Shoolini University

INTERNATIONAL COLLABORATION
DATA GATHERING FOR SDGs

2025



Shoolini University of Biotechnology and Management Sciences

Solan, Himachal Pradesh, India – 173229

17.2.3 International collaboration data gathering for SDG

Shoolini University actively engages in international collaborations focused on the collection, analysis, and measurement of data related to the Sustainable Development Goals (SDGs). These partnerships strengthen the university's contribution to evidence-based sustainability research and support a deeper understanding of global and regional challenges aligned with the United Nations 2030 Agenda. Through joint research projects, international data-sharing initiatives, collaborative studies, and peer-reviewed publications with leading institutions worldwide, Shoolini University contributes scientific evidence and knowledge that support monitoring and progress towards multiple SDGs. These collaborations bring together interdisciplinary expertise, research infrastructure, and diverse datasets to generate meaningful insights for sustainable development.



Papers Published in leading journals

The table below highlights selected internationally co-authored publications by Shoolini University researchers during 2025, demonstrating the University's strong global research collaborations and continued contribution to high-quality, impactful research aligned with the United Nations Sustainable Development Goals.

Table: Selected internationally co-authored publications by Shoolini University researchers

S. No.	Title of Collaboration	Journal	Cite Score	Relevant SDGs	International Collaboration	Evidence
1	Bi2S3-based photocatalysts: Properties, synthesis, modification strategies, and mechanistic insights towards environmental sustainability and green energy technologies	Coordination Chemistry Reviews	39.9	SDG 7	King Saud University; King Abdulaziz University; Korea University; Silesian University of Technology	Link
2	Bacteriogenic metallic and semiconducting nano-system as a potential sustainable solution for one health complexities	Advances in Colloid and Interface Science	33.5	SDG 3; SDG 9; SDG 12	Mahidol University; Florida Polytechnic University	Link
3	Artificial intelligence in sustainable food design: Technological, ethical consideration, and future	Trends in Food Science and Technology	27.3	SDG 2; SDG 10; SDG 12; SDG 13	National and Kapodistrian University of Athens	Link

4	Exploring complex silver sulfide nano-systems as efficient photocatalysts for wastewater remediation and clean energy production: Toward sustainable and circular economy	Materials Today	27	SDG 6; SDG 7; SDG 9; SDG 13	Florida Polytechnic University; Mahidol University	Link
5	Tuning ZnCdS heterostructures for enhanced photocatalysis: Hybrid architectures for sustainable energy and environmental applications	Journal of Materials Chemistry A	14.5	SDG 7	King Abdulaziz University; Silesian University of Technology	Link
6	Advanced CeO2-Based Heterojunctions: Aspects of Structure–Function Relationships for Sustainable CO2 Conversion and H2 Production	Transactions of Tianjin University	13	SDG 7; SDG 13	Silesian University of Technology	Link
7	Synthesis of gum acacia-cl-acrylic acid-co-itaconic acid hydrogels for efficient removal of toxic dye rhodamine-B: A step for sustainable environment	International Journal of Biological Macromolecules	11.4	SDG 6	University of Cincinnati	Link

8	A comprehensive review of sustainable hydrogels from lignin for advanced wastewater solutions	International Journal of Biological Macromolecules	11.4	SDG 6; SDG 9	Universidad de Tarapacá	Link
9	Engineered boron-doped biochar for sustainable environmental remediation and circular energy systems	Journal of Environmental Chemical Engineering	10.2	SDG 6; SDG 7; SDG 9; SDG 12	Ho Chi Minh City University of Industry and Trade; Gachon University	Link
10	Valorization of flowers and their role in circular bioeconomy and sustainable development goals	Bioresources and Bioprocessing	9.7	SDG 2; SDG 6; SDG 8; SDG 9	Univerzita Hradec Králové; Universiti Malaysia Kelantan; Jimma University; VSB – Technical University of Ostrava	Link
11	Biofloc technology for sustainable aquaculture: Microbial regulation, nutrient dynamics, and integrated system approaches	Journal of Water Process Engineering	9.6	SDG 3; SDG 12; SDG 14	National Taiwan Ocean University	Link
12	Biochar-based technologies for sustainable aquaculture: A review of synthesis, properties, and application in water quality improvement and nutrient management	Journal of Water Process Engineering	9.6	SDG 3; SDG 6; SDG 7; SDG 8; SDG 12; SDG 14	National Taiwan Ocean University	Link

13	Green nanocarriers and Biodegradable Systems for sustainable drug delivery solutions	Journal of Drug Delivery Science and Technology	9.3	SDG 7; SDG 12	Mashhad University of Medical Sciences; Islamic Azad University, Tehran Medical Branch	Link
14	Green-synthesized nanofertilizers: A sustainable approach to enhancing crop productivity and stress tolerance	Current Research in Biotechnology	8.6	SDG 2; SDG 8; SDG 12	Southern Federal University; Jimma University	Link
15	Advancements in AgBiO3-based heterojunctions for environmental sustainability: Modification strategies and mechanistic insights	Inorganic Chemistry Communications	8.5	SDG 6; SDG 8	King Abdulaziz University	Link
16	Sustainable management of post-phytoremediation biomass	Energy, Ecology and Environment	7.9	SDG 7; SDG 9; SDG 12; SDG 15	Marymount Manhattan College; Tsinghua University; China Agricultural University; The University of Western Australia	Link
17	Recent advancements in sustainable CO2 conversion utilizing black TiO2-based photocatalysts	Journal of Materials Science	7	SDG 7; SDG 13	King Abdulaziz University	Link

18	Macronutrients-availing microbiomes: Biodiversity, mechanisms, and biotechnological applications for agricultural sustainability	Folia Microbiologica	6.5	SDG 2; SDG 8; SDG 12	Imam Abdulrahman Bin Faisal University; Kuwait Institute for Scientific Research	Link
19	Enhancing post-harvest sustainability in temperate crops through smart IoT-integrated indirect solar dryer	Scientific Reports	6.4	SDG 2; SDG 7; SDG 12	Universiti Kebangsaan Malaysia; Princess Nourah Bint Abdulrahman University	Link
20	Emergence of potassium solubilizing microbes-assisted crop processing for sustainable food production and microbial complexities	Food and Bioproducts Processing	6.1	SDG 2; SDG 3; SDG 8; SDG 12	Mahidol University	Link
21	Sustainable vinblastine production by Alternaria alternata, an endophytic fungus isolated from Catharanthus roseus in the Northern Himalayan Region	3 Biotech	5.7	SDG 3; SDG 9	Texas Tech University Health Sciences Center El Paso	Link
22	Nanocomposite-based agricultural delivery systems: A sustainable approach to enhanced crop productivity and soil health	Journal of Nanoparticle Research	4.9	SDG 2; SDG 3; SDG 8; SDG 12	Academia Sinica, Taiwan; National Taiwan University; Université de Genève;	Link

					Université de Genève Faculté de Médecine	
23	Integrating molecular farming into sustainable plant biotechnology: A review of transgenic plants as biofactories for protein-based pharmaceutical production	Plant Cell, Tissue and Organ Culture	4.5	SDG 2; SDG 9	Yeungnam University; The Aga Khan; Simon Fraser University; University of Ilorin; King Fahd University of Petroleum and Minerals	Link
24	Extrusion technology in food processing: Principles, innovations and applications in sustainable product development	Food and Humanity	3.3	SDG 9	VSB – Technical University of Ostrava; IUST	Link

Conclusion

Shoolini University demonstrates a strong commitment to international collaboration for advancing the United Nations Sustainable Development Goals (SDGs). During 2025, the University's researchers contributed to internationally co-authored publications with institutions across several countries. These collaborations address key global challenges, including clean energy, water quality, sustainable agriculture, healthcare, and environmental protection. Publishing in reputed journals strengthens the University's global research visibility and promotes interdisciplinary knowledge exchange. Such partnerships contribute to evidence-based research and support progress towards sustainable development.