

SUSTAINABLE DEVELOPMENT GOAL 12

**KINNAIRD COLLEGE FOR WOMEN
REPORT ON**

SUSTAINABLE DEVELOPMENT GOAL 12



RESPONSIBLE CONSUMPTION AND PRODUCTION

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GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Goal 12 is about ensuring sustainable consumption and production patterns, which is key to sustain the livelihoods of current and future generations.

Our planet is running out of resources, but populations are continuing to grow. If the global population reaches 9.8 billion by 2050, the equivalent of almost three planets will be required to provide the natural resources needed to sustain current lifestyles.

We need to change our consumption habits, and shifting our energy supplies to more sustainable ones are one of the main changes we must make if we are going to reduce our consumption levels. However, global crises triggered a resurgence in fossil fuel subsidies, nearly doubling from 2020 to 2021.

We are seeing promising changes in industries, including the trend towards sustainability reporting being on the rise, almost tripling the amount of published sustainability over just a few years, showing increased levels of commitment and awareness that sustainability should be at the core of business practices.

Food waste is another sign of over consumption, and tackling food loss is urgent and requires dedicated policies, informed by data, as well as investments in technologies, infrastructure, education and monitoring. A staggering 931 million tons of food is wasted a year, despite a huge number of the global population going hungry.

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Kinnaird's activities on GOAL 12: Responsible Consumption and Production

Ilyas, S., Ghaffar, A., Shakeel, A., Tariq, S., Majid, H. & Tariq, A. (2024). Fostering Corporate Sustainability and Environmental Performance in IT Industries of Pakistan. *Journal of Excellence in Management Sciences*. 3(3), 49-67

Hiba Majid, Saroosh Tariq & Dr. Anam Tariq (2024) "Fostering Corporate Sustainability and Environmental Performance in IT Industries of Pakistan". 4th International Conference on Social Sciences and Humanities. Kinnaird College for Women, Lahore, Pakistan. February 26-28, 2024.

Project: ARTISTS OF GAZA LIVE IN OUR HEART'

Project submission 15th Sept, 2024 Students of semester 7 are currently engaged in producing work for this KB24 Project for Art Students. The project submission deadline is 15th Sept, 2024. Maham Yousaf & Dr. Anam



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KARACHI BIENNALE TRUST

ARTISTS OF GAZA LIVE IN OUR HEART

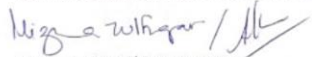
KB24 Project for Art Students

August to November 2024

Form

Name of Art Educational Institution:	Kinnaird College for Women, Lahore
Address:	93 Jail Road, Lahore
Email:	Head - Fine Arts Department mizna.zulfiqar@kinnaird.edu.pk
Contact Person:	Amra Khan Assistant Professor, Fine Arts
Email and Phone No.	amra.khan@kinnaird.edu.pk 0323 4516813

Our institution will participate in the project and abide by the rules and guidelines.


 Signature of Head/ Contact person

Stamp of institution



Plot No. 33-C, Mezzanine Floor, 6th Lane, Zamzama Commercial, DHA Phase V Karachi
 info@karachibiennale.org.pk | 99213017366

Market/ Material Exploration 8th Sept, 2024

Students of semester 7 specializing in painting along with course instructor Ms. Amra Khan went on a market recce trip. The visit began in the Inner City Baboo Market, exploring various canvas qualities and thicknesses along with learning what to aspects to consider when buying a canvas. Followed by a visit to Ayub Paints, Main market to explore mass-produced paint, including machine-based color mixing, with a focus on how to work with different paint forms

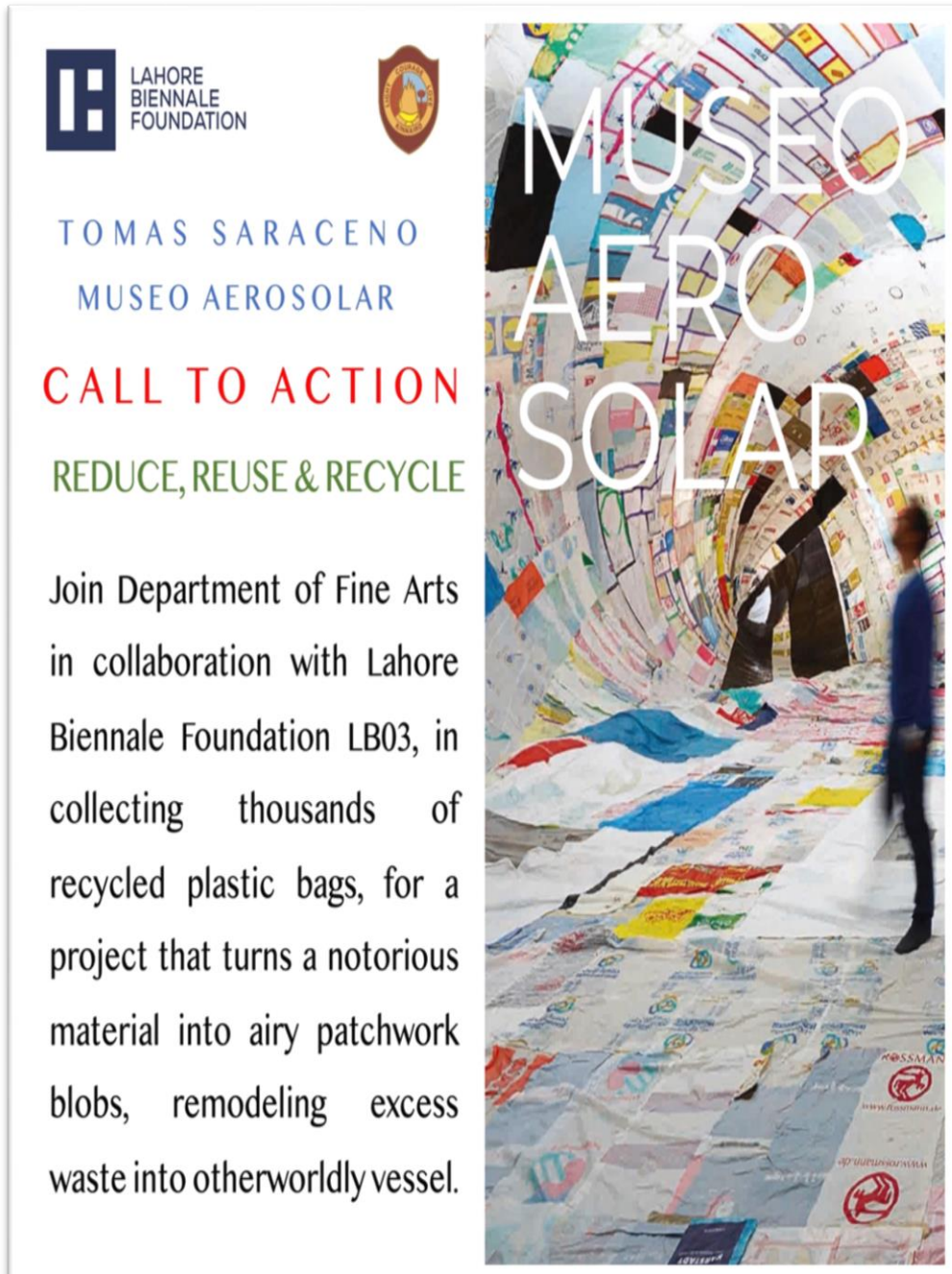
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Museo Aero Solar (9th Sept – 8th Nov, 2024)

A collaboration between Lahore Biennale Foundation (LBF), a non-profit organization that works across all forms of art and Department of Fine Arts, Kinnaird College for Women, Lahore



 LAHORE
BIENNALE
FOUNDATION



TOMAS SARACENO
MUSEO AEROSOLAR

CALL TO ACTION

REDUCE, REUSE & RECYCLE

Join Department of Fine Arts
in collaboration with Lahore
Biennale Foundation LB03, in
collecting thousands of
recycled plastic bags, for a
project that turns a notorious
material into airy patchwork
blobs, remodeling excess
waste into otherworldly vessel.

MUSEO
AERO
SOLAR

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Conducted Following Workshops: Workshop 1: Understanding Food Exchange Workshop 2: Tasting Culture: Standardizing Traditional Pakistani



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Workshop 3: Cuisine Flavors of Pakistan: Sensory Profiling of Traditional Pakistani Dishes



Oral Presentation by Yusra Mahmood and Samawia Qureshi at Kinnaird's 2nd International conference on Science, Technology and Innovation 8-10th March 2023, “A comprehensive analysis of studies aimed at quantifying dairy intake among Adolescents”

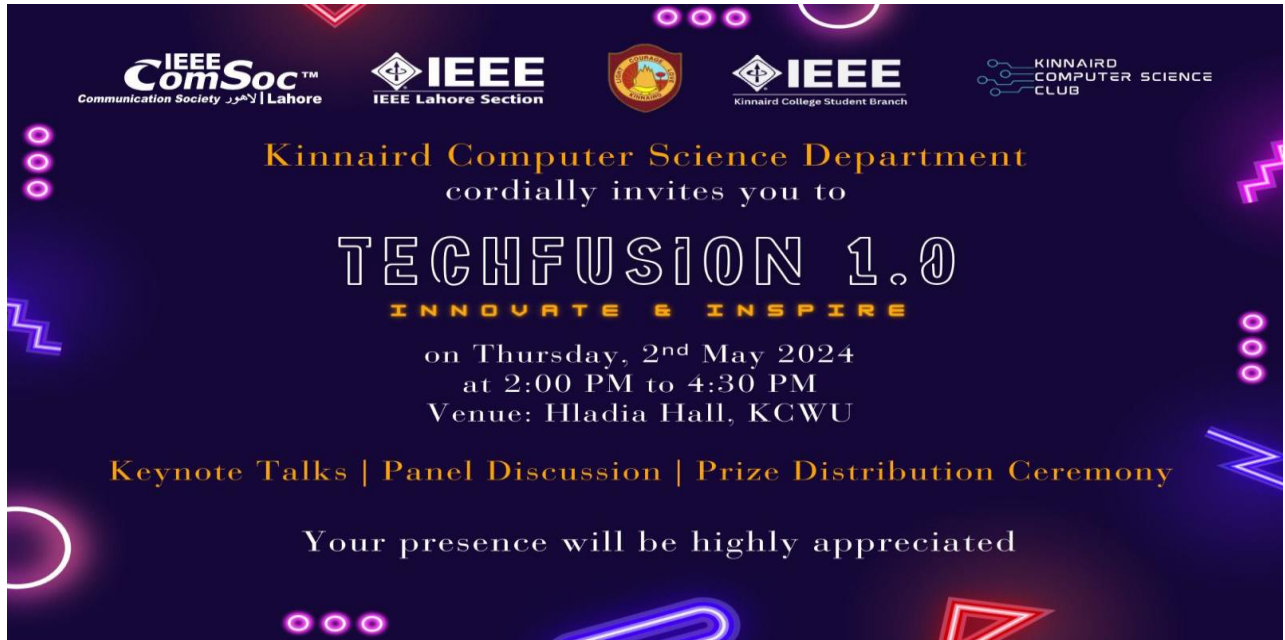


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TechFusion 1.0 Event

Topic: Software Engineering Posters about SGDs

Dated: 22-05-2024



International Webinar Curbside Recycling increases Household Consumption, Resources and Conservation and Recycling Journal organization UK Dated: 9 May 2024.



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10:23 [LIVE] Roland GEYER

(Quasi)-Experimental Setup

Method: Difference-in-differences regression analysis with two way fixed effects

$$Y_{it} = \beta D_{it} + \alpha_i + \delta_t + \epsilon_{it}$$

Outcome

Observed outcome trend in intervention group

Intervention effect

Constant difference in outcome

Unobserved Counterfactual Outcome trend for intervention group

Observed outcome trend in comparison group

Pre Intervention Post Intervention

RC&R Webinar – 9 May 2024

Students completed Online Training course on Environmental Management System “ISO 14001” October 2024 by Alison.

Alison EMPOWER YOURSELF

CERTIFICATE

MAMONA NOOR

has received this award for successfully completing the course:

ISO 14001:2015 - Environmental Management Systems (EMS)

To verify:

1428-43707446

<https://alison.com/certification/check/ad258e06a1>

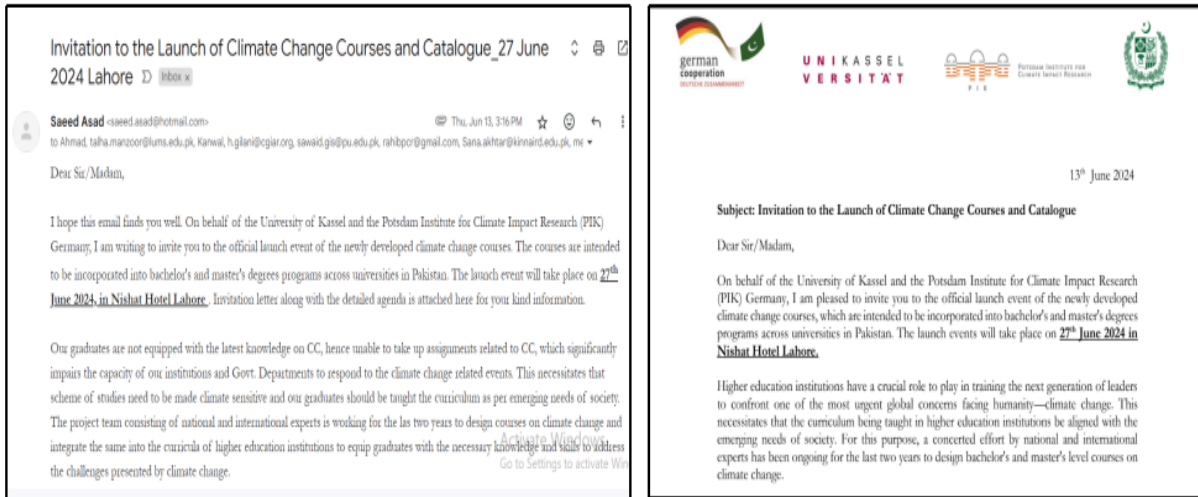
Maere Richardson
Director of Certification

CPD CERTIFIED
The CPD Certification Service

26th October, 2024
Date of Award

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Faculty attended Training on Mainstreaming Climate Change into Higher Education of Pakistan; Launch of Climate Change Courses and Catalogue (GIZ, University of Kassel, PIK and German Cooperation) on 27-06-24 at Nishat Hotel



Students participated in intra-college poster competition on Innovative Ideas for Energy Conservation: Shaping a Sustainable Future, organized by GYM Club Kinnaird College for Women Dated: 25-4-2024



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Student participated and won in Provincial Competition for COP 21 in
 Dated: September 2024.



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The paper was received in published form in 2024, and this publication is from a BS research report of my student Sara Zahid: Sara Zahid* and Shahnaz Choudhry. Research paper titled “Sand quality improvement using watermelon (*Citrullus lanatus*) seeds–derived urease-induced calcium carbonate precipitation” International Journal of Economic and Environmental Geology. Vol. 14(4) 20-27, 2023

www.econ-environ-geol.org

Int. J. Econ. Environ. Geol. Vol. 14 (4) 20-27 2023
Journal home page: www.econ-environ-geol.org

Open Access
ISSN: 2223-957X

Sand Quality Improvement Using Watermelon (*Citrullus Lanatus*) Seeds -Derived Urease-Induced Calcium Carbonate Precipitation

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Received: 16 March, 2024

Accepted: 14 May, 2024

Abstract In Pakistan, the global warming and liquefaction problems have increased due to CO₂ emissions during the cement manufacturing process and the water absorption ability of the cement, respectively. Recently, enzyme-induced carbonate precipitation (EICP) has become increasingly popular due to its eco-friendly nature and mechanical properties. This study is aimed to extract the crude urease enzyme from watermelon seeds, considered "food waste," to test its effects on biocementation and produce a building material with more strength and less permeability for water absorption. Watermelon seeds were used in dry and germinated conditions to investigate urease activity and calcium carbonate formation. The EICP-coated brick showed less weight change than the control brick. The bricks were added in cycles (1, 7, 14 times); the 14-cycle brick was firmer than the other two bricks, but still wasn't sufficiently durable. Therefore to overcome this problem, another EICP method was used, which is the one-phase method, in which a large volume of EICP solution was mixed with sand in the same brick, and compacted in a mold again. The brick was incubated at 35–37 °C and cured for 14 days, resulting in a hardened brick. A water absorption test was conducted on the sample, and it was found that the bio brick could not endure the water conditions for a long period of time. Scanning Electron Microscopy (SEM) confirmed that major vaterites were formed instead of calcite, which was the cause of some disintegration of the bio brick. However, it is suggested that the EICP solution can be used as a binder in crack-filling.

Keywords: Watermelon seeds, urease, EICP, calcium carbonate, bio cement.

Dr. Maira Qaddos published a Research Article on The Panopticon Legacy: A systematic Literature Review of Difficult conversations on SNS AND Social Media Serveillance in 2024



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The Book Bank Active citizenship Project Accepted Active Citizenship Program



SUBMITTED BY:

Rishayal Naz, Fatima Saleem, Muriel Cecil, Aqsa Shakoor, Mahnoor
Aijaz, Hajra Tajamul, Maham Ashraf, Mehar Issac

SUBMITTED TO: Ma'am Sadia Arshad

SEMESTER: 7th

The Book Bank

The "The Book Bank" initiative in government schools is designed to promote sustainable use of educational resources and reduce paper wastage by encouraging students to reuse and recycle textbooks. This initiative aims to lessen the environmental impact associated with paper production, decrease the financial burden on families and build a culture of sharing and sustainability within the school community.



Objectives

- **Reduce Waste:** Minimize the environmental impact by reusing and recycling textbooks, decreasing demand for new paper.
- **Create a Sustainable System:** Establish an organized book exchange system within schools, which encourages ongoing reuse of academic materials.
- **Foster Community Engagement:** Encourage a culture of resourcefulness and community involvement among students, teachers, and staff.

Published article: Akhtar S, Shoaib A, Javiad I, Qaisar U, Tasadduq R. Farmyard manure, a potential organic additive to reclaim copper and *Macrophomina phaseolina* stress responses in mash bean plants. *Sci Rep.* 2023, 1;13(1):14383

Thesis: Optimization of Bacterial Cellulose Production from Food Waste
Capacity building workshop: "The role of the arts and sciences in preparing women for entrepreneurship and financial security" on 6th June 2024, KCW.

