

Jamia Millia Islamia (University) & Environmental Sustainability



Prof. Sirajuddin Ahmed

Deptt of Env. Science
Faculty of Engg & Tech

Sustainability Measures within the Campus

239 acres campus

09 Faculties

39 Departments

29 Centre of Higher Studies

270 Courses

16000 Students

> 700 Faculty

75 Contract and Guest Faculty

1147 Nonteaching staff including

87 school staff



Sustainability Measures within the Campus



TOTAL WATER MANAGEMENT



❖ Water Availability	5180 KLD
❖ Water Consumption	1097 KLD
❖ Roof Top Rainwater Harvesting Structure	19 Nos
❖ Water Harvested / Water Use	9.87 %
❖ Sewage Treatment Plant	4 Nos
❖ Water Recycle for Horticulture Purpose	180 KLD (Internal)
❖ Reuse of treated Sewage water from Municipal	100 KLD (External)
❖ Treated Water Recycle	27.34 %

New Constructions are fitted with water saving fixture as per GRIHA requirement (20% Saving)



Flora and Fauna



According to a Botanical survey of Jamia conducted in 2019-2020, there are around 130 species of large shrubs and trees, and 45 species of small shrubs and herbs.







Avenue/Medical Tree

Indian Laburnum
Cassia fistula

Botanical Name

FAMILY: FABACEAE

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Jamia Millia Islamia
www.jmi.ac.in/Flora

SCAN QR CODE TO VALIDATE & EXPLORE AT KEW (UK)

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THE TIMES OF INDIA

City: Delhi Mumbai Bengaluru Hyderabad Kolkata Chennai Agra Agartala Ahmedabad Ajmer

DELHI MCD ELECTIONS CIVIC ISSUES CRIME POLITICS SCHOOL AND COLLEGES CITIZEN REPORTER VIDEOS PHOTOS WE

NEWS / CITY NEWS / DELHI NEWS / Scan QR Code, Know More About Trees At Jamia Millia Islamia

THIS STORY IS FROM DECEMBER 9, 2021

Scan QR code, know more about trees at Jamia Millia Islamia

HINJINI GHOSH / TNN / Updated: Dec 9, 2021, 14:59 IST

33 PTS SHARE

ARTICLES

- Scan QR code, know more about trees at Jamia Millia Islamia
- Statement-making watches



Flora and Fauna

Total Green Cover 58 %

Total No of Plants 5150

Forest 16%

Common squirrels

Chameleons and mongoose could be seen in the rocky forest patches.

Rock Pigeons, Green Pigeons, Parrots, Peacocks, Crows, Hornbills, Woodpeckers, Sparrows, Babblers (7-sister Birds), Barbets, Hoopoe, Common Mynah, Owls (common and barn), Laughing Doves, Nightangle, Bee eaters, Black Drongo, Kingfishers, Magpie Robin, Sunbirds, Red-wattled Lapwing, Red-napes Ibis, Eagles, Shikra, Pariah kites, Starlings (Brahmini and Rosy), Treepie, Munias, Ashy Prinia, Asian Koel,



ENERGY

Average Energy Requirement	50000 kW-h
Capacity of Roof Top Solar Power Plant	2.5 MWP
Average Energy generated Through Solar	7500 kW-h
% of Green Energy	16.2 %
Annual Saving of Carbon Foot Print	3,375 ton of Carbon



Installation of Roof Top Solar Power system 92% capacity
The average generation is around 2 MW.
Saving Rs 1.5 Cr per annum from Electricity Bills

SOLID WASTE MANAGEMENT

Solid Waste Generation 5000 kg/d

Garden Waste 1150 kg/d

Waste Segregation Yes (Separate Wet and Dry Bins available)

Waste Composting Garden and Kitchen waste is composted)

Biomedical Waste Management Yes as per Delhi Pollution Committee Guidelines

E Waste Management Separate Collection System



Future plans for the University

- Paper less file processing
- Plastic Free Campus
- Zero waste Campus
- Reduction of Energy Consumption by 15% in next five year (Base line Data 2022)
- Non motorized Campus
- Sponge Roads and paved /semi paved area

JMI & Urban Sustainability



Courses on Environment & Sustainability



- ❖ Ph D
- ❖ Post Graduate Programmes

Environmental Sc. & Engineering

Environmental Sc & Management

Urban Regeneration

Energy & Power System Management

Energy Sc. & Technology

Bio Technology

Under Graduate Programmes

Solar Energy



Shortly to be introduced one credit Course on UNSDG for All students supported by UN Social Development Network



Academic and Research Activities

1. Climate change impact evaluation on water resources in Satluj River basin in India and Upper Thames River basin in Ontario, Canada
2. A K-Nearest neighbor model has been developed by the researchers at Jamia Millia Islamia in collaboration with University of Waterloo at Ontario.
3. Changes in flood regime using peaks over threshold approach has been in collaboration with the researchers at Mahidol University, Thailand
4. JMI has active collaboration with the Technical University of Erfurt Germany and Asian Institute of Technology, Thailand wherein the focus is on water resource management under changing climate scenarios



Academic and Research Activities

Research Project in Progress

The Assessment of Vulnerability of Satluj River Basin Under Climate Change Scenarios Based on Representative Concentration Pathways

Micro aeration of UASB treated sewage for its sustainable reuse

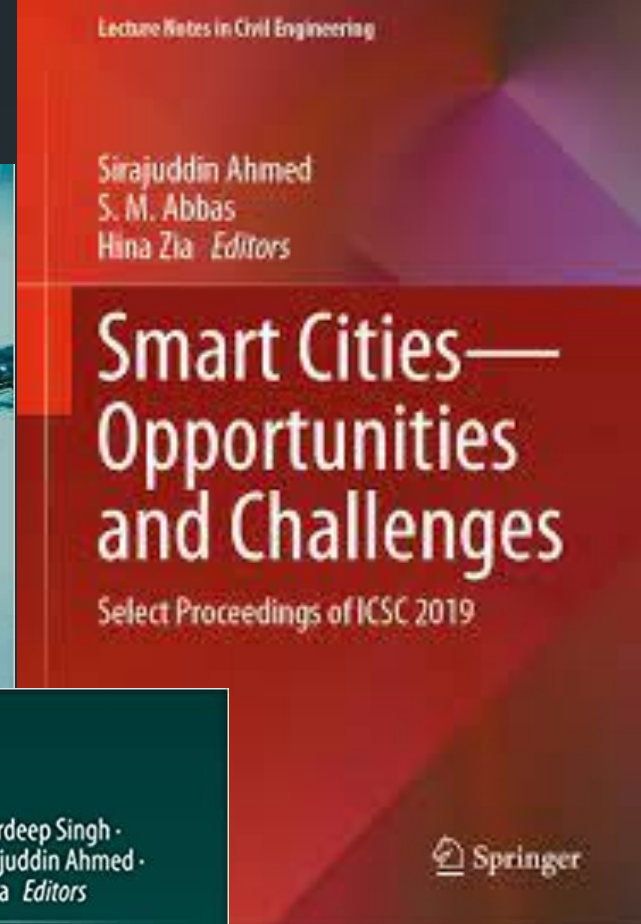
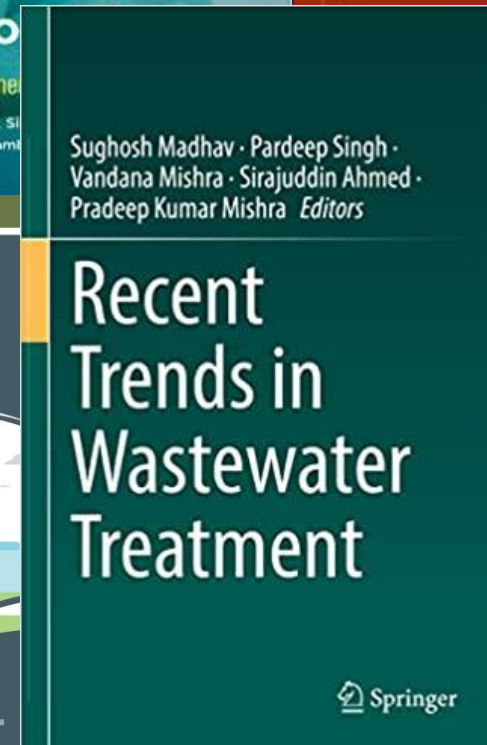
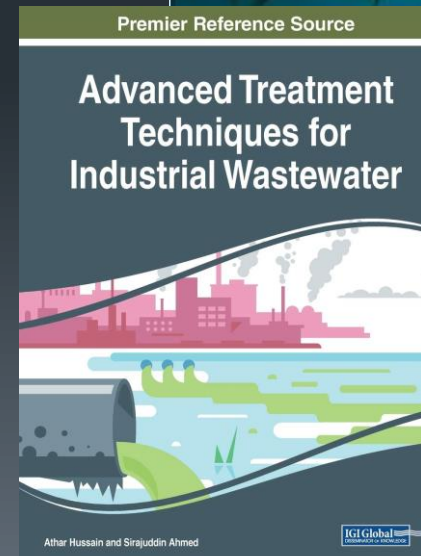
Treatment of Emerging Contaminants treatment and its bioaccumulation

Biological Impact of Electromagnetic Waves

International Conference on Smart Cities – Challenges and Opportunities (March 2019)

An Indo-Iranian workshop on Water Resource Management (October 2020)

International Conference on Smart Villages – Challenges and Opportunities (August 2023)



Consultancies and Advisory Activities

Closely working for **National Mission for Clean Ganga** under Ministry of Environment, Forest & Climate Change since 2017

Hon'ble Prime Minister Shri Modi has praised the efforts of **National Mission for Clean Ganga** made to clean the aquatic environment of Ganga Basin.



Jamia was recognized among the top three contributing Technical Institutes along with IIT Delhi & IIT Roorkee for Nemami Ganga project

Prof Sirajuddin is a nodal expert Environmental Management of Slaughter houses and Dairy Industries

Consultancies and Advisory Activities

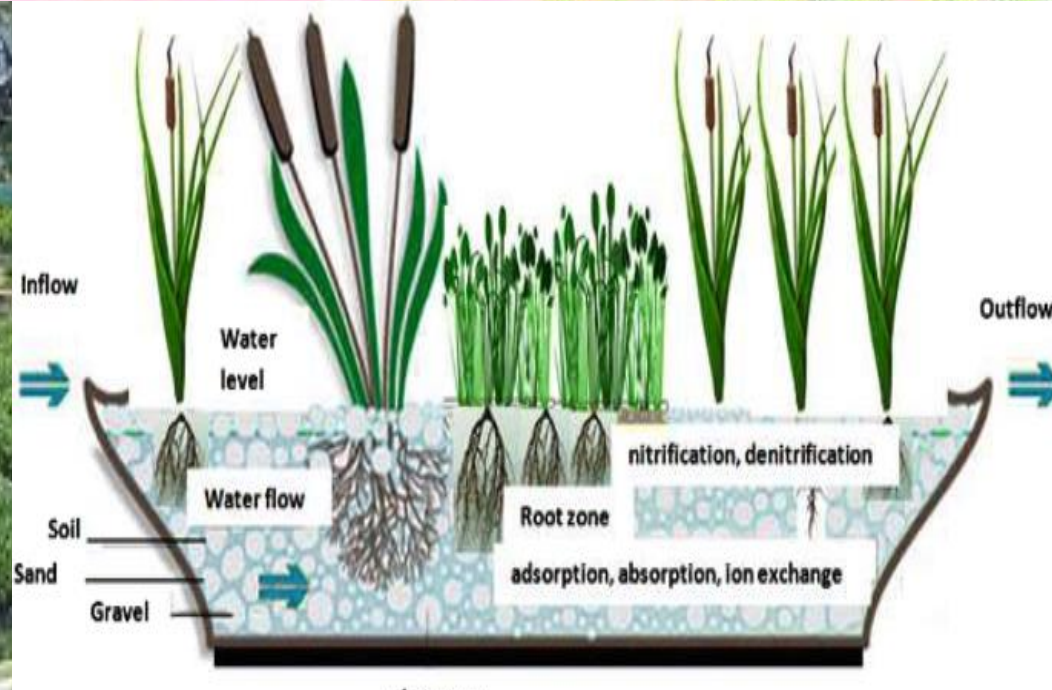
Decentralized sewage treatment for its reuse

DEWATS Technology

12 Parks and its water bodies have been rejuvenated in Delhi

Community center and business districts

Major Drains flowing in Delhi



спасибо

GRACIAS

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THANK YOU

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