

Alicia Valero Delgado

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Journal editorial management

- PLOS Sustainability and Transformation. 2767-3197. 01/06/25
- Journal of Environmental Accounting and Management. 2325-6192. 01/01/13

Participation in conferences

- **ECOS24. 37th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). EXERGY STRATEGIES FOR THE CIRCULAR ECONOMY: DISMANTLING, DISASSEMBLY, ECO-DESIGN AND RECYCLING IN ELECTRIC VEHICLES. Rhodes. 30/06/24
- **ECOS 2024- 37rd International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Validation of exergy as a tool for a holistic assessment of the environmental impacts of agricultural processes. Rhodes. 30/06/24
- **ECOS24. 37th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Póster. STUDY OF THE RECYCLABILITY OF THE BATTERY OF AN ELECTRIC VEHICLE FROM AN EXERGY AND CRITICALITY STANDPOINT. Rhodes. 30/06/24
- **11th International Conference on Industrial Ecology (ISIE 2023).** Participativo - Ponencia oral (comunicación oral). Circular economy in car electronics - a case study of the combimeter and the infotainment of the SEAT Leon II model Leiden. 02/07/23
- **11th International Conference on Industrial Ecology (ISIE 2023).** Participativo - Ponencia oral (comunicación oral). Critical raw materials demand for green & digital pathways in Spain. Leiden. 02/07/23
- **11th International Conference on Industrial Ecology (ISIE 2023).** Participativo - Póster. Leading the transition of the european automotive supply chain towards a circular future -TREASURE Leiden. 02/07/23
- **11th International Conference on Industrial Ecology (ISIE 2023).** Participativo - Póster. Disassemblability, recyclability and ecodesign assessment to promote the circular economy in the automotive sector (póster). Leiden. 02/07/23
- **ECOS 2023 36TH INTERNATIONAL CONFERENCE ON EFFICIENCY, COSTS, OPTIMIZATION, SIMULATION AND ENVIRONMENTAL IMPACT OF ENERGY SYSTEMS.** Participativo - Ponencia oral (comunicación oral). Energy and carbon footprint of metals through physical allocation of co-products from a life-cycle perspective. Implications for energy transition. Gran Canaria. 25/06/23
- **ECOS 2023 36TH INTERNATIONAL CONFERENCE ON EFFICIENCY, COSTS, OPTIMIZATION, SIMULATION AND ENVIRONMENTAL IMPACT OF ENERGY SYSTEMS.** Participativo - Ponencia oral (comunicación oral). Exergy cost associated with polymers recycling in vehicles: from qualitative to quantitative indicators. Gran Canaria. 25/06/23
- **ECOS 2023 36TH INTERNATIONAL CONFERENCE ON EFFICIENCY, COSTS, OPTIMIZATION, SIMULATION AND ENVIRONMENTAL IMPACT OF ENERGY SYSTEMS.** Participativo - Ponencia oral (comunicación oral). TaesLab: An advanced software tool for circular thermoeconomics. Gran Canaria. 25/06/23
- **ECOS 2023 36TH INTERNATIONAL CONFERENCE ON EFFICIENCY, COSTS, OPTIMIZATION, SIMULATION AND ENVIRONMENTAL IMPACT OF ENERGY SYSTEMS.** Participativo - Ponencia oral (comunicación oral). Remediation costs of topsoil fertility: an exergy indicator of agricultural impacts. Gran Canaria. 25/06/23
- **ECOS 2023 36TH INTERNATIONAL CONFERENCE ON EFFICIENCY, COSTS, OPTIMIZATION, SIMULATION AND ENVIRONMENTAL IMPACT OF ENERGY SYSTEMS.** Participativo - Ponencia oral (comunicación oral). A new way to assess the loss of mineral wealth: the case of copper. Gran Canaria. 25/06/23

- **ECOS 2023 36TH INTERNATIONAL CONFERENCE ON EFFICIENCY, COSTS, OPTIMIZATION, SIMULATION AND ENVIRONMENTAL IMPACT OF ENERGY SYSTEMS.** Participativo - Ponencia oral (comunicación oral). The Future of Thermoeconomics after the School of Zaragoza. Gran Canaria. 25/06/23
- **5TH WASWAC World Conference** Participativo - Ponencia oral (comunicación oral). Methodology to quantify the global agricultural crop footprint including soil impacts./. Olomouc. 19/06/23
- **VI International Virtual Conference on Educational Research and Innovation (CIVINEDU 2022).** Participativo - Ponencia oral (comunicación oral). Aprendizaje basado en juegos: escape room sobre recursos naturales y economía circular. Madrid. 28/09/22
- **ECOS 2022 35th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Beyond metal prices: geological scarcity as a physical cost allocation criterion. The case of Rare Earth Element mining. Copenhagen. 03/07/22
- **ECOS 2022 35th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Identification of critical metals and potential bottlenecks in passenger cars through a thermodynamic approach. Copenhagen. 03/07/22
- **ECOS 2022 35th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Ecological, spatial and critical material footprints as limiting indicators of sustainability in a bioregion. Copenhagen. 03/07/22
- **ECOS 2022 35th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). On the thermoeconomic modelling of thermal waste cost allocation and diagnosis of malfunctions for environmental aspects assessment. Copenhagen. 03/07/22
- **ECOS 2022 35th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Exergy as an indicator to assess soil erosion. Copenhagen. 03/07/22
- **5th International Virtual Conference on Educational Research and Innovation (CIVINEDU 2021), Educational Research and Innovation Network REDINE.** Participativo - Ponencia oral (comunicación oral). El uso de Mentimeter como herramienta de evaluación en los cursos de verano. Madrid. 20/09/21
- **ECOS, 2021, The 34th international conference on efficiency, cost, optimization, simulation and environmental impact of energy systems.** Participativo - Ponencia oral (comunicación oral). Variation of the specific energy when the ore grade decreases: the case of nickel, cobalt and PGMs. Giardina Naxos. 28/06/21
- **ECOS, 2021, The 34th international conference on efficiency, cost, optimization, simulation and environmental impact of energy systems.** Participativo - Ponencia oral (comunicación oral). Assessment of the thermodynamic rarity of mobile phones PCB. Giardina Naxos. 28/06/21
- **ECOS 2021- 34rd International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). A tool for the exergy assessment of topsoil fertility. Taormina (Sicilia) 27/06/21

- **4th International Virtual Conference on Educational Research and Innovation (CIVINEDU 2020)** Participativo - Ponencia oral (comunicación oral). Enseñanza de los ODS en asignaturas de ingeniería: el caso de la termodinámica técnica. ONLINE. 23/09/20
- **Contemporary Problems of Thermal Engineering.** Participativo - Ponencia oral (comunicación oral). MINING ENERGY CONSUMPTION AS A FUNCTION OF ORE GRADE DECLINE. THE CASE OF LEAD AND ZINC. Krakow. 21/09/20
- **ECOS 2020 – 33rd Int. Conf. on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). "Towards an exergy methodology to assess the fertility of topsoil". Osaka. 03/07/20
- **COVIDMIN. Congreso Virtual de Minería 2020.** Participativo - Ponencia oral (comunicación oral). Variación de la energía específica de concentración cuando disminuye la ley de mina: el caso del níquel y cobalto. Online. 09/06/20
- **ECOS, 2019, The 32st international conference on efficiency, cost, optimization, simulation and environmental impact of energy systems.** Participativo - Ponencia oral (comunicación oral). Simulation-based approach to study the effect of the ore-grade decline on the production of gold. Worclaw. 23/06/19
- **ECOS, 2019, The 32st international conference on efficiency, cost, optimization, simulation and environmental impact of energy systems.** Participativo - Ponencia oral (comunicación oral). The avoided energy cost of producing minerals: The case of iron-ore & the production of gold. Worclaw. 23/06/19
- **ECOS, 2019, The 32st international conference on efficiency, cost, optimization, simulation and environmental impact of energy systems.** Participativo - Ponencia oral (comunicación oral). Ecocredit system for incentivizing the recycling of waste electric and electronic equipment based on a thermodynamic approach. Worclaw. 23/06/19
- **ECOS, 2019, The 32st international conference on efficiency, cost, optimization, simulation and environmental impact of energy systems.** Participativo - Ponencia oral (comunicación oral). Towards a reference environment for topsoil: the fourth dimension of Thanatia. Worclaw. 23/06/19
- **EVS 32, 2019 32nd International Electric Vehicle Symposium .** Participativo - Ponencia oral (comunicación oral). Raw material use in a battery electric car - a sustainability assessment . Lyon. 17/05/19
- **13th SDEWES conference.** Participativo - Ponencia oral (comunicación oral). Strategic metals ranking in the automobile sector. Palermo. 30/09/18
- **5th International Conference Contemporary Problems of Thermal Engineering (CPOTE 2018).** Participativo - Ponencia oral (comunicación oral). Producing minerals from common rocks: from Thanatia to Copper Ore. Gliwice. 18/09/18
- **5th International Conference Contemporary Problems of Thermal Engineering (CPOTE 2018).** Participativo - Ponencia oral (comunicación oral). Thermoeconomic analysis of metallurgical and recycling flowsheets through a simulation tool. Gliwice. 18/09/18
- **5th International Conference Contemporary Problems of Thermal Engineering (CPOTE 2018).** Participativo - Ponencia invitada/ Keynote. Exergy - an increasingly recognized tool for resource depletion and circular economy assessments. Gliwice. 18/09/18

- **XV Congreso Nacional de Materiales y I Iberian Meeting on Materials Science.** Participativo - Ponencia invitada/ Keynote. Materials for Circular Economy: facts and limits. Salamanca. 04/07/18
- **ECOS 2018 -The 31st International Conference On Efficiency, Cost, Optimization, Simulation And Environmental Impact Of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Szargut's updated reference environment and the exergoecology portal. Guimarães. 17/06/18
- **ECOS 2018 -The 31st International Conference On Efficiency, Cost, Optimization, Simulation And Environmental Impact Of Energy Systems.** Participativo - Ponencia oral (comunicación oral). An exergy flow analysis of the energy transition. Guimarães. 17/06/18
- **30th International Conference on Efficiency, Cost, Optimisation, Simulation and Environmental Impact of Energy Systems (ECOS).** Participativo - Ponencia oral (comunicación oral). The Cost of Mineral Depletion in Latin America: an exergy based analysis. San Diego. 03/07/17
- **9th biennial conference of the International Society for Industrial Ecology (ISIE) and the 25th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST).** Participativo - Ponencia oral (comunicación oral). Material constraints in the future development of green technologies. Chicago. 25/06/17
- **9th biennial conference of the International Society for Industrial Ecology (ISIE) and the 25th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST).** Participativo - Ponencia oral (comunicación oral). Incorporating physical quality in the assessment of critical raw materials using thermodynamic rarity. Chicago. 25/06/17
- **9th biennial conference of the International Society for Industrial Ecology (ISIE) and the 25th annual conference of the International Symposium on Sustainable Systems and Technology (ISSST).** Participativo - Ponencia oral (comunicación oral). Applying the Hubbert peak model to assess future availability of mineral commodities through exergy. Chicago. 25/06/17
- **El extractivismo en América Latina: dimensiones económicas, sociales, políticas y culturales.** Participativo - Ponencia oral (comunicación oral). Explotación minera en la región andina: un enfoque termodinámico. Sevilla. 10/05/17
- **ECOS 2016 - 29th International Conference on Efficiency, Cost, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). "Composed thermodynamic rarity" of the materials in electric and electronic equipment Portoroz. 19/06/16
- **Life Cycle Assessment for Waste Management** Participativo - Ponencia oral (comunicación oral). Decreasing ore grades in global metallic mining, a thermoetical issue of a global reality?. Cetraro. 05/06/16
- **World Resources Forum.** Participativo - Ponencia oral (comunicación oral). Thanatia and thermodynamic rarity: assessment of mineral resource depletion. Davos. 14/10/15
- **EERA - European Energy Research Alliance.** Participativo - Ponencia invitada/ Keynote. The relationship between Materials, Energy and Environment. An Introduction to Thanatia. Estambul. 29/09/15

- **X Congreso Nacional y V Internacional del Carbón y Combustibles Alternativos (Connica 2015).** Participativo - Ponencia invitada/ Keynote. Valoración termoeconómica de la extracción de los recursos minerales de Colombia. Medellín. 18/08/15
- **8th Conference of the International Society for Industrial Ecology (ISIE).** Participativo - Ponencia oral (comunicación oral). The Principles of Resource Efficiency. Guildford. 07/07/15
- **8th Conference of the International Society for Industrial Ecology (ISIE).** Participativo - Ponencia oral (comunicación oral). Material flow analysis for Europe. A thermodynamic approach. Guildford. 07/07/15
- **28th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS).** Participativo - Ponencia oral (comunicación oral). Exergy as a resource efficiency indicator for industries. Pau. 29/06/15
- **28th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS).** Participativo - Ponencia oral (comunicación oral). Integrating the thermo-ecological and exergy replacement costs to assess mineral processing. Pau. 29/06/15
- **28th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS).** Participativo - Ponencia oral (comunicación oral). Sustainability assessment of power generation systems by applying exergy analysis and LCA methods. Pau. 29/06/15
- **13th Joint European Thermodynamics Conference (JETC).** Participativo - Ponencia oral (comunicación oral). The physical value of minerals as a function of their thermodynamic rarity. Nancy. 22/05/15
- **13th Joint European Thermodynamics Conference (JETC).** Participativo - Ponencia oral (comunicación oral). How Rare are Rare Minerals? An objective assessment of the thermodynamic rarity of 40 minerals Nancy. 22/05/15
- **The Club of Rome. EU Chapter.** Participativo - Ponencia invitada/ Keynote. Thanatia: Earth's Mineral Resources Destiny. The need for Efficiency and Sufficiency. Bruselas. 19/05/15
- **I ciclo de conferencias y videoconferencias "Diseño industrial, innovación, tecnologías sostenibles, responsabilidad social y emprendimiento" Universidad de Los Andes.** Participativo - Ponencia invitada/ Keynote. ECOLOGÍA INDUSTRIAL COMO HERRAMIENTA PARA ALCANZAR LA SOSTENIBILIDAD EN LAS EMPRESAS. Mérida. 04/05/15
- **7th International Exergy, Energy and Environment Symposium (IEEEES).** Participativo - Ponencia oral (comunicación oral). Sankey and Grassmann diagrams for mineral trade in the EU-28. Valenciennes. 27/04/15
- **ECOS 2014 - 27st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Thermodynamic rarity and the loss of mineral wealth. Turku. 15/06/14
- **ECOS 2014 - 27st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). An exergoecological analysis of the mineral economy in Spain. Turku. 15/06/14

- **ECOS 2014 - 27st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Exergy Cost Allocation of by-products in the mining and metallurgical industry. Turku. 15/06/14
- **ECOS 2014 - 27st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). Exergy Cost Allocation of by-products in the mining and metallurgical industry. Turku. 15/06/14
- **12th Joint European Thermodynamics Conference - JETC 2013.** Participativo - Ponencia oral (comunicación oral). Thermodynamic accounting of the global depletion of the mineral capital on Earth. A proposal to the U.N. Brescia. 01/07/13
- **10th biennal conference of the European Society for Ecological Economics.** Participativo - Ponencia oral (comunicación oral). How to account for mineral depletion. The exergy and economic mineral balance of Spain as a case study. Lille. 18/06/13
- **Fourth Aachen International Mining Symposia.** Participativo - Ponencia oral (comunicación oral). Is the lead indicator GDP/DMC preliminarily proposed by the European Commission an appropriate indicator to measure resource efficiency?. Aachen. 22/05/13
- **XIII Congreso Internacional sobre Patrimonio Geológico y Minero.** Participativo - Ponencia oral (comunicación oral). Detalles históricos sobre la producción de wolframio y estaño en España. Manresa. 20/09/12
- **3th International Conference on Contemporary Problems of Thermal Engineering (CPOTE 2012).** Participativo - Ponencia oral (comunicación oral). Assessing the exergy mineral capital on earth: a proposal to the United Nations System of Environmental-Economic Accounting (UNSC-SEEA). Gliwice. 18/09/12
- **ECOS 2012 - The 25th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems.** Participativo - Ponencia oral (comunicación oral). What is the cost of losing irreversibly the mineral capital on Earth?. Perugia. 26/06/12
- **SDEWES 2011.** Participativo - Ponencia oral (comunicación oral). Exergy of Comminution and the Crepuscular Planet in Thermodynamics in Sustainability. Dubrovnik. 25/09/11
- **SDEWES 2011.** Participativo - Ponencia oral (comunicación oral). Exergy of Comminution and the Crepuscular Planet. Dubrovnik. 25/09/11
- **SDEWES 2011.** Participativo - Póster. Influence of technical development and declining ore grades on the availability of gold resources. Dubrovnik. 25/09/11
- **ECOS 2011.** Participativo - Ponencia oral (comunicación oral). The actual exergy of fossil fuel reserves. Novi Sad. 04/07/11
- **Exergie 2011.** Participativo - Ponencia invitada/ Keynote. From grave to cradle: An exergy approach for accounting mineral resource depletion in LCA. Paris. 17/06/11
- **SDIMI 2011.** Participativo - Ponencia oral (comunicación oral). Trends of exergy costs and ore grade in global mining. Aachen. 14/06/11

- **SDIMI 2011.** Participativo - Ponencia oral (comunicación oral). The exergy decrease of the mineral capital endowment due to raw-material production. Aachen. 14/06/11
- **ISIE2011.** Participativo - Póster. Energy costs associated to the expansion of cities. Case study of a Spanish city. Berkeley. 07/06/11
- **ISIE2011.** Participativo - Ponencia oral (comunicación oral). Thermoeconomics As A Tool For A Fair Product Cost Allocation In Industrial Symbiosis. Berkeley. 07/06/11
- **ISIE2011.** Participativo - Póster. The Crepuscular Earth. A reference for calculating the depletion of mineral resources using LCA. Berkeley. 07/06/11
- **XI Simposio Internacional. Gestión ambiental en ámbitos locales.** Participativo - Ponencia invitada/ Keynote. El coste de la expansión de las ciudades: Costes energéticos directos e indirectos. Movilidad e infraestructuras. Madrid. 20/10/10
- **ECOS 2010.** Participativo - Póster. Engineering application of Exergy analysis: gas recovery system in steel industry. Lausanne. 14/06/10
- **ECOS 2010.** Participativo - Ponencia invitada/ Keynote. Thermodynamics and society. Lausanne. 14/06/10
- **ECOS 2010.** Participativo - Ponencia oral (comunicación oral). The thermodynamic properties of the upper continental crust: Exergy, Gibbs free Energy and Enthalpy. Lausanne. 14/06/10
- **ECOS 2010.** Participativo - Ponencia oral (comunicación oral). Thermoeconomics meets industrial ecology. Lausanne. 14/06/10
- **3rd International Conference on Eco-Efficiency.** Participativo - Ponencia oral (comunicación oral). Thermoeconomic input-output analysis applied to industrial ecology. Egmond aan Zee. 09/06/10
- **The 3rd International Conference on Eco-Efficiency.** Participativo - Ponencia oral (comunicación oral). Thermoeconomic input-output analysis applied to industrial ecology. Egmond aan Zee. 09/06/10
- **Degrowth conference.** Participativo - Ponencia oral (comunicación oral). Depleting the great mine Earth. Barcelona. 27/03/10
- **SDEWES 2009.** Participativo - Ponencia oral (comunicación oral). A prediction of the exergy loss of world's mineral reserves in the 21st century. Dubrovnik. 30/09/09
- **ECOS 2009.** Participativo - Ponencia oral (comunicación oral). Applying thermoeconomics to the analysis of the American food chain. Iguazú. 31/08/09
- **ECOS 2009.** Participativo - Ponencia oral (comunicación oral). Exergy cost assesment for water-related technologies. Iguazú. 31/08/09

- **ECOS 2009.** Participativo - Ponencia oral (comunicación oral). The crepuscular planet part II: a model for the exhausted continental crust. Iguazú. 31/08/09
- **ECOS 2009.** Participativo - Ponencia oral (comunicación oral). The crepuscular planet part I: a model for the exhausted atmosphere. Iguazú. 31/08/09
- **JETC10.** Participativo - Ponencia oral (comunicación oral). Exergy evolution of the mineral capital on Earth. Copenhagen. 22/07/09
- **SDIMI 2009.** Participativo - Ponencia oral (comunicación oral). Exergy – A Useful Indicator for the Sustainability of Mineral Resources and Mining. Gold Coast, QLD, (Australia). 06/07/09
- **15th Annual International Sustainable Development Research Conference.** Participativo - Ponencia oral (comunicación oral). Physical geonomics: combining the exergy and hubbert peak. Analysis for predicting mineral resources depletion. Utrecht. 05/07/09
- **ASME 2008.** Participativo - Ponencia oral (comunicación oral). Exergy and the Hubbert peak. Assessment of the scarcity of Minerals on earth. Boston, MA. 31/10/08
- **AES 2008.** Participativo - Ponencia oral (comunicación oral). Comparative Analysis of Different Exergy Assessment Methodologies to Evaluate the Organic Matter Content in a Water Body. Graz. 29/06/08
- **ECOS 2008.** Participativo - Ponencia oral (comunicación oral). Environmental costs of a river watershed, within Water Framework Directive: results from Physical Hydronomics. Cracovia. 24/06/08
- **ECOS 2008.** Participativo - Ponencia oral (comunicación oral). Inventory of the exergy resources on Earth including its mineral capital. Cracovia. 24/06/08
- **the Mineral Deposits Studies Group Conference.** Participativo - Ponencia oral (comunicación oral). Assessing world mineral deposits through the second law of thermodynamics. Keyworth. 02/01/08
- **ECOS 2007.** Participativo - Ponencia oral (comunicación oral). Physical Hydronomics: application of the exergy analysis to the assessment of environmental costs of water bodies. The case of the Inland Basins of Catalonia. Padova. 25/06/07
- **ISEE 2006.** Participativo - Ponencia oral (comunicación oral). A physical way to assess the decrease of mineral capital through exergy. The Australian case. New Delhi. 16/12/06
- **ISEE 2006.** Participativo - Ponencia oral (comunicación oral). Physical Hydronomics: a new approach to assess the environmental costs of the European Water Framework Directive. New Delhi. 16/12/06
- **ASME 2006.** Participativo - Ponencia oral (comunicación oral). Exergy as an indicator for resources scarcity. The exergy loss of Australian mineral capital, a case study. Chicago. 05/11/06
- **ECOS 2006.** Participativo - Ponencia oral (comunicación oral). Evolution of the decrease in mineral exergy throughout the 20th century. 1) The Case of Copper in the US. Aghia Pelaghia, Creta. 12/07/06

- **ECOS 2006.** Participativo - Ponencia oral (comunicación oral). Implementation Potencial of Fuel Cell Systems for CHP: threats and Opportunity Analysis. Aghia Pelaghia, Creta. 12/07/06
- **Emergy Research Conference.** Participativo - Ponencia oral (comunicación oral). Comparing the earth's minerals wealthness from the point of view of emergy and exergetic cost analysis. University of Florida. 19/01/06
- **ASME 2005.** Participativo - Ponencia oral (comunicación oral). Exergy evaluation of the mineral capital onEarth. Influence of the reference environment. Orlando, FL. 05/11/05
- **ECOS 2005.** Participativo - Ponencia oral (comunicación oral). Towards an International Legal Reference Environment. Trondheim. 20/06/05
- **ECOS 2004.** Participativo - Ponencia oral (comunicación oral). Analysis of the energy costs and potential saving in a polymery industry. Study case and methodology. Guanajuato. 07/07/04