

# CURRICULUM VITAE

## General Information.



Names and Surname(s): **Eleno Alfonso Brindis**

Sex: **Male**

Date and Place of birth: **August 18<sup>th</sup>, 1954, Ciudad Matanzas, Cuba**

Age: **61 years**

Nationality: **Cuban**

Permanent Residence: **Paramaribo, Suriname**

Marital Status: **Married**

## Professional Data.

### 1. Education.

- ❖ His title of Technologist and Instructor in Metal Cutting Processing was obtained at the Industrial-Pedagogical Institute, Leningrad, Russia, in 1977.
- ❖ In 1983 he obtained the title Mechanical Engineer at the University of Matanzas, Cuba.
- ❖ His Ph.D. Degree in Technical Sciences (Materials Science and Manufacturing Processes) was obtained at the Moscow Institute of Chemical Machinery-Construction, Russia in 1990.

2. **Teaching category:** Full Professor, since 1992.

3. **Teaching experience at the university level:** 39 years.

4. **Research experience:** 34 years.

5. **Branches of sciences, in which he has developed expertise and he has performed with positive results.**

- ❖ Material Science, including corrosion control through new types of treatments of steel.
- ❖ Technology of Metals.
- ❖ Mechanical Technology.

- ❖ Metallurgy of Steel.
- ❖ Strength of Materials.
- ❖ Mechanics of Materials.
- ❖ Fracture Mechanics.
- ❖ Fatigue.
- ❖ Mechanical and Structural Vibrations.
- ❖ Design of Machine Elements.
- ❖ Design of Manufacturing Processes.
- ❖ Technology of Manufacturing Processes.
- ❖ Manufacturing Processes (for Industrial and Control Engineering).
- ❖ Cutting Metal Theory and Design of Cutting Tools.
- ❖ Heat Treatments, Case-hardening, Thermal-mechanical and Mechanical- Thermal Treatments of Steel.
- ❖ Determination of Wear Resistance and Fatigue of Steel, including in Corrosive Environments.
- ❖ Studies of influence and relevance of quality indicators of the surface layers on the microstructures, properties and useful lifetime of the structural machinery components.
- ❖ Plastic deformation during forming and machining of hardened steel parts.
- ❖ Research Methodology.
- ❖ Modeling, Simulation and Analysis by means of Finite Element Method.
- ❖ Composite Materials.
- ❖ Design of Experiments and Statistics.

## **6. Overview of developed research works during the aforementioned years.**

- ❖ Influence of cutting rate elements on the tool-life of tool material Selenite-R, during the finish cutting of steel parts.
- ❖ Application of internal friction methods and microstructural analysis during the studies of high temperature-resistant steel and nickel alloys.
- ❖ Research on application of high-temperature thermomechanical processing in carburized steel parts.
- ❖ Optimization of the cutting process of quenched and tempered steel.
- ❖ Research of mechanical properties of hardened steel parts after finish turning instead grinding.
- ❖ Microstructure and properties formation in the surface layers of quenched and tempered steel, after its finish turning.
- ❖ Formation of microstructure, properties, work-hardening and wear resistance in the surface layers of case-hardened with electrolytic iron and its alloys steel parts.
- ❖ New technology for recycling and rehabilitation of piston pins of motorcars.
- ❖ Exclusion of abrasive grinding as finish cutting operation in previously hardened shaft and spur gear.
- ❖ Application of substructural hardening (mechanic-thermal processing and cyclical mechanic-thermal processing) to reduce intercrystalline corrosion in ferritic stainless steel and the fretting corrosion in martensitic stainless steel.
- ❖ Application of substructural hardening in order to reduce the corrosion effects in the zones of low temperatures in the electric steam boilers.
- ❖ Research of mechanical properties for steel parts submitted to both kinds of substructural hardening.

- ❖ Obtaining of composite materials through the recycling of waste material from industries.
- ❖ Modeling, simulation and analysis of manufacturing processes and design of machine elements and mechanisms, through the finite element method.
- ❖ Modeling, simulation and analysis of the thermomechanical processing of steel, using the finite elements method.
- ❖ Modeling, simulation and analysis of the mechanic-thermal processing and cyclical mechanic-thermal processing of steel in parts type shaft, plate and spur gear, by means of the finite elements method.
- ❖ Modeling, simulation and analysis of creep, in plain carbon and high temperature-resistant steels, using the finite elements method.
- ❖ Modeling, simulation and analysis using the finite elements method of fracture and fatigue mechanisms of steel.

## 7. His most important scientific achievements.

- ❖ New findings resulting from research regarding the strain hardening level, the residual stresses and the density of the retained dislocations in the surface layers, resulting directly from the application of a single point tool during the turning of quenched and tempered steel and its influence on the wear resistance in the processed parts.
- ❖ He was the first, which established, in the most complete sense, the integral dependencies of the wear resistance on the processed parts, starting from their microstructure, from the quality indicators of the surface layers and the employed cutting parameters.
- ❖ New methodology to guarantee a high wear resistance of rotating parts, starting from the optimal microhardness and the required microstructures in the surface layers, for each specific work application of the coupling pair.
- ❖ Disclosing the specifics, related to the hardening of surface layers along their depth, during the parts manufacturing, and its influence on the parts wear resistance, with the establishment of the interrelation between the microhardness - depth of the hardened layer and the residual stresses - depth of the hardened layer.
- ❖ Determining of the influence of substructural hardening on the increasing of physical and mechanical quality indicators of the surface layers of steel parts, as well as how it is revealed on the performance of these parts, before different kind of degradations.

## 8. Overview of the most important publications.

- ❖ **Alfonso Brindis, Eleno**, A way to optimize the application of the inter-material principle in the Specialized Departments of Labor Education and Technical Drawing at the Cuban Higher Pedagogical Institutes—pp. 39-52—Published in ‘Institutos Superiores Pedagógicos’. Scientific Publications – Methodology (Editorial: Pueblo y Educación, Havana) —Nº.8, 1988.
- ❖ **Gordienko, L.K.** Peculiarities of the finished turning steel, after quenching and tempering /L.K. Gordienko, **Eleno Alfonso Brindis**, Jesús Ramón Águila Monzón.—pp. 25-33; In: ‘Construcción de Maquinarias’ (Santa Clara). — Nº.3, July –September 1988.
- ❖ **Gordienko, L.K** Experimental determination of the chip contraction coefficient /L. K. Gordienko, **Eleno Alfonso Brindis**.—pp. 27–32. In: ‘Construcción de Maquinarias’ (Santa Clara). — Nº 1, January-March, 1989.

- ❖ **Alfonso Brindis, Eleno.** Microstructure and properties formation in the surface layers of quenched and tempered steel, after its finish turning (in Russian). Ph.D. thesis, Moscow Institute of Chemical Machinery-Construction, Moscow, 1990.
- ❖ **Alfonso Brindis, Eleno.** Computing program for determining the optimal cutting rate during finish turning of quenched and tempered steel /Eleno Alfonso Brindis, Osvaldo Vázquez González, José Antonio Dean Baceló.—pp. 22-26. In: ‘Construcción de Maquinarias’ (Santa Clara). N° 2-3, May to December 1992.
- ❖ Determination of cutting force in the finish turning of quenched and tempered steel / **Eleno Alfonso Brindis...** (et.al.). In: ‘Construcción de Maquinarias’ (Santa Clara). N° 2-3, May to December 1992.
- ❖ Determination of residual stresses, applying the X-ray diffraction technique in the surface layers of quenched and tempered steel, after its finish turning /**Eleno Alfonso Brindis...** (et.al.)—Havana: National Foundation for Scientific-Technical Manuscripts (Academy of Sciences of Cuba), 1994.—6 pp.
- ❖ **Alfonso Brindis, Eleno.** Exclusion of abrasive grinding as finish cutting operation in previously hardened shaft /Eleno Alfonso Brindis—1994—7 pp. In: ‘Proceedings of the First International Workshop of Industrial Maintenance (TIMANTE ‘94)’. University of Matanzas.
- ❖ **Alfonso Brindis, Eleno.** Theoretical fundamentals of finish machining of steel parts with high hardness in their surface layers /Eleno Alfonso Brindis—1995--18 pp.—Handout—University of Matanzas.
- ❖ **Alfonso Brindis, Eleno.** Materials Engineering and Materials Tests /Eleno Alfonso Brindis—1995 --78 pp.--Handout -- University of Matanzas.
- ❖ Research of work-hardening and residual stresses formation mechanism in the surface layers during the cutting process of hardened parts /**Eleno Alfonso Brindis...** (et.al.)—pp. 52-56. In: ‘Construcción de Maquinarias’ (Santa Clara). N° 1, January to April 1995.
- ❖ **Fernández Orquín, Antonio.** Utilization of cutting force and tool-life empirical models for training of neuronal networks /Antonio Fernández Orquín, **Eleno Alfonso Brindis**—1995 – pp. 76-78—In: ‘Proceedings of Second International Scientific-Methodological Conference of Mathematics and Computer Sciences’ (COMAT ‘95)
- ❖ **Fernández Orquín, Antonio.** Creation and training of a neuronal network to obtain several quality parameters in the surface layers of turned machine parts /Antonio Fernández Orquín, **Eleno Alfonso Brindis**—1996—21 pp. In: ‘Proceedings of the Second International Workshop of Industrial Maintenance’ (TIMANTE ‘96). University of Matanzas.
- ❖ **Fernández Orquín, Antonio.** Neuronal network aimed at researching the surface layers /Antonio Fernández Orquín, **Eleno Alfonso Brindis** --1997--6 pp. In: CD-ROM 4-102- Commission N° 4, Third Iberian-American Congress of Mechanical Engineering (CIDIM ‘97) – Convention Palace , Havana , (ISBN 959-16-0136-0).
- ❖ **Alfonso Brindis, Eleno.** New Methodology aimed at improving the performance of revolving steel parts—1999—8pp. In: ‘Proceedings of the First International Conference on Design and Materials in Engineering (DIMAT ‘99)’ - University of Matanzas.
- ❖ **Alfonso Brindis, Eleno.** Application of the finite elements method in modeling of materials testing. In: ‘Proceedings of the Fourth International Scientific-Methodological Conference of Mathematics and Computer Sciences’ (COMAT ‘99), 1999, University of Matanzas.
- ❖ **Alfonso Brindis, Eleno.** A mathematical model to improve the design of pneumatic hammer pistons / **Eleno Alfonso Brindis**, Agustín Almería Baró, José M. Álvarez

- Martell –1999. In: ‘Proceedings of the Fourth International Scientific-Methodological Conference of Mathematics and Computer Sciences (COMAT ‘99)’ - University of Matanzas.
- ❖ **Alfonso Brindis, Eleno.** Application of the Wolf-Bragg law to determine the residual stresses of type I (macro-residual stresses) /**Eleno Alfonso Brindis**, Jorge T. Martín Alfonso—2000—pp. 334 – 342. In: ‘Proceedings of the Second International Workshop on the Didactics of Physics at the University’ (DIDACFISU 2000). University of Matanzas.
  - ❖ **Velázquez Del Rosario, Alberto.** Behavior of AISI HH and HK40 heat-resistance alloys in carburization and nitriding processes /Velázquez Del Rosario, Alberto, Maritza Mariño Cala, **Eleno Alfonso Brindis** –2001—pp. 83 – 87. In: ‘Minería & Geología’. Vol. 18(1).
  - ❖ **Alfonso Brindis, Eleno.** Application of the physic model of creep and visco-elasticity in Strength of Materials /**Eleno Alfonso Brindis**, Laureano E. Suárez Martínez, Jorge Mazorra Acuay--2002—9 pp. In: ‘CD-ROM of the Third International Workshop on the Didactics of Physics at the University (DIDACFISU 2002)’. University of Matanzas. (ISBN 959-16-0136-0).
  - ❖ **Alfonso Brindis, Eleno.** Stress field and energy of dislocations —2002—7 pp. In: ‘CD-ROM of the Third International Workshop on the Didactics of Physics at the University’ (DIDACFISU 2002). University of Matanzas. (ISBN 959-16-0136-0).
  - ❖ **Alfonso Brindis, Eleno.** Defects in the crystalline structures of metals and alloys and their influences on the physical-mechanical properties and performance —2002—13 pp. In: ‘CD-ROM of the Third International Workshop on the Didactics of Physics at the University (DIDACFISU 2002)’. University of Matanzas. (ISBN 959-16-0136-0).
  - ❖ **Alfonso Brindis, Eleno.** Notes on the interrelation between composition, microstructure and properties of steel. In: ‘CD-ROM, University of Matanzas’, 2002—149 pp. (ISBN 959-16-0188-3).
  - ❖ **Alfonso Brindis, Eleno.** Gear transmissions; methodology for their calculations--2004—40 pp. In: ‘Biblioteca del Instituto Tecnológico de Estudios Superiores de Monterrey. Campus Ciudad Juárez’.
  - ❖ **Alfonso Brindis, Eleno.** Modeling and simulation of laboratory practices of Strength of Materials by means of the finite elements method /Eleno Alfonso Brindis, Jorge Mazorra Acuay—2005--13 pp. In: ‘CD-ROM: Proceedings of the RIEFEP 2005’ (ISBN 959-16-0362-2). University of Matanzas.
  - ❖ **Torres Alpízar, Eduardo.** Determination of residual stresses of type I in the welding deposits of manganese (Hadfield) steel /Torres Alpízar, Eduardo, Manuel Rodríguez Pérez, **Eleno Alfonso Brindis**—2005—pp. 67-79. In: ‘Revista Centro Azúcar’. Vol. 1 (ISSN 02535757).
  - ❖ **Quiza Sardiñas, Ramón.** Global multi-objective optimization of the turning process through genetic algorithms / Ramón Quiza Sardiñas, Marcelino Rivas Santana, **Eleno Alfonso Brindis**. In: Proceedings of the Fourth International Conference on Mechanical Engineering (COMEC 2006) [CD-ROM]. Santa Clara, Cuba. ISBN 959-250-295-1.
  - ❖ **Quiza Sardiñas, Ramón.** Genetic algorithm-based multi-objective optimization of cutting parameters in turning processes /Ramón Quiza Sardiñas, Marcelino Rivas Santana, **Eleno Alfonso Brindis**. In: ‘Engineering applications of Artificial Intelligence’ Vol. 19 (2) 2006, pp. 127-133.
  - ❖ **González Quintero, Orestes.** Modeling of spur gears: a computerized solution /Orestes González Quintero, **Eleno Alfonso Brindis**. In: ‘CD-ROM of Monographs 2006’. ISBN 959-16-0940-4. University of Matanzas.

- ❖ **González Quintero, Orestes.** Combined hardening of spur gears /Orestes González Quintero, **Eleno Alfonso Brindis.** In: ‘Proceedings of the Fourth International Conference on Mechanical Engineering (COMEC 2006)’ [CD-ROM]. Santa Clara, Cuba. ISBN 959-250-295-1.
- ❖ **González Quintero, Orestes.** Research of substructural hardening in spur gear /Orestes Gonzalez Quintero, **Eleno Alfonso Brindis.** In: ‘Proceedings of the 10<sup>th</sup> International Conference on Metallurgical, Metal-Mechanic and Recycling Industries, Third Workshop on Integrated Engineering (METANICA 2007)’. Havana. ISSN 1607-6281.
- ❖ **González Quintero, Orestes.** Implementation of the finite elements method in a two-dimensional analysis with MATLAB /Orestes Gonzalez Quintero, **Eleno Alfonso Brindis.** In: ‘Tenth International Scientific Event MATECOMPU 2008’ [CD-ROM]. ISBN 978-969-18-0406-8. University of Matanzas.
- ❖ **González Quintero, Orestes.** Analysis of stress state in the contact zone of spur gear by means of Finite Element Method /Orestes Gonzalez Quintero, **Eleno Alfonso Brindis.** —pp. 63-69. In: ‘Ingeniería Mecánica’ (Havana). Vol. 11, N° 3, 2008.
- ❖ **Alfonso García, Jesús.** Simulation of corrosion applying numerical methods/Jesús Alfonso García, **Eleno Alfonso Brindis,** Laureano E. Suárez Martínez--11pp. In: ‘Proceedings of the scientific program Universidad 2010’. Editorial Universitaria. ISBN: 9789591611642. 2010.
- ❖ **Quiza Sardiñas, Ramón.** Hybrid modeling and multi-objective optimization of mechanical manufacturing processes / Ramón Quiza Sardiñas, Marcelino Rivas Santana, J. Paulo Davim, Omar López Armas, **Eleno Alfonso Brindis**—8 pp. In: ‘Revista Anales de la Academia de Ciencias de Cuba’. Vol. 4, N° 2, 2014.
- ❖ **González Quintero, Orestes.** Phases of mechanical thermal treatment applied to spur gears /Orestes González Quintero, **Eleno Alfonso Brindis,** Bárbaro L. Peña Rodríguez, Francisco Tchiquendja Eleno—2015—6 pp. In: ‘Proceedings of 23<sup>rd</sup> ABCM International Congress of Mechanical Engineering (COBEM 2015)’. Rio de Janeiro.
- ❖ **Alfonso Brindis, Eleno.** Influence of the cyclical mechanic-thermal processing on the strain hardening in the surface layers of steel parts /Eleno Alfonso Brindis, Sanjeevkoemar Bissesar, Faizel Abdoel Wahid, Francisco Tchiquendja Eleno—2015—6 pp. In: ‘Proceedings of 23<sup>rd</sup> ABCM International Congress of Mechanical Engineering (COBEM 2015)’. Rio de Janeiro.
- ❖ **Alfonso Brindis, Eleno.** Modeling and simulation of cyclical mechanic-thermal processing by means of finite element analysis (FEA) /Eleno Alfonso Brindis, Sanjeevkoemar Bissesar, Faizel Abdoel Wahid, Orestes González Quintero—2015—6 pp. In: ‘Proceedings of 23<sup>rd</sup> ABCM International Congress of Mechanical Engineering (COBEM 2015)’. Rio de Janeiro.

## 9. Participation in Technical and Scientific Events.

- ❖ Scientific and Methodological Conferences and Seminars organized by the Higher Pedagogical Institute of Matanzas, Cuba; annually since 1979 until 1992. He participated as speaker, receiving several awards.
- ❖ National Workshops for instructors of practice teaching in labor education and technical drawing at the Cuban Higher Pedagogical Institutes, in Pinar del Rio (1986) and in Santiago de Cuba (1988).
- ❖ First National Teachers’ Meeting of Specialty Labor Education and Technical Drawing. He lectured a keynote speech. Santiago de Cuba, 1990.

- ❖ Scientific and methodological conferences and seminars organized by the Moscow Institute of Chemical Machinery-Construction. Annually, since 1986 until 1990, always he participated as speaker. In 1990 he won an award. Moscow, Russia
- ❖ Scientific sessions organized by the Department of Materials Science at the Moscow Institute of Chemical Machinery-Construction, Russia, since 1986 until 1990. At least twice a year he participated as speaker.
- ❖ Scientific Seminar at the Institute for Studies of Machines and Mechanisms in the Academy of Sciences of USSR, 1990. He participated as speaker.
- ❖ Scientific Seminar at the Institute of Ferrous Metallurgy in the Academy of Sciences of USSR, 1990. He participated as speaker.
- ❖ Municipal and Provincial Forums on Science and Technology in Matanzas, Cuba. He participated annually since 1990 until 1997, winning several awards.
- ❖ First International Workshop of Industrial Maintenance (TIMANTE '94) at the University of Matanzas, Cuba. 1994. He participated as speaker.
- ❖ Second International Scientific-Methodological Conference of Mathematics and Computer Sciences (COMAT '95), University of Matanzas, Cuba. 1995. He participated as speaker.
- ❖ Second International Workshop of Industrial Maintenance (TIMANTE '96) at the University of Matanzas, Cuba. 1996. He participated as speaker and guest lecturer.
- ❖ International Conference on Combustion and Fluid-dynamics (Cuba '97), at the University of Matanzas, Cuba. 1997. He participated as facilitator.
- ❖ International Conference on Corrosion Control (ANTICORROSION '97) at the University of Matanzas, Cuba. 1997. At this Conference he participated as facilitator.
- ❖ Third International Scientific-Methodological Conference of Mathematics and Computer Sciences (COMAT '95), University of Matanzas, Cuba. 1995. He participated as speaker.
- ❖ Third International Workshop of Industrial Maintenance (TIMANTE '99), University of Matanzas, Cuba. 1999. He participated as guest lecturer.
- ❖ First International Conference on Design and Materials in Engineering (DIMAT '99), University of Matanzas. He participated as speaker.
- ❖ Fourth International Scientific-Methodological Conference of Mathematics and Computer Sciences (COMAT '99), University of Matanzas, Cuba. 1999. He participated as speaker.
- ❖ Second International Workshop on the Didactics of Physics at the University (DIDACFISU 2000), University of Matanzas, Cuba. 2000. He participated as speaker.
- ❖ First Congress on Engineering at the Higher Technological Institute of Poza Rica, Veracruz, Mexico. 2001. He imparted a seminar on Materials Engineering.
- ❖ Third International Workshop on the Didactics of Physics at the University (DIDACFISU 2002). University of Matanzas, Cuba. 2002. He participated as speaker
- ❖ International Meeting on the Teaching of Physics 'RIEFEP 2005'. University of Matanzas, Cuba. 2005. He participated as speaker
- ❖ International Scientific Convention of the University of Matanzas, 'CIUM'. He had participated as speaker in the versions of 2009, 2011, 2013 and 2015.
- ❖ 23<sup>rd</sup> ABCM International Congress of Mechanical Engineering (COBEM 2015). Rio de Janeiro, Brazil. 2015. He participated as speaker.

## 10. Working Places.

- ❖ Technical School "Ernest Thaelman", Matanzas, Cuba (since 1972 until 1977). He was instructor of practice teaching.

- ❖ Higher Pedagogical Institute “Juan Marinello”, Matanzas, Cuba. He served as Instructor since September 1977 until July 1986, as Assistant Professor until July 1989, as Associated Professor until July 1992 and as Full Professor until January 1993.
- ❖ University of Matanzas, Cuba (since February 1993 until December 2013). He worked as Full Professor at the Department of Mechanical Engineering and he was its Head since April 1994 until October 2010. During his work in this University he was involved in the academic interchanges with other Universities, such as:
  - Technological Institute of Higher Studies of Monterrey, Campus Juarez City, Chihuahua, Mexico. Since January until May 2004 he functioned as Invited Professor in the Careers Mechatronic Engineering, and Industrial and Controls Engineering.
  - Technological Institute of Higher Studies of Monterrey, Campus Toluca, Mexico State, Mexico. Since July until November 2007, he worked as Invited Professor Researcher in the careers Mechatronic Engineering, and Mechanical Engineering, joined to Research Center of Automotive-Mechatronic Engineering (CIMA).
  - University Institute of Technology (Capital Region) “Federico Rivero Palacio” and Western University Institute of Technology “Mariscal Sucre”, both institutions are in Caracas, Venezuela; since September until November 2008. He collaborated in Doctorate Program of the Higher Mining- Metallurgical Institute of Moa, Cuba.
  - Equinoctial Technological University, Extension Santo Domingo, Ecuador; since September 2012 until August 2013. He performed as Invited Professor.
- ❖ University Anton de Kom of Suriname, since December 2014, up to the present. He performances as Senior Researcher at the Department of Mechanical Engineering

### **11. Performed Responsibilities.**

- ❖ Member of the National Career Commission of Specialty Labor Education and Technical Drawing in the Higher Pedagogical Institutes of Cuba, since 1986 until 1993.
- ❖ Head of Department of Mechanical Engineering at the University of Matanzas, Cuba; since April 1994 until October 2010.
- ❖ Member of the National Board for Discussion of Ph.D. Degree Thesis in Metallurgical Engineering (Moa, Cuba), since 2005 until 2014. Several times he performed as Invited Member of the National Board for Discussion of Ph.D. Degree Thesis in Mechanical Engineering (Havana, Cuba).

### **12. Developed postgraduate activities.**

- ❖ Coordinator of the first three versions of the Master Program Computer Aided Engineering, at the Department of Mechanical Engineering in the University of Matanzas, Cuba,
- ❖ Tutoring and defense of a great number of Master’s Degree and Engineering Thesis, in correspondence which his research works.
- ❖ Opponent of seven Ph.D. Degree Thesis at the National Boards for Discussion of Metallurgical Engineering (four thesis) and Mechanical Engineering (three thesis).
- ❖ On December 23<sup>rd</sup> 2002 the first Ph.D. thesis, tutored by him, was successfully defended in the National Board for Discussion of Metallurgical Engineering; on



January 9<sup>th</sup>, 2009 another Ph.D. thesis tutored by him, was successfully defended in the National Board for Discussion of Mechanical Engineering.

### **13. International Award.**

- ❖ Engineering Applications of Artificial Intelligence. **Top Cited Article 2005-2010** (See Appendix 1).

### **14. Communication Languages.**

- ❖ He speaks, writes and reads in Spanish (native language), Russian and English.



## Engineering Applications of Artificial Intelligence Top Cited Article 2005-2010

Awarded to:

*Quiza Sardiñas, R., Rivas Santana, M., Alfonso Brindis, E.*

For the paper entitled:

**"Genetic algorithm-based multi-objective optimization of cutting  
parameters in turning processes"**

This paper was published in:

**Engineering Applications of Artificial Intelligence, Volume 19, Issue 2, 2006**

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*David Clark*

*Senior Vice President, Physical Sciences I  
Amsterdam, The Netherlands*

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