

Forum 2 Green Science Popularization



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Chair:	Prof. Desire Atchike (Taizhou University)	
20:00 - 20:04	Introduction to the forum	
Time	Speaker	Affiliation
20:05 - 20:15	José Gabriel Pérez Canencio & Mary Luz Ojeda Solarte	Unidad Central del Valle del Cauca
20:16 - 20:27	Dorofeeva Anastasiia	Language School Welcome
20:28 - 20:39	Sotindjo Coffi Patrick	National University of Sciences, Technologies, Engineering and Mathematics (UNSTIM) - Benin
20:40 - 20:50	Alexandra Trujillo Zapata & Karol Andrea Leal Vásquez & Luisa Fernanda Cabezas Burbano	Unidad Central del Valle del Cauca
20:51 - 20:56	Shabahat Hasnain Qamar	National University of Sciences and Technology (NUST)
20:57 - 21:08	Zhang Jing Jing	Jinzhong College of Information
21:09 - 21:13	Cristina Morataya & Manuel Diaz	Executive committee CICITLAC

Green Science Popularization is vital for fostering widespread awareness, understanding, and engagement with environmentally sustainable practices. As societies grapple with pressing ecological challenges, such as climate change and biodiversity loss, the dissemination of green science knowledge plays a pivotal role in shaping informed decision-making at individual, community, and policy levels. By making complex environmental concepts accessible to the public, green science popularization inspires a sense of shared responsibility for our planet. It empowers individuals to adopt eco-friendly behaviors, influences consumer choices, and encourages the integration of sustainable technologies. Moreover, a well-informed public can drive demand for green policies, influencing governments and industries to prioritize environmentally conscious practices. Ultimately, the popularization of green science is not just an educational endeavor; it is a catalyst for positive change, contributing to the creation of a more sustainable and resilient future. The Green Science Popularization forum is a vital section of the World Green Science Day celebration.

Topic: Citizen Science as a tool for discovering pro-environmental behaviors

Forum 2 Green Science Popularization



Prof. Jose G. Perez C.

ORCID:

Prof. Mary L. Ojeda S.

ORCID:

Unidad Central del Valle del Cauca

Speaker 1

Abstract

Pro-environmental behaviors address the study of actions consciously oriented to the optimal maintenance of natural resources and the care of ecosystems in response to social and individual needs to maintain the balance of the planet and survival on earth. When pro-environmental behaviors are studied for research purposes, the behavior of communities or social groups in specific topics of interest to the researcher will be known. Applying some Citizen Science techniques can be very useful to obtain knowledge of the pro-environmental behavior of the population on issues related to the environment and biodiversity. In this study we include the integration of Citizen Science with technology for the construction of instruments that facilitate the process of obtaining information in an agile, entertaining and efficient way. Likewise, we explain a way to verify a set of questions and research objectives that through observation and experimentation guided by a methodological process for the systematization of the knowledge acquired can lead to the formulation of hypotheses.

Topic: Green Science Popularization in Benin as part of the SDG-4

Forum 2 Green Science Popularization

Dr. Sotindjo Coffi Patrick

National University of Sciences, Technologies, Engineering and Mathematics (UNSTIM)

Speaker 3

Abstract

This communication aims to show the relevance of the popularization of green science within the framework of SDG-4. To do this, we will start with a definition of green science and SDG-4. Then, we will present the importance of green sciences and the extent of the field of action of this science in the field of technology. We will end this communication by showing the impact of green science on quality education (SDG-4).

Topic: Inter-structuring training on food security with a focus in the sustainable production as a contribution to the foundation of Green Science in the Agricultural Engineering program



Forum 2 Green Science Popularization

Prof. Alexandra Trujillo Zapata
Prof. Karol Andrea Leal Vásquez
Prof. Luisa Fernanda Cabezas Burbano
Unidad central del Valle del Cauca

Speaker 4



Abstract

The Agricultural Engineering program at the Unidad Central del Valle del Cauca implements integrative projects as an integral part of its institutional inter-structuring pedagogical model. The goal purpose of these projects is for students to apply the knowledge acquired in their formative process to address current challenges in the agricultural sector, with the aim of managing sustainable production that corresponds to environmental changes and facilitates the creation of scenarios that guarantee food security.

Through these projects, it is intended that students not only understand the theoretical concepts but also apply them effectively in the real context, proposing innovative solutions to improve the problems associated with production processes in the agricultural field. In this process, a dynamic is followed that involves the formulation, execution, and socialization of a project that integrates the content of the semester's subjects.

This initiative encourages collaboration between students and professors by allowing students to evaluate their knowledge and skills. Integrative projects focus specifically on the design of alternatives for agricultural production processes with an emphasis on sustainability and the minimization of environmental impacts in a global and local context their considering social, technical, environmental, and economic complexities.

This work compiles significant contributions that have emerged during the execution of these integrative projects, which, through an interdisciplinary approach, comprehensively address challenges in the agricultural field. In this way, it contributes to the advancement and sustainable development of the community and the sector as a whole.

Topic: Unraveling the Quantum Computing Climate Conundrum



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Shabahat Hasnain Qamar

National University of Sciences and Technology (NUST)

Speaker 5

Abstract

Quantum computing has emerged as a disruptive technology that holds immense potential to revolutionize various industries, including climate science. Quantum computers are capable of resolving complicated issues that are beyond the capabilities of classical computers by utilizing the concepts of quantum mechanics, such as superposition and entanglement.

The fight against climate change, one of the most urgent issues confronting humanity, is significantly impacted by this. Rising temperatures, sea level rise, and extreme weather events are just a few of the causes of the climate crisis, and resolving these problems calls for creative solutions.

We can open the door to a more sustainable future by solving the quantum computing climate conundrum. In order to improve renewable energy systems, simulate complex climate models more precisely, and create new materials for carbon capture and storage, quantum computing can play a crucial role in this.

The presentation will provide a thorough analysis of how quantum computing might be used to fight the climate crisis and identifies the obstacles that must be removed in order to fully utilize its potential.

Topic: Design and Implementation of Courses on Ecological Protection Based on the Concept of General Education



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Zhang Jingjing
Jinzhong College of Information
Speaker 6

Abstract

The presentation highlighted the concept and practice of comprehensive general education courses that focuses on ecological protection. The course design prioritizes enhancing students' understanding of ecological concepts, promoting environmental awareness, and fostering a sense of responsibility towards ecological preservation.

The curriculum includes a diverse range of topics such as climate change, biodiversity, sustainable development, and conservation strategies. The implementation of the courses integrates theoretical knowledge with practical learning experiences. Students are engaged through interactive lectures, group activities, field trips, and case studies.

Course encourages critical thinking, problem-solving, and collaboration among students. Moreover, the presentation emphasized the importance of interdisciplinary approaches, incorporating elements from natural and social sciences, humanities, and technology. Such a holistic approach ensures that students gain a well-rounded understanding of ecological protection issues and are prepared to address them from various angles.

Overall, the design and implementation of this kind of courses on ecological protection based on the concept of general education provide students with the necessary knowledge, skills, and attitudes to protect and preserve the environment in a sustainable manner.