

Dr. LUIS INOSTROZA

Ruhr Universität Bochum, Geographisches Institut
Fakultät für Geowissenschaften, Universitätsstraße 150, IA 06/115, D-44780 Bochum, Deutschland
Tel. +49 - (0) 234-32 19618 Luis.Inostroza@ruhr-uni-bochum.de

EXPERTISE

My research is empirical and policy oriented. I integrate spatially explicit quantitative analysis, remote sensing and GIS to investigate the metabolism of socio-ecological systems, and its links to ecological and economic functions, from local to global scales.

EDUCATION

2011	TECHNICAL UNIVERSITY OF MADRID <i>PhD in Sustainable Urban Development</i> <ul style="list-style-type: none">• Thesis: Land use change in Southern Patagonia, Chile: The paradox of nature. GIS modelling of land use change patterns and human influence on natural ecosystems. An approach from the landscape ecology• Summa cum laude (“Outstanding cum laude”)• Santander –UPM Fellowship	Madrid, Spain
2008	DRESDEN UNIVERSITY OF TECHNOLOGY <i>Certificate in Proficiency</i> <ul style="list-style-type: none">• Land use change management and Remote Sensing• UNESCO, BMU (Germany) Fellowship	Dresden, Germany
2006	GEOGRAPHICAL INSTITUTE AGUSTIN CODAZZI <i>Certificate in Proficiency</i> <ul style="list-style-type: none">• GIS modelling for environmental applications• OAS (Organization of the American States) Fellowship	Bogotá, Colombia
2006	LINCOLN INSTITUTE OF LAND POLICY <i>Certificate in Proficiency</i> <ul style="list-style-type: none">• Land Markets Analysis	Santiago, Chile
2005	TECHNICAL UNIVERSITY OF MADRID <i>DEA in Urban Spatial Planning</i> <ul style="list-style-type: none">• Summa cum Laude	Madrid, Spain
2003	UNIVERSITY OF CHILE <i>Postgraduate</i> <ul style="list-style-type: none">• Human settlements and regional planning• ECLAC Fellowship	Santiago, Chile
2000	UNIVERSITY OF CHILE <i>Valuer/Appraisal Diploma</i>	Santiago, Chile
1998	UNIVERSITY OF CHILE <i>Architect (Ms)</i> <ul style="list-style-type: none">• Honors	Santiago, Chile

ACADEMIC AWARDS AND HONOURS

- ✓ 2016-2019 Research Grant CONICYT (Chilean research ministry) -EUR 120.000
- ✓ 2012-2014 Research Grant. Lincoln Institute of Land Policy, Cambridge USA - EUR 24.000
- ✓ 2010-2012 Research Grant. Lincoln Institute of Land Policy, Cambridge USA –EUR 43.000

- ✓ 2010 Adriana Schiffrin Award. Academic essay, First Honourable Mention. FARN, Buenos Aires, Argentina
- ✓ 2009-2011 SANTANDER-UPM Ph.D. Fellowship
- ✓ 2009 ECLAC Fellowship. Course
- ✓ 2008 INTERNATIONAL AWARD. Academic Essay. Observatory on Latin America, the New School University, NY USA
- ✓ 2008 UNESCO BMU (Germany) Fellowship, TU Dresden
- ✓ 2006 Organisation of American States (OAS) Fellowship
- ✓ 2002 ECLAC Fellowship, Urban Management and Sustainable Development, Dominican Rep
- ✓ 1995 HONOURABLE MENTION. Steel Design Student Competition. Pacific Steel Company
- ✓ 1994 REGIONAL PRIZE, NORTH AND SOUTH AMERICA. Second Annual Urban Housing Student Design Competition. AIA /ACSA/OTIS. Presented in RIBA, London

PROFESSIONAL POSITIONS

2017-Present	SENIOR RESEARCHER <i>Ruhr University Bochum, Institute of Geography</i>	Bochum, Germany
2015 – 2017	RESEARCH ASSOCIATE, TU-DRESDEN <i>Remote sensing for environmental studies</i>	Dresden, Germany
2011-2014	DRESDEN UNIVERSITY OF TECHNOLOGY <i>Postdoc Remote Sensing for Urban Studies</i>	Dresden, Germany
2001-2009	DIRECTOR OF URBAN PLANNING DEPARTMENT <i>Municipality of Punta Arenas</i> <ul style="list-style-type: none"> ▪ Urban regional planner: developing, implementing, monitoring and evaluating plans, programs, and large urban projects ▪ Land use planning. Environmental monitoring & environmental impact assessment ▪ Design and implementation of urban/land regulations 	Punta Arenas, Chile
2003-2009	INDEPENDENT CONSULTANT IN URBAN PLANNING <i>ARCADIS (Consultancy)</i> <ul style="list-style-type: none"> ▪ Expert adviser in urban and regional planning, environmental management ▪ Depth knowledge of urban & land policies, strategies, regulatory framework, and institutions 	Santiago, Chile
2000-2001	ANALYST URBAN PLANNER <i>URBE (Consultancy), Department of Economic Studies</i> <ul style="list-style-type: none"> ▪ Consultancy in urban and regional planning, urban economics ▪ Tourism and real estate development ▪ Economic assessment (cost-benefit; NPV, IRR, etc.) of urban projects and programs 	Santiago, Chile

RESEARCH PROJECTS

2019-2021	IMPLEMENTATION OF THE ECOSYSTEM SERVICES FRAMEWORK IN GREEN INFRASTRUCTURE PLANNING FOR RESILIENT URBAN DEVELOPMENT IN THE RUHR AND IN CHINESE MEGACITIES <ul style="list-style-type: none"> ▪ Co-researcher ▪ BMBF (394.018 Euro) 	
2016-2019	ECOSYSTEM SERVICES, URBANIZATION AND NATURE-BASED SOLUTIONS IN 5 MEDITERRANEAN CITIES (CHILE) <ul style="list-style-type: none"> ▪ Principal Investigator ▪ EUR 140.000 	
2012-2014	CLIMATE CHANGE ADAPTATION IN URBAN AREAS <ul style="list-style-type: none"> ▪ Principal Investigator ▪ EUR 24.000 ▪ Outcomes: 2 workshops with stakeholders (Santiago de Chile and Lima Perú) working paper, one publication in peer review journal (Q1-Plos One), 6 conference presentations 	

- 2010-2012 **URBAN SPRAWL AND FRAGMENTATION IN LATIN AMERICA AND EUROPE**
- Principal Investigator
 - EUR 43.000
 - Outcomes: working paper, 1 publication (Q1-ELSEVIER), 40Gb Spatial Database

PUBLICATIONS (peer review)

Refereed scientific journals (WoK, SCOPUS)

1. Hossu, C., Ioja, I.-C., Onose, D.A., Nita, M.R., Popa, A.-M., Talaba, O., **Inostroza, L.**, 2019. Ecosystem services appreciation of urban lakes in Romania. Synergies and trade-offs between multiple users. *Ecosyst. Serv.* 37, 100937. <https://doi.org/10.1016/j.ecoser.2019.100937>.
2. Artmann, M., L. **Inostroza**, and P. Fan. 2019. Urban sprawl, compact urban development and green cities. How much do we know, how much do we agree? *Ecological Indicators* 96: 3–9. doi:10.1016/j.ecolind.2018.10.059.
3. **Inostroza**, Luis, Zoé Hamstead, Marcin Spyra, and Salman Qureshi. 2019. “Beyond Urban-Rural Dichotomies : Measuring Urbanisation Degrees in Central European Landscapes Using the Technomass as an Explicit Indicator.” *Ecological Indicators* 96 (February 2018). Elsevier:466–76. <https://doi.org/10.1016/j.ecolind.2018.09.028>.
4. Wentz, E.A., York, A.M., Alberti, M., Conrow, L., Fischer, H., **Inostroza, L.**, Jantz, C., Pickett, S.T., Seto, K.C. and Taubenböck, H., 2018. Six fundamental aspects for conceptualizing multidimensional urban form: A spatial mapping perspective. *Landscape and Urban Planning*, 179, pp.55-62.
5. Palme, M., L. **Inostroza**, and A. Salvati. 2018. Technomass and cooling demand in South America: a superlinear relationship? *Building Research & Information* 46: 864–880. doi:10.1080/09613218.2018.1483868.
6. **Inostroza** L., 2018. The circularity of the urban ecosystem material productivity: the transformation of biomass into technomass in Southern Patagonia. *Sustainable Cities and Society*, 39(May), pp. 335–343. doi: 10.1016/j.scs.2018.03.001.
7. Spyra, M., **Inostroza, L.**, Hamerla, A., Bondaruk, J., 2019 Ecosystem services deficits in cross-boundary landscapes: spatial mismatches between green and grey systems. *Urban Ecosystems*, 22(1), pp. 37–47. doi: 10.1007/s11252-018-0740-3.
8. **Inostroza, L.**, König, H. J., Pickard, B., & Zhen, L. 2017. Putting ecosystem services into practice: Trade-off assessment tools, indicators and decision support systems. *Ecosystem Services*, 26(b), 303–305. <https://doi.org/10.1016/j.ecoser.2017.07.004>.
9. Montoya-Tangarife, C., De La Barrera, F., Salazar, A., & **Inostroza, L.** 2017. Monitoring the effects of land cover change on the supply of ecosystem services in an urban region: A study of Santiago-Valparaíso, Chile. *PLoS ONE*, 12(11). <https://doi.org/10.1371/journal.pone.0188117>.
10. Palme, M., **Inostroza, L.**, Villacreses, G., Lobato, A., & Carrasco, C. 2017. Urban weather data and building models for the inclusion of the urban heat island effect in building performance simulation. *Data in Brief*, 14. <https://doi.org/10.1016/j.dib.2017.08.035>.
11. S.A. Mukul, M. Shawkat, I. Sohel, J. Herbohn, **L. Inostroza**, H. König, 2017. Integrating ecosystem services supply potential from future land-use in protected area management: A Bangladesh study. *Ecosystem Services*, 26(B), 355–364. doi: 10.1016/j.ecoser.2017.04.001.
12. M. Palme, G. Villacreses, **L. Inostroza**, A. Lobato, C. Carrasco, 2017. From urban climate to energy consumption. Enhancing building performance simulation by including the urban heat island effect. *Energy and Buildings*. Elsevier B.V., 145, pp. 107–120. doi: 10.1016/j.enbuild.2017.03.069.
13. Zewdie, W, E Csaplovics, and **L Inostroza**. 2017. “Monitoring Ecosystem Dynamics in Northwestern Ethiopia Using NDVI and Climate Variables to Assess Long Term Trends in

Dryland Vegetation Variability.” *Applied Geography* 79:167–78.
<https://doi.org/10.1016/j.apgeog.2016.12.019>.

14. **Inostroza, L.** 2017. Informal urban development in Latin American urban peripheries. Spatial assessment in Bogotá, Lima and Santiago de Chile. *Landscape and Urban Planning*, 165. <https://doi.org/10.1016/j.landurbplan.2016.03.021>.
15. **Inostroza L.**, Palme M., de la Barrera F., 2016. A heat vulnerability index: spatial indexes for exposure, sensitivity and adaptive capacity for Santiago de Chile. *PLOS one*. DOI 10.1371/journal.pone.0162464.
16. **Inostroza, L.**, Zasada, I. and König, H.J., 2016. Last of the wild revisited: assessing spatial patterns of human impact on landscapes in Southern Patagonia, Chile. *Regional Environmental Change*, pp.1-15.
17. La Rosa, D., Spyra, M. and **Inostroza, L.**, 2016. Indicators of cultural ecosystem services for urban planning: a review. *Ecological Indicators*, 61, pp.74-89.
18. **Inostroza L.**, 2015. El mito de pristinidad y los usos efectivos del territorio de la región de Magallanes, Patagonia Chilena: forestal, minería y acuicultura. *Estudios Geográficos LXXVI* (Enero-Junio), 141–175.
19. **Inostroza L.** 2015. Review: The New Science of Cities, Michael Batty. *EURE* Vol. 41, núm. 122.
20. Fürst C., Opdam P., **Inostroza L.**, Luque S. 2014. Evaluating the role of ecosystem services in participatory land use planning: proposing a balanced score card. *Landscape Ecology*, June, 1-12.
21. **Inostroza L.**, 2014. Measuring urban ecosystem functions through ‘Technomass’ - a novel indicator to assess urban metabolism. *Ecological Indicators*, Volume 42, 10–19.
22. **Inostroza L.**, Baur R., Csaplovics E., 2013. Urban sprawl and fragmentation in Latin America : a dynamic quantification and characterization of spatial patterns. *Journal of Environmental Management*, 115, 87–97.

Conference proceedings (indexed SCOPUS/WoS)

1. **Inostroza, L.** (2019). Clustering Spatially Explicit Bundles of Ecosystem Services in A Central European Region Clustering Spatially Explicit Bundles of Ecosystem Services in A Central European Region. In *IOP Conference Series: Materials Science and Engineering* (pp. 1–9). <https://doi.org/10.1088/1757-899X/471/9/092027>
2. **Inostroza, L.**, & Barrera, F. de la. (2019). Ecosystem Services and Urbanisation. A Spatially Explicit Assessment in Upper Silesia, Central Europe. In *IOP Conference Series: Materials Science and Engineering* (pp. 1–10). <https://doi.org/10.1088/1757-899X/471/9/092028>
3. Barrera, F. de la, Henriquez, C., Ruiz, V., & **Inostroza, L.** (2019). Urban Parks and Social Inequalities in the Access to Ecosystem Services in Santiago, Chile. In *IOP Conference Series: Materials Science and Engineering* (pp. 1–10). <https://doi.org/10.1088/1757-899X/471/10/102042>
4. Salvati, A., Palme, M., & **Inostroza, L.** (2017). Key Parameters for Urban Heat Island Assessment in A Mediterranean Context: A Sensitivity Analysis Using the Urban Weather Generator Model. *IOP Conference Series: Materials Science and Engineering*, 245(8). <https://doi.org/10.1088/1757-899X/245/8/082055>
5. Calice, C., Clemente, C., Salvati, A., Palme, M., & **Inostroza, L.** (2017). Urban Heat Island Effect on the Energy Consumption of Institutional Buildings in Rome. In *IOP Conference Series: Materials Science and Engineering* (Vol. 245). <https://doi.org/10.1088/1757-899X/245/8/082015>

6. Carrasco, C., Palme, M., Angel Galvez, M., **Inostroza, L.**, Padilla, U., & Fonseca, A. (2017). Urban Heat Island of Valparaíso, Chile - A Comparison between 2007 and 2016. In *IOP Conference Series: Materials Science and Engineering* (Vol. 245). <https://doi.org/10.1088/1757-899X/245/7/072036>
7. Palme, M., Carrasco, C., Ángel Gálvez, M., & **Inostroza, L.** (2017). Natural Ventilation: A Mitigation Strategy to Reduce Overheating in Buildings under Urban Heat Island Effect in South American Cities. In *IOP Conference Series: Materials Science and Engineering* (Vol. 245). <https://doi.org/10.1088/1757-899X/245/7/072046>
8. Zepp, H., & **Inostroza, L.** (2017). Ecosystem Services framework as a tool to assess environmental trade-offs and synergies. In *Proceedings of the Resilient Cities 2017 congress Session* (pp. 1–12). Bonn: ICLEI
9. **Inostroza L.**, 2016. Measuring Urban Informality in Latin America. GIS Spatial Assessment of Informal Urban Development in Santiago de Chile. *Procedia Engineering* (ELSEVIER) Volume 161, 2016, Pages 1631–1638. DOI 10.1016/j.proeng.2016.08.638
10. **Inostroza L.**, Tábbita J.H., 2016. Informal urban development in the Greater Buenos Aires Area: A quantitative-spatial assessment based on households' physical features using GIS and principal component analysis. *Procedia Engineering* (ELSEVIER) Volume 161, 2016, Pages 2138–2146. DOI 10.1016/j.proeng.2016.08.806
11. Zimmermann E., Bracalenti L., Piacentini R., **Inostroza L.**, 2016. Urban flood risk reduction by increasing green areas for adaptation to climate change. *Procedia Engineering* (ELSEVIER), Volume 161, 2016, Pages 2241–2246. DOI 10.1016/j.proeng.2016.08.822

Other scientific publications (not indexed)

1. Zepp, H., **Inostroza, L.**, Sutcliffe, R., Ahmed, S., Moebus, S., 2018. Neighbourhood Environmental Contribution and Health. A novel indicator integrating urban form and urban green. *Chang. Adapt. Socio-Ecological Syst.* 4, 46–51. <https://doi.org/10.1515/cass-2018-0005>
2. Herbert, Matthias; Wende, Wolfgang; Mathey, Juliane; Otto, Andreas; **Inostroza, Luis**; Breuste, Jürgen; Artmann, Martina; Fürst, Christine; Spyra, Marcin. Urban Ecosystem Services and Biological Diversity. In: United Nations University Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES): Dresden Nexus Conference. State of the Nexus Approach 2015 - Management of Environmental Resources. Dresden: UNU-FLORES, 2015, S.40-42. DNC2015 Conference Report.
3. **Inostroza L.**, 2014. Open spaces and urban ecosystem services. Cooling effect towards urban planning in South American cities. *TeMA Journal of Land Use, Mobility and Environment*, SI (June), pp.523–534.
4. **Inostroza L.** & Csaplovics E., 2014. Measuring climate change adaptation in Latin-America. Spatial indexes for exposure, sensitivity and adaptive capacity to urban heat islands in Lima and Santiago de Chile. Working paper, Lincoln Institute of Land Policy.
5. **Inostroza L.**, 2012. Patagonia: La antropización de un territorio natural. Monografía, *Cuadernos de Investigación Urbanística CIUR 83*, julio/agosto 2012, 86 pp. I.S.S.N. (ed. imp.): 1886-6654, I.S.S.N. (edición digital): 2174-5099.
6. **Inostroza L.**, Baur R., Csaplovics E., 2011. Urban sprawl and fragmentation in Latin America: A comparison with European cities. The myth of the diffuse Latin American city. Working paper, Lincoln Institute of Land Policy.
7. **Inostroza L.**, 2009. Humedal urbano en Punta Arenas: Sustentabilidad del proyecto parque ecológico Humedal Tres Puentes. *Revista Urbano N° 20, Vol. 12* Noviembre 2009, pp. 13-24 ISSN 0717-3997.

8. **Inostroza L.**, 2008. Turismo en la Patagonia: una amenaza para la integridad ecológica del medio natural. Monografía. *Cuadernos de Investigación Urbanística CIUR 56*, enero/febrero de 2008, 122 pp. I.S.S.N.: 1886-6654. <http://polired.upm.es/index.php/ciur/article/view/271/266>
9. **Inostroza L.**, 2008. La evolución del espacio social y urbano en la capital de la Patagonia chilena. Punta Arenas, *Revista Urbano N°17, Vol. 11* Mayo de 2008, pp. 15-25 ISSN 0717-3997.
10. **Inostroza L.**, 2005. La Huella ecológica de Magallanes. *Revista Urbano N°11, Vol. 8* Julio de 2005, pp. 28-40 ISSN 0717-3997 edición impresa.

BOOKS CHAPTERS

1. Palme, M., **Inostroza, L.**, Villacreses, G., Carrasco, C. and Lobato, A., 2019. Urban Climate in the South American Coastal Cities of Guayaquil, Lima, Antofagasta, and Valparaíso, and Its Impacts on the Energy Efficiency of Buildings. In *Urban Climates in Latin America* (pp. 33-62). Springer, Cham.
2. **Inostroza L.**, 2016. “Climate change adaptation responses in Latin American urban areas. Challenges for Santiago de Chile and Lima”. In “Cambio climático: lecciones de y para ciudades de América latina”, Nail Ed., Universidad Externado de Colombia, pp. 391-420, ISBN 978-958-772-479-0.
3. **Inostroza L.**, 2013. “El metabolismo urbano: un sistema de apropiación de excedentes ecológicos. La transformación de la estepa patagónica en arquitectura burguesa”, en Palacios Barra, Alfredo; Sousa González, Eduardo y Cadena Vargas, Edel (ed.): *Urban space, reconstruction and territorial reconfiguration*. Hualpén, Chile: Universidad del Bío-Bío-Universidad Autónoma del Estado de México-Universidad Autónoma de Nuevo León, pp. 101-118. ISBN (13): 978-607-27-0180-9.
4. **Inostroza L.**, 2012. Reivindicación histórica. Obras y proyectos en el confín del mundo. En: *Construir bicentenarios latinoamericanos en la era de la globalización*, Ediciones Infinito 2012, Gutman & Molinos Ed. pp. 193-206 ISBN 978-987-9393-71-0.
5. **Inostroza L.**, (2009). La huella ecológica de Magallanes. En: *Chile: del país urbano al país metropolitano*, Pontificia Universidad Católica de Chile 2009, Hidalgo + Arenas + DeMatos Ed., pp 439- 458 ISBN 978-956-14-1054-1.

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Ecosystem Services Partnership (ESP), Executive Committee 2019-2023 elected member (Treasurer)
- European Land-Use Institute (ELI), Partner since 2011
- Society for Urban Ecology (SURE), Partner (elections nomination committee 2016)
- Member of the scientific board, Faculty of Regional Development and International Studies, Mendel University Brno, Czechia
- RIBA (Royal Institute of British Architects), Chartered Member since 2012
- Court Expert, Supreme Court of Chile, Urban Law and Appraiser since 2003
- Director Professional body of Architects (2002-2004), Punta Arenas, Chile

EDITORIAL/REVIEWER EXPERIENCE

Journal Editor:

- Associate Editor, Ecosystem Services (Elsevier)
- Journal Editor, Changes and Adaptation in Socio-Ecological Systems (CASES)
- Associate Editor Frontiers in Sustainable Cities - Urban Resource Management
- Guest Editor Remote Sensing (MDPI) Special Issue: Remote Sensing of Urban Form
- Guest Editor Ecological Indicators. Special Issue: “From urban sprawl to compact green cities – indicators for multi-scale and multi-dimensional analysis”

- Guest Editor CASES Special Issue: The Size of the Society – Linkages Between Material Flows and Stocks of Socio-Economic Metabolism
- Managing-Guest Editor Ecosystem Services. Special Issue: “Putting Ecosystem Services into practice. Assessment tools and indicators for land management”

Journal Reviewer:

1. Landscape and Urban Planning (member of the editorial board)
2. Science of the Total Environment
3. Ecosystem Services
4. Ecological Economics
5. Journal of Environmental Management
6. Ecological Indicators
7. PLOS ONE
8. CATENA
9. Ecological Applications
10. Remote Sensing
11. Land Use Policy
12. Applied Geography
13. Urban Forestry & Urban Greening
14. Resources, Conservation & Recycling
15. Habitat International
16. International Journal of Environmental Research and Public Health
17. Cities
18. Journal of Planning History
19. Ecological Modelling
20. Sustainable Cities and Society
21. Environment and Planning B: Planning and Design
22. Journal of Environmental Planning and Management
23. iForest, Journal of Biogeosciences and Forestry SISIF
24. Journal of Housing and the Built Environment
25. Urban Geography
26. European Planning Studies
27. Landscape Research
28. EURE, revista latinoamericana de estudios urbano-regionales
29. International Journal of Urban Sciences
30. Sustainability
31. Journal of Biodiversity Science, Ecosystem Services & Management
32. Journal of Urban Ecology
33. CIUR, Cuadernos de Investigación Urbanística

Book Reviewer:

- SPRINGER, urban ecology books

Grant proposals reviewer:

- Grant reviewer for the Chile's National Commission for Scientific and Technological Research (CONYCIT) in the fields of:
 - Architecture, Urbanism, Geography and Arts
 - Agronomy (remote sensing)

Conference's scientific committee:

- Ecosystem Services Partnership (ESP) 2019 World Congress, Hannover, Germany, 21-25 October 2019
- 15th European Ecological Federation (EEF) Congress, Lisbon, Portugal July 2019
- IUFRO Regional conference “Adaptive Management for Forested Landscapes in Transformation”, Posadas, Argentina. October 2018
- Regio-Resources conferences 2013, Catania, Italy; 2014 Katowice, Poland; 2016 Lugo, Spain
- First South Asian Regional SURE Conference, 18-22 January 2017 Karachi, Pakistan

- WMCAUS 2017/2018/2019, World Multidisciplinary Civil Engineering Architecture Urban Planning Symposium, Prague, Czech Republic

ORGANIZATION OF SESSIONS/SYMPOSIUMS

October 2019, Ecosystem Services Partnership (ESP) World Congress, Hanover, Germany:

- Session Chair: B10a Urban ecosystem services
- Session Chair: G7b How to get published. The reviewers and editor's perspective
- Session Co-chair: G6a ES and education
- Session Co-chair: G5 ES & LCA

July 2019, 10th IALE (International Association of Landscape Ecology) world congress, Milan, Italy:

- Session Chair: Urbanisation Concepts, methods and spatially explicit indicators

April 2019, Global Land Project (GLP) 4th Open Science Meeting, Bern, Switzerland:

- Session Convener: Governance of natural heritage in peri-urban open spaces

October 2018, Ecosystem Services Partnership (ESP) European conference, San Sebastian, Spain:

- Session Convener: T18b peri-urban landscapes

December 2017, 9th World Ecosystem Services Partnership (ESP) conference, Shenzhen, China:

- Session Convener: B10 Urban Ecosystem Services and Sustainable urban development
- Co-convener: T14 Ecosystem Services assessments and trade-offs. Methods and indicators for spatial planning

September 2017, IUFRO - Landscape Ecology Conference 2017, Halle, Germany:

- Session Convener: Sustainable governance of urban landscapes in cross-boundaries contexts

June 2017, World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prague, Czech Republic:

- Session Chair: Urban planning revisited. New challenges, theories, and methods
- Session Chair: Urban heat island effects: from urban scale to buildings and health

October 2016, Regio-Resources conference. European Land-Use Institute, Lugo, Spain:

- Member of the Conference organization team and scientific committee

August 2016, 5th International ECOSUMMIT Ecological Sustainability, Montpellier, France:

- Session Chair: Cities as hybrid ecosystems

July 2016, Society for Urban Ecology 2nd world international congress, Shanghai, China:

- Session convener: from urban sprawl to compact green cities
- Session Chair: the metabolism of the urban ecosystems

June 2016, World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prague, Czech Republic:

- Session Chair: Urban planning revisited. New challenges, theories, and methods
- Session Chair: Urban design, regional planning - I
- Session Chair: Risk management and mitigation planning – I

April 2016, Regional Studies Association Annual Conference 2016, Graz, Austria:

- Session Chair: Building smart bridges. Enhancing governance models and synergies between urban-rural linkages through metabolic approaches

November 2015, 8th World Ecosystem Services Partnership (ESP) conference, South Africa:

- Session Convener: Use of ES in trade-off assessment tools and other DSS

September 2015, Universitätsspital Basel, Zentrum für Lehre und Forschung, Switzerland, the 5th World Sustainability Forum:

- Session Convener: Urban Form and Climate Change

August 2015, Tartu, Estonia, IUFRO Landscape Ecology Conference:

- Session convener & session's moderator: "Ensuring ecosystem services provision in spatial planning"

July 2015, Portland, USA, International Association of Landscape Ecology:

- Session Chair: The Landscape's metabolism

March 2015, Nexus Conference, Dresden, Germany. Urban Ecosystem Services Symposium:

- Session Convener: Urban ecosystem services and biological diversity

September 2014 Regio-Resources conference, European Land-Use Institute, Katowice, Poland:

- Member of the Conference organization team and scientific committee

INVITED PRESENTATIONS (Keynote speaker, key lectures)

November 2019, Invited key note. Universidad de la Frontera, Temuco, Chile:

- A pathway for integrating urban ecosystem services into urban/land planning

September 2019, Invited key lecture. Universidad de Magallanes, Punta Arenas, Chile:

- The hidden value of Patagonian Ecosystems

November 2018, Invited key lecture. Universidad de Magallanes, Punta Arenas, Chile:

- Grey or green infrastructure for urban wetlands conservation?

November 2018, Invited key lecture. Universidad Autonoma de Chile, Santiago de Chile:

- Cowboys or Astronauts? Towards a new science for cities

April 2017, Invited key lecture. Mendel University, Czech Republic:

- The use of GIS and Remote Sensing applied to urban studies

December 2016, Colloquium Urban and Regional Resilience, Ruhr-Universität Bochum, Germany:

- Incorporating the socio-economic dimension in resilience studies. Concepts and examples of spatially explicit approaches

October 2016, Arizona State University, USA (Funded by NASA): Urban Land Cover/Land Use Change. Synthesis Workshop

July 2016, Sino-German Symposium, Nature-Based Solutions, Shanghai, China:

- Cities as Hybrid Ecosystems. Learning from Ecology and Metabolism Towards Sustainability

April 2016, The Ecosystem Services of Urban Rivers, Mendel University, Chateau Křtiny, Czech Republic:

- Indicators of Cultural Ecosystem Services for urban planning: a review

February 2016, Key lecture. Dep. of Civil Engineering and Architecture, Opole University of Technology, Poland:

- Landscape urbanization: concepts and methods

September 2015, Bogota, the International Symposium on Urban Ecology. Society for Urban Ecology (SURE) & the Alexander von Humboldt Institute, Colombia:

- Processes of urbanization in Latin America. Concepts, methods, and challenges (keynote)
- Session moderator: Urbanization, eco-cities, and environmental urban management

December 2014, Key lecture. School of Architecture; Catholic University of the North, Chile:

- Urban ecosystem functions: open spaces and climate change

November 2014, Department of Civil Engineering and Architecture, Opole University of Technology, Poland:

- The use of GIS and Remote Sensing (RS) in Urban Studies. Examples & Study Cases

December 2013, Centre for Energy, Environment and Land Management, Faculty of Law, University Mayor, Chile:

- The use of GIS and Remote Sensing applied to urban studies

November 2013, Institute of Geography, Pontifical Catholic University of Chile:

- Spatial indexes for exposure, sensitivity and adaptive capacity to the UHI in Santiago de Chile

November 2013, Key lecture. Faculty of Architecture and Urbanism, University of Chile:

- Urban sprawl and fragmentation in Latin America

September 2013, Invited key lectures. Technical University of Madrid, Spain:

- Urban ecosystem services or functions?
- The use of GIS and Remote Sensing applied to landscape studies

March 2013, Key lecture. Workshop development strategy for the Czech-Polish cross-border area, Prudnik Poland:

- Ecology, urban development, and environmental protection

January 2013, Invited key lecture. Technical University of Madrid:

- Urban expansion and climate change in Latin America. Trends and methodological aspects

June 2012, Invited presentation, Mining Institute (GIG), Katowice, Poland:

- Spatial patterns, ecology, and urban development

February 2009, Invited Conference (Award). The New School University, Theresa Lang Community Centre, New York, USA:

- Bicentennial celebration in Punta Arenas: projects and concepts

SPEAKER IN CONFERENCES (only first author)

July 2019, 10th IALE (International Association of Landscape Ecology) world congress, Milan, Italy:

- Technomass: building a bridge between urban ecology, metabolism and planning

April 2019, Global Land Project (GLP) 4th Open Science Meeting, Bern, Switzerland:

- Beyond urban-rural dichotomies: Measuring urbanisation degrees in central European landscapes using the technomass as an explicit indicator

November 2018 Urban Transitions 2018:

- A heat vulnerability index for Santiago, Chile
- How healthy makes us the urban green? Spatial assessment of illness frequency and green areas
- The circularity of the urban ecosystem material productivity: the transformation of biomass into technomass in Southern Patagonia

October 2018 ESP European conference, San Sebastian, Spain:

- The entanglement of ecosystem services provision. Bundling Ecosystem services to ascertain spatiotemporal trade-offs and synergies in Europe
- Clustering spatially explicit bundles of ecosystem services in a central European region

September 2018 48th Annual Meeting of the Ecological Society of Germany, Austria and Switzerland:

- Technomass, a novel indicator to understand, measure and analyse urbanisation

July 2018 The 25th IAPS 2018 Conference, Rome, Italy:

- How healthy makes us the urban green? Spatial assessment of illness frequency and green areas

June 2018, World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prague, Czech Republic:

- Ecosystem services and landscape urbanization. spatial assessment in upper Silesia, central Europe
- Clustering spatially explicit bundles of ecosystem services in a central European region

April 2018 REGIO RESOURCES 21-2018, Smolenice, Slovakia: Global megatrends and Landscape:

- Towards a homogeneous continent? Long-term land use change Trends in Europe from 1900-2010

December 2017, 9th World Ecosystem Services Partnership (ESP) conference, Shenzhen, China:

- Indicators for Cultural Ecosystem Services in urban contexts: a critical review for urban planning
- Integrating ecosystem services supply potential from future land-use scenarios in protected area management: insights from Bangladesh

September 2017, IUFRO - Landscape Ecology Conference 2017, Halle, Germany:

- How healthy makes us the urban green? Spatial assessment of illness frequency and green areas
- September 2017, IALE - European Congress 2017, Ghent, Belgium:
- Ecosystem services provision and landscape urbanization degrees. Spatial assessment in upper Silesia, central Europe
- July 2017, AESOP – Association of European Schools of Planning Conference 2017, Lisbon, Portugal:
- Ecosystem services and landscape urbanization. spatial assessment in upper Silesia, central Europe
 - Articulating urban metabolism and urban ecology through novel indicators: introducing technomass. conceptual and operational implications
- January 2017, The Size of the Society International workshop, Debrecen University, Hungary:
- The transformation of the Patagonian steppe in bourgeois architecture: a socio-ecological system of surplus appropriation
- October 2016, Regio-Resources conference. European Land-Use Institute, Lugo, Spain:
- Sustaining Cultural Ecosystem Services in Urban Landscapes. Challenges for research and planning
- August 2016, 5th International ECOSUMMIT Ecological Sustainability, Montpellier, France:
- The urban ecosystems material productivity function
 - Indicators of Cultural Ecosystem Services for urban planning: a review
- July 2016, Society for Urban Ecology 2nd world international congress, Shanghai, China:
- Articulating urban metabolism and urban ecology through novel indicators: introducing technomass
 - Landscape urbanization patterns in Central Europe. A spatial assessment using technomass indicator at landscape scale
 - A heat vulnerability index for Santiago, Chile
- June 2016, World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prague, Czech Republic:
- Measuring Urban Informality in Latin America. GIS Spatial Assessment of Informal Urban Development in Santiago de Chile
 - Urban flood risk reduction by increasing green areas for adaptation to climate change
- November 2015, 8th World Ecosystem Services Partnership (ESP) conference, South Africa:
- Provision of ecosystem services and urbanization: spatial assessment at landscape scale
 - Indicators of Cultural Ecosystem Services for urban planning: a review
- September 2015, Universitätsspital Basel, Zentrum für Lehre und Forschung, Switzerland. The 5th World Sustainability Forum:
- Spatial regression analysis of heat hazard factors in Santiago de Chile
- August 2015, Tartu, Estonia, IUFRO Landscape Ecology Conference:
- South American urban peripheries: compact or sprawled? Formal or informal? A GIS spatial characterization
 - Ecosystem services in urban fringes. Spatial assessment at landscape scale looking to urban planning
- October 2014, Congreso Iberoamericano de Urbanismo, Lisboa, Portugal:
- Tecnomasa: un puente entre la ecología urbana, los estudios metabólicos y la planificación urbana
- September 2014, Portuguese Congress of Philosophy, Lisboa, Portugal:
- Ecological materialism: recovering a philosophic understanding of urban phenomenon as key driver in current global environmental crisis
- September 2014, Regio-Resources conference, Katowice, Poland. European Land-Use Institute:
- Urban Ecosystem Functions: A metabolic framework for understanding urban phenomenon

June 2014, Invited symposium. University of Naples, 8th International Conference on Innovation in Urban and Regional Planning:

- Open spaces and urban ecosystem services. Cooling effect towards urban planning in South American cities

September 2013, Lincoln Institute of Land Policy conference, Mexico:

- Measuring climate change adaptation in Latin America

September 2013, Regio-Resources conference, Catania Italy. European Land-Use Institute:

- Urban ecosystem services under a cross-border perspective
- Technomass and Technotope: new indicators of urban ecosystem functions
- Session moderator: approaches for stakeholders' involvement in planning for ecosystem services

July 2013, Society for Urban Ecology conference, Berlin, Germany:

- Ecological linkages between urban metabolism and wetland biodiversity
- Urban ecosystem functions with Remote Sensing technologies

September 2012, EcoSummit 2012 - Ecological Sustainability, Ohio, USA:

- Which pattern is the best for whom, urban systems as a landscaping force

October 2011, Lincoln Institute of Land Policy conference, Montevideo, Uruguay:

- Urban sprawl and fragmentation patterns in Latin America and Europe

May 2011, Regio-Resources Conference, European Land-Use Institute, Dresden, Germany:

- Urban sprawl and fragmentation in Latin America. Methodological approach

TEACHING

2017-Present	RUHR-UNIVERSITÄT BOCHUM <i>Institute of Geography</i>	Bochum, Germany
	<ul style="list-style-type: none">• Lecturer. Master program Transformation of Urban Landscapes: Analytical Concepts, Methods and Applications (ACOMAP)	
2013-2016	UNIVERSITY OF ECONOMICS, PRAGUE <i>Department of Regional Studies</i>	Prague, Czech Republic
	<ul style="list-style-type: none">• Assistant Professor of Urban Economic Geography and Regional Structures of LA (Ms)	
2012-Present	TECHNICAL UNIVERSITY OF MADRID <i>Faculty of Architecture, Dep. of Urbanism and Territorial Planning</i>	Madrid, Spain
	<ul style="list-style-type: none">• Visiting Professor (PhD program in urban regeneration) (Ms, PhD)	
2009-Present	DRESDEN UNIVERSITY OF TECHNOLOGY <i>CIPSEM Centre for International Postgraduate Studies of Environmental Management</i>	Dresden, Germany
	<ul style="list-style-type: none">• Lecturer of Urban Planning, GIS and Remote Sensing (Postgraduate studies)	
2006-2007	UNIVERSITY OF MAGELLAN, CHILE <i>School of Architecture</i>	Punta Arenas, Chile
	<ul style="list-style-type: none">• Assistant Professor of Urban Planning, Urban Law, and Ethics for Architects (undergraduate)	

Theses (Ms, PhD, External evaluator, panel board)

2017-2020	Ph.D. thesis: "Global multitemporal assessment of Urban Heat Islands." Author: Richard Lemoine-Rodriguez. Ruhr University Bochum, Institute of Geography. Supervisor.
2016	Ph.D. thesis: "Ecosystem Services for Spatial planning. A proposal for practical application." Author: Silvia Ronchi. Faculty of Architecture, Dep. of Architecture and Urban Studies, Politecnico de Milano. External expert.
2015	Ph.D. thesis: "Space conformation and regional disintegration in the Bogota's Sabana. A proposal for regional development in the XXI Century." Author: Raquel González

- Báez. Faculty of Architecture, Dep. of Urbanism and Territorial Planning, Technical University of Madrid. External expert. Panelboard.
- 2015 **Ph.D. thesis:** “2010 earthquake in Chile and social housing: results and lessons for public policy recommendations”. Author: Ricardo Tapia Zarricueta. Faculty of Architecture, Dep. of Urbanism and Territorial Planning, Technical University of Madrid. External expert.
- 2015 **Ph.D. thesis:** Size and urban density: Land occupation analysis in Spanish urban areas. Author: Carlos Jiménez Romera. Faculty of Architecture, Dep. of Urbanism and Territorial Planning, Technical University of Madrid. External expert.
- 2014 **Ph.D. thesis:** Environmental Impact Assessment of Land Use Change, Models and Trends in EU. Author: Soraiya H. Karimabadi. Department of Building Environment Science & Technology, Politecnico di Milano. External expert.
- 2014 **Ms. Thesis:** The Commercialization of Microfinance in Chile: Opportunities and Trade-offs. Author: Fotis Bellon. University of Economics, Prague. Panelboard.
- 2014 **Ms. Thesis:** The inequality in Chile: economic, political and social impacts. Author: Zuzana Seifertová. University of Economics, Prague. Panelboard.
- 2014 **Ms. Thesis:** The possibility of future for South-South Cooperation on the example of Brazil’s emerging Development Assistance on the International Scale. Author: Alya Babirli. University of Economics, Prague. Panelboard.
- 2013 **Ms. Thesis:** The place of Latin America in the strategy for improving the French trade balance: the specific case of Chile. Author: Marine Banfo. University of Economics, Prague. Panelboard.
- 2013 **Ms. Thesis:** The Mexican Food Industry Investments. Situation and Opportunities in the Czech Republic. Author: Antonio Moctezuma. University of Economics, Prague. Panelboard.
- 2013 **Ms. Thesis:** Inequality in Mexico, Author: Sarka Prat, University of Economics, Prague. Panelboard.

LANGUAGE PROFICIENCY

- Spanish, mother tongue
- English, Proficient
- German, Czech and Portuguese, Independent user
- Italian: fair