescu, Physical Review A, 8, 1666-1672 (1973) - **68 citations**.
05. MULTIPHOTON IONIZATION OF MOLECULAR CESIUM WITH A TUNABLE DYE LASER, C.B.Collins, B.W.Johnson, Denisa Popescu, G.Musa, M.L.Pascu, and I.-Iovitz Popescu, Physical Review A, 8, 2197-2201 (1973)- **48 citations**.
06. MULTIPHOTON EXCITATION AND IONIZATION OF ATOMIC CESIUM WITH A TUNABLE DYE LASER, Denisa Popescu, C.B.Collins, B.W.Johnson, and I.-Iovitz Popescu, Physical Review A, 9, 1182-1187 (1974) - **70 citations**.
07. MULTIPHOTON IONIZATION OF CESIUM THROUGH RESONANT DISSOCIATIVE MOLECULAR STATES OF Cs2 , C.B.Collins, B.W.Johnson, M.Y.Mirza, Denisa Popescu, and I.-Iovitz Popescu, Physical Review A, 10, 813-821 (1974)- **66 citations**.
08. DOUBLET LINE-STRENGTH RATIOS FOR THE PRINCIPAL SERIES OF CESIUM, Denisa Popescu, I.-Iovitz Popescu, J.Maurer, C.B.Collins, and B.W.Johnson, Physical Review A, 12, 1425-1431 (1975) - **15 cittaions**.
09. FINE-STRUCTURE MEASUREMENTS OF TWO-PHOTON TRANSITIONS IN ATOMIC CESIUM WITH A TUNABLE DYE LASER, S.M.Curry, C.B.Collins, M.Y.Mirza, Denisa Popescu, and I.-Iovitz Popescu, Optics Communications, 16, 251-255 (1976). FINE AND HYPERFINE STRUCTURE MEASUREMENTS OF TWO-PHOTON TRANSITIONS IN ATOMIC CESIUM WITH A TUNABLE DYE LASER, S.M.Curry, C.B.Collins, T.W.Hänsch, S.A.Lee, Denisa Popescu, I.-Iovitz Popescu, and A.L.Schawlow (recipient Nobel Prize for Physics in 1981), Bull.Am.Phys.Soc., 19, 1198 (1974) - **33 citations**.

10. MULTIPHOTON IONIZATION OF RUBIDIUM, C.B.Collins, S.M.Curry, B.W.Johnson, M.Y.Mirza, M.A.Chellehmalzadeh, J.A.Anderson, Denisa Popescu, and I.-Iovitz Popescu, Physical Review A, 14, 1662-1671 (1976) - **51 citations**.
11. OPTICAL IMPEDANCE SPECTROSCOPY, C.Stanciulescu, R.Bobulescu, Ani Surmeian, Denisa Popescu, I.-Iovitz Popescu, and C.B.Collins, Applied Physics Letters, 37, 888-890 (1980) - **24 citations**.
12. TWO PHOTON TECHNIQUE FOR THE DISSOCIATIVE SPECTROSCOPY OF SIMPLE MOLECULES, C.B.Collins, J.A.Anderson, F.W.Lee, P.A.Vicharelli, Denisa Popescu, and I.-Iovitz Popescu, Physical Review Letters, 44, 139-142 (1980). MULTIPHOTON TECHNIQUE FOR DISSOCIATIVE SPECTROSCOPY OF SIMPLE MOLECULES, C.B.Collins, F.W.Lee, J.A.Anderson, P.A.Vicharelli, Denisa Popescu, and I.-Iovitz Popescu, Jour. Optical Society of America, 70, 628 (1980) - **16 citations**.
13. PHOTOLYTIC SPECTROSCOPY OF SIMPLE MOLECULES, PART I, THE PRODUCTION OF 52D ATOMS FROM Cs2 , C.B.Collins, J.A.Anderson, Denisa Popescu, and I.-Iovitz Popescu, Journal of Chemical Physics, 74, 1053-1066 (1981) - **45 citations**.
14. PHOTOLYTIC SPECTROSCOPY OF SIMPLE MOLECULES, PART II, THE PRODUCTION OF 6P ATOMS FROM THE X1?g STATE OF Cs2 , C.B.Collins, F.W.Lee, J.A.Anderson, P.A.Vicharelli, Denisa Popescu, and I.-Iovitz Popescu, Journal of Chemical Physics, 74, 1067-1073 (1981) - **56 citations**.
15. PHOTOLYTIC SPECTROSCOPY OF SIMPLE MOLECULES, PART III: THE SELECTIVE PHOTOLYSIS OF CsKr AND Cs2Kr AT VISIBLE WAVELENGTHS, C.B.Collins, F.W.Lee, H.Golnabi, F.Davanloo, P.A.Vicharelli, Denisa Popescu, and I.-Iovitz Popescu, Journal of Chemical Physics, 75, 4852-4862 (1981); STATE-SELECTIVE PHOTOLYSIS OF Cs2 AND CsKr , Bull.Am.Phys.Soc., 26, 727 (1981); STATE-SELECTIVE PHOTOLYSIS OF CsKr AND Cs2Kr , Bull.Am.Phys.Soc., 27, 113 (1982) - **6 citations**.
16. SELECTIVE PHOTOLYSIS AND PHOTOIONIZATION OF ALKALI METAL DIMERS, C.B. Collins, F.W. Lee, P.A. Vicharelli, Denisa Popescu, and I.-Iovitz Popescu, American Chemical Society Symposium Series on "Metal Bonding and Interactions in High Temperature Systems", 179, 19 (1982) .

► PAPERS IN ROMANIAN ACADEMY JOURNALS

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02. R. ON THE OPTIMUM ADDED NOBLE GAS PRESSURE IN CESIUM THERMIONIC DIODES, G.Musa, Denisa Popescu, and Alexandra Baltog, Rev.Roum.Phys., 13, 73-80 (1968) .
03. R. TWO-PHOTON IONIZATION OF THE Cs2 MOLECULE, Denisa Popescu, Rev.Roum.Phys., 15, 859-863 (1970).
04. R. SPECTROSCOPIE DE MARE REZOLUTIE CU LASERI ACORDABILI, I.-Iovitz Popescu, Denisa Popescu, C.Stanciulescu, R.Bobulescu and M.A.Bratescu, Analele Universitatii Bucuresti, 25, 27 (1976).
05. R. A PLANE PARALLEL PLATES NITROGEN LASER, C.Stanciulescu, R.Bobulescu, Denisa Popescu, and I.-Iovitz Popescu, Rev.Roum.Phys., 24, 301 (1979) - **1 citation**.
06. R. A NEW METHOD IN ATOMIC LASER SPECTROSCOPY OF SPUTTERED METALS, R.Bobulescu, C.Stanciulescu, Ani Surmeian, Denisa Popescu, and I.-Iovitz Popescu, Rev.Roum.Phys., 24, 311 (1979)- **1 citation**.

07. UNABLE LASER QUANTITATIVE ABSORPTION SPECTROSCOPY OF SPUTTERED URANIUM ATOMS IN THE HOLLOW CATHODE GLOW DISCHARGE, Denisa Popescu, I.-Iovitz Popescu, R.Bobulescu, and Ani Surmeian, Rev.Roum.Phys., 24, 773 (1979) - **1 citation**.
08. R. OPTOGALVANIC LASER SPECTROSCOPY OF THERMIONIC AND HOLLOW CATHODE PLASMAS OF ALKALI, RARE GAS AND URANIUM, Denisa Popescu, R.Bobulescu, C.Stanciulescu, Ani Surmeian, I.-Iovitz Popescu, and C.B.Collins, Rev.Roum.Phys., 25, 711-781 (1980) - **12 citations**.
09. R. HERTZIAN AND OPTICAL IMPEDANCE SPECTROSCOPY, PART I, C.Stanciulescu, R.Bobulescu, Ani Surmeian, Denisa Popescu, I.-Iovitz Popescu, and C.B.Collins, Rev.Roum.Phys., 25, 783 (1980) - **4 citations**.
10. R. HERTZIAN AND OPTICAL IMPEDANCE SPECTROSCOPY, PART II, C.Stanciulescu, R.Bobulescu, Ani Surmeian, Denisa Popescu, I.-Iovitz Popescu, and C.B.Collins, Rev.Roum.Phys., 25, 915 (1980)- **5 citations**.
11. R. TWO PHOTON OPTICAL IMPEDANCE SPECTROSCOPY, R.Bobulescu, C.Stanciulescu, Ani Surmeian, Denisa Popescu, I.-Iovitz Popescu, and C.B.Collins, Rev.Roum.Phys., 25, 927 (1980) - **1 citation**.
12. R. PROGRESS REPORT ON THERMIONIC ENERGY CONVERSION AT THE CENTRAL INSTITUTE OF PHYSICS, G.Musa, Alexandrina Popescu, Alexandra Baltog, Denisa Popescu, I.Mustata, Ligia Nastase, N. Niculescu, Alexandra Cormos, Analele Academiei Romane, Memoriile Sectiunilor Stiintifice, tom IV, nr.1, pp.73-152 (1981); REVIEW PAPER ON THERMIONIC ENERGY CONVERSION RESEARCHES AT IFTAR, Preprint IFTAR, P.P.1.1977, pp.1-57 (1977).
13. R. THE CW DYE LASER DESIGN FOR INTRACAVITY SPECTROSCOPY, Denisa Popescu, N.Manolescu, Ani Surmeian, R.C.Bobulescu, and C.Stanciulescu, Rev.Roum.Phys., 27, 617-619 (1982).

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01. P. A CAESIUM-NOBLE GAS FILLED THERMIONIC DIODE WITH AUXILIARY DISCHARGE, E.Badareu, G.Musa, Denisa Popescu, and Alexandra Baltog, Proceedings of the VII-th International Conference on Ionization Phenomena in Gases, Belgrade 1965, 384-387 (1965).
02. P. ON THE CESIUM-NOBLE GAS FILLED PLASMA DIODE, G.Musa, Denisa Popescu, and Alexandra Baltog, Proceedings of the VIII-th International Conference on Ionization Phenomena in Gases, Vienna 1967, 147-150 (1967).
03. P. STEPWISE EXCITATION AND IONIZATION OF CESIUM VAPORS, Denisa Popescu, I.-Iovitz Popescu, and J.Richter, Proceedings of the IX-th International Conference on Ionization Phenomena in Gases, Bucharest 1969, p. 22 (1969).
04. P. THE IMPORTANCE OF HYBRID RESONANCES IN THE MULTIPHOTON IONIZATION OF CESIUM AND RUBIDIUM, Denisa Popescu, C.B.Collins, B.W.Johnson, S.M.Curry, M.Y.Mirza, M.A.Chellehmalzadeh, J.A.Anderson, and I.-Iovitz Popescu, Proceedings of the 26-th Annual Gaseous Electronics Conference, Madison, Wisconsin 1973.
05. P. MULTIPHOTON EXCITATION OF ATOMIC RUBIDIUM WITH A TUNABLE DYE LASER, C.B.Collins, S.M.Curry, B.W.Johnson, M.Y.Mirza, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the 27-th Annual Gaseous Electronics Conference, Houston, Texas 1974.

06. P. FINE AND HYPERFINE STRUCTURE MEASUREMENTS OF TWO-PHOTON TRANSITIONS IN ATOMIC CESIUM WITH A TUNABLE DYE LASER, S.M.Curry, C.B.Collins, T.W.Hänsch, S.A.Lee, Denisa Popescu, I.-Iovitz Popescu, and A.L.Schawlow (recipient Nobel Prize in Physics, 1981), Proceedings of the VI-th Annual Meeting of the Division of Electron and Atomic Physics, Chicago, Illinois 1974, Bull.Am.Phys.Soc., 19, 1198 (1974).
07. P. MULTIPHOTON IONIZATION THROUGH DISSOCIATIVE MOLECULAR STATES, C.B.Collins, S.M.Curry, M.Y.Mirza, B.W.Johnson, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the IX-th International Conference on the Physics of Electronic and Atomic Collisions, Seattle, Washington 1975.
08. P. MULTIPHOTON IONIZATION OF Cs2 DIMERS THROUGH DISSOCIATIVE MOLECULAR STATES, J.A.Anderson, C.B.Collins, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the 30-th Annual Gaseous Electronics Conference, Palo Alto, California 1977.
09. P. MULTIPHOTON IONIZATION THROUGH DISSOCIATIVE MOLECULAR STATES, J.A.Anderson, M.A.Chellehmalzadeh, M.E.Koch, C.B.Collins, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the International Conference on Multiphoton Processes, Rochester 1977, p.225 (1977) - **1 citation.**
10. P. MULTIPHOTON IONIZATION OF Cs2 DIMERS THROUGH DISSOCIATIVE MOLECULAR STATES, J.A.Anderson, C.B.Collins, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the 31-th Annual Gaseous Electronics Conference, Buffalo, New York 1978 .
11. P. A MULTIPHOTON TECHNIQUE FOR THE DISSOCIATIVE SPECTROSCOPY OF SIMPLE MOLECULES, C.B.Collins, J.A.Anderson, F.W.Lee, P.A.Vicharelli, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the International Conference on Lasers '79, Orlando, Florida 1979, edited by V.J.Corcoran, S.T.S. Press, McLean, VA, pp.185-189 (1980) .
12. P. MULTIPHOTON TECHNIQUE FOR DISSOCIATIVE SPECTROSCOPY OF SIMPLE MOLECULES, C.B.Collins, F.W.Lee, J.A.Anderson, P.A.Vicharelli, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the 11-th International Quantum Electronics Conference, Boston, Massachusetts 1980, Jour. Optical Society of America, 70, 628 (1980).
13. P. C.B.Collins, F.W.Lee, H.Golnabi, P.A.Vicharelli, F.Davanloo, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the International Conference on Lasers '80, edited by C.B.Collins, S.T.S. Press, McLean, VA, pp.741-747 (1981).
14. P. P.A.Vicharelli, C.B.Collins, F.W.Lee, H.Golnabi, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the International Conference on Lasers '80, edited by C.B.Collins, S.T.S. Press, McLean, VA, pp.748- 753 (1981).
15. P. MODELING OF OPTICAL IMPEDANCE SPECTROSCOPY, W.M.Tepfenhart, C.B.Collins, Denisa Popescu, I.-Iovitz Popescu, and C. Stanciulescu, Proceedings of the International Conference on Lasers '81, New Orleans, Louisiana 1981, edited by C.B.Collins, S.T.S. Press, McLean, VA (1981).
16. P. STATE-SELECTIVE PHOTOLYSIS OF Cs2 AND CsKr , C.B.Collins, F.W.Lee, H.Golnabi, F.Davanloo, O.Vicharelli, Denisa Popescu, and I.-Iovitz Popescu, Proceedings of the 33-rd Annual Gaseous Electronics Conference, Norman, Oklahoma 1980, Bull.Am.Phys.Soc., 26, 727 (1981).
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3. H. Walther, ATOMIC AND MOLECULAR SPECTROSCOPY WITH LASERS, in LASER SPECTROSCOPY OF ATOMS AND MOLECULES, edited by H.Walther, Springer, Berlin, pp.35, 36 (1976).
4. N. Bloembergen, M. D. Levenson, DOPPLER-FREE TWO-PHOTON ABSORPTION SPECTROSCOPY, Chap.8, page 315 in HIGH-RESOLUTION LASER SPECTROSCOPY, edited by K.Shimoda, Topics in Applied Physics, 13, Springer, Berlin, p.347 (1976).
5. R. S. Berry, TWO-PHOTON PROCESSES, Chap.44, page 559 in ELECTRON AND PHOTON INTERACTIONS WITH ATOMS, Festschrift for Professor Ugo Fano, edited by H.Kleinpoppen and M.R.C.McDowell, Plenum Press, New York, p.560 (1976).
6. M. Prokhorov, opening paper, page 5, and J.J.Wynne, page 217 in MULTIPHOTON PROCESSES, Proc.Int.Conf. on Multiphoton Processes, Rochester, USA, June 1977, edited by G.Mainfray, J.Eberly and P.Lambropoulos, Wiley Interscience, New York (1978) .
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► **CITATIONS BY NOBEL LAUREATES:**

- M. PROKHOROV (1964 Nobel Prize in Physics for Quantum Electronics),
- N. BLOEMBERGEN (1981 Nobel Prize in Physics for laser spectroscopy),
- A.L. SCHAWLOW (1981 Nobel Prize in Physics for laser spectroscopy).

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A few hours after Mrs. Denisa – Georgeta Popescu had passed away, the american Professor Carl B. Collins (University of Texas in Dallas, USA) was announcing her death to all his co-workers throughout the world, by the following message:

Date: Thu, 27 Nov 2003 10:34:26 -0600
From: "Carl Collins" <cbc@utdallas.edu>
To:"Agee Jack Civ AFRL/AFOSR" <jack.agee@afosr.af.mil>, "ageeindex@aol.com" <ageeindex@aol.com>, "Anatoly Zadernovsky" <a.z@relcom.ru>, "Austin" <austin.cunningham@utdallas.edu>, "Calin Ur" <calin.ur@pd.infn.it>, "Catalin Zoita" <cnzoita@utdallas.edu>, "Claudiu Rusu" <rusucl@yahoo.com>, "cunning@utdallas.edu" <cunning@utdallas.edu>, "Elena CRACIUN" <lenus@sabba.geodin.ro>, "Farzin Davanloo" <fdavan@utdallas.edu>, "Jean Michel Pouvesle" <Jean-Michel.Pouvesle@univ-orleans.fr>, "Karamian Sarkis" <karamian@cv.jinr.ru>, "Lev Rivlin" <rivlin140322@mccinet.ru>, "M. Ganciu" <mganciu@dnt.ro>, "Radu Presura" <presura@physics.unr.edu>, "Ries, Nancy L" <nlries@sandia.gov>, "rusu@lnl.infn.it" <rusu@lnl.infn.it>, "Vladimir Kirischuk" <kirisch@mpca.kiev.ua> **CC:** "cbc@utdallas.edu" <cbc@utdallas.edu>
Subject: DenisaPopescu

Dear Colleagues, It is with deepest sorrow that I inform you of the passing of Dr. Denisa Popescu. Twice nominated for the Nobel Prize in Physics for her discovery of multiphoton spectroscopy, it is a terrible loss. Although formally retired some years ago because of her heart problems, as recently as a few months ago she was still providing us with

critical help in establishing the statistical significance of our synchrotron data. She will be greatly missed in our profession. Those of us who also knew her as a friend must sustain a greater loss. Blessed with a radiant personality; and a brilliant and gracious style of hospitality, there was always a welcome at her table and a joy in our associations with Denisa. Hers was the "Heart" behind the Conferences, Workshops, and the Foundation with which we shared goals and efforts in Romania, as well as the source of essential insights into the Physics with which we struggled at those times. That heart expired during remedial surgery today; a great sorrow. Denisa is survived by her husband and soulmate of decades, Academician Professor Ion Iovitzu Popescu. God grant him strength and comfort at this terrible time. Sincerely, Carl Collins

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Through her whole scientific activity and through its very high professional standards, Dr. Denisa – Georgeta Popescu represented with honor the Romanian school of physics.

With our souls hurt by the loss we dedicate this number of the ANNALS OF THE UNIVERSITY OF CRAIOVA – PHYSICS AUC – as a pious tribute for the memory of savant and human being **DENISA – GEORGETA POPESCU**.