







# THIRD WORLD SYMPOSIUM ON SUSTAINABILITY SCIENCE AND RESEARCH

8<sup>th</sup> April 2021- ON-LINE

## PROGRAMME





#### ORGANISING TEAM

#### Chairpersons

- Prof. Walter Leal (PhD, DSc, DPhil, DL, DLitt) Manchester Metropolitan University (UK) and Hamburg University of Applied Sciences (Germany)
- Prof. Salvador Ruiz de Maya (PhD) University of Murcia (Spain)

#### Vice-chairperson

Prof. Longinos Marin (PhD) University of Murcia (Spain)

#### **Technical Committee**

Prof. Lucas V Ávila, University of Santa Maria, Brazil Prof. Luciana Brandli, University of Passo Fundo, Brazil Prof. Roberto Bichueti, University of Santa Maria, Brazil Prof. Manuel Soto Castiñeira, University of A Coruña, Spain Luana Damke, University of Santa Maria, Brazil Dr. Maria del Carmen Alarcón del Amo, University of Murcia, Spain Dr. Domingo Javier Calvo Dopico, University of A Coruña, Spain Rodrigo Favarin, University of Santa Maria, Brazil Barbara Fritzen Gomes, University of Passo Fundo, Brazil Kamila Frizzo, University of Santa Maria, Brazil Dr. Andrea Gatto, University of Greenwich, UK Prof.Clandia Maffini Gomes, Santa Maria Federal University, Brazil Prof. Jordana Margues Kneipp, University of Santa Maria, Brazil Samara Neiva, Federal University of Santa Catarina, Brazil Dr. Amanda Lange Salvia, University of Passo Fundo, Brazil Dr. Mihaela Sima, Institute of Geography, Romania

#### CONTACT PERSONS FOR TECHNICAL ISSUES

Barbara Fritzen Gomes, University of Passo Fundo, Brazil Dr. Amanda Lange Salvia, University of Passo Fundo, Brazil E-mail: FTZ-NKProjects@haw-hamburg.de



## PROGRAMME – Please note all times are Central European Time (CET)

**08:30-08.40- Opening-** Walter Leal, HAW Hamburg, Germany & Salvador Ruiz de Maya, University of Murcia, Spain

**08:40-09:00 - Plenary presentation 1-** Net Zero: Working with the next generation – Reflections on the strategy for and delivery of the 2021 Newcastle upon Tyne Student Climate Change Summit & Net Zero Student Innovation Challenge Katie Ridley Northumbria University, UK

**09:00-09:20- Plenary presentation 2-** In times of uncertainty: Advancing university sustainability model in Hong Kong Tamara Savelyeva The Hong Kong Institute of Education for Sustainable Development, Hong Kong

09:20-09:30- Questions

09:30-09:45- Break

09:45:10:45- Session 1

Breakout Room 1A

Moderator: Dr. Amanda Lange Salvia

- Please note all times are Central European Time (CET)

**9:45 - 10:00:** Academic motivation and previous academic achievement in higher education Carolina Rodríguez-Llorente, Tania Vieites, Isabel Piñeiro, Rocío González-Suárez Universidade da Coruña, Spain

**10:00 - 10:15:** Towards nature-immersive pedagogy of place in outdoor education Johannes M. Luetz, Christian Heritage College (CHC), Brisbane, Australia; University of New South Wales (UNSW), Sydney, Australia; University of the Sunshine Coast (USC), Maroochydore, Australia

**10:15 - 10:30:** Geospatial ecological footprint calculators through participatory processes Francisco-Alberto Varela-García, Francisco-Alberto Varela-García, Manuel Soto, Domingo Javier Calvo Dopico, Verónica Torrijos, Jorge López Fernández Universidade da Coruña, Spain

10:30- 10:45: Discussion



## Breakout Room 2A

#### Moderator: Dr. Jelena Barbir

## - <u>Please note all times are Central European Time (CET)</u>

**9:45 - 10:00:** Teaching sustainability of higher education in Indonesia in response to COVID-19: problems and strategy, Indonesia Warjio Lemane Universitas Sumatera utara (USU), Medan, Indonesia

10:00 - 10:15: Challenges in Effective Education of Sustainability: A Framework for Aligning Curriculum and Content to the Contextual Need
Shiv K. Tripathi
IIHMR University, Jaipur, India

10:15 - 10:30: The key role of alliances and multi-stakeholder collaboration for climate action implementation within higher education institutions: the Chilean experience Claudia Mac-lean, Maryon Urbina, Óscar Mercado, Pablo Yañez, Cecilia Campos Marín, Cristopher Toledo, Juan Carlos Aravena, Rodolfo Sapiains University of Magallanes, Chile

#### 10:30- 10:45: Discussion

Breakout Room 3A

Moderator: Franziska Wolf

#### - <u>Please note all times are Central European Time (CET)</u>

**9:45 - 10:00:** Connecting international sustainability research to medical education studies in Oman Hashim Al Musawi Sadiq Hussain, Omar Al Rawas Sultan Qaboos University Hospital, Oman

**10:00 - 10:15:** More "fair" trade for global sustainable development Katarzyna Cichos, Cardinal Stefan Wyszyński University in Warsaw, Poland

**10:15 - 10:30:** The integration of Sustainability for the development of two Geoparks - UN in Southern Brazil

Lucas Veiga Avila and Rudiney Soares Pereira, Federal University of Santa Maria, Brazil



#### 10:30 - 10:45: Discussion

#### Breakout Room 4A

Moderator: Dr. Mihaela Sima

#### - <u>Please note all times are Central European Time (CET)</u>

**9:45 - 10:00:** Interconnected principles for cultivating higher education student's learning at the interface of science and society Valentina Tassone Wageningen University, the Netherlands

**10:00 - 10:15:** Healthy ageing studies and sustainability science research Hashim Al-Musawi, Sadiq Hussain University Hospital Bristol and Weston NHS Trust, Bristol, UK

10:15 - 10:30: How does educational research face a future marked by climate emergency? Analysis of recent scientific productionMercedes VarelaUniversity of A Coruña, Spain

10:30 - 10:45: People have the power. A comparative analysis of electricity production across the Nordic-Baltic region – renewables transition, power grids and communities empowerment Andrea Gatto, Elkhan Richard Sadik-Zada
 Natural Resources Institute - University of Greenwich, UK

10:45-11:00- Break

11:00-12.00- Session 2

Breakout Room 1B

Moderator: Dr. Andrea Gatto

#### - <u>Please note all times are Central European Time (CET)</u>

**11:00 - 11:15:** Climate Change And Energy In The Azores Context Fernanda Carvalho, Maria Meirelles, Diamantino Henriques, Patrícia Navarro Instituto Português do Mar e da Atmosfera I.P., Portugal

**11:15 - 11.30:** Moving from conventional plastics to sustainable solutions – assessing human willingness to change current practices

Jelena Barbir, Maren Theresa Christin Fendt, Amanda Salvia Lange, Barbara Fritzen, Caroline Paul Kanjookaran, Walter Leal Filho

Hamburg University of Applied Sciences, Germany



11.30 - 11:45: Using a PBL approach to develop sustainability competencies in higher education students
Bento Cavadas, Elisabete Linhares
Polytechnic Institute of Santarém, Portugal

**11:45 - 12:00:** Transforming Universities for a Changing Climate: the project CLIMATE-U Luciana L Brandli and Amanda Salvia, University of Passo Fundo, Brazil

Breakout Room 2B

Moderator: Prof. Salvador Ruiz de Maya

#### - <u>Please note all times are Central European Time (CET)</u>

11:00 - 11:15: Sustainable practices toward thrivability: First reflections under an accountability perspective
Sara Moggi
Università degli Studi di Verona, Italy

**11:15 - 11.30:** Ambient air quality within urban communities of South Africa Newton R. Matandirotya, Zamahlase Sibisi, Dirk P. Cilliers and Roloef P. Burger North-West University, South Africa

**11:30 - 11:45:** Challenges and Opportunities for Seaports Towards Future Sustainability: The UK's North East Smart Ports Testbed Case Study Matteo Conti, Marco Zilvetti, Richard Kotter Northumbria University, UK

11:45 - 12:00: Reviewing the role of community involvement in the elaboration of a state water resources plan: The case of Urussanga River Basin Celso Lopes de Albuquerque Junior, Samara da Silva Neiva University of Southern of Santa Catarina, Brazil

Breakout Room 3B

Moderator: Prof. Longinos Marin

#### - <u>Please note all times are Central European Time (CET)</u>

**11:00 - 11:15:** The nonlinear dynamics of culture: prospects for sustainable development Martysiuk Pavel The Minsk branch of Plekhanov Russian University of Economics, Belarus

**11:15 - 11.30:** Challenging transformation for universities?



Silke Rühmland, Hartwig Haase, Julius Brinken Otto-von-Guericke-University Magdeburg, Germany

**11.30 - 11:45:** Methodology for selecting agile methods in transdisciplinary sustainability projects Andrea Heilmann, Rebecca Spaunhorst, Felix Schulz Harz University of Applied Sciences, Germany

**11:45 - 12:00:** Mobility carbon footprint of the University of A Coruña, Spain José-Benito Pérez-López, Alfonso Orro, Margarita Novales, Francisco-Alberto Varela-García, Verónica Torrijos, Manuel Soto Universidade da Coruña, Spain

## Breakout Room 4B

Moderator: Barbara Fritzen

## - <u>Please note all times are Central European Time (CET)</u>

**11:00 - 11:15:** Towards forests' sustainability and multifunctionality: are Portuguese forests on the right track?

Castro, P, Follmann, F, Viana, H, Gaião, D, Santos-Silva, C, Castro, S, Canhoto, C, Loureiro, J, Alves, F, Alves da Silva, A., Gonçalves, A.L, Freitas, H, Sousa, P, Alves, J University of Coimbra, Portugal

11:15 - 11.30: Education for sustainable development - Is there a way to catch up with the front runners?Irja Malmio, Hans LiwångDefence University of Stockholm, Sweden

**11.30 - 11:45:** Open Eco-Innovation Research Landscape in the Industrial Sector: A Systematic Review and Future Outlook Maruf Sanni, Elena Verdolini

European Institute on Economics and the Environment, Italy

11:45 - 12:00: Challenges and opportunities for scaling up global upcycling towards sustainable production and consumption: a literature reviewKyungeun Sung, Amal AbuzeinabDe Montfort University, UK

## 12:00-13:00- Lunch break

13:00-13:20- Plenary presentation 3- Climate action from interdisciplinary university communities. Challenges of sustainability training in Universities of Mexico Lorena del Carmen, Álvarez-Castañón, University of Guanajuato, Mexico

**13:20-13:40- Plenary presentation 4-** The Digital Introduction of the SDGs into Higher Education Jennifer Pohlmann, HAW Hamburg, Germany



Breakout Room 1C

Moderator: Prof. Manuel Soto Castiñeira

## - <u>Please note all times are Central European Time (CET)</u>

**13:40 - 13:55:** Governance to sustainability in higher education institutions: a systematic review aiming the implementation of green campus

Paulo Guilherme Fuchs, Elaisa Ana Stocco Buhr, Ana Regina de Aguiar Dutra, José Baltazar Salgueirinho Osório de Andrade Guerra

Instituto Federal de Santa Catarina, Universidade do Sul de Santa Catarina, Brazil

**13:55** - **14:10:** Relating the metrics and indicators of the Living Building Challenge and urban ecosystem services for regenerative design, Clara Barbosa Monteiro, Clarissa Ferreira Albrecht Federal University of Viçosa, Brazil

**14:10 - 14:25:** Comparative study of the economic-environmental performance of activated alkali cement and Portland cement using LCA and LCC Andreza Frare, Renata Degraf Miara, Marcell Mariano Corrêa Maceno Federal University of Parana, Brazil

**14:25 - 14:40:** The Initiative Democratia-Aqua-Technica - using a cross-media approach for developing sustainable projects Ulrike Gayh, Maja Turk-Seculic, Benjamin Zierock SRH University Heidelberg, Germany

Breakout Room 2C

Moderator: Samara Neiva

## - <u>Please note all times are Central European Time (CET)</u>

13:40 - 13:55: Institutional Pressures On Sustainable Development Education In Business Management Undergraduate Courses
Mateus Santos De Freitas-Martins
Universidade Federal do Paraná, Brazil

**13:55 - 14:10:** The participation of Brazilian universities in sustainability rankings Noah Emanuel Brito Teles, Bárbara Galleli Dias, Mateus Santos de Freitas-Martins Brazil



**14:10 - 14:25:** The sustainability at the University of Florence: the Green Office and the Science Shop experience

Giovanna Pacini, Sara Falisini, Ugo Bardi, Franco Bagnoli University of Florence

## Breakout Room 3C

Moderator: Dr. Andrea Gatto

## - <u>Please note all times are Central European Time (CET)</u>

13:40 - 13:55: Reflective Thinking in Business Courses: Validation of an Instrument to Evaluate Reflection

Rodrigo Libanez Melan, Thais Accioly Baccaro, Saulo Fabiano Amâncio-Vieira State University of Londrina, Parana, Brazil

**13:55 - 14:10:** Future research trends on the Water-Energy-Food nexus approach: A review of definition, methods, and metrics Fernando Caixeta, Pedro Saraiva, Fausto Freire, Federal Institute of Education, Science and Technology of Triângulo Mineiro, Brazil

University of Coimbra, Portugal

**14:10 - 14:25:** The contribution of the circular economy to the fulfillment of the 2030 Agenda in Higher Education Institutions Norma Faitani, S. Luciana Galvan, and Raquel O. Bielsa

Universidad Nacional de General Sarmiento, Argentina

14:25 - 14:40: Practical aspects of sustainability and its relationship with the valorization of coffee grounds generated in a Brazilian educational institution

Isael Colonna Ribeiro, Jacqueline Rogéria Bringhenti, Poliana Daré Zampirolli Pires, Adriana Marcia Nicolau Korres

Federal Institute of Education, Science and Technology of Espirito Santo, Brazil

#### 14:40-15:00- Break

#### 15:00-16:00- Session 4

Breakout Room 1D

Moderator: Prof. Luciana Brandli

#### - <u>Please note all times are Central European Time (CET)</u>

**15:00 - 15:15:** Some Best Practices of U.S. Universities Sustainability Offices Maria A. Petrova and Olivia Kleier Georgetown University, USA



**15:15 - 15:30:** Waste generation and management at the University of A Coruña Verónica Torrijos, Manuel Soto Universidade da Coruña, Spain

**15:30 - 15:45:** Neighborhood Sustainability Assessment (NSA) Tools: A systematic review on how to choose the best analysis tool Chimanski, R. T., Maceno, M. M. C, Chopra, S. S. Federal University of Parana, Brazil

**15:45 - 16:00:** Sustainability and transformational Learning: The education for classroom space as disruption Robert Vanwynsberghe University of British Columbia, Canada

#### Breakout Room 2D

Moderator: Barbara Fritzen

#### - <u>Please note all times are Central European Time (CET)</u>

**15:00 - 15:15:** Extensionist Actions For Environment: Multicampi Brazilian Public Hei Case Study Aline Guimarães Monteiro Trigo, Bauer de Oliveira Bernardes, Luane da Costa Pinto Lins Fragoso, Nelson Mendes Cordeiro, Wanderley Freitas Lemos, Wladmir Henriques Motta, José Aires Trigo, Úrsula Maruyama

Brazil

**15:15 - 15:30:** The commitment of Brazilian public universities to the sustainable development goals Carolina Grano, Vanderli Correia Prieto, José Carlos Curvelo Santana Federal University of ABC (UFABC), Brazil

**15:30 - 15:45:** Sustainability indicators related to organic waste for educational institutions: A systematic review

Yasmin Coelho de Freitas, Fernanda Aparecida Veronez, Adriana Marcia Nicolau Korres Federal Institute of Education, Science and Technology of Espirito Santo, Brazil

**15:45 - 16:00:** Organizational Learning Towards Sustainability In Higher Education Institutions: A Brazilian case study

Vanessa de Campos Junges, Simone Alves Pacheco de Campos, Rubia Goi Becker Universidade Federal de Santa Maria, Brazil

Breakout Room 3D

Moderator: Samara Neiva

- <u>Please note all times are Central European Time (CET)</u>



15:00 - 15:15: Environmental impact of the Intermunicipal Consortium of Multifunctional Management (CITEGEM) on the source of the Erval Novo streamRafael BurlaniUniversidade do Vale do Itajaí, Brazil

15:15 - 15:30: The gaps for future studies in life cycle analysis (LCA) of single-use plastic bags: A literature reviewMatheus Tavares Lacerda, Marcell Mariano Corrêa MacenoFederal University of Parana, Brazil

**15:30 - 15:45:** SDG 6 and Industry 4.0: Development of a performance prediction model by Artificial Neural Networks applied to water treatment plants, located in the state of Espírito Santo, Brazil, aiming at the sustainability in their operations

Dominique Nápoli Caliari, Dejanyne Paiva Zamprogno, Juscelino Alves Henriques, Mariângela Dutra de Oliveira

Federal Institute of Espírito Santo, Brazil

**15:45 - 16:00:** Comparative analysis of environmental impacts between two structural methods: a Brazilian case study

Renata Degraf Miara , Andreza Frare, Marcell Mariano Corrêa Maceno Federal University of Paraná - Curitiba - Brazil, Latin America

## 16:00-16:30- Final plenary and follow-up, Walter Leal, HAW Hamburg, Germany

#### 16:30- End of the Symposium