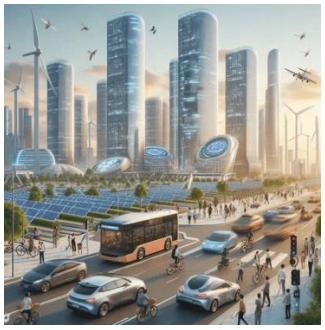
Forum 5 Hydrogen Energy, an alternative for the future



Forum 5 Hydrogen Energy, an alternative for the future		
Chair:	Yang Shanshan (Jinzhong College of Information)	
20:00 - 20:04	Introduction to the forum	
Time	**Speaker**	**Affiliation**
20:05 - 20:16	Prof. Kong Yanqiang	School of Energy Power and Mechanical Engineering, North China Electric Power University, and Deputy Director of the Hydrogen Energy Teaching and Research Office
20:17 - 20:27	Zhang Ruixue	Regional Manager of Beijing China Electronics Fengye Technology Development Co., Ltd.
20:28 - 20:39	Prof. Chen Dongfang	University of Science and Technology Beijing
20:40 - 21:00	Yang Kai	Beijing Hydron New Energy Technology Co., Ltd. Founder/General Manager
21:01 - 21:12	Yang Wei	Sales Manager of Carbon Energy Technology (Beijing) Co., Ltd.

Hydrogen energy stands as a pivotal alternative for the future, offering a transformative solution to the pressing challenges of climate change and sustainable energy. As a clean and versatile energy carrier, hydrogen holds the potential to revolutionize various sectors of our economy, including transportation, industry, and electricity generation. Its production, particularly through green methods like electrolysis powered by renewable energy, promises zero-emission energy. Hydrogen can serve as a storage medium for intermittent renewable sources, addressing the challenge of energy storage and grid stability. By fostering hydrogen adoption, we can significantly reduce carbon emissions, enhance energy security, and drive the transition to a more sustainable and resilient energy landscape, marking a critical step toward a greener and more environmentally conscious future.

Outlook for the celebration of the WGSD in 2023

The popularization of science ought to touch on issues such as the Sustainable Development Goals (SDGs), biodiversity conservation, and green development. These are areas that need immediate attention to realize the 2030 Agenda for Sustainable Development. It is feasible to design programs that can be sustainable over time and even included in university curriculums to engage youngsters to popularize science and scientific education. Efforts to improve the popularization of science can be directed in at least three directions: the general public, children and young adults, politicians, and entrepreneurs.

Also, initiatives to make scientific and technological knowledge accessible and familiar to the general public should be complemented by educational reforms that support the role of science teaching in primary and secondary schools as well as a significant expansion of hands-on experimental activities. After all, science is an experimental endeavor. We have entered a period of technological prosperity.

The advancement of science has never been so rapid, the scope of science has never been so broad, and the responsibility of fostering and promoting scientific culture has never been so vital and weighty as it is today. In our quest to popularize science, we must promote scientific culture as a way of life, viewing it as the most important component of advanced culture and the cornerstone of science and technology power. This is the only way to advance our scientific cause, and it is also our historical responsibility.

How did the Science Culture Construction start?

During the "1st Annual Meeting on Science Literacy 2021: A Prerequisite for Stimulating Climate Change Engagement" organized in November 2021. Several institutions and organizations from different fields around the world including research, academia, education, innovation, and technology, agreed on the First Declaration on Science and Climate Literacy across the Latin American and Caribbean regions. In 2022, we prepared a second version of the declaration, and in 2023, we launched its third version inviting the community of researchers, practitioners, scientists, activists, and the general public to work together to promote the harmonious development of science and technology, to contribute to the improvement of public science literacy, climate literacy, biodiversity conservation, green science, and green development to create a better future for the whole of human society.

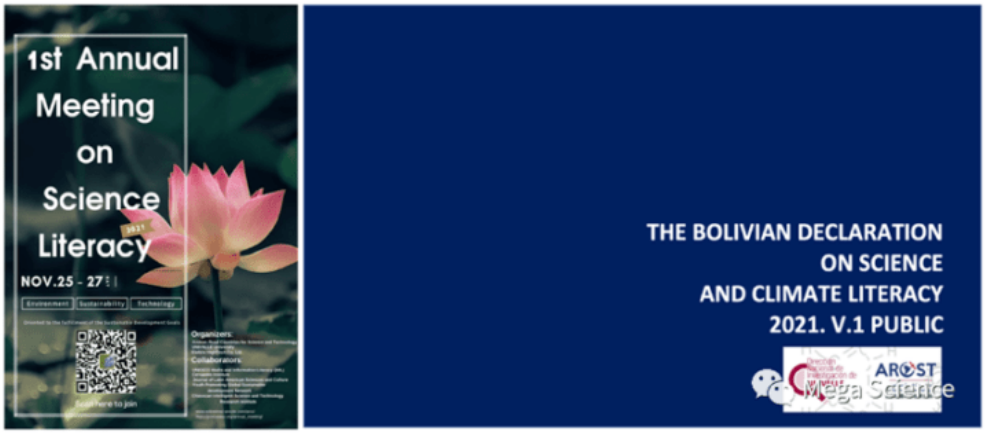


Figure 3. The first version (2021) of the Declaration on Science and Climate Literacy. Source: Andean Road Countries for Science and Technology (ARCST)

In 2023 the updated version of the Declaration on Science and Climate Literacy is shown below.

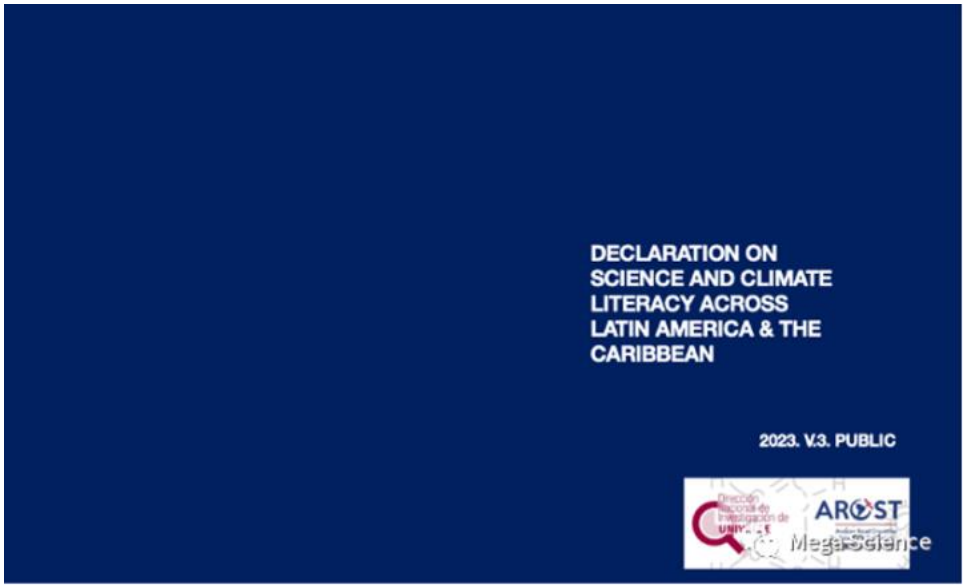


Figure 4. Third version (2023) of the Declaration on Science and Climate Literacy across Latin America and the Caribbean. Source: Andean Road Countries for Science and Technology (ARCST).

How are SCC and the WGSD related?

The "South-South Biodiversity Science Project (SSBSP)" initiated by the China Biodiversity Conservation and Green Development Foundation (CBCGDF) and the Green Science Project (GSP) initiated by the Andean Road Countries for Science and Technology (ARCST) joined efforts to start the first of the four phases of the SCC through Science Popularization to raise awareness of climate change in Latin America and the Caribbean.

The project in Latin America and the Caribbean aims to develop a foundation for the scientific cause and build a community with a shared future for mankind.

If you want to know more about the "New Paradigm for Collaboration: The Science Culture Construction Fostering Innovation and Green Development" kindly visit the following links.

1 http://www.cbcgdf.org/English/NewsShow/5012/21823.html
2 http://www.cbcgdf.org/English/NewsShow/5008/21612.html
3 https://journalasc.org/2022/11/17/international-green-science-academy-network-igsan-an-initiative-of-the-south-south-biodiversity-science-project/
4 https://cbcgdf.wordpress.com/2022/09/05/the-south-south-biodiversity-science-project-was-introduced-in-the-fifth-forum-on-china-and-latin-american-countries-lac-dialogue-between-civilizations/
5 https://journalasc.org/2021/08/13/scientific_literacy_gsp_1/
6 http://z.cbcgdf.org/nd.jsp?id=580&_sc=3
7 https://journalasc.org/annual_meeting/
8 https://mp.weixin.qq.com/s/UpCYN7c1bs09ysKVJg3Hyg
9 https://onlinemac.wixsite.com/arcs
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11 https://revistas.univalle.edu/index.php/jlsc, https://journalasc.org/
12 https://onlinemac.wixsite.com/wwwelektrocom
13 https://www.univalle.edu/
14 https://www.uceva.edu.co
15 https://www.unesco.org/en/media-information-literacy#:~:text=Media%20and%20information%20literacy%20empowers,to%20information%2C%20and%20sustainable%20development.
16 https://mp.weixin.qq.com/s/UpCYN7c1bs09ysKVJg3Hyg
17 Wang Chufa. Scientific Culture and the Construction of a World Leader in Science and Technology. Cultures of Science. (1),1, 2018
18 https://www.wosl.org.cn/en/NewsCenter/GlobalVision/art/2023/art_58cc7472b2124bb1ae0d6d314af93ef7.html (in English)
19 https://www.wosl.org.cn/xwzx/gjsc/art/2023/art_75aa87dffcc2436db115595bdff51c49.html (in Chinese)20 https://journalasc.org/blog/igsan/scc/21 https://journalasc.org/2023/01/25/science_lac/22 https://baike.baidu.com/item/%E4%B8%96%E7%95%8C%E7%BB%BF%E8%89%B2%E7%A7%91%E5%AD%A6%E6%97%A5/62454248?fr=ge_ala23 https://baijiahao.baidu.com/s?id=1751740800246938865&wfr=spider&for=pc24 http://www.cbcgdf.org/English/NewsShow/5007/22019.html