

c v n CURRÍCULUM VITAE NORMALIZADO



Juan Carlos Gamero Salinas

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General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

Publicaciones en Q1 (según WoS): 5 ; Numero de citas (según WoS): 44 ; Numero de citas (según Scopus): 57 ; Numero de citas (según Google Scholar): 81 ; Promedio de citas en los últimos 5 años (según WoS): 8,8 por año ; Número de publicaciones como primer autor: 7 ; Número de publicaciones como autor correspondiente: 7



Juan Carlos Gamero Salinas

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 Country of birth: **Honduras**
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 Contact aut. region/reg.: **Foral Community of Navarre**
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Current professional situation

Employing entity: Universidad de Navarra **Type of entity:** University
Department: Instituto de Ciencia de los Datos e Inteligencia Artificial (DATAI)
Professional category: Investigador Post-Doc **Educational Management (Yes/No):** No
City employing entity: Pamplona, Spain
Phone: 948425600
Start date: 23/10/2021
Type of contract: Permanent employment contract **Dedication regime:** Full time
Performed tasks: Contrato de investigador de convenio

Previous positions and activities

	Employing entity	Professional category	Start date
1	Universidad de Navarra	Investigador Predoctoral	01/09/2017
2	Centro Nacional de Energías Renovables (CENER)	Becario / Practicante	01/04/2017
3	Fundación Ecológica de Tegucigalpa	Consultor / Arquitecto	01/03/2014

1 **Employing entity:** Universidad de Navarra **Type of entity:** University
Department: Construcción, Instalaciones y Estructuras, Escuela Técnica Superior de Arquitectura
City employing entity: Pamplona, Spain
Professional category: Investigador Predoctoral **Educational Management (Yes/No):** No



Start-End date: 01/09/2017 - 13/10/2021 **Duration:** 4 years - 1 month
Type of contract: Temporary employment contract
Dedication regime: Full time
Performed tasks: Personal Investigador en Formación (PIF)

2 **Employing entity:** Centro Nacional de Energías Renovables (CENER) **Type of entity:** R&D Centre
Department: Departamento de Energética Edificatoria, Departamento de Energética Edificatoria
City employing entity: Sarriguren, Navarra, Spain
Professional category: Becario / Practicante **Educational Management (Yes/No):** No
Start-End date: 01/04/2017 - 24/06/2017 **Duration:** 2 months
Type of contract: Grant-assisted student (pre or post-doctoral, others)
Dedication regime: Full time

3 **Employing entity:** Fundación Ecológica de Tegucigalpa **Type of entity:** Foundation
Department: Departamento de Construcción, -
City employing entity: Tegucigalpa, Honduras, Honduras
Professional category: Consultor / Arquitecto **Educational Management (Yes/No):** No
Start-End date: 01/03/2014 - 29/02/2016 **Duration:** 2 years
Type of contract: Temporary employment contract
Dedication regime: Full time



Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

University degree: Higher degree

Name of qualification: Graduado o Graduada en Arquitectura

City degree awarding entity: Tegucigalpa, Honduras, Honduras

Degree awarding entity: Universidad Católica de Honduras (UNICAH) **Type of entity:** University

Date of qualification: 15/03/2014

Doctorates

Doctorate programme: Doctorado en Diseño Ambiental y Tecnológico en Arquitectura

Degree awarding entity: Universidad de Navarra **Type of entity:** University

City degree awarding entity: Pamplona, Spain

European doctorate: Yes

Thesis title: Overheating risk in warm tropical climates. Semi-outdoor spaces as form-based & passive adaptation measures

Thesis director: Ana Sánchez-Ostiz Gutiérrez

Thesis co-director: Aurora Monge Barrio; Nirmal Kishnani Tulsidas

Obtained qualification: Sobresaliente

Other postgraduate university studies

Type of education: Masters

Postgraduate qualification: Máster en Diseño y Gestión Ambiental de Edificios (MDGAE)

City degree awarding entity: Pamplona, Spain

Degree awarding entity: Universidad de Navarra **Type of entity:** University

Date of qualification: 02/10/2017

Teaching experience



General teaching experience

- 1** **Type of teaching:** Official teaching
Name of the course: Análisis y gestión de datos (MRE)
Type of teaching: In person theory
Type of subject: Obligatory
University degree: Mást.ECArq+Real-21, Mást.Estr.Neg.I-21
Course given: 1
Start date: 09/01/2023 **End date:** 30/06/2023
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 40
Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura
City of entity: Pamplona, Spain
Subject language: Spanish
- 2** **Type of teaching:** Official teaching
Name of the course: Trabajo Fin de Master (MDGAE Madrid)
Type of teaching: Practical work (classroom-problems)
Type of subject: Obligatory
University degree: Mást.Dis.Gest.-20, Mást.EC Arq+Dis-20
Course given: 1
Start date: 09/01/2023 **End date:** 30/06/2023
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 6
Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura
City of entity: Pamplona, Spain
Subject language: Spanish
- 3** **Type of teaching:** Official teaching
Name of the course: Trabajo Fin de Master (MRE)
Type of teaching: Docencia nacional oficial
Type of subject: Obligatory
University degree: Mást.ECArq+Real-21, Mást.Estr.Neg.I-21
Course given: 1
Start date: 09/01/2023 **End date:** 30/06/2023
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 10
Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura
City of entity: Pamplona, Spain
Subject language: Spanish
- 4** **Type of teaching:** Official teaching
Name of the course: Análisis y gestión de datos (MRE)
Type of teaching: In person theory
Type of subject: Obligatory
University degree: Mást.ECArq+Real-21, Mást.Estr.Neg.I-21
Course given: 1
Start date: 10/01/2022 **End date:** 30/06/2022
Type of hours/ ECTS credits: Hours



Hours/ECTS credits: 37

Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura

City of entity: Pamplona, Spain

Subject language: Spanish

5 Type of teaching: Official teaching

Name of the course: Form and Matter (Properties)

Type of teaching: Practical work (classroom-problems)

Type of subject: Obligatory

University degree: Gr.Diseño-16, PI-Económicas-19

Course given: 1

Start date: 06/01/2020

End date: 27/06/2020

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura

City of entity: Pamplona, Spain

Subject language: English

6 Type of teaching: Official teaching

Name of the course: Construcción I (GEA)

Type of teaching: Practical work (classroom-problems)

Type of subject: Obligatory

University degree: Gr.Arquitectura-09, Gr.Estudio Arq.-17

Course given: 4

Start date: 02/09/2019

End date: 25/11/2019

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura

City of entity: Pamplona, Spain

Subject language: Spanish

7 Type of teaching: Official teaching

Name of the course: Gestión de la energía. Medidas pasivas (MDGAE)

Type of teaching: Practical work (classroom-problems)

Type of subject: Obligatory

University degree: Mást.Dis.Gest.-11

Course given: 1

Start date: 02/09/2019

End date: 25/11/2019

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 2

Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura

City of entity: Pamplona, Spain

Subject language: Spanish

8 Type of teaching: Official teaching

Name of the course: Construcción II (GEA)

Type of teaching: Practical work (classroom-problems)

Type of subject: Obligatory

University degree: Gr.Estudio Arq.-17

Course given: 2

Start date: 07/01/2019

End date: 31/07/2019



Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura

City of entity: Pamplona, Spain

Subject language: Spanish

9 Type of teaching: Official teaching

Name of the course: Form and Matter (Properties)

Type of teaching: Practical work (classroom-problems)

Type of subject: Obligatory

University degree: Gr.Diseño-16

Course given: 1

Start date: 07/01/2019

End date: 31/07/2019

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura

City of entity: Pamplona, Spain

Subject language: English

10 Type of teaching: Official teaching

Name of the course: Form and Matter (Properties)

Type of teaching: Practical work (classroom-problems)

Type of subject: Obligatory

University degree: Gr.Diseño-16

Course given: 1

Start date: 08/01/2018

End date: 30/06/2018

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 60

Faculty, institute or centre: Universidad de Navarra - Escuela Técnica Superior de Arquitectura

City of entity: Pamplona, Spain

Subject language: English

11 Type of teaching: Official teaching

Name of the course: Construcción I (GEA)

Type of teaching: Practical work (classroom-problems)

Type of subject: Obligatory

University degree: Grado en Arquitectura

Course given: 2

Start date: 18/09/2017

End date: 31/12/2017

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Faculty, institute or centre: Escuela de Arquitectura

City of entity: Pamplona, Spain

Subject language: Spanish



Scientific and technological experience

Research and development groups/teams

Name of the group: SAVIArquitectura

City of group: Pamplona, Spain

Start date: 01/09/2017

Duration: 4 years - 1 month - 21 days

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

- 1 Name of the project:** Gemelos Digitales para la climatización de edificios (BuildTwin)
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Jesús Fernando López Fidalgo
Nº of researchers: 10
Funding entity or bodies:
GOBIERNO DE NAVARRA

Type of participation: Investigador
Name of the programme: 2022 GN Proyectos Colaborativos
Code according to the funding entity: 0011-1383-2022-000015 PC032-033 BuildTwin
Start-End date: 01/04/2022 - 30/11/2024 **Duration:** 2 years - 7 months - 29 days
Total amount: 370.917,55 €
- 2 Name of the project:** PERSONIA
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Darian Horacio Grass Boada
Nº of researchers: 6
Funding entity or bodies:
GOBIERNO DE NAVARRA

Type of participation: Investigador
Name of the programme: 2022 GN I+D Transferencia del conocimiento (empresas)
Code according to the funding entity: 0011-1365-2022-000225
Start-End date: 01/10/2022 - 31/05/2024 **Duration:** 1 year - 7 months - 30 days
Total amount: 52.745,86 €

**R&D non-competitive contracts, agreements or projects with public or private entities**

- 1** **Name of the project:** Proyecto INFOPERMIT
Geographical area: National
Degree of contribution: Responsable
Name principal investigator (PI, Co-PI....): Juan Carlos Gamero Salinas
Nº of researchers: 2
Funding entity or bodies:
Confidencial **Type of entity:** Business
Start date: 05/10/2022 **Duration:** 2 months - 26 days
Total amount: 5.000 €
- 2** **Name of the project:** PLAN PARA DESARROLLAR SISTEMAS DE RECOMENDACIÓN PARA EL SERVICIO DE EJECUCIÓN PENAL Y JUSTICIAS RESTAURATIVA
Geographical area: Regional
Degree of contribution: Responsable
Name principal investigator (PI, Co-PI....): Juan Carlos Gamero Salinas
Nº of researchers: 1
Participating entity/entities: HumanAI; Universidad de Navarra
Funding entity or bodies:
Gobierno de Navarra **Type of entity:** Body, others
Start date: 01/09/2022 **Duration:** 1 month - 29 days
Total amount: 6.900 €

Scientific and technological activities**Scientific production**

H index: 4
Date of application: 14/03/2023

Publications, scientific and technical documents

- 1** Gamero-Salinas Juan; Kishnani N.; Sánchez-Ostiz Ana; Monge Aurora; Benitez Edgar. Porosity, openness, and exposure: Identification of underlying factors associated with semi-outdoor spaces? thermal performance and clustering in tropical high-density Singapore. ENERGY AND BUILDINGS. 272, pp. 112339. 2022. ISSN 0378-7788
DOI: 10.1016/j.enbuild.2022.112339
Type of production: Scientific paper **Format:** Journal
Position of signature: 1
Total no. authors: 5 **Corresponding author:** Yes
Impact source: ISI **Category:** Science Edition - CONSTRUCTION & BUILDING TECHNOLOGY
Impact index in year of publication: 7.201 **Journal in the top 25%:** Yes
Position of publication: 8 **No. of journals in the cat.:** 68



Impact source: ISI
Impact index in year of publication: 7.201
Position of publication: 36

Category: Science Edition - ENERGY & FUELS
Journal in the top 25%: No
No. of journals in the cat.: 119

Impact source: ISI
Impact index in year of publication: 7.201
Position of publication: 8

Category: Science Edition - ENGINEERING, CIVIL
Journal in the top 25%: Yes
No. of journals in the cat.: 138

Relevant results: The lack of green open spaces undermines the environmental and social quality of tropical highly-dense cities (i.e. raises urban temperatures, limits social interaction). The goal of this study, which focused on environmental aspects, was to identify underlying factors (i.e. hypothetical constructs) in semi-outdoor spaces within building forms that explain their microclimatic behaviour, thermal comfort levels, and clustering. Sixty-three semi-outdoor spaces in four high/mid-rise building forms of Singapore were studied using microclimatic data collected from field measurements and analysed via inferential statistical methods (e.g., exploratory factor analysis, multivariate regression analysis, and hierarchical clustering analysis). Findings demonstrate: (1) that spatial attributes (i.e. height, depth, void, solid, total frontage, open frontage, area, volume, perimeter, sky view factor, green plot ratio) are manifestations of three underlying factors: volume porosity (VP), perimeter openness (PO) and exposure to sky (ES); (2) that VP and PO are significantly associated with air velocity and predicted thermal comfort; and (3) that vertical breezeways appear to be the most thermally comfortable cluster due to high VP and low PO. This study sheds new light on the spatial nature of semi-outdoor spaces, which designers can consider in order to enhance wind movement for promoting thermally comfortable semi-outdoor environments in highly-dense Singapore. (c) 2022 The Author(s). Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

- 2** Gamero-Salinas Juan; Kishnani Nirmal; Monge Aurora; López-Fidalgo J.; Sánchez-Ostiz Ana. Evaluation of thermal comfort and building form attributes in different semi-outdoor environments in a high-density tropical setting. BUILDING AND ENVIRONMENT. 205, pp. 108255. 2021. ISSN 0360-1323

DOI: 10.1016/j.buildenv.2021.108255

Type of production: Scientific paper

Format: Journal

Position of signature: 1

Total no. authors: 5

Corresponding author: Yes

Impact source: ISI

Category: Science Edition - CONSTRUCTION & BUILDING TECHNOLOGY

Impact index in year of publication: 7.093

Journal in the top 25%: Yes

Position of publication: 10

No. of journals in the cat.: 68

Impact source: ISI

Category: Science Edition - ENGINEERING, CIVIL

Impact index in year of publication: 7.093

Journal in the top 25%: Yes

Position of publication: 10

No. of journals in the cat.: 138

Impact source: ISI

Category: Science Edition - ENGINEERING, ENVIRONMENTAL

Impact index in year of publication: 7.093

Journal in the top 25%: No

Position of publication: 17

No. of journals in the cat.: 54

Relevant results: In highly dense tropical cities, a semi-outdoor space (SOS) is frequently used as a social space within tall building forms where people can interact and connect. Thermal comfort in SOSs within tall buildings, however, may vary depending on the type and form attributes that define it. This study classifies 63 SOSs in four tall buildings of Singapore into five types based on literature review: perimeter buffers, sky terraces, horizontal breezeways, breezeway atria and vertical breezeways. Findings suggest that the five SOS types perform differently in terms of thermal comfort (based on PMV*), environmental parameters (air temperature, mean radiant temperature, relative humidity, and air velocity), and building form attributes (height-to-depth ratio, open space ratio, and green plot ratio). Of these five, vertical breezeways and horizontal breezeways are the most thermally comfortable for all activities during a typically warm hour. It is postulated that higher thermal comfort levels in these SOS types are linked to form attributes that enhance air velocity. This study examines the pros and

cons of each SOS type in terms of thermal comfort in their role as communal spaces in tall buildings situated within a highly dense tropical city.

- 3** Gamero-Salinas Juan; Monge Aurora; Kishnani N.; López-Fidalgo J.; Sánchez-Ostiz Ana. Passive cooling design strategies as adaptation measures for lowering the indoor overheating risk in tropical climates. ENERGY AND BUILDINGS. 252, 2021. ISSN 0378-7788

DOI: 10.1016/j.enbuild.2021.111417

Type of production: Scientific paper

Position of signature: 1

Total no. authors: 5

Impact source: ISI

Impact index in year of publication: 7.201

Position of publication: 8

Impact source: ISI

Impact index in year of publication: 7.201

Position of publication: 36

Impact source: ISI

Impact index in year of publication: 7.201

Position of publication: 8

Format: Journal

Corresponding author: Yes

Category: Science Edition - CONSTRUCTION & BUILDING TECHNOLOGY

Journal in the top 25%: Yes

No. of journals in the cat.: 68

Category: Science Edition - ENERGY & FUELS

Journal in the top 25%: No

No. of journals in the cat.: 119

Category: Science Edition - ENGINEERING, CIVIL

Journal in the top 25%: Yes

No. of journals in the cat.: 138

Relevant results: Year-round high temperatures and humidity in the Tropics, coupled with poor design decisions and climate change, can cause indoor environments to overheat, affecting health and increasing energy demand and carbon emissions. Passive cooling could help lower the indoor overheating risk. Given the gap in the relative influence of passive cooling design strategies on lowering the indoor overheating risk in tropical locations, this study investigated their impact in two warm tropical cities (i.e., Tegucigalpa and San Pedro Sula), considering both current and future climate scenarios, with a total of 3840 thermal simulations performed. Indoor overheating risk in apartment-type dwellings was assessed using two metrics (i.e., hours of exceedance and the indoor overheating degree), and considering fixed and adaptive thermal comfort limits. Simulation results show that the overheating risk can be significantly lowered in these tropical contexts using solely passive cooling strategies as heat adaptation measures. Multivariate regression models demonstrate that natural ventilation, wall absorptance, the solar heat gain coefficient, and semi outdoor spaces have the greatest impact in lowering the risk in vertical social housing projects. This study emphasizes the importance of passive cooling and overheating protection design strategies in tropical building codes and building design while considering current and future risk. (c) 2021 The Author(s). Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

- 4** Gamero-Salinas Juan; Kishnani N.; Monge Aurora; López-Fidalgo J.; Sánchez-Ostiz Ana. The influence of building form variables on the environmental performance of semi-outdoor spaces. A study in mid-rise and high-rise buildings of Singapore. ENERGY AND BUILDINGS. 230, pp. 110544. 2021. ISSN 0378-7788

DOI: 10.1016/j.enbuild.2020.110544

Type of production: Scientific paper

Position of signature: 1

Total no. authors: 5

Impact source: ISI

Impact index in year of publication: 7.201

Position of publication: 8

Impact source: ISI

Impact index in year of publication: 7.201

Position of publication: 36

Format: Journal

Corresponding author: Yes

Category: Science Edition - CONSTRUCTION & BUILDING TECHNOLOGY

Journal in the top 25%: Yes

No. of journals in the cat.: 68

Category: Science Edition - ENERGY & FUELS

Journal in the top 25%: No

No. of journals in the cat.: 119

**Impact source:** ISI**Impact index in year of publication:** 7.201**Position of publication:** 8**Category:** Science Edition - ENGINEERING, CIVIL**Journal in the top 25%:** Yes**No. of journals in the cat.:** 138

Relevant results: This study delved on the role of semi-outdoor spaces (SOS), as form-based strategies, in providing enhanced, thermally comfortable environments in highly dense urban contexts. A sample of sixtythree (63) SOS was studied, within four different mid-rise and high-rise buildings located in the warm-humid tropical city of Singapore. It was found: (i) that SOS may act as thermal buffer spaces; (ii) that microclimate creation in SOS is linked to form, specifically to geometrical variables such as void-to-solid ratio, height, height-to-depth ratio, height from ground level, green plot ratio and open space ratio, which influence significantly the environmental factors of air temperature, mean radiant temperature, air velocity and relative humidity; (iii) that some aforementioned geometrical variables (height-to-depth ratio and open space ratio) are linked to thermal comfort when estimated with SET* and PMV* thermal indices; (iv) and that thermal comfort (between -1 and +1 PMV*) can be achieved in SOS considering a typical Singaporean outdoor CLO of 0.3, especially for 1 MET (85.7% of SOS). In the context of Singapore, this study demonstrates that incorporating SOS to mid-rise and high-rise building forms promotes the creation of thermally comfortable microclimates suitable for human activity, even during the hottest hours. (C) 2020 Elsevier B.V. All rights reserved.

- 5** Gamero-Salinas Juan; Monge Aurora; Sánchez-Ostiz Ana. Overheating risk assessment of different dwellings during the hottest season of a warm tropical climate. BUILDING AND ENVIRONMENT. 171, pp. 106664. 2020. ISSN 0360-1323

DOI: 10.1016/j.buildenv.2020.106664**Type of production:** Scientific paper**Position of signature:** 1**Total no. authors:** 3**Impact source:** ISI**Impact index in year of publication:** 6.456**Position of publication:** 6**Impact source:** ISI**Impact index in year of publication:** 6.456**Position of publication:** 6**Impact source:** ISI**Impact index in year of publication:** 6.456**Position of publication:** 12**Format:** Journal**Corresponding author:** Yes**Category:** Science Edition - CONSTRUCTION & BUILDING TECHNOLOGY**Journal in the top 25%:** Yes**No. of journals in the cat.:** 66**Category:** Science Edition - ENGINEERING, CIVIL**Journal in the top 25%:** Yes**No. of journals in the cat.:** 136**Category:** Science Edition - ENGINEERING, ENVIRONMENTAL**Journal in the top 25%:** Yes**No. of journals in the cat.:** 54

Relevant results: Cities with hot tropical climate suffer generally from warm conditions during all year long, which could result on buildings 'overheating' or high energy consumption by cooling. This paper is the first of its kind in Central America, region that lacks studies regarding thermal performance of buildings. This study develops an overheating risk assessment to twelve dwellings of Tegucigalpa, Honduras, with a warm tropical climate, based on 41-day field study measurements of indoor air temperatures during its hottest season of the year. The aim of the study was to find if overheating risk differed depending on the building typology, single-family (SD) or apartment-type (AT), and based on the latter, to what extent roof exposure to solar gains and material properties, such as u-values and thermal mass, are parameters that influence the risk of overheating. The adopted methodology followed CIBSE TM52 Overheating Risk Methodology, and EN15251 and ASHRAE 55 adaptive thermal comfort approaches. Overheating risk was found to vary depending on the residential building typology. Dwellings with high roof exposure and high u-values in roof were found to be 'overheating' more. Following CIBSE TM52 methodology, some AT and SD dwellings experienced hours of exceedance above 3% of occupied hours, reaching up to 12.5% (61 h) and 20.3% (133 h) of occupied hours, respectively. Passive strategies such as improving roof properties (e.g. low u-values), shading and night ventilation may be necessary to reduce the risk of overheating in Tegucigalpa and similar tropical contexts where air conditioning is less affordable.

- 6** Gamero-Salinas Juan; Monge Aurora; Sánchez-Ostiz Ana. A thermal comfort assessment in a rehabilitated residential building of the city center of Tegucigalpa, Honduras. REHABEND 2020 8th Euro-American Congress: Construction Pathology, Rehabilitation Technology and Heritage Management. pp. 1849 - 1856. Granada(Spain): REHABEND 2020, 2020. Available on-line at: <https://www.rehabend.unican.es/wp-content/uploads/2021/02/Libro_RESUMENES.pdf>. ISBN 978-84-09-17873-5
- Type of production:** Book chapter
Position of signature: 1
Total no. authors: 3
- Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 7** Gamero-Salinas Juan; Kishnani N.; Monge Aurora; Gandhi B.; Bilgi M.; Sánchez-Ostiz Ana. The influence of building form on energy use, thermal comfort and social interaction: A post-occupancy comparison of two high-rise residential buildings in Singapore. Planning Post Carbon Cities: Proceedings of the 35th PLEA Conference on Passive and Low Energy Architecture. 1, pp. 61 - 66. A Coruña(Spain): University of A Coruña & Asoc. PLEA 2020 Planning Post Carbon Cities, 2020. Available on-line at: <<https://doi.org/10.17979/spudc.9788497497947>>. ISBN 978-84-9749-794-7
- DOI:** 10.17979/spudc.9788497497947
Legal deposit: C. 1551-2020
Type of production: Book chapter
Position of signature: 1
Total no. authors: 6
- Format:** Book
Degree of contribution: Author or co-author of chapter in book
- Relevant results:** Two recently completed high-rise residential developments, located side-by-side in a neighbourhood in Singapore, are compared in a post-occupancy study. Both have near identical demographics, are exposed to the same microclimate, and constructed with a similar palette of materials. The primary difference is form. One has a high degree of porosity with inner voids that act as conduits for natural air flow and offer a sheltered space for social engagement. The other is more compact, less porous and has social spaces attached to the building's exterior. The study included surveys of residents, behavioural observations and environmental measurements. On three counts – self-reported energy use, thermal comfort and social interaction – the former appears to be more successful than the latter. Findings suggest that building form affects multiple outcomes at once. A form strategy that lowers energy use, for instance, can also improve social engagement. The implication of this socioenvironmental approach to form-making is discussed in the context of high-density tropical typologies.

Works submitted to national or international conferences

- 1** **Title of the work:** The influence of building form on energy use, thermal comfort and social interaction: A post-occupancy comparison of two high-rise residential buildings in Singapore
- Name of the conference:** Planning Post Carbon Cities: 35th PLEA Conference on Passive and Low Energy Architecture, A Coruña, 1st-3rd September 2020
- Type of event:** Conference
Geographical area: Non EU International
- Type of participation:** Participatory - oral communication
- City of event:** A Coruña, Spain
- Date of event:** 01/09/2020
- End date:** 03/09/2020
- Publication in conference proceedings:** Yes
- Juan Carlos Gamero Salinas; Kishnani N.; Aurora Monge Barrio; Gandhi B.; Bilgi M.; Ana Sánchez-Ostiz Gutiérrez. En: Planning Post Carbon Cities: Proceedings of the 35th PLEA Conference on Passive and Low Energy Architecture. 1, pp. 61 - 66. University of A Coruña & Asoc. PLEA 2020 Planning Post Carbon Cities, 2020. Available on-line at: <doi.org/10.17979/spudc.9788497497947>. ISBN 978-84-9749-794-7



2 **Title of the work:** A thermal comfort assessment in a rehabilitated residential building of the city center of Tegucigalpa, Honduras

Name of the conference: REHABEND 2020 8th Euro-American Congress: Construction Pathology, Rehabilitation Technology and Heritage Management

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Granada, Spain

Date of event: 24/03/2020

End date: 27/03/2020

Publication in conference proceedings: Yes

Juan Carlos Gamero Salinas; Aurora Monge Barrio; Ana Sánchez-Ostiz Gutiérrez. En: REHABEND 2020 8th Euro-American Congress: Construction Pathology, Rehabilitation Technology

and Heritage Management. pp. 1849 - 1856. REHABEND 2020, 2020. Available on-line at:

<www.rehabend.unican.es/wp-content/uploads/2021/02/Libro_RESUMENES.pdf>. ISBN 978-84-09-17873-5

Other dissemination activities

1 **Title of the work:** La visión de Juan Carlos Gamero de la Inteligencia Artificial en la arquitectura

Name of the event: COPE Navarra

Type of event: Media interviews

Geographical area: National

City of event: Pamplona, Spain

Date of event: 21/04/2023

Juan Carlos Gamero Salinas. Available on-line at: <www.cope.es/emisoras/navarra/navarra-provincia/pamplona/audios/vision-juan-carlos-gamero-inteligencia-artificial-arquitectura-20230421_2238724>.

2 **Title of the work:** La edificación sostenible del futuro deberá tener como visión la creación de impactos positivos hacia las personas, las ciudades y el planeta

Name of the event: Universidad de Navarra

Type of event: Media interviews

Geographical area: National

City of event: Pamplona, Spain

Date of event: 10/12/2021

Juan Carlos Gamero Salinas. Available on-line at: <www.unav.edu/noticias/-/contents/10/12/2021/la-edificacion-sostenible-del-futuro-debera-tener-como-vision-la-creacion-de-impactos-positivos-hacia-las-personas-las-ciudades-y-el-planeta/content/lovPblW1fC70/35946584>.

3 **Title of the work:** IN-FLUX Season 1

Name of the event: France 3 Noa, Kanaldude, Octele

Type of event: Media interviews

Geographical area: European Union

City of event: France

Date of event: 09/02/2021

Juan Carlos Gamero Salinas. Available on-line at: <www.vimeo.com/508367252>.



Other achievements

Stays in public or private R&D centres

Entity: School of Design & Environment - National University of Singapore (NUS) **Type of entity:** University
City of entity: Singapur, Singapore
Start-End date: 18/05/2019 - 19/08/2019 **Duration:** 3 months - 2 days
Funding entity: UNAV, Obra Social la Caixa, Fundación Caja Navarra
City funding entity: Spain
Goals of the stay: Doctorate

Obtained grants and scholarships

- 1 Name of the grant:** Ayudas para estudios doctorado de la Asociación de Amigos de la Universidad de Navarra
City awarding entity: Pamplona, Spain
Aims: Pre-doctoral
Awarding entity: Asociación de Amigos de la Universidad de Navarra **Type of entity:** University
Conferral date: 30/06/2017 **Duration:** 4 years - 1 month - 13 days
End date: 13/10/2021
- 2 Name of the grant:** Ayuda de movilidad para la obtención de mención "Doctor Internacional"
City awarding entity: Pamplona, Spain
Aims: Pre-doctoral
Awarding entity: Universidad de Navarra, Obra Social 'la Caixa' y Fundación Caja Navarra **Type of entity:** University
Amount of the grant: 2.500 €
Conferral date: 17/12/2018 **Duration:** 3 months - 2 days
End date: 19/08/2019
- 3 Name of the grant:** Becas Universidad de Navarra - Banco Santander
City awarding entity: Pamplona, Spain
Aims: Becario
Awarding entity: Banco Santander **Type of entity:** Body, others
Amount of the grant: 4.000 €
Conferral date: 23/06/2016 **Duration:** 1 year
End date: 31/08/2017
- 4 Name of the grant:** Beca para estudios de máster 'Hondufuturo'
City awarding entity: Tegucigalpa, Honduras
Aims: Becario
Awarding entity: Fundación Hondufuturo **Type of entity:** Foundation
Amount of the grant: 25.000 €
Conferral date: 01/06/2016 **Duration:** 1 year
End date: 31/08/2017