

CURRICULUM VITAE

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Academic Degrees

- BSc in Civil Engineering, Universidad Autónoma de Chiapas, 1985–1990. Degree awarded in 1991 with the thesis “Analysis of Grid Structures using a personal computer (stiffness method)” (*summa cum laude*).
- Master of Science in Computer Science, Tulane University, New Orleans, Louisiana, EUA, 1991–1993. Degree awarded in December, 2003.
- PhD in Computer Science, Tulane University, New Orleans, Louisiana, EUA, 1993–1996. Degree awarded in May, 1996, with the thesis entitled “An Empirical Study of Evolutionary Techniques for Multiobjective Optimization in Engineering Design”.

Most Relevant Publications

Books

1. Carlos A. Coello Coello, Clarisse Dhaenens and Laetitia Jourdan (editors), “Advances in Multi-Objective Nature Inspired Computing”, Springer, Berlin/Heidelberg, 2010, ISBN: 978-3-642-11217-1.
2. Carlos Artemio Coello Coello, Satchidananda Dehuri and Susmita Ghosh (eds), “Swarm Intelligence for Multi-objective Problems in Data Mining”, Springer, Berlin/Heidelberg, 2009, ISBN 978-3-642-03624-8.
3. Carlos A. Coello Coello, Gary B. Lamont & David A. Van Veldhuizen, “Evolutionary Algorithms for Solving Multi-Objective Problems”, Springer, New York, ISBN 978-0-387-33254-3, September 2007 (Second Edition).
4. Carlos A. Coello Coello and Gary B. Lamont (eds), “Applications of Multi-Objective Evolutionary Algorithms”, World Scientific, Singapore, ISBN 981-256-106-4, 2004.

Book Chapters

1. Antonio López Jaimes and Carlos A. Coello Coello, “Applications of Parallel Platforms and Models in Evolutionary Multi-Objective Optimization”, in Andrew Lewis, Sanaz Mostaghim and Marcus Randall (editors), *Biologically-Inspired Optimisation Methods*, pp. 23–49, Springer, 2009, ISBN 978-3-642-01261-7.

2. Antonio López Jaimes, Luis Vicente Santana Quintero and Carlos A. Coello Coello, “Ranking Methods in Many-objective Evolutionary Algorithms”, in Raymond Chiong (editor), *Nature-Inspired Algorithms for Optimisation*, pp. 413–434, Springer, Berlin, 2009, ISBN 978-3-642-00266-3.
3. Guillermo Leguizamón and Carlos Coello Coello, “Boundary Search for Constrained Numerical Optimization Problems”, in Efrén Mezura-Montes (editor), *Constraint-Handling in Evolutionary Optimization*, pp. 25–49, Springer-Verlag, Berlin, 2009, ISBN 978-3-642-00618-0.
4. Antonio López Jaimes and Carlos A. Coello Coello, “Multi-Objective Evolutionary Algorithms: A Review of the State-of-the-Art and some of their Applications in Chemical Engineering”, in Rangaiah Gade Pandu (editor), *Multi-Objective Optimization Techniques and Applications in Chemical Engineering*, Chapter 3, pp. 61–90, World Scientific, Singapore, 2009, ISBN 978-981-283-651-9.
5. Fabio Freschi, Carlos A. Coello Coello and Maurizio Repetto, “Multiobjective Optimization and Artificial Immune Systems: A Review”, in Hongwei Mo (editor), *Handbook of Research on Artificial Immune Systems and Natural Computing: Applying Complex Adaptive Technologies*, pp. 1–21, Medical Information Science Reference, Hershey, New York, 2009, ISBN 978-1-60566-310-4.
6. Luis V. Santana-Quintero, Noel Ramírez-Santiago and Carlos A. Coello Coello, “Towards a More Efficient Multi-Objective Particle Swarm Optimizer”, in Lam Thu Bui and Sameer Alam (editors), *Multi-Objective Optimization in Computational Intelligence: Theory and Practice*, pp. 76–105, Information Science Reference, Hershey, USA, 2008, ISBN 978-1-59904-498-9.
7. El-Ghazali Talbi, Sanaz Mostaghim, Tatsuya Okabe, Hisao Ishibuchi, Günter Rudolph and Carlos A. Coello Coello, “Parallel Approaches for Multi-objective Optimization”, in Jürgen Branke, Kalyanmoy Deb, Kaisa Miettinen and Roman Slowinski (editors), *Multiobjective Optimization. Interactive and Evolutionary Approaches*, pp. 349–372, Springer, Lecture Notes in Computer Science Vol. 5252, Berlin, Germany, 2008.
8. Antonio López Jaimes and Carlos A. Coello Coello, “An Introduction to Multi-Objective Evolutionary Algorithms and some of Their Potential Uses in Biology”, in Tomasz Smolinski, Mariofanna G. Milanova and Aboul-Ella Hassanien (editors), *Applications of Computational Intelligence in Biology: Current Trends and Open Problems*, pp. 79–102, Springer, Berlin, 2008, ISBN 978-3-540-78533-0.
9. Alfredo G. Hernández-Díaz, Luis V. Santana-Quintero, Carlos A. Coello Coello, Rafael Caballero, and Julián Molina, “Rough Sets Theory for Multi-Objective Optimization Problems”, in Carlos Cotta, Simeon Reich, Robert Schaefer and Antoni Ligęza (editors), *Knowledge-Driven Computing*, pp. 81–98, Springer-Verlag, Berlin, 2008, ISBN 978-3-540-77474-7.
10. Efrén Mezura-Montes, Margarita Reyes-Sierra and Carlos A. Coello Coello, “Multi-Objective Optimization using Differential Evolution: A Survey of the State-of-the-Art”, in Uday K. Chakraborty (editor), *Advances in Differential Evolution*, pp. 173–196, Springer-Verlag, Berlin, 2008, ISBN 978-3-540-68827-3.
11. Ricardo Landa-Becerra, Luis V. Santana-Quintero and Carlos A. Coello Coello, “Knowledge Incorporation in Multi-Objective Evolutionary Algorithms”, in Ashish Ghosh, Satchidananda Dehuri and Susmita Ghosh (editors), *Multi-objective Evolutionary Algorithms for Knowledge Discovery from Data Bases*, pp. 23–46, Springer, Berlin, 2008, ISBN 978-3-540-77466-2.
12. Efrén Mezura-Montes and Carlos A. Coello Coello, “Constrained Optimization via Multiobjective Evolutionary Algorithms”, in Joshua Knowles, David Corne and Kalyanmoy Deb (Editors), *Multi-Objective Problem Solving from Nature: From Concepts to Applications*, pp. 53–75, Springer, 2008, ISBN 978-3-540-72963-1.
13. Efrén Mezura-Montes, Edgar A. Portilla-Flores, Carlos A. Coello Coello, Jaime Alvarez-Gallegos and Carlos A. Cruz-Villar, “An Evolutionary Approach to Solve a Novel Mechatronic Multiobjective Optimization Problem”, in Patrick Siarry and Zbigniew Michalewicz (editors), *Advances in Metaheuristic Methods for Hard Optimization*, pp. 329–351, Springer, 2008, ISBN 978-3-540-72959-4.
14. Carlos A. Coello Coello, “Evolutionary Algorithms: Basic Concepts and Applications in Biometrics”, in Svetlana N. Yanushkevich, Patrick S.P. Wang, Marina L. Gavrilova and Sargur N. Srihari (editors), *Image Pattern Recognition: Synthesis and Analysis in Biometrics*, pp. 289–320, World Scientific, Singapore, 2007, ISBN 981-256-908-1.
15. Leticia Cagnina, Susana C. Esquivel and Carlos A. Coello Coello, “Hybrid Particle Swarm Optimizers in the Single Machine Scheduling Problem: An Experimental Study”, in Keshav Dahal, Kay Chan Tan and Peter Cowling (editors), *Evolutionary Scheduling*, pp. 143–164, Springer-Verlag, 2007, ISBN 3-540-48582-1.
16. Margarita Reyes Sierra and Carlos A. Coello Coello, “A Study of Techniques to Improve the Efficiency of a Multi-Objective Particle Swarm Optimizer”, in Shengxiang Yang, Yew Soon Ong and Yaochu Jin (editors), *Evolutionary Computation in Dynamic and Uncertain Environments*, pp. 269–296, Springer, 2007, ISBN 978-3-540-49772-1.
17. Carlos A. Coello Coello, “Evolutionary Multi-Objective Optimization in Finance”, in Jean-Philippe Rennard (editor), *Handbook of Research on Nature Inspired Computing for Economy and Management*, pp. 74–88, Vol. I, Idea Group Reference, Hershey, UK, 2006, ISBN 1-59140-984-5.

18. Carlos A. Coello Coello, “20 Years of Evolutionary Multi-Objective Optimization: What Has Been Done and What Remains to be Done”, in Gary Y. Yen and David B. Fogel (editors), *Computational Intelligence: Principles and Practice*, Chapter 4, pp. 73–88, IEEE Computational Intelligence Society, 2006, ISBN 0-9787135-0-8.
19. Efrén Mezura-Montes, Arturo Hernández Aguirre and Carlos A. Coello Coello, “Using Evolution Strategies to Solve Constrained Optimization Problems”, in William Annicchiarico, Jacques Périaux, Miguel Cerrolaza and Gabriel Winter (editors), *Evolutionary Algorithms and Intelligent Tools in Engineering Optimization*, pp. 1–25, WIT Press, CIMNE Barcelona, Southampton, Boston, 2005, ISBN 1-84564-038-1.
20. Mezura-Montes, Efrén and Coello Coello, Carlos A. “Use of Multiobjective Optimization Concepts to Handle Constraints in Genetic Algorithms”, in Ajith Abraham, Lakhmi Jain and Robert Goldberg (editors), *Evolutionary Multiobjective Optimization: Theoretical Advances And Applications*, pp. 229–254, Springer-Verlag, London, 2005, ISBN 1-85233-787-7.
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23. Dragan Cvetkovic and Carlos A. Coello Coello, “Human Preferences and Their Applications in Evolutionary Multi-Objective Optimization”, en Yaochu Jin (editor) *Knowledge Incorporation in Evolutionary Computation*, Springer, pp. 479–502, Studies in Fuzziness and Soft Computing, Vol. 167, ISBN 3-540-22902-7, 2005.
24. Ricardo Landa Becerra and Carlos A. Coello Coello, “A Cultural Algorithm for Solving the Job-Shop Scheduling Problem”, en Yaochu Jin (editor) *Knowledge Incorporation in Evolutionary Computation*, Springer, pp. 37–55, Studies in Fuzziness and Soft Computing, Vol. 167, ISBN 3-540-22902-7, 2005.
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Papers Published in International Journals

1. Gideon Avigad and Carlos A. Coello Coello, “Highly Reliable Optimal Solutions to Multi Objective Problems and their Evolution by Means of Worst-case Analysis”, *Engineering Optimization*, 2010 (*in press*).
2. Carlos Soza Canales, Ricardo Landa Becerra, María Cristina Riff and Carlos Coello Coello, “A Cultural Algorithm with Operator Parameters Control for Solving Timetabling Problems”, *Applied Soft Computing*, 2010 (*in press*).
3. Antonin Ponsich and Carlos A. Coello Coello, “Differential Evolution performances for the solution of mixed integer constrained Process Engineering problems”, *Applied Soft Computing*, 2010 (*in press*).
4. J.J. Durillo, A.J. Nebro, C.A. Coello Coello, J. García-Nieto, F. Luna and E. Alba, “A Study of Multi-Objective Metaheuristics when Solving Parameter Scalable Problems”, *IEEE Transactions on Evolutionary Computation*, 2010 (*in press*).
5. M. Davarynejad, C. W. Ahn, J. Vrancken, J. van den Berg and C. A. Coello Coello, “Evolutionary Hidden Information Detection by Granulation-Based Fitness Approximation”, *Applied Soft Computing*, 2010 (*in press*).

6. Daniel Ortiz-Arroyo, Francisco Rodríguez-Henríquez and Carlos A. Coello Coello, "The Turing-850 Project: Developing a Personal Computer in the Early 1980s in Mexico", *IEEE Annals of the History of Computing*, 2010 (in press).
7. Oliver Schuetze, Marco Laumanns, Emilia Tantar, Carlos A. Coello Coello and El-Ghazali Talbi, "Computing gap-free Pareto front approximations with stochastic search algorithms", *Evolutionary Computation*, 2010 (in press)).
8. Adriana Lara, Gustavo Sanchez, Carlos A. Coello Coello and Oliver Schütze, "HCS: A New Local Search Strategy for Memetic Multi-Objective Evolutionary Algorithms", *IEEE Transactions on Evolutionary Computation*, Vol. 14, No. 1, pp. 112–132, February 2010.
9. Luis V. Santana-Quintero, Alfredo G. Hernández-Díaz, Julián Molina, Carlos A. Coello Coello and Rafael Caballero, "DEMORS: A hybrid Multi-Objective Optimization Algorithm using Differential Evolution and Rough Sets for Constrained Problems", *Computers & Operations Research*, Vol. 37, No. 3, pp. 470–480, March 2010.
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11. J.E. Mendoza, M.E. López, C.A. Coello Coello and E.A. López, "Microgenetic multiobjective reconfiguration algorithm considering power losses and reliability indices for medium voltage distribution network", *IET Generation, Transmission & Distribution*, Vol. 3, No. 9, pp. 825–840, September 2009.
12. Carlos A. Coello Coello, "Evolutionary Multi-Objective Optimization: Some Current Research Trends and Topics that Remain to be Explored", *Frontiers of Computer Science in China*, Vol. 3, No. 1, pp. 18–30, 2009, ISSN 1673-7350.
13. Jorge E. Rodríguez, Andrés L. Medaglia and Carlos A. Coello Coello, "Design of a motorcycle frame using neuroacceleration strategies in MOEAs", *Journal of Heuristics*, Vol. 15, No. 2, pp. 177–196, April 2009.
14. Julián Molina, Luis V. Santana, Alfredo G. Hernández-Díaz, Carlos A. Coello Coello and Rafael Caballero, "g-dominance: Reference point based dominance for MultiObjective Metaheuristics", *European Journal of Operational Research*, Vol. 197, No. 2, pp. 685–692, September 2009.
15. Y. Pablo Oñate, Juan M. Ramirez and Carlos A. Coello Coello, "An optimal power flow plus transmission costs solution", *Electric Power Systems Research*, Volume 79, No. 8, pp. 1240–1246, August 2009.
16. Guillermo Leguizamón and Carlos A. Coello Coello, "Boundary Search for Constrained Numerical Optimization Problems with an Algorithm Inspired on the Ant Colony Metaphor", *IEEE Transactions on Evolutionary Computation*, Vol. 13, No. 2, pp. 350–368, April 2009.
17. Carlos A. Coello Coello and Ricardo Landa Becerra, "Evolutionary Multi-Objective Optimization in Materials Science and Engineering", *Materials and Manufacturing Processes*, Vol. 24, No. 2, pp. 119–129, February 2009.
18. Oliver Schütze, Marco Laumanns, Carlos A. Coello Coello, Michael Dellnitz and El-ghazali Talbi, "Convergence of Stochastic Search Algorithms to Finite Size Pareto Set Approximations", *Journal of Global Optimization*, Vol. 41, No. 4, pp. 559–577, August 2008.
19. Efrén Mezura-Montes and Carlos A. Coello Coello, "An Empirical Study About The Usefulness of Evolution Strategies to Solve Constrained Optimization Problems", *International Journal of General Systems*, Vol. 37, No. 4, pp. 443–473, August 2008.
20. Oliver Schütze, Carlos A. Coello Coello, Sanaz Mostaghim, El-Ghazali Talbi and Michael Dellnitz, "Hybridizing Evolutionary Strategies with Continuation Methods for Solving Multi-Objective Problems", *Engineering Optimization*, Vol. 40, No. 5, pp. 383–402, May 2008.
21. Nareli Cruz Cortés, Francisco Rodríguez-Henríquez and Carlos A. Coello Coello, "An Artificial Immune System Heuristic for Generating Short Addition Chains", *IEEE Transactions on Evolutionary Computation*, Vol. 12, No. 1, pp. 1–24, February 2008.
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23. Alfredo G. Hernández-Díaz, Luis V. Santana-Quintero, Carlos A. Coello Coello and Julián Molina, "Pareto-adaptive ϵ -dominance", *Evolutionary Computation*, Vol. 15, No. 4, pp. 493–517, Winter 2007.
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Courses Taught

- **An Introduction to Evolutionary Computation** (MSc level). 48 hours. It has been taught 7 times at CINVESTAV-IPN since 2001.
- **An Introduction to Evolutionary Multiobjective Optimization** (PhD level). 48 hours. It has been taught 3 times at CINVESTAV-IPN since 2001.
- **Programming Languages** (MSc level). 48 hours. It has been taught 2 times at CINVESTAV-IPN since 2001.
- **Engineering Optimization** (MSc level). 48 hours. It has been taught 4 times at CINVESTAV-IPN since 2001.

Theses Supervised

- Has supervised 8 PhD theses (7 at CINVESTAV-IPN and 1 at the Universidad Nacional de San Luis, in Argentina). Four of these PhD theses have received **first place** awards in national competitions of PhD theses in Computer Science.
- Has supervised 27 MSc theses between 2000 and 2009.
- Has supervised 6 BSc theses.
- Currently supervises 4 PhD theses and 2 MSc thesis at CINVESTAV-IPN. Additionally, he supervises 2 PhD theses at the Universidad Nacional de San Luis, in Argentina.

Editorial Activities

1. Associate Editor of the international journal *IEEE Transactions on Evolutionary Computation* (IEEE Press), 2003–date.
2. Associate Editor of the international journal *Evolutionary Computation* (MIT Press), ISSN 1063-6560/05, 2005–date.
3. Associate Editor of the international journal *Soft Computing* (Springer), ISSN 1432-7643, 2008–date.
4. Associate Editor of the international journal *Pattern Analysis & Applications* (Springer), ISSN 1433-7541, 2007–date.
5. Associate Editor of the international journal *Journal of Heuristics* ((Springer), ISSN 1381-1231, 2006–date.
6. Associate Editor of the international journal *Computational Optimization and Applications*, (Springer), ISSN 0926-6003, 2006–date.
7. Associate Editor of the *International Journal of Swarm Intelligence*, (Information Resources Management Association), ISSN 1947-9263, 2009–date.
8. Associate Editor of the international journal *Applied Computational Intelligence and Soft Computing*, (Hindawi Publishing Corporation), ISSN 1687-9724, 2007–date.
9. Associate Editor of the mexican journal *Computación y Sistemas*, (CIC-IPN), 2001–date.
10. Member of the Editorial Board of the international journal *Engineering Optimization* (Taylor & Francis), ISSN 0305-215X, 2004–date.
11. Member of the Editorial Board of the international journal *Memetic Computing* (Springer), ISSN 1865-9284, 2008–date.
12. Member of the Editorial Board of the *International Journal of Intelligent Computing and Cybernetics*, (Emerald Group Publishing Limited, ISSN: 1756-378X, 2007–date.
13. Member of the Editorial Board of the *International Journal of Computational Intelligence*, (The International Computational Intelligence Society), ISSN 1304-2386, 2005–date.
14. Guest Editor of the *IEEE Transactions on Evolutionary Computation* for a special issue on *Evolutionary Multi-Objective Optimization*. The special issue was published as number 2 of the volume 7 (April 2003).
15. Guest Editor of the *European Journal of Operational Research*, for a special issue in *Evolutionary Multi-Objective Optimization*. The special issue was published as number 3 of the volume 181 (16 September 2007).
16. Technical reviewer for over 30 international journals and member of the scientific program of over 40 international conferences, including all the major evolutionary computation conferences.

Conferences and Special Sessions Organization

- General Chair of the *Third International Conference on Evolutionary Multi-Criterion Optimization* (EMO'2005), which took place in Guanajuato, México, from 9 to 11 March, 2005.
- Special Sessions Chair at the *2006 IEEE Congress on Evolutionary Computation*, Vancouver, Canada, 2006.
- Organizer of a special session on “evolutionary multiobjective optimization”, at the *Congress on Evolutionary Computation* in the years 2000 (San Diego, California, USA), 2004 (Portland, Oregon, USA), 2005 (Edinburgh, Scotland, UK) and 2010 (Barcelona, Spain).
- General Chair of the *IEEE Symposium on Computational Intelligence in Multicriteria Decision-Making* in the years 2007 (Honolulu, Hawaii, USA) and 2009 (Nashville, Tennessee, USA).
- Technical Co-Chair of the *2007 IEEE Congress on Evolutionary Computation*, Singapore, 2007.
- Technical Co-Chair of the *2009 IEEE Congress on Evolutionary Computation*, Trondheim, Norway, 2009.
- Program Co-Chair of the *2010 IEEE Congress on Evolutionary Computation*, Barcelona, Spain, 2010.

IEEE Committees

1. Member-at-Large for *IEEE CIS VP Membership Committee*, 2005.
2. Member of the *IEEE CIS Outstanding Dissertation Award Subcommittee* of the *IEEE Computational Intelligence Society*, 2007.
3. Member of the *IEEE Computational Intelligence Society Nominations Committee*, 2008.
4. Member of the *IEEE Computational Intelligence Society Awards Committee*, 2009, 2010.
5. Vice-Chair of the *Evolutionary Computation Technical Committee* (ECTC) of the *IEEE Computational Intelligence Society*, 2009.
6. Member of the *IEEE CIS Continuing Education Sub-Committee*, 2009, 2010.
7. Chair of the *Evolutionary Computation Technical Committee* (ECTC) of the *IEEE Computational Intelligence Society*, 2010.

Professional Experience

- Teacher Assistant, Computer Science Department, Tulane University, New Orleans Louisiana, USA, 1994–1995.
- Lecturer of the course “Symbolic Computing” (CPSC 319), Computer Science Department, Tulane University, New Orleans, Louisiana, USA, Fall 1995.
- Postdoctoral Fellow, Computer Science Department, Tulane University, New Orleans, Louisiana, USA, June–August 1996. Project: *Us of Genetic Algorithms in Combinational Circuit Design*.
- Adjunct Professor, Computer Science Department, ITESM Campus Edo. de México, August–November 1997.
- Visiting Professor, Masters Program in Computer Science, Universidad Autónoma Metropolitana, Unidad Azcapotzalco, México, D. F., México, October 1997–February 1998.
- *Senior Research Fellow*, Engineering Design Centre, University of Plymouth, Plymouth, Devon, UK, February–September 1998.
- Researcher, LANIA, Xalapa, Veracruz, México, November 1998–December 2000.
- Investigador CINVESTAV 3B (Assistant Professor), CINVESTAV-IPN, Departamento de Ingeniería Eléctrica, Sección de Computación, January 2001–March 2004.
- Investigador CINVESTAV 3D (Associate Professor), CINVESTAV-IPN, Departamento de Ingeniería Eléctrica, Sección de Computación, April 2005–March 2009.
- Investigador CINVESTAV 3E (Professor), CINVESTAV-IPN, Departamento de Computación, April 2009–date.

Invited Talks

1. Keynote speaker at the *International Conference on Computer Science, Communication & Information Technology*, Nanded, India, 9–11 January, 2010.
2. Invited speaker at the *Multiobjective Optimisation Workshop*, organized by *CSIRO Energy Technology*, Newcastle, Australia, September 2009.
3. Plenary speaker at the *9th International Conference on Intelligent Systems Design and Applications (ISDA'09)*, Pisa, Italy, November–December, 2009.
4. Invited speaker at the *2nd International Seminar on New Issues in Artificial Intelligence*, University Carlos III of Madrid, Colmenarejo, Spain, February, 2009.
5. Plenary speaker at the *VI IEEE Latin-American Summer School on Computational Intelligence*, Santiago, Chile, December, 2008.
6. Plenary speaker at the *International Conference on Neural Network and Genetic Algorithm in Materials Science and Engineering*, Kolkatta, India, 9–11 January, 2008.
7. Invited speaker at the *2006 Congress on Evolutionary Computation (CEC'2006)*, Vancouver, Canada, 16–21 July, 2006.
8. Keynote speaker at the *XIII Latinamerican Conference on Operations Research (CLAIO)*, Montevideo, Uruguay, 27–30 November 2006.
9. Invited speaker at the *2006 IEEE Congress on Evolutionary Computation*, Vancouver, Canada, 21–26 July, 2006.
10. Keynote speaker at the *Seventh International Conference on Adaptive Computing in Design and Manufacture*, 25–27 April, 2006.
11. Invited speaker at the *International Seminar on Computational Intelligence 2005*, Mexico City, Mexico, 17–18 October, 2005.

12. Keynote speaker at the XI ELAVIO (*XI Latin American Summer Workshop on Operations Research*), Villa de Leyva, Colombia, 25–29 July, 2005.
13. Keynote speaker at the *Fifth International Conference on Hybrid Intelligent Systems (HIS'2005)*, Rio de Janeiro, Brazil, 6–9 November 2005.
14. Keynote speaker at the *8th Joint Conference on Information Sciences (JCIS'2005)*, Salt Lake, Utah, USA, 21–26 July, 2005.
15. Keynote speaker at the *International Workshop on Biometric Technologies (BT'2004)*, Calgary, Canada, 22–23 June, 2004.
16. Keynote speaker at the *First Spanish Conference on Evolutionary and Bio-inspired Algorithms*, Mérida, Spain, February 2002.
17. Dr. Coello has also acted as Keynote speaker for several conferences held in different parts of Mexico, including the two most important in computer science (these two conferences are organized by the Mexican Society of Artificial Intelligence and the Mexican Society of Computer Science, respectively).

Awards

1. *2010 Medal to the Scientific Merit*, granted by the *Asamblea Legislativa del Distrito Federal* (Mexico City's congress). This medal is granted to scientists who have made a significant contribution to both Mexico City and Mexico. For 2010, one of the 3 recipients of this medal was Dr. José Narro Robles, who is the President of the Universidad Nacional Autónoma de México (UNAM), which is the largest and most prestigious university in Mexico (and the best in Latin America).
2. Recipient of the *2007 National Research Award* in the area of *exact sciences*. This award is granted by the Mexican Academy of Science to researchers under the age of 40 who have shown an outstanding performance, and is the second most prestigious scientific award granted in Mexico. Dr. Coello is the only computer scientist who has received this award, since its inception, in 1961.
3. *Best Paper Award* at the international conference *Artificial Evolution 2009 (EA' 2009)*, held in Strasbourg, France in October, 2009. The proceedings of this conference will be published in 2010.
4. *Best Paper Award* from the *Evolutionary Multiobjective Optimization track* at the *2008 Genetic and Evolutionary Computation Conference (GECCO'2008)*, held in Atlanta, Georgia, USA, in July, 2008.
5. *Best Paper Award* from the *Evolutionary Multiobjective Optimization track* at the *2007 Genetic and Evolutionary Computation Conference (GECCO'2007)*, held in London, UK, in July, 2007.
6. *Best Paper Award* in the category “Novel Smart Engineering System Design Award” at the international conference *Artificial Neural Networks in Engineering (ANNIE'2001)*, held in St. Louis, Missouri, USA, in November 2001.
7. Recipient of the Presidential Award Medal *Diario de México* for being one of the best undergraduate students of Mexico, 1990.

Professional and Academic Achievements

- Has been external evaluator of PhD theses from Singapore, Australia, Israel, Argentina and Spain.
- Has taught short courses in Spain, England, Argentina, Chile, Colombia, and USA.
- Has taught tutorials at the major conferences in evolutionary computation: the *IEEE Congress on Evolutionary Computation*, the *Genetic and Evolutionary Computation Conference* and *Parallel Problem Solving from Nature*. Has also been tutorial speaker at the *First International Conference on Evolutionary Multi-Criterion Optimization* held in Zurich, Switzerland, in 2001, and at the *IEEE Swarm Intelligence Symposium*, held in Indianapolis, USA, in 2003.
- Member of the *Council of Authors* of SIGEVO (formerly known as the *International Society for Genetic and Evolutionary Computation*), since 2003.
- *Senior Member* of the IEEE (since 2004), and IEEE Member for 12 years. IEEE Member Number: 40269291.
- Member of *Sigma Xi, The Scientific Research Society*, 2004–date.
- Member of the Advisory Board of the *Hispanic-American Fuzzy Systems Association (HAFSA)*, 2004–date.
- Member of the Mexican Academy of Science (since 2002).
- Over **3900 citations** reported to my publications (1910 from them are recorded in the *ISI Citation Index*). The detailed list is available at: <http://delta.cs.cinvestav.mx/~ccoello/impact.html>. Dr. Coello has had 6 of his paper in the *Hot Papers List* of the *ISI Web of Science* for being the most highly cited in the last 10 years. Some of the algorithms developed by Dr. Coello have been discussed in detail by other authors in monographs, PhD theses and conference papers.

- His **h-index** is of **35**, according to *Publish or Perish* (as of January 2010).
- Member of the Advisory Board of Science and Technology of CONACyT (the mexican equivalent of the *National Science Foundation*), 2000-2002.
- Vice-President of the Mexican Society of Computer Science, 1999-2000.
- National Researcher Level **3** (National System of Researchers), since 2005. Level 3 is the highest possible. There are only 8 computer scientists in Mexico with this level. From them, Dr. Coello is the only one who has received this distinction under the age of 40.
- Full scholarship from the Secretaría de Educación Pública to pursue MSc and PhD studies in Computer Science at *Tulane University*, 1991–1996.
- Member of “Upsilon Pi Epsilon” (UPE).
- Member of the “Association for Computing Machinery” (ACM).