

# GALESS TiltShift Challenge 2024 Information Pack 3 "Life Sources – Natural Resources" Belo Horizonte/Varginha, 1 - 7 September 2024

The GALESS TiltShift Challenge (GTC) addresses an effort to contribute to awareness about complex questions in different research-domains. In 2024 the research domain in connected to "Life Sources". The GTC "Life Sources" is looking for sustainable and responsible answers from our young generation coming in from each part of the world in this particular domain. The TiltShift Challenge Life Sources consists of 3 conference editions in 2024 with locations in Miami – USA, Varginha - Brazil and Melbourne - Australia.

The GTC Brazil will be organized in a physical conference week, where international students can meet each other in a local program. As the title reveals, this time our student research area "Life Sources — Natural Resources" will have a focus on the local setting of this research domain in Brazil and gives students the possibility to exchange creative ideas, while bringing in their ideas from their home country perspective at the same time.

The TiltShift Challenge includes a standard period for research efforts and the production of a final report followed up by physical presentations. The conference will start September 1, 2024 and end on September 7, 2024. Report Presentation location: CEFET Varginha, Brazil. The research activities are meant to be set in a school environment, in a school team of 4 students and a guiding teacher. Reference contacts from your school, local community, and region may have served as "living libraries" as indicated in Information Pack 1 / 2.

GALESS TiltShift Challenge Brazil will be organized by **CEFET: Centro Federal de Educação Tecnológica de Minas Gerais - Brazil** and guided by Prof. Cristina Roscoe Vianna, the local representative of CEFET. She's also the contact for questions regarding the conference week. (<a href="mailto:crisroscoe@gmail.com">crisroscoe@gmail.com</a>)

### **CONCEPT PROGRAM - AGENDA**

# Arrival in Belo Horizonte – September 1st

### Monday (September 2nd, 2024)

Morning – jet lag recovers.

11:30 A.M - Lunch at CEFET

2:00 P.M- Short Presentation of CEFET-MG and Belo Horizonte

2:30 P.M – Tour of the Central Market – Importance of biodiversity on food production, economics and health. Icebreaking dynamics in the market.

### <u>Tuesday – Belo Horizonte – Sabará city – Varginha – September 3rd, 2024</u>

8:00 – 12:00 A.M – Cultural and technical visit in Sabará city – Minas Gerais History - Gold Cycle and its social and environmental impacts.

12:00 - Lunch

1:00 P.M – 5 P.M – Trip to Varginha – accommodation in the host families' homes.

# Wednesday – Varginha – September 4th, 2024

10:00 A.M – Alien Memorial - History of Varginha Alien and Life beyond the Earth

12:00 A.M – Lunch at CEFET (lunch package)

Afternoon of lecture, cultural and scientific presentations.

01:30 P.M – cultural presentations

2:00 P.M– Guest speaker: Strategy for biodiversity preserving and its economic and social value. Profa. Dra. Bruna Evelyn (Bicho do Mato Meio Ambiente)

3:00 P.M – 3:50 P.M – Oral presentation of students' research work (2 works, 20 minutes - 15 min. presentation, 5 min. Discussion).

3:50 P.M – 4:20 P.M – Coffee break (coffee tasting)

4:20 P.M – 5:30 P.M – Oral presentation of student research paper (1 paper, 20 minutes - 15 minutes. presentation, 5 min. Discussion).

Socialization time: Bowling at the mall

# Thursday – Varginha – September 5<sup>th</sup>, 2024

8:00 – 1:00 P.M – Morning – Coffee production chain – from the field to the industry – Sustainable Agriculture. SENAR MINAS e Carmocoffees

1:00 P.M - 2:00 P.M : lunch (lunch package)

2:00 P.M– 4:15 P.M: Oral presentation of students' research work (2 works, 20 minutes - 15 min. presentation, 5 min. discussion).

4:15 P.M - 4:30 P.M - Coffee Break

4:30 P.M – 5:45 P.M: - Oral presentation of students' research work (2 works, 20 minutes - 15 minutes. presentation, 5 min. Discussion).

"Quinta da Boa Música" social moment at the old railway station

# Friday - Belo Horizonte - September 6th, 2024

7:00 A.M - Trip to Belo Horizonte with stop in Inhotim - Lunch at Inhotim Museum and guided tour

Saturday (free day) - Belo Horizonte (September 7th, 2024)

Suggestions: Guided tour at Mangabeiras and Serra do Curral Parks (morning), Lunch at a restaurant Baiana do Acarajé, Cultural Circuit of Praça da Liberdade.

### \*subject to change and availability

# **PROJECT PRESENTATION**

Project presentation will be divided into 2 parts: presentation (15 minutes) and Q & A (5 minutes)

Participating teams must prepare their presentation. Digital media device available on location (computer, Powerpoint etc)

### **Jury Team:**

### **Local Jury Team:**



**Bruna Evelyn Paschoal Silva** is PhD and Master in Plant Physiology, specialist in: Education and Gender Diversity. She is an Environmental Consultant specializing in the Infrastructure, Energy, ESG, Greenhouse Gas Inventory, Mining and Environmental Licensing sectors.

She has extensive experience working with private and public organizations to develop sustainable practices and reduce their environmental impact. Bruna also has a strong background in research and has published papers in peer-reviewed journals and congresses on topics related to plant physiology and environmental sustainability.

Overall, Bruna is a passionate advocate for sustainability and environmental protection, and she is dedicated to finding innovative solutions to help businesses reduce their carbon footprint and operate in a more sustainable manner.

**Bruna Evelyn Paschoal Silva** works for Bicho do Mato Environmental Consulting Company (https://bichodomato.net.br/).



José Eustáquio Bueno has more than 40 years of expertise as an English teacher with a vast comprehension of world challenges and an important background traveling around the world. His teaching skills focus on multicultural and interdisciplinary approaches, encompassing the most significant current themes such as policies, biodiversity, engineering, and many others. He graduated in business and has a postgraduation in Strategic Marketing and Business Management.

Additionally, José Eustáquio Bueno has a strong passion for environmental sustainability and social responsibility. He has actively participated in several projects and initiatives aimed at promoting these values within his community and beyond. His dedication to lifelong learning and continuous improvement has made him a respected figure in the educational field, known for his innovative teaching methods and ability to inspire and challenge his students.

José Eustáquio Bueno is committed to providing his students with a comprehensive and enriching learning experience that goes beyond traditional academic boundaries. By incorporating real-world examples and practical exercises into his lessons, he helps students develop critical thinking skills and a deeper understanding of the interconnectedness of global issues.

Overall, José Eustáquio Bueno stands out as a highly experienced and dedicated English teacher who is passionate about empowering his students to become informed and responsible global citizens. His unique combination of academic knowledge, practical experience, and personal values make him a valuable asset to any educational institution.

José Eustáquio Bueno works for Friends school (https://friendsidiomas.com.br/)

### **GALESS Jury Team:**

The GALESS Jury Board will be represented by Prof. Wim Uijttewaal from University of Delft The Netherlands.



Wim's curiosity is triggered by the great consequences of turbulence as we find them in our daily life. Whether it is the ever changing weather patterns, the mixing of olive oil with vinegar in making a salad dressing, or the incredibility shaped plan-forms of natural rivers. All large-scale mixing and transport processes are governed by the complex turbulent motions, that work sometimes in our advantage but can often be a nuisance as in the case of e.g. cycling against the wind.

After an MSc-study in Applied Physics and a PhD-study in Medical Physics, Wim Uijttewaal became involved in the research field of turbulent mixing and transport processes. In 1995 he joined the faculty of Civil Engineering and Geosciences at the Delft University of Technology, as an assistant professor performing experimental research in the Environmental Fluid Mechanics Laboratory. With much experience in experimental research and knowledge of turbulent processes he holds the chair of Experimental Hydraulics at TUDelft since 2009 and is responsible for the experimental research at the Environmental Fluid Mechanics Laboratory. He initiated the conference series on Shallow Flows, and (co)organised many other conferences in the field of Fluid Mechanics and Hydraulic Engineering. Over the past years his research scope has widened ranging from sediment transport and river morphodynamics to stability of breakwaters and the interaction between flow and vegetation.

### **PAYMENT INFORMATION**

# Payment Info will be sent to you separately

### **DOCUMENTS TO ENTER BRAZIL**

### Please prepare your travel-documents in time!

1. Visa (if needed)

Please let the local organization know as soon as possible about Invitation Letters if necessary

- Passport
- 2. Vaccine Certificate, please be aware of local requirements/vaccines for Dengue protection. Your own local health-autorities can give you advise in this particular issue in their travel-advices for the region you visit.

Some more information regarding further travel-requirements will be sent to you one week before the conference in the last mailing before the conference (clothing advice, electricity plug-ins etc.)

### **MEDIA**

- If schools want to upload an introduction-movie of their team on the gales-website, let us know (info@gales.org)
- Media-form included in the last mailing.

### **Further information**

Research Report deadline: August 15, 2024 (to: info@galess.org)

Reports will only be published on GALESS website starting in the week of the conference