

SESSION #1: A SUSTAINABLE APPROACH TO LANDSCAPE AND INFRASTRUCTURE 1

Cincuentenario Building / Classroom: CT 355

Session Chair: Lía Aliaga

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|---|
| 14:40 -15:00 | 1 | Debashis Sanyal | Sustainability in Super tall housing: An Architect's approach |
| 15:00 -15:20 | 75 | Guilherme Pessanha, Celso Romanel and Jean Novo | An index for evaluation of urban bicycle lanes |
| 15:20-15:40 | 78 | David Gonzalez, Bastián Henríquez and Leonardo Sierra | Social Sustainability Assessment of Infrastructure Projects: A case study of an Urban Highway Improvement in Temuco – Chile |
| 15:40 -16:00 | 95 | Cristina Felsenhardt, Margarita Jans and Pamela Zuñiga | Green infrastructure development on Santiago's foothill for sustainable and resilient urban planning |
| 16:00 -16:20 | 135 | Ximena Ferrada, Claudia Valderrama and Constanza Fuentes | Economic and technical analysis of universal accessibility in social and private housing |
| 16:20 -16:40 | 201 | Alejandro Cohen Arazi, Nahuel Recabarren and Leandro Piazzi | Hybrid Infrastructures and Operational Landscapes |
| 16:40 -17:00 | 268 | Daniela Alejandra Gaete Fontirroig and Lía Aliaga | The instability of the limits |

SESSION #2: CIRCULAR ECONOMY AND RESOURCE MANAGEMENT 1

Cincuentenario Building / Classroom: CT 354

Session Chair: Francisco Ramírez

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|---|
| 14:40 -15:00 | 84 | Alfonso Mardones-Lazcano, Gustavo Cabrera Barjas and Ximena Salas-Carrasco | Circular economy for fish farms in Araucanía, Chile |
| 15:00 -15:20 | 93 | Andres Basantes, José Saez, Amelia Tapia and Michael Davis | A manual suction toilet for sewage reduction |
| 15:20 -15:40 | 117 | Tomas Errazuriz, Ricardo Greene and Daniel Berczeller | Long live my objects! Silent practices to delay divestment |
| 15:40 -16:00 | 118 | Pablo Badilla, Viviana Letelier, Patricia Aros and Felipe Careau | Analysis of the mechanical and thermal behavior of concretes manufactured by the joint use of diferentes residues |
| 16:00 -16:20 | 163 | Alejandra Calabi-Floody, Viviana Letelier, Gonzalo Valdes and Elsa Sánchez-Alonso | Promoting the circular economy of concrete through innovation in asphalt pavements |
| 16:20 -16:40 | 166 | Elsa Sánchez-Alonso, Gonzalo Valdes, Alejandra Calabi-Floody and Luis Mardones | Development of asphalt mixtures for sustainable pavements |
| 16:40 -17:00 | 203 | Hernán Cabrera, Juan Figueroa, Javiera Ávila, Katherine Méndez, Christian López and Bárbara López | Evaluation of the generation of waste in a building work of housing, to develop improvements in its final disposition |

SESSION #3: CLIMATE CHANGE AND THE BUILT ENVIRONMENT 1

Cincuentenario Building / Classroom: CT 353

Session Chair: Carlos Bascou

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|--|--|
| 14:40 -15:00 | 112 | Wilmer Barreto, Nilson Ramos, Kevin Castro, Roberto Torres, Jesús Torres and Ricardo Picon | Development of a GIS Tool for Sustainable Urban Drainage Systems Evaluation |
| 15:00 -15:20 | 116 | José Pedro Carvalho, Luís Bragança and Ricardo Mateus | The role of BIM in Building Sustainability Assessment methods |
| 15:20 -15:40 | 123 | Grace Cardoso and Fernanda Moscarelli | Urban rules and morphology analysis as support to solar performance |
| 15:40 -16:00 | 131 | Noelia Liliana Alchapar, María Florencia Colli and Erica Norma Correa | Albedo quantification using remote sensing techniques. Cool Roof in the Metropolitan Area of Mendoza- Argentina |
| 16:00 -16:20 | 148 | Juliana Santos and Cristina de Álvarez | Climate change adaptation in Brazilians cities through urban green infrastructure |
| 16:20 -16:40 | 191 | Larissa Tsuneto and Jorim Virgens Filho | Rainwater harvesting system using alternative energy sources in climate change scenarios in the State of Parana – Brazil |
| 16:40 -17:00 | 260 | Alex González-Cáceres | A method to calibrate building simulation model through visual inspection and smart meter |

SESSION #4: CULTURAL SUSTAINABILITY 1

Cincuentenario Building / Classroom: CT 356

Session Chair: Pedro Pérez

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|--|---|
| 14:40 -15:00 | 73 | Alvarez Eugenia | Strategy of social organization, for the use of wood heating in areas generating polluting material in the city of Temuco, La Araucanía region, Chile |
| 15:00 -15:20 | 82 | Roberta Krahe Edelweiss and Fabio Bortoli | Public Open Spaces Urbanity: a confrontation between the physical and social dimension at Germania Park |
| 15:20-15:40 | 88 | Jorge B. Ulloa and Victor Castillo | The informality and the public space. The case of street vending Los Ángeles, Chile |
| 15:40 -16:00 | 149 | María Montserrat Salvadó Robles, Cristian Schmitt and Waldo Bustamante | Tangible patterns of neighborhood public spaces and degrees of belonging |
| 16:00 -16:20 | 293 | Wladimir Antivil and Iván Orellana | Mapuche constructions and their relationship with sustainable standards |
| 16:20 -16:40 | 297 | Antil Camacho | Challenges of creative and sustainable cities in Chile |
| 16:40 -17:00 | 300 | Patricia Zúñiga Gómez | KAY: Restoration of the Native Forest for the conservation of the craft tradition of the Pilwa of Budi Lake. |

SESSION #5: ENVIRONMENTALLY EFFICIENT BUILDING MATERIALS AND PRODUCTS 1

Cincuentenario Building / Classroom: CT 352

Session Chair: Daniel Ostrowski

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|--|
| 14:40 -15:00 | 6 | Nathalia Abreu and Marco Gonçalves | Clogging of permeable pavements: Case Study |
| 15:00 -15:20 | 81 | António Curado, João P. Silva and Sérgio I. Lopes | Radon Risk Reduction in Public Buildings with Regular Occupancy: a Case Study in Minho Region, Portugal |
| 15:20 -15:40 | 91 | Juan Vilches, Juan Figueroa, Leonardo Chamorro and Carlos Piña | Analysis of the carbonation in normal concrete with the addition of tire rubber |
| 15:40 -16:00 | 92 | Juan Figueroa, Marta Fuentealba, Rodrigo Ponce and Miguel Zuñiga | Effects on the compressive strength and thermal conductivity of the replacement of fine aggregate replacement by particulate of mussel shells in mass concrete |
| 16:00 -16:20 | 104 | Eduardo Rain, Carlos Abella, Roberto Torres, Jesús Torres, Wilmer Barreto and Ricardo Picón | Cost evaluation for the design of regular structures with green roofs |
| 16:20 -16:40 | 160 | Domingos Ribas, António Curado and Paulo Cachim | Comparative Economic Sustainability of commonly used flat roofs in Portugal |
| 16:40 -17:00 | 286 | Wladimir Buguëño and Danny Lobos | Determination of reliability of an energy simulation consulting based on an organizational Capacity and Maturity model |

SESSION #6: PUBLIC SPACES AND QUALITY OF LIFE 1

Cincuentenario Building / Classroom: CT 351

Session Chair: Jaime Inostroza

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|---|
| 14:40 -15:00 | 8 | Jaime Inostroza | To Dwell in the Architectural Procession: Wright's and Siza's Site Building through Light and Landscape |
| 15:00 -15:20 | 76 | Augustine Yaw Asuah and Antonio Zumelzu | Measuring urban diversities in cities in transformation – Case of Temuco |
| 15:20 -15:40 | 86 | María Teresa Rodríguez Tastets | Urban growth and Sustainability. Case study, Ribera Norte, Concepción, Chile |
| 15:40 -16:00 | 109 | Carlla Portal Volpatto and Roberta Krahe Edelweiss | Alfândega square: A place of plurality |
| 16:00 -16:20 | 110 | Verena Maldonado, Marcelo Loyola and Leonardo Sierra-Varela | Social contribution of the housing for vulnerable populations: A case of study for Araucania Region, Chile |
| 16:20 -16:40 | 129 | Rocío Hidalgo | Public transport as a public place: urban insertion strategies of the Coquimbo – La Serena light rail project |
| 16:40 -17:00 | 206 | Montserrat Delpino-Chamy and Laura Navarrete | Relation between inhabitants' perception and urban design principles. Case study Coastal Park, Bío bío river, Concepción, Chile |

SESSION #7: A SUSTAINABLE APPROACH TO LANDSCAPE AND INFRASTRUCTURE 2

Cincuentenario Building / Classroom: CT 355

Session Chair: Lía Aliaga

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|--|---|
| 14:40 -15:00 | 7 | Fernando da Casa Martín, Rodrigo García Alvarado, Ernesto Echeverría Valiente, Flavio Celis D'Amico, Alberto Nope Bernal, Patricia Domínguez Gómez and Pilar Chías Navarro | Need for a particular conception of BIM for sustainable management in hospitals in existing buildings |
| 15:00 -15:20 | 151 | Pablo Castañer-Jeria, Nina Hormazabal-Poblete and Gerardo Saelzer-Fuica | The thermal influence of the mud wall of the sunspace in the indoor climate of the 1811-1950 home's of Valparaíso |
| 15:20-15:40 | 182 | Ismael Alecrim, José Pedro Carvalho, Luís Bragança and Ricardo Mateus | Using BIM for assessing buildings life cycle impacts |
| 15:40 -16:00 | 79 | Vera Luz and Antonio Fabiano Jr. | Towards an Urban-Rural-Environmental Relationship in the Metropolis: the case of Vila Bela |
| 16:00 -16:20 | 194 | Luisa Fernanda Callejas Ochoa, Lucía Pereira Ruchansky, Alejandro Reyes Riveros, Paula Estefanía Torres López and María Beatriz Piderit Moreno | Optimization of natural lighting design for visual comfort in modular classrooms: Temuco case study |
| 16:20 -16:40 | 296 | Verónica Eltit Neumann | Disconnection of Green Areas with Natural Systems, Temuco Chile |
| 16:40 -17:00 | 308 | Lizeth Rodríguez-Potes and Kattia Villadiego | Thermal sensation assessment at different types of covered outdoor spaces in Barranquilla – Colombia |

SESSION #8: CIRCULAR ECONOMY AND RESOURCE MANAGEMENT 2

Cincuentenario Building / Classroom:CT 354

Session Chair: Francisco Ramírez

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|--|--|
| 14:40 -15:00 | 190 | Renato D'Alençon Castrillón, Anamaria De Leon, Roger Saintard, Oscar Huerta and Claudio Vásquez Zaldívar | Potentials for Construction Waste Reduction of in the architectural design phase |
| 15:00 -15:20 | 200 | Fabrizio Tucci and Alessandra Battisti | Green Economy for sustainable architectures and cities: Guidelines, Strategies, Measures, Actions |
| 15:20 -15:40 | 218 | Lucas Bracho Venegas and Patricia Martínez | Diagnosis of the generation of solid waste in the construction of a building under the focus of Industrial Ecology |
| 15:40 -16:00 | 238 | Patricia Martínez, José Videla, Edmundo Muñoz, Valentina Abello and Monserrat Ovalle | An assessment of Industrial sector of Valparaíso Region for implementation of industrial ecology strategies: opportunities for the construction sector |
| 16:00 -16:20 | 249 | Camila López, Claudia Peña and Edmundo Muñoz | Effects of the circular economy model of secondary steel production on resource use and environmental impacts of steel production in Chile |
| 16:20 -16:40 | 303 | Pamela Hidalgo, Gladys Coronado, Alejandra Sanchez and Renato Hunter | Agro-industrial waste as precursor source for carbon nanotubes (CNTs) synthesis using a new technical of solvent autoignition |
| 16:40 -17:00 | 304 | Gustavo Curaqueo, Paul Riquelme, Erico Carmona, Andrés Pérez-San Martín and Aixa González Ruiz | Composting with industrial and domiciliary ashes in Temuco |

SESSION #9: CLIMATE CHANGE AND THE BUILT ENVIRONMENT 2

Cincuentenario Building / Classroom:CT 353

Session Chair: Carlos Bascou

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|--|--|
| 14:40 -15:00 | 98 | Fabiana Rosa, Andrea Kern and Luís Bragança | Comparative analysis of Sustainable development environmental indicators between worldwide, Portugal and Brazil and between two universities within these countries |
| 15:00 -15:20 | 128 | Catalina Bozán and Lía Aliaga | Obtaining Water from Mine Tailings in Arid Environments Water infrastructure for catchment, channeling, filtration and accumulation for landscape interventions in the City of Copiapó |
| 15:20 -15:40 | 185 | Carlos Bascou Bentjerodt | CICA position paper on sustainable construction |
| 15:40 -16:00 | 196 | Alejandra Herrera | Evaluation of vulnerability to heavy precipitation of the roofs of Chilean historic buildings with wooden structure. A methodology to apply at an early stage |
| 16:00 -16:20 | 198 | Norman Goijberg and Hernán Madrid | Sustainable Building Certification in Chile |
| 16:20 -16:40 | 229 | Emanuela Alves, André Paiva, Patricia Drach and Gisele Barbosa | Microclimatic strategies for “Vila Residencial da UFRJ”: mitigating the effects of high temperatures |
| 16:40 -17:00 | 285 | Jullyanne Ferreira de Souza, Barbara Lumy Noda Nogueira, Amanda V. P. Lima and Solange Leder | Thermal comfort analysis in both naturally ventilated and artificially refrigerated classrooms in a warm and humid climate |

SESSION #10: CULTURAL SUSTAINABILITY 2

Cincuentenario Building / Classroom:CT 356

Session Chair: Pedro Pérez

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|--|
| 14:40 -15:00 | 106 | Carolina Navarrete, Juan Manuel Fierro, Daniela Sandoval, María Carbonetti and Gabriel Saldías Rossel | Towards a Sustainable Model in Higher Education in the Araucanía Region, Chile |
| 15:00 -15:20 | 216 | Miguel Del Pino and Stefan Berres | Towards a sustainable and harmonized education in the Mapuche context |
| 15:20-15:40 | 217 | Alex Mellado Larraín | Animitas in the Araucanía; Grieving and tragedies crystallized in the public space |
| 15:40 -16:00 | 243 | Lorena Villegas | Celia Leyton, Indigenist Paiting of Mapuche People |
| 16:00 -16:20 | 262 | Pedro Perez and Miguel Eyquem | Living and Building in Nature: A Case Study of an Ethical and Ecological Architectural Education in Araucanía |
| 16:20 -16:40 | 265 | Leonardo Cravero | A Sustainable Approach to the Threatened Landscape Through Visual Arts |
| 16:40 -17:00 | 272 | Fabián Leal, Carolina Navarrete and Bastián García | Alberto Curamil and the Goldman Environmental Prize: Discussion on Cultural Sustainability in the Araucania Region |

SESSION #11: ENVIRONMENTALLY EFFICIENT BUILDING MATERIALS AND PRODUCTS 2

Cincuentenario Building / Classroom: CT 352

Session Chair: Daniel Ostrowski

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|--|
| 14:40 -15:00 | 111 | Juan Pablo Rivas, Viviana Letelier, Camila Parodi and Miguel Angel Manosalva | Evaluation of industrial ashes in cement replacement in mortars |
| 15:00 -15:20 | 138 | Valentina Fernández, Claudia Valderama-Ulloa, Fabien Rouault, Cristián Schmitt, Rodrigo Del Río and Diego Vasco | Plywood with Improved Thermal Mass Through Phase Change Materials |
| 15:20 -15:40 | 169 | Walter Schmidt Ibacache, Juan Vilches Tapia, David Zamora Barraza, Marión Bustamante Valenzuela and Ricardo Cofré Fernández | Effect on the mechanical strength of the concrete that generates the incorporation of biomass ash calcined in boiler, in sand from the Maule River |
| 15:40 -16:00 | 170 | Eriverson Alves and Maria Leticia Beinichis | Analysis of Taipa as sustainable construction material for low-income communities – a case study |
| 16:00 -16:20 | 174 | Gustavo Sarabia, Lauro Olfos and Luis Barros | Thermal Insulating Panels Based on Recycled Tetrapak® Boxes |
| 16:20 -16:40 | 261 | Rodrigo García Alvarado, Alexis Pérez Fargallo, Jesús Pulido Arcas, Paula Ulloa Aguayo, Javier Sepulveda and Eric Forcael | Robotic assembly of stay-in-place concrete blocks |
| 16:40 -17:00 | 295 | Oscar Soto, Aixa González, Nelson Gómez and Cristian Manzur | Mortar based on biomass ashes from Araucanía region |

SESSION #12: PUBLIC SPACES AND QUALITY OF LIFE 2

Cincuentenario Building / Classroom:CT 351

Session Chair: Jaime Inostroza

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|--|
| 14:40 -15:00 | 89 | Dayana Enríquez Burbano and Nélio Domingues Pizzolato | Mobility for compact and less segregated cities: the urban plan of expanded center from Bogotá |
| 15:00 -15:20 | 121 | Antonio Zumelzu, Mariana Estrada, Constanza Jara and Constanza Peña | Effects of the built environment on pedestrian accessibility in neighbourhoods in southern Chile. Three cases in Temuco, Chile |
| 15:20 -15:40 | 211 | Oscar Figueroa and Carole Gurdon | Streets as public spaces, a challenge in urban planning for intermediate cities in Chile |
| 15:40 -16:00 | 215 | Aimee Maron, Francisco Ramirez and Michael Maks Davis | Social Perceptions of Living Walls in Quito: A Study of Four Vertical Gardens |
| 16:00 -16:20 | 263 | Tomas Folch, Luis Valenzuela, Andrea Castro, Alejandra Vasquez, Camila Romero | Andes Mountain Strategic Plan |
| 16:20 -16:40 | 282 | Marcela Soto, Jorge León and Anne Escobar | Public Space and Resilient Urban Development from a Children's perspective: A Case Study in Valparaíso, Chile |
| 16:40 -17:00 | 288 | Ivan Cisternas | Reintegration of Collective Housing in the Public Space: Improving Quality of Life in the Urban Setting |

SESSION #13: A SUSTAINABLE APPROACH TO LANDSCAPE AND INFRASTRUCTURE 3

Cincuentenario Building / Classroom:CT 355

Session Chair: Lía Aliaga

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|--|---|
| 14:40 -15:00 | 164 | Loreнна Luna and Maria Leticia Beinichis | Sustainability and Smart City: a case study |
| 15:00 -15:20 | 179 | Katherine Piedra, Waldo Bustamante and Cristián Schmitt | Ventilation and Interior Comfort Standards in Heritage Housing – The “Cité” Building Type in Santiago de Chile |
| 15:20-15:40 | 208 | Katherine Athié and Bruno Rocha | Critical mapping of indicators for smart cities evaluation |
| 15:40 -16:00 | 209 | Jesus Torres, Roberto Torres, Ricardo Picon, Wilmer Barreto and Jackeline Peña | Vetiver grass as a sustainable technic of slope stabilization, erosion control and environment responsible |
| 16:00 -16:20 | 227 | Ismael Palacios and Ariel Bobadilla | Heating and cooling energy savings of a proposed variable thermal resistance envelope in office buildings |
| 16:20 -16:40 | 254 | Claudia Muñoz, Aracely Rocha, Mabel Vega, Antonio Molina, Gabriel Cereceda and Patricia González | Ecoefficiency tool for the decrease of the environmental load in the life cycle of buildings Ábaco-Chile |
| 16:40 -17:00 | 256 | Ximena Ovalle Núñez and Edmundo Muñoz Alvear | Effects of geographical location on energy demand, climate change and demand for fossil fuel in the life cycle of tourist accommodation establishments in Chile |

SESSION #14: CIRCULAR ECONOMY AND RESOURCE MANAGEMENT 3

Cincuentenario Building / Classroom:CT 354

Session Chair: Francisco Ramírez

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|--|
| 14:40 -15:00 | 94 | Francisco Ramírez Carrasco and Fernando Peña-Cortés | Criteria for Indicators Selection. A Practical Framework to Assessing and Weighting Urban Indicators Values Regarding Climate Change |
| 15:00 -15:20 | 134 | Fabien Rouault, Paulina Gonzalez-Levin, Claudia Valderrama-Ulloa and David Peña | Breakdown of the use of energy in common areas of residential buildings in Chile |
| 15:20 -15:40 | 146 | Claudia Mac-Lean, Luis Vargas and Carolina Reyes | Renewable Energy at Chilean Universities: Is it possible? |
| 15:40 -16:00 | 172 | David Zamora Barraza, Juan Vilches Tapia, Francisco Sierra Diaz and Hector Bravo Díaz | Effect of freeze-thaw and saturation-dryness cycles in the mechanical properties of geothermal mortars |
| 16:00 -16:20 | 183 | Francois Simon, Claudio Roberts, Aymeric Girard and Javier Ordoñez | Economical and environmental impact of military electrical vehicle conversion |
| 16:20 -16:40 | 186 | Filipi Libório Narcizo and Heloisa Firmo | Pumped Hydroelectric Energy Storage in Brazil: Challenges and Opportunities |
| 16:40 -17:00 | 277 | Billy Mark Peralta Marquez, Richar Soria, Luis Caro, Nicolas Schiappacasse, Alejandro Mellado and Stefan Berres | Detection of anomalous pollution sensors using deep learning considering simulated data in Temuco city |

SESSION #15: CLIMATE CHANGE AND THE BUILT ENVIRONMENT 3

Cincuentenario Building / Classroom:CT 353

Session Chair: Carlos Bascou

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|--|---|
| 14:40 -15:00 | 119 | Dafne Consuelo Lagos Hurel, Rodrigo Andrés Mancilla Vargas and Paola Elizabeth Leal Mora | Energy management through optimal logistics planning. Case study of a power electrical distribution company in southern Chile |
| 15:00 -15:20 | 124 | Dafne Consuelo Lagos Hurel, Rodrigo Andrés Mancilla Vargas and Paola Elizabeth Leal Mora | Variation in solar irradiance on facades according to solar access at neighbourhood scales in Santiago on winter. A rationale for public policy in the urban planning |
| 15:20 -15:40 | 132 | Jose Tomas Videla, Brian Roberts, Marcela Allue and Francisca Guerrero | Secondary cities and their development challenges: the case of Central Chile Macro Region. |
| 15:40 -16:00 | 159 | Jason Achermann and Lirandina Gomes | The delimitation of green areas through ecological principles in urban spaces: The case of Praia do Forte – Bahia, Brazil |
| 16:00 -16:20 | 204 | Layra Ramos Lugão, Cristina Engel De Alvarez | Applicability Analysis: Indicators of Urban Sustainability for Public Spaces |
| 16:20 -16:40 | 220 | Claudio Carrasco and Massimo Palme | Urban form and urban materials as controller of urban climate in Valparaíso, Chile |
| 16:40 -17:00 | 253 | Patricia Gutierrez | Sustainability visions in planning at the regional scale in Chile |

SESSION #16: CULTURAL SUSTAINABILITY 3

Cincuentenario Building / Classroom:CT 356

Session Chair: Pedro Pérez

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|---|
| 14:40 -15:00 | 115 | Rand Askar and Luis Braganca | Eco-Mimesis – A Regenerative Approach in Pursuing Sustainable Development |
| 15:00 -15:20 | 177 | Alejandra Sandoval Luna | Dancing and Place Attachment – The Case of the Quinta Normal Metro Station |
| 15:20-15:40 | 178 | Stella Schroeder | A citizen-defined vision for the city’s future. A new contribution to the discourse of citizen participation in Piura, Perú |
| 15:40 -16:00 | 188 | María Paula Simian | Accessible design in UC Temuco |
| 16:00 -16:20 | 250 | Magdalena Vergara, Nina Hormazabal-Poblete and Sandro Maino | Damage to the District of Puchuncaví: A zone of sacrifice |
| 16:20 -16:40 | 252 | Samuel Quiroga and Pablo Cayuqueo | Social sustainability in the use of public space |
| 16:40 -17:00 | 259 | David Figueroa, Miguel Aguayo, Jorge Jeréz, David Fonseca, Fernanda Aguayo, Carlos Aguayo, Katerina González, Miguel Escalona and Francisco Encina. | Natural Heritage, Ecosystem Services and Socio-Environmental Development: Case of Villarrica Lake |

SESSION #17: ENVIRONMENTALLY EFFICIENT BUILDING MATERIALS AND PRODUCTS 3

Cincuentenario Building / Classroom: CT 352

Session Chair: Daniel Ostrowski

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|--|
| 14:40 -15:00 | 74 | Maria Beatriz Piderit Moreno, Franklin Vivanco and Shady Attia | A roadmap for net zero energy schools in Chile |
| 15:00 -15:20 | 90 | Renato Hunter, Pablo Valenzuela and Pamela Hidalgo | Increase of mechanical and thermic performance of polymers with renewable-base nanomaterials to develop composite for fiber reinforced polymers industry |
| 15:20 -15:40 | 102 | Hermes Sepulveda, Jorge Galbiati, Pamela Hermosilla and José Tomás Videla | Tailoring energy efficiency policies in the housing sector: using conglomerate analysis to determine the aggregate and disaggregate distribution of dwellings types and the parameters that define their energy demand |
| 15:40 -16:00 | 219 | Túlio Márcio de Salles Tibúrcio and Débora Mela | Dual facade configuration and technologies in Brazil |
| 16:00 -16:20 | 244 | Kamila Drago Bona, Stella Brunoro Hoppe and Cristina Engel De Alvarez | Daylighting analysis: a contribution to the urban planning of the city of Marilândia – ES (Brazil) |
| 16:20 -16:40 | 248 | Islamán Villalobos, Svetlana Ushak, Luisa Cabeza and Álvaro De Gracia | Experimental comparison of passive heating/cooling space in light-weight buildings with potential application in mining camps |
| 16:40 -17:00 | 255 | Matias Soto, Maleni Vera, Karin Parra, Carlos Rojas and Juan Pablo Cárdenas | Potential of the residual fibers of Pisum Sativum (PS), for use in a development of a thermal insulator material |

SESSION #18: PUBLIC SPACES AND QUALITY OF LIFE 3

Cincuentenario Building / Classroom:CT 351

Session Chair: Jaime Inostroza

| TIME | Easy-Chair ID | AUTHORS | TITLE |
|--------------|---------------|---|--|
| 14:40 -15:00 | 96 | Andrés Muñoz-Pedrerros, Marilyn González-Urrutia and Heraldo V. Norambuena | Evaluation and valorization of bird diversity in two cities of southern Chile |
| 15:00 -15:20 | 99 | Bady Carvalho, Gisele Barbosa and Patricia R. Drach | Investigating the walkability index of a commercial city center using simulation and surveys: the Juiz de Fora case study |
| 15:20 -15:40 | 189 | Claudia Jiménez Valero and Jimena Gomez Lues | Recovering public spaces: A comparison of three case studies to recover public spaces in vulnerable communities in Santiago Chile |
| 15:40 -16:00 | 231 | Waldo Bustamante, German Molina, Daniel Uribe and Sergio Vera | Use of different complex fenestration systems in office spaces of Chile: Analysis of the energy consumption and occupants' visual comfort during the early stages of their design process. |
| 16:00 -16:20 | 267 | Luis Valenzuela, John Treimun, Danisa Moya, Andrea Castro and Alexis Gamboa | Systemic territorial strategic planning of environment and sustainability |
| 16:20 -16:40 | 273 | Clara Camarasa, Effrosyni Roussou, Holger Wallbaum and Abolfazl Sou-sanabadi Farahani | Relevant indicators of European building portfolio owners in maintenance measures |
| 16:40 -17:00 | 302 | Elizabeth Nogueira, Daniel Almeida and Andressa Silva | Urban analysis of the open spaces systems in Santa Cruz, Rio de Janeiro |