

EDITORIAL SCIRES-IT. CULTURAL AND ENVIRONMENTAL HERITAGE, ACCESSIBILITY, TECHNOLOGICAL INNOVATION, INCLUSIVENESS, AND SUSTAINABILITY

*Virginia Valzano**

*University of Salento - CEIT, Italy - SCIRES-IT Founder and Editor-in-Chief.

Abstract

This issue of SCIRES-IT (No.2, 2023) contains various and interesting contributions on innovative technologies in support of Cultural and Environmental Heritage documentation, preservation and fruition, on accessibility, inclusiveness, sustainability, and on the achievement of the Sustainable Development Goals (SDGs) of the UN Agenda 2030.

Keywords

SCIRES-IT, Editorial, SCientific REsearch and Information Technology, Cultural and Environmental Heritage, Eco-sustainable Publications, Diamond Open Access Journal, Sustainable Development Goals (SDGs), UN Agenda 2030.

This issue of SCIRES-IT - SCientific RESEARCH and Information Technology (No. 2 vol. 13, 2023) contains various and interesting contributions dealing with topics of highly actuality and in line with the main objectives of our journal, focused on digital technologies in support of Environmental and Natural Cultural Heritage.

Technological innovation, preservation and enjoyment of cultural, environmental and natural heritage, environmental monitoring, 3D acquisitions and reconstructions, digital and physical reproductions, virtual representations, accessibility, inclusiveness and sustainability are the strengths of the contributions and projects presented in this issue, as well as of our own journal Diamond Open Access.

Accessibility in the broad sense, with special attention to people with disabilities and poor and/or developing countries, to data, digital content, formats, new technologies, historical, artistic and archaeological heritage, museums, cultural and environmental assets in general.

Special attention is paid to the new EU directives on sustainability, resilience and energy efficiency of the building stock, and to the achievement of the Sustainable Development Goals (SDGs) of the UN Agenda 2030, also through

the use and synergy of new technologies, Artificial Intelligence (AI), Fifth Generation Cellular(5G), Internet of Things (IoT), Big Data analytics, and Cyber-security, while being aware of the new problems that might emerge or are being addressed with artificial intelligence and more advanced technologies.

The 2030 Agenda of the Member Countries of the United Nations for Sustainable Development, launched in 2015, is a plan of action for People, Planet and Prosperity. It is based on five key concepts (People, Planet, Prosperity, Peace, Partnership) and is characterised by 17 specific goals for sustainable development (OSS/SDGs, Sustainable Development Goals), closely interlinked and articulated in 169 targets, linked to essential issues such as ending poverty and inequality, human rights, climate change, social and economic development, accessibility, inclusiveness, etc.¹

Achieving the Sustainable Development Goals (SDGs) by 2030 is no easy feat, but all countries have collectively pledged to make a contribution, according to their capacities, to achieve these goals, to contribute to global development, promote human well-being and protect the environment.

¹ <https://sdgs.un.org/2030agenda>

“The World in 2050 (TWI2050)” is a global research initiative in support of a successful implementation of the United Nations’ 2030 Agenda. The goal of TWI2050 is to provide the fact-based knowledge to support the policy process and implementation of the SDGs.²

“The TWI2050 Report: Transformations to achieve the Sustainable Development Goals”, prepared in 2018, examines the current trends and dynamics that promote and jeopardize the achievement of the SDGs.

TWI2050 identifies six exemplary transformations which will allow achieving the SDGs and long-term sustainability to 2050 and beyond: i) Human capacity and demography; ii) Consumption and production; iii) Decarbonization and energy; iv) Food, biosphere and water; v) Smart cities, and vi) Digital revolution. The report provides policy recommendations on how to achieve integrated pathways that implement these transformations.

TWI2050 shows that a transformation toward the sustainable future is possible with strong political commitment.³

As has already been mentioned, achieving the goals for sustainable development by 2030 is no easy feat.

In “The Sustainable Development Goals Report 2020”⁴ António Guterres (Secretary-General, United Nations) and Liu Zhenmin (Under-Secretary-General for Economic and Social Affairs, United Nations) highlight these difficulties and at the same time encourage us to firmly pursue the principles and goals for sustainable development.

“The 2030 Agenda for Sustainable Development was launched in 2015 to end poverty and set the world on a path of peace, prosperity and opportunity for all on a healthy planet. The 17 Sustainable Development Goals (SDGs) demand nothing short of a transformation of the financial, economic and political systems that govern our societies today to guarantee the human rights of all.” (Guterres, 2020).

“The pandemic abruptly disrupted implementation towards many of the SDGs and, in some cases, turned back decades of progress..... However, we must hold firm in our convictions and not let the crisis derail our hopes and ambitions. In

fact, the principles on which the SDGs were established are key to building back better in the post-COVID-19 recovery. The continued pursuit of these universal Goals will keep Governments focused on growth, but also on inclusion, equity and sustainability.” (Zhenmin, 2020).

“Everything we do during and after this crisis [COVID-19] must be with a strong focus on building more equal, inclusive and sustainable economies and societies that are more resilient in the face of pandemics, climate change, and the many other global challenges we face.” (Guterres, 2020).

Some goals of the 2030 Agenda for Sustainable Development have been included in the editorial lines of our journal SCIRES-IT - SCientific REsearch and Information Technology since its foundation in 2011.

In fact, SCIRES-IT is an eco-sustainable open-access journal, providing an international forum for the exchange and sharing of know-how in the areas of Digitalization and Multimedia Technologies and Information & Communication Technology (ICT) in support of Cultural and environmental Heritage (CH) documentation, preservation and fruition.

As we mentioned in our other editorials, it combines the main principles of the Berlin Declaration on Open Access with the aims of the International Convention on Biological Diversity, fostering scientific dissemination, biodiversity awareness, environment preservation, and sustainable use of natural resources.

In line with the editorial project “Eco-sustainable OA publications”, for each issue of SCIRES-IT, an action of environmental restoration has been carried out in protected areas by planting local ecotypes of native species (SCIRES-IT Manifesto 2011).

SCIRES-IT is a Diamond Open Access Journal, a communication model in which research outputs are openly available, without charging fees to either readers or authors.

SCIRES-IT does not require authors to pay any APCs (Article submission or Processing Charges) for submission or publication of articles, and it has no financial contribution. The Editorial Team has been working without any financial support, with remarkable generosity, sustained by great passion only.

² <http://twi2050.org>

³ <https://pure.iiasa.ac.at/id/eprint/15347/>

⁴ <https://unstats.un.org/sdgs/report/2020/>

It is therefore a Journal fully aligned with the principles of Open Access and Open Science, since its foundation, in a linear, clear and precise way, supporting researchers and facilitating scientific research and the dissemination of knowledge (Valzano & Cigola, 2019).

SCIRES-IT has achieved, in a few years, a very high scientific level, adhering to Best Practice and high publishing standards. It has been included by ANVUR in the list of “Scientific” journals for the areas 08, 10, 11, 13 and 14, and in 2018 it was also ranked as a “Class A” journal in the area 08 - Architecture.

Diamond Open Access Journal since 2011, SCIRES-IT maintained, over all these years, its fundamental objectives and its policy, thus achieving excellent results in both national and international scientific fields (Boero & Lucarella, 2018).

This confirms the validity of the fundamental objectives of SCIRES-IT and its policy, since 2011, which we can define as pioneering and that we will maintain in the future (Valzano & Cigola, 2020).

SCIRES-IT has faced many operational challenges, relying mostly on volunteers, and playing a crucial role for scientific communities around the world.

With the increase in APCs from some publishers, it has also faced many publication requests (Gallo & Accogli, 2022).

These important achievements are the result of the work and commitment of the Editorial Team, Reviewers and Authors, to whom goes our sincere gratitude, and our wholehearted adherence to the principles of Open Science, which have made the journal a valuable opportunity, nationally and internationally.

We are convinced of our choices and we hope that these principles can be fully affirmed in all the scientific-disciplinary sectors, overcoming obstacles, resistances and opacities (Valzano & Cigola, 2019).

We hope to see, in the coming years, more journals embracing the Diamond Open Access model, but this requires funding and cannot be based only on volunteerism and voluntary contributions.

Since knowledge is a common good, encouraging its wider dissemination is of paramount importance.

Support for existing and new Diamond OA journals, repositories, and platforms globally can lower barriers to accessing and disseminating publicly-funded research.

With a view to free circulation of content, this is a trend that should be encouraged. The role of Diamond Open Access initiatives is very important in the transition to a sustainable and fair system for open access publications from academia and science.

The “Global Summit on Diamond Open Access / Cumbre Global sobre Acceso Abierto Diamante”, held in Toluca, México, in October 2023, organised by Science Europe and other institutions, including UNESCO, cOAlition S, OPERAS, etc.⁵, marks a huge step in the direction of globally equitable Open Access, towards a sustainable and inclusive future.

It successfully brought together for the first time the international community of Diamond OA stakeholders to share ideas and build a common vision on Diamond publishing, advance Diamond OA initiatives and practices.

The global Diamond OA community focused its discussions on the equity, quality, usability, and sustainability of this scholarly publishing model, on good practices and policies from across the globe.

The Global Summit concluded with great success and a commitment to promote the Diamond Open Access academic communication ecosystem, in order to recognise, support and advance Science as a Global Public Good.⁶

“Knowledge is our most valuable asset and a public good that must be shared widely to ensure the sustainability of our planet and future”⁷

“Open science practices are on the rise but access to, participation in and sharing of the benefits from open science are uneven across the world. For open science to reach its full potential, it must be an equitable global phenomenon.

Open science can be a powerful tool to bridge the existing science, technology and innovation gaps, to accelerate the achievement of the Sustainable Development Goals and to promote the fulfillment of

⁵ <https://scienceeurope.org/events/2023-global-summit-diamond-oa/>; globaldiamanttoa.org

⁶ <https://operas.hypotheses.org/6792>

⁷ <https://globaldiamanttoa.org/wp-content/uploads/2023/10/202310-Global-Summit-Conclusions-Way-Forward.pdf>

the human right to science... Lack of equity in access to funding, skills and tools are preventing open science from reaching its full potential. The transition to open science requires a shift in the culture of and partnerships for science. Only collective, collaborative and coordinated action and investment can accelerate the transition to a truly global, equitable open science.”(UNESCO, 2023).⁸

As underlined in Article 27 of the Universal Declaration of Human Rights. “Everyone has the right (...) to share in scientific advancement and its benefits.” (Unite Nations, 1948).⁹

⁸ <https://doi.org/10.54677/GIIC6829>

⁹ <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

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