

## CURRICULUM VITAE



### 1.- PERSONAL INFORMATION:

Name : Pablo Alberto Adasme Soto  
Date of birth : February, 07 de 1972.  
ID card number : 14.420.559-6  
Civil status : Single.  
Nationality : Chilean.  
Personal address : Maria vial 8482- La Cisterna - Santiago  
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Full Academic Position : Associate Professor at University of Santiago de Chile (USACH). Department of Electrical Engineering. From 2011 to current date. Avda. Ecuador 3519 - Estación Central, Santiago Chile.  
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Publications in DBLP: <http://dblp.uni-trier.de/pers/hd/a/Adasme:Pablo>

### 2. - EDUCATION:

#### Under graduate Studies:

- **Title: Ingeniero Civil Industrial (1993-1999 - Distinción Máxima.)** Universidad de Santiago de Chile. Licenciado en ciencias de la ingeniería. [www.usach.cl](http://www.usach.cl). Tema de tesis: *ōDiseño de un modelo de administración para directores de establecimientos escolaresö.*

#### Post graduate Studies:

- **Master en ciencias de la Ingeniería, mención Ingeniería Industrial (2004-2006 - Distinción Máxima).** Thesis subject: *ōEstudio comparativo sobre mecanismos de convergencia para resolver el problema del Job Shop usando la meta-heurística Ant Systemö.* Universidad de Santiago de Chile.

- **Conicyt National Grant for PhD studies: Beca nacional Conicyt para estudios de doctorado en ciencias de la ingeniería mención ingeniería de procesos.** CONICYT. [www.conicyt.cl](http://www.conicyt.cl). 2006.
- **Conicyt International Grant for PhD studies: Beca de cotutela colegio doctoral franco-chileno.** For PhD studies at the University of Paris Sud 11, Laboratoire de Recherche en Informatique (LRI). Orsay Paris Francia. CONICYT. [www.conicyt.cl](http://www.conicyt.cl). 2007.
- **PhD degree in Chile: Doctor en Ciencias de la Ingeniería mención Ingeniería de Procesos (2006-2010 - Distinción Máxima).** Universidad de Santiago de Chile. Thesis name: *δDETERMINISTIC-UNCERTAIN NONLINEAR FORMULATIONS FOR WIRELESS OFDMA NETWORKS WITH APPLICATIONS ON SEMIDEFINITE PROGRAMMINGö.*
- **PhD degree in France: Docteur en Informatique (2007-2010 ó Avec Mention Très Honorable), modélisation mathématique.** Laboratoire de Recherche en Informatique ([www.lri.fr](http://www.lri.fr)), Université de Paris Sud 11, Paris, France. Thesis name: *δFORMULATIONS NON LINEAIRES SEMI-DEFINIES DETERMINISTES ET INCERTAINES DE PROBLEMES DE RESEAUX SANS-FILS OFDMAö.*
- **Post-Doc : at LRI, University of Paris Sud 11, Paris, Francia (2011-2012). Robust and stochastic optimization with applications in wireless networks.**
- **Post-Doc : at LRI, University of Paris Sud 11, Paris, Francia (2013-2014). Netflow, Multi-commodity and graph network design optimization with applications in wireless networks.**

#### **Further studies:**

- Advanced English (Read, write and speak). (1984-1986). Instituto chileno norteamericano de cultura. <http://www.norteamericano.cl/>
- Advance French (Read and speak), (2006-2009). Instituto chileno Francés de cultura. <http://www.icf.cl/>
- Computing languages: visual Basic, C, C++, Java, Microsoft Office (power point, excel, word, access, Visio) Power Designer, SQL, LINGO, GAMS, CPLEX, MOSEK, DICOPT, CVX, CSDP, MATLAB, LATEX, BEAMER, among others. Universidad de Santiago de Chile. University of Paris Sud 11.
- XXII Taller de Ingeniería de Sistemas *öGestionando el Nuevo Sigloö* Universidad de Chile (1999). [www.uchile.cl](http://www.uchile.cl).

### 3. ó Working Experience

- **Administrative position:** òGENDARMERÍA DE CHILEö. 1997.
- **Profesional position:** òGENDARMERÍA DE CHILEö. 1998.
- **Compañía Cad Ingeniería y Montaje Ltda:** Strategic planning. Leadership, design and implementation of databases Microsoft Access, SQL, visual Basic, 2000.
- **Banco De créditos e Inversiones BCI:** Re- Engineering proceses, 2004.
- **Teaching:** at the University Arturo Prat. 2002-2006. [www.unap.cl](http://www.unap.cl) and at the University of Santiago de Chile from 2003 to current date.
- **Active member at the research laboratory òGetic Labö.** Universidad de Santiago de Chile from 2003 to current date. [www.lab\\_getic.usach.cl](http://www.lab_getic.usach.cl).
- **Participation as associate researcher at the Conicyt Ring Project:** òANALYSIS, MODELLING AND OPTIMIZATION IN THE APPLICATION OF WIRELESS TECHNOLOGIESö. Funded by Chilean Government " Bicentenario de Ciencia y Tecnologíaö, PBCT ACT-11/2004.
- **Main researcher at the Conicyt Insertion Academy Project at the University of Santiago de Chile:** òOPTIMIZACION DE LAS REDES DE RETRANSMISION CUANTICAö, Código proyecto 79 1000 20, 2010. Página web: <http://www.conicyt.cl/573/article-36294.html>, (2011-2013).
- "Seguridad y Optimización en microcontroladores de bajo consumo para redes sensoras inalámbricas aplicadas a redes sociales" Investigadores principales: Claudio Valencia Cordero, Pablo Adasme, Rodrigo Abarzua, DICYT Asociativo 061513VC\_DAS (2015-2017).

### 4. ó Teaching Courses:

- **Teacher at High School Level Degree:**
  - Mathematics. 2001-2002, Centro Educacional San Luis.
- **University Arturo Prat:**
  - Calculus, algebra and linear algebra.
  - Administrative information systems for engineering applications.
  - Statistics and probabilities.
  - Operations research. Convex optimization, Optimization Softwares: GAMS, CVX, CSDP, SEDUMI, MOSEK, Matlab, and so on.
- **University of Santiago de Chile:**
  - Teaching course: fundamentos de informática industrial. Lenguaje de programación Java.

- Teaching course: métodos computacionales e ingeniería. (MCI). Modelación matemática y optimización convexa. Software, JGRASP, Netbeans IDE, Eclipse, Plugin de UML, Microsoft UML VISIO, Matlab, CPLEX, GAMS (*General Algebraic Modeling System*).
- Teaching course: Optimización de Sistemas. Undergraduate: ingeniería civil eléctrica, 2011 a la fecha.
- Teaching course: Tópicos en sistemas inteligentes híbridos (in master and PhD programs), 2011 to current date.
- Teaching course: Fundamentos colaborativos (in PhD program).
- Teaching course: Métodos numéricos y optimización (in master program).
- **Full Academic Position:** Departamento de Ingeniería Eléctrica, USACH, from 2011 to current date.

## 5.- International Conference Papers:

- 1) Pablo Adasme, Pedro Palominos, "Comparative Study on Mechanisms of Convergence of Ant System Metaheuristic in the Problem of Job Shop", XIII CLAIO - Congreso Latino-Iberoamericano de Investigación Operativa, Montevideo, Uruguay, November 27 - 30, 2006.
- 2) Adasme P., Soto I., Carrasco R.A., Leszek Szczecinski, "A New Detection Scheme for Wireless Ad Hoc Networks Based on Product Trellises using MIMO Channel and Convolutional Codes". WSEAS Transactions on Mathematics, Dallas, Texas, USA, November 1-3, 2006.
- 3) Adasme P., Soto I., Carrasco R.A., Leszek Szczecinski, "A New Detection Algorithm for Manets Based on Product Trellises using Space Time Trellis Codes", WSEAS Transactions on Mathematics, Issue 2, Volume 6, pages 247-252, ISSN: 1109-2769, 2006.
- 4) Adasme P., Soto I., Carrasco R.A., "A New Bi-Allocation Scheme for Uplink OFDMA Wireless System Using Compound Symbols for the Detection Process". Universidad Católica de Valparaíso, 19-th International Conference on Production Research (19-th ICPR), Valparaíso, Chile 2007.
- 5) Adasme P., Soto I., Carrasco R.A., "An M-Allocation Algorithm for Uplink OFDMA Multi-user Wireless Systems Under a New Detection Scheme Based on Product Trellises", Ninth International Symposium on Communication Theory and Application ISCTA 07, Ambleside England, 2007.

- 6) Adasme P., Lisser A., Soto I, "A Semidefinite Relaxation for Downlink OFDMA Resource Allocation using Adaptive Modulation", International Network Optimization Conference, INOC-2009, Pisa, Italy, 2009.
- 7) Pablo Adasme, Abdel Lisser and Ismael Soto, "A Robust Semidefinite Relaxation Approach for Downlink Resource Allocation using Adaptive Modulation", 20th International Symposium on Mathematical Programming, ISMP Chicago USA, 2009.
- 8) Pablo Adasme, Abdel Lisser and Ismael Soto, "Semidefinite Programming for Stochastic Wireless OFDMA Networks", 9th Cologne Twente Workshop on Graphs and Combinatorial Optimization, Germany, 2010.
- 9) Pablo Adasme and Abdel Lisser, "Semidefinite and Conic Programming for Robust wireless OFDMA networks", ISCO 2010, International Symposium on Combinatorial Optimization, March 24-26, 2010, Hammamet, Tunisia.
- 10) Pablo Adasme, Abdel Lisser and Ismael Soto, "SDP Relaxations for Two Stage OFDMA Networks with and without Probabilistic Constraints", In Proceedings of the 5th Multidisciplinary International Scheduling Conference: Theory and Applications (MISTA 2011), 9-12 Aug 2011, Arizona, USA, accepted paper.
- 11) Pablo Adasme, Abdel Lisser and Ismael Soto, "A Two Stage Stochastic Semidefinite Relaxation for wireless OFDMA Networks", LAGOS'11: VI Latin-American Algorithms, Graphs and Optimization Symposium, Bariloche Argentina, 28 de Marzo al 1 de Abril de 2011.
- 12) Hugo Rodriguez, Pablo Adasme, Abdel Lisser and Ismael Soto, "Computing Upper Bounds for a LBPP with and without Probabilistic Constraints", International Network Optimization Conference, INOC-2011, Hamburg, Germany, 2011. To appear in lectures notes in computer science, Springer [www.springer.com/lncs](http://www.springer.com/lncs)
- 13) Pablo Adasme, Abdel Lisser and Ismael Soto, "Semidefinite and Two Stage Stochastic Programming for wireless OFDMA Networks", Informs Annual Meeting Charlotte North Carolina Charlotte Convention Center, November 13-16, 2011. webpage: <http://meetings2.informs.org/charlotte2011/abstract.html>, accepted abstract.
- 14) Pablo Adasme, Abdel Lisser and Ismael Soto, "A joint scheduling resource allocation scheme for OFDMA using semidefinite programming", 13th International Conference on Project Management and Scheduling (PMS 2012), april 1-4, 2012, Catholic University of Lovain, Leuven, Belgium.
- 15) Pablo Adasme and Abdel Lisser, "Upper bounds and optimal solutions for a Deterministic and Stochastic linear Bilevel Problem", Seventh International Multi-Conference on Computing in

the Global Information Technology (ICCGI 2012), June 24-29, 2012 - Venice, Italy. Web page: <http://www.iaria.org/conferences2012/CfPICCGI12.html>

- 16) Pablo Adasme and Abdel Lisser, "A Semidefinite Relaxation Approach for Stochastic Bilevel Programming", 11th Cologne-Twente Workshop on Graphs and Combinatorial Optimization, May 29th - 31st 2012, Universität der Bundeswehr München, Germany.
- 17) Pablo Adasme, Abdel Lisser and Chen Wang, "A Distributionally Robust Formulation for Stochastic Quadratic Bi-level Programming", 2nd International Conference on Operations Research and Enterprise Systems, ICORES 2013, Barcelona España, 2013. Best Student paper Award.
- 18) Pablo Adasme, Rafael Andrade, Marc Letournel and Abdel Lisser, "A polynomial formulation for the stochastic maximum weight forest problem", International Network Optimization Conference (INOC-2013), Tenerife, España, 2013.
- 19) Belarmino Nuñez, Pablo Adasme, Ismael Soto and Abdel Lisser, "Robust Optimization for Stochastic Wireless CDMA/TDMA Networks", The Eighth International Multi-Conference on Computing in the Global Information Technology (ICCGI 2013), July 21 - 26, 2013 - Nice, France. Web page: <http://www.iaria.org/conferences2013/ICCGI13.html>.
- 20) Pablo Adasme, Abdel Lisser, Chen Wang and Ismael Soto, "Scheduling in Wireless OFDMA-TDMA Networks using Variable Neighborhood Search Meta-Heuristic", In Proceedings of the 6th Multidisciplinary International Scheduling Conference: Theory and Applications (MISTA 2013), 27-30 Aug 2013, Ghent, Belgium.
- 21) P. Adasme, I. Soto, Jianqiang Cheng, Marc Letournel, and Abdel Lisser, "Joint versus Individual Chance Constraints for an Uplink Wireless OFDMA Network", IEEE LatinCom 2013, Santiago de Chile, Noviembre de 2013.
- 22) P. Adasme, A. Lisser and Chuan Xu, "A Multicommodity Formulation for Routing in Healthcare Wireless Body Area Networks", ICORES 2014 3rd International Conference on Operations Research and Enterprise systems, Angers, France, March 2014.
- 23) Pablo Adasme, Abdel Lisser, and Chen Wang, "Stochastic Resource Allocation for Uplink Wireless Multi-cell OFDMA Networks", The 11th International Conference on Mobile Web Information Systems (MobiWIS 2014), 27-29 August 2014, Barcelona, Spain.
- 24) Belarmino Nuñez, Pablo Adasme, Ismael Soto, Jianqiang Cheng, Marc Letournel, and Abdel Lisser, "A Chance Constrained Approach for Uplink Wireless OFDMA Networks", 9<sup>th</sup>

International Symposium on Communication Systems, Networks & Digital Sign (CSNDSP), 23-25<sup>th</sup> July 2014, Manchester England.

- 25) Gustavo Gatica, Tamara Sáez, Rodrigo Linfati, Pablo Adasme, John Willmer Escobar, "Un algoritmo de inicialización eficiente para el Periodic Location Routing Problem", Congreso Internacional de Industria y Organizaciones, Bogotá Colombia 21-22 agosto de 2014.
- 26) Pablo Adasme and Abdel Lisser, "Stochastic maximum capacity for a backbone network design", EURO Mini-Conference on Stochastic Programming, 24-26 September 2014, Paris, France (Accepted, 2014).
- 27) Belarmino Núñez, Pablo Adasme and Ismael Soto, "Asignación de Recursos en Redes Inalámbricas OFDMA usando Restricciones Probabilísticas", XXI congreso Asociación Chilena de Control Automático (ACCA), Santiago de Chile, 2014.
- 28) Raúl Carrasco Armijo, Ismael Soto, Pablo Adasme, Miguel Alfaro and Manuel Eduardo Vargas Guz, "Pronósticos de precios del cobre, usando algoritmos genéticos", XXI congreso Asociación Chilena de Control Automático (ACCA), Santiago de Chile, 2014.
- 29) Gustavo Gatica, Carlos Contreras Bolton, Nicolás Venegas, Omar Opazo, John Willmer Escobar, Rodrigo Linfati and Pablo Adasme, "Una aplicación web, para asignación y ruteo de vehículos en caso de desastres", Congreso Internacional de Industria y Organizaciones, Bogotá Colombia, Agosto de 2015.
- 30) Pablo Adasme, Rafael Andrade, and Abdel Lisser, "Probabilistic constrained dominating trees", 13th Cologne-Twente Workshop on Graphs & Combinatorial Optimization (CTW 2015), Istanbul, Turkey May 26-28, 2015.
- 31) Pablo Adasme, Janny Leung and Abdel Lisser, "A Probabilistic Constrained Approach for Unrelated Parallel Machine Scheduling", In Proceedings of the 6th Multidisciplinary International Scheduling Conference: Theory and Applications (MISTA 2015), Prague, Czech Republic (25-28 Aug 2015).
- 32) Pablo Adasme and Abdel Lisser, "Piecewise Linear Formulations for Downlink Wireless OFDMA Networks, MobiWis 2015: The 12th International Conference on Mobile Web and Intelligent Information Systems 24-26 August 2015, Rome, Italy.
- 33) Fabián Seguel, Raúl Carrasco, Pablo Adasme, Miguel Alfaro, Ismael Soto: "A Meta-heuristic Approach for Copper Price Forecasting. ICISO 2015: 156-165, Information and Knowledge Management in Complex Systems - 16th IFIP WG 8.1 International

Conference on Informatics and Semiotics in Organisations, ICISO 2015, Toulouse, France, March 19-20, 2015. Proceedings. IFIP Advances in Information and Communication Technology 449, Springer 2015, ISBN 978-3-319-16273-7.

34) Pablo Adasme, Rafael Andrade, Janny Leung and Abdel Lisser, "A Comparative Study of Network-Based Approaches for Routing in Healthcare Wireless Body Area Networks", ICORES 2015 - 4th International Conference on Operations Research and Enterprise systems, Lisbon, Portugal, (10-12 January 2015).

35) Pablo Adasme, Rafael Andrade, Janny Leung and Abdel Lisser, Models for minimum cost dominating trees, INOC 2015 - International Network Optimization Conference, May 18-20, 2015, Warsaw, Poland.

#### **6.- Indexed Selected Publications (ISI, SCOPUS, DBLP, IEEE-xplore, SCITEPRESS, THINKMIND):**

- 1) (ISI Journal) Adasme P. and Lisser A., "A Computational Study for Bilevel Quadratic Programs using Semidefinite Relaxations", submitted in revised form to European Journal of Operational Research, June 2015. (Under review).
- 2) (ISI Journal) Pablo Adasme and Abdel Lisser, "Uplink scheduling for joint wireless orthogonal frequency and time division multiple access networks", Accepted paper 2015, to appear in Journal of scheduling, Springer 2015.
- 3) (ISI Journal) Pablo Adasme, Rafael Andrade, Marc Letournel and Abdel Lisser, Stochastic maximum weight forest problem, Networks 65(4): 289-305 (2015).
- 4) (ISI Journal) Pablo Adasme, Janny Leung and Abdel Lisser, Resource Allocation in Uplink Wireless Multi-cell OFDMA Networks, Accepted paper. To appear in Computer Standards & Interfaces 2015, Elsevier 2015.
- 5) (ISI Journal) Adasme P., Lisser A., Soto I., "Robust semidefinite relaxations for a quadratic OFDMA resource allocation scheme", Computers & Operations Research 38 (2011) 1377-1399.
- 6) (ISI Journal) Pablo Adasme, Abdel Lisser and Ismael Soto: "A quadratic semidefinite relaxation approach for resource allocation in orthogonal frequency division multiple access". Networks 59(1): 3-12 (2012).



- 7) (ISI Journal) Pablo Adasme, Abdel Lisser: "Stochastic and semidefinite optimization for scheduling in orthogonal frequency division multiple access networks", *Journal of Scheduling* 17(5): 445-469 (2014).
- 8) Pablo Adasme and Abdel Lisser, "Semidefinite and Conic Programming for Robust wireless OFDMA networks", *Electronic Notes in Discrete Mathematics*, Volume 36, 1 August 2010. Pages 1225-1232. (SCOPUS, DBLP)
- 9) Pablo Adasme, Abdel Lisser and Ismael Soto, "A Two Stage Stochastic Semidefinite Relaxation for wireless OFDMA Networks", *Electronic Notes in Discrete Mathematics* 37: 69-74 (2011). (SCOPUS, DBLP)
- 10) Hugo Rodriguez, Pablo Adasme, Abdel Lisser and Ismael Soto, "Computing Upper Bounds for a LBPP with and without Probabilistic Constraints", Julia Pahl, Torsten Reiners, Stefan Voß (Eds.): *Network Optimization - 5th International Conference, INOC 2011, Hamburg, Germany, June 13-16, 2011. Proceedings. Lecture Notes in Computer Science 6701-Springer 2011, ISBN 978-3-642-21526-1.* (SCOPUS, DBLP)
- 11) P. Adasme, A. Lisser, and I. Soto. "A quadratic semi-definite relaxation approach for OFDMA resource allocation", CNRS-Université de Paris Sud 11, Centre d'Orsay, Rapport de Recherche N° 1521, 2009.
- 12) Adasme P., Lisser A., Soto I., "Robust Semidefinite Relaxations for a New Quadratic OFDMA Resource Allocation Approach", CNRS-Université de Paris Sud 11, Centre d'Orsay, Rapport de Recherche N° 1522, 2009.
- 13) Pablo Adasme, Rafael Andrade, Marc Letournel and Abdel Lisser, "A polynomial formulation for the stochastic maximum weight forest problem", *Electronic Notes in Discrete Mathematics*, 41: 29-36, 2013. (SCOPUS, DBLP).
- 14) Pablo Adasme, Rafael Andrade, Marc Letournel et Abdel Lisser, "Une formulation polynomiale pour le probleme stochastique de la foret de poids maximum", Unité Mixte de Recherche 8623, CNRS-Université Paris Sud ó LRI, 11/2012, Rapport de Recherche N° 1554.
- 15) Adasme Pablo, Lisser Abdel, Chen Wang, Ismael Soto, "Scheduling in wireless OFDMA-TDMA networks using Variable Neighborhood Search Metaheuristic", Unité Mixte de Recherche 8623, CNRS-Université Paris Sud ó LRI, 06/2013, Rapport de Recherche N° 1561.

- 16) Pablo Adasme, Abdel Lisser and Chen Wang, "A Distributionally Robust Formulation for Stochastic Quadratic Bi-level Programming", SCITEPRESS Digital Library, Doi: 10.5220/0004207100240031. Best Student paper Award 2013. (SCOPUS, DBLP, SCITEPRESS).
- 17) Pablo Adasme and Abdel Lisser, "Upper bounds and optimal solutions for a Deterministic and Stochastic linear Bilevel Problem", Seventh International Multi-Conference on Computing in the Global Information Technology (ICCGI 2012), June 24-29, 2012 - Venice, Italy. Web page: <http://www.iaia.org/conferences2012/CfPICCGI12.html>. (THINKMIND).
- 18) Belarmino Nuñez, Pablo Adasme, Ismael Soto and Abdel Lisser, "Robust Optimization for Stochastic Wireless CDMA/TDMA Networks", The Eighth International Multi-Conference on Computing in the Global Information Technology (ICCGI 2013), July 21 - 26, 2013 - Nice, France. Web page: <http://www.iaia.org/conferences2013/ICCGI13.html>. (THINKMIND).
- 19) P. Adasme, A. Lisser and Chuan Xu, "A Multicommodity Formulation for Routing in Healthcare Wireless Body Area Networks", ICORES 2014 6 3rd International Conference on Operations Research and Enterprise systems, Angers, France, March 2014. (SCOPUS, DBLP, SCITEPRESS).
- 20) Pablo Adasme, Abdel Lisser, and Chen Wang, "Stochastic Resource Allocation for Uplink Wireless Multi-cell OFDMA Networks", The 11th International Conference on Mobile Web Information Systems (MobiWIS 2014), 27-29 August 2014, Barcelona, Spain. To appear in LNCS Springer. (SCOPUS, DBLP). Best paper Award Springer LNCS, 2014.
- 21) Belarmino Nuñez, Pablo Adasme, Ismael Soto, Jianqiang Cheng, Marc Letournel, and Abdel Lisser, "A Chance Constrained Approach for Uplink Wireless OFDMA Networks", 9<sup>th</sup> International Symposium on Communication Systems, Networks & Digital Sign (CSNDSP), 23-25<sup>th</sup> July 2014, Manchester England, pages 754 6 757, 2014. (IEEE xplore, SCOPUS, DBLP).
- 22) Pablo Adasme and Abdel Lisser, "A Semidefinite Relaxation Approach for Stochastic Bilevel Programming", 11th Cologne-Twente Workshop on Graphs and Combinatorial Optimization, May 29th - 31st 2012, Universität der Bundeswehr München, Germany (DBLP).
- 23) Pablo Adasme, Rafael Andrade, Janny Leung and Abdel Lisser, "A Comparative Study of Network-Based Approaches for Routing in Healthcare Wireless Body Area Networks", ICORES 2015 6 4th International Conference on Operations Research and Enterprise

systems, Lisbon, Portugal, (10-12 January 2015). ICORES 2015. (SCOPUS, DBLP, SCITEPRESS).

- 24) Pablo Adasme, Rafael Andrade, and Abdel Lisser, "Probabilistic constrained dominating trees", 13th Cologne-Twente Workshop on Graphs & Combinatorial Optimization (CTW 2015), Istanbul, Turkey May 26-28, 2015. (In DBLP, SCOPUS).
- 25) Pablo Adasme and Abdel Lisser, "Piecewise Linear Formulations for Downlink Wireless OFDMA Networks", MobiWis 2015: The 12th International Conference on Mobile Web and Intelligent Information Systems 24-26 August 2015, Rome, Italy. (In DBLP, SCOPUS, Springer).
- 26) Fabián Seguel, Raúl Carrasco, Pablo Adasme, Miguel Alfaro, Ismael Soto: "A Meta-heuristic Approach for Copper Price Forecasting". ICISO 2015: 156-165, Information and Knowledge Management in Complex Systems - 16th IFIP WG 8.1 International Conference on Informatics and Semiotics in Organisations, ICISO 2015, Toulouse, France, March 19-20, 2015. Proceedings. IFIP Advances in Information and Communication Technology 449, Springer 2015, ISBN 978-3-319-16273-7. (In DBLP, SCOPUS, Springer).
- 27) Pablo Adasme, Rafael Andrade, Janny Leung and Abdel Lisser, "A Comparative Study of Network-Based Approaches for Routing in Healthcare Wireless Body Area Networks", ICORES 2015 - 4th International Conference on Operations Research and Enterprise systems, Lisbon, Portugal, (10-12 January 2015). (In DBLP, SCOPUS)
- 28) Pablo Adasme, Rafael Andrade, Janny Leung and Abdel Lisser, "Models for minimum cost dominating trees", INOC 2015 - International Network Optimization Conference, May 18-20, 2015, Warsaw, Poland. To appear in Electronic Notes in Discrete Mathematics Journal (In DBLP, SCOPUS, Elsevier)

## **7.- Reviewer Invitations from ISI Journals and International Conferences:**

- Computers & Operations Research (Elsevier).
- Optimization and Engineering (Springer).
- Operations Research & Decision Theory (Springer).
- International network optimization conference (INOC 2013).
- The Eighth International Multi-Conference on Computing in the Global Information Technology ICCGI 2013, IARIA 2013, 2014, 2015.

- IEEE LatinCom 2013, 2014, 2015.
- Discrete Applied Mathematics, Elsevier.
- European Journal of Operations Research, Elsevier.
- Computer Standards & Interfaces, Elsevier.
- Transportation Science, Informs.
- Revista DYNA Journal.

## **8.- Research Interests:**

- Wireless network communications.
- Mathematical programming, linear and non-linear programming.
- Combinatorial and convex optimization (Conic optimization: semi-definite programming, second order cone programming, bi-level programming, among others).
- Meta-heuristics.
- Graph optimization problems.
- Robust optimization and stochastic programming.
- Decomposition approaches.
- Network flow routing and scheduling problems.
- Geometric and signomial programming applications.

## **9. ó Thesis supervision and co-supervision undergradate**

- 1) "Modelamiento matemático de redes sociales basado en teoría de semigrupos", Cristian Montecinos Carrillo, Magíster en Ingeniería Industrial, USACH 2011, INGENIERÍA INDUSTRIAL.
- 2) "Diagnóstico y Rediseño de Procesos Asociados al Canal Web en la empresa ADT SECURITY SERVICES", Marcos Uribe Verdugo, Tesis Ingeniero de Ejecución Industrial, USACH 2008, INGENIERÍA INDUSTRIAL.
- 3) "Rediseño al área QA del Departamento de Informática del IPS", Carlos Alfonso Castillo Tapia. Obtención Título de ingeniero civil industrial Universidad de Santiago de Chile, 2012.
- 4) "Sistema ubicuo de posicionamiento minero subterráneo sobre un robot basado en comunicaciones inalámbricas CDMA-TDMA". Supervisor en Tesis de magister en Ingeniería Eléctrica y tesis para obtención de título de Ingeniero Civil Electricista. Finalizada en 2013: Alumno Belarmino Nuñez, 2012-2013.

## **10. 6 Thesis supervision and co-supervision Master and PhD programs**

- 5) "Sistema ubicuo de posicionamiento minero subterráneo sobre un robot basado en comunicaciones inalámbricas CDMA-TDMA". Supervisor en Tesis de magister en Ingeniería Eléctrica y tesis para obtención de título de Ingeniero Civil Electricista. Finalizada en 2013: Alumno Belarmino Nuñez, 2012-2013.
- 6) Belarmino Nuñez, tesis doctoral: "Modelos matemáticos estocásticos para comunicaciones inalámbricas en túneles subterráneos en minería", En proceso 2014.
- 7) Chen Wang, tesis doctoral en Universidad de Paris Sud 11, Francia. "Variants of Deterministic and Stochastic Nonlinear Optimization Problems", Co-supervisión y Examinador Internacional, Octubre de 2014, Finalizada.
- 8) Gustavo Gatica, tesis doctoral en Universidad de Santiago de Chile, "Nuevos enfoques meta-heurísticos para problemas de enrutamiento", Supervisor directo en programa de Doctorado en Automática del departamento de Ingeniería Eléctrica de la USACH. Finalizada en Enero de 2015.
- 9) Evaluation in several seminars related with Master and PhD students in process.

**August 12, 2015**