

Ajay Kumar Garg Engineering College Ghaziabad

## **Message From The Director General**

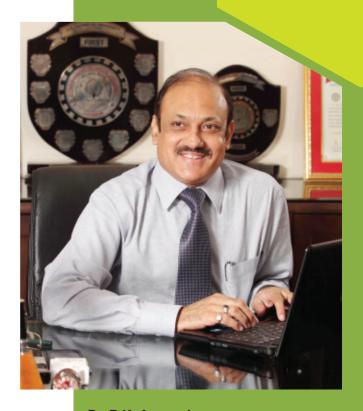
The scope of education is not only to impart and grasp technical knowledge, but also to ensure harmony with the nature and environment.

Being environment friendly simply means having a lifestyle that is complimentary for the environment. Environment friendly processes, also referred to as eco-friendly, nature-friendly, and green, are basically sustainability measures referring to products and services, habits, laws, guidelines and policies that claim reduced, minimal or no harm upon ecosystems or the environment.

Learning to be more environment friendly is easier than you may think. You don't have to jump in by changing everything, start small to make the changes more sustainable and a part of your normal life. You need to start with learning to make different choices on a personal level that help in changing your awareness and consumption of resources. The changes are surprisingly easy to make; there are more ways than you can imagine to begin to practice conservation. And the next step is to make your fellow beings aware of the need of protecting the environment and practice ecofriendliness on a community level; the rest will fall in place itself.

AKGEC not only ensures its commitment to an environment friendly milieu in its infrastructure and activities but also brings about awareness in its students, faculty and staff towards the necessity of looking after the Mother Earth to make this planet a better place for our communities and generations to come.

This brochure highlights the focus and efforts made by AKGEC towards eco-friendly approach and conservation of natural resources in different areas.



**Dr. R.K. Agarwal**Director General



#### **AKGEC - AN ECO FRIENDLY CAMPUS**

Ecological balance in nature is the equilibrium and harmonious co-existence among all living organisms and their environment. Excessive usage of one or more of natural resources leads to environmental imbalance. The present global warming is a serious outcome of environmental imbalance to cause devastation in form of melting glaciers, rising sea levels, disruption of weather patterns etc. Hence there is an urgent need for a collaborated approach towards saving the nature and the environment.

AKGEC firmly believes in contributing to safeguard our environment. In keeping with the college philosophy of environmental sustenance, the college adopts a holistic ecofriendly approach across its campus infrastructure and activities.

The simplest way to define what being eco friendly means is to say that it is the act of living with intent. The intent is focused on not creating harm to environment, and to prevent as much harm from occurring to the environment through your interactions with it. It goes beyond an idea and extends to actual practices that influence how communities, businesses and individuals conduct themselves.







## **BUILDINGS**

The architecture and design of the college buildings are in accordance with the philosophy of the famous Architect Laurie Baker.

The buildings ensure maximum sunlight and ventilation. Brick walls are provided in parts of the buildings and the wall bricks have intermittent gaps to provide thermal isolation that facilitates higher temperature in winters and lower temperature in summers

The construction of buildings is with maximum use of bricks and stones and minimal use of cement plastering. This helps to reduce maintenance.

The hostel buildings have been designed with open court yards with green plantations inside to provide high circulation of natural and fresh air with natural sunlight.





#### **WATER RESOURCES**

Overflow of water is prevented by automation of water flow in overhead tank. For safe and clean drinking water, dosing pump at water inlet of the tanks for chlorination are installed.

Testing of ground water sources is commissioned every 6 months from Government approved laboratories.

A network of 20 rain water harvesting wells connected to all terraces ensures channelization of rain water towards ground water level and recharge of ground water.

The sewage treatment plants, designed under the guidance of Centre for Science & Energy (CS&E), a Government Agency, are installed to recycle the waste water for horticulture needs.









The design of washbasin taps has been altered by the college Mechanical Engineering Department in order to optimize water flow for reduced wastage. The design of the taps is such so as to facilitate proper closing of the taps after use.

Water dispensers have also been installed in all urinals to release only the required quantity of water after use.







## **ENERGY & ELECTRICITY**

AKGEC has installed on-grid solar power systems of capacity of 330 kW by installing solar photovoltaic panels on the available roof area of academic complexes and hostels to facilitate harnessing of solar energy. The solar power systems are linked with electric supply grid and surplus power is fed back to grid.

Consumption of electric power is minimized by use of solar water heaters in all 6 hostels, LED lights in the academic and administrative areas and power saving air conditioners and other electrical equipment.

Surprise check by the electrical staff in the premises and minor penalties for wastage of electricity serves as a deterrent against wastage.



#### **GREENERY & HORTICULTURE**

The college places high focus on plantation in all non-concrete areas of the campus to prevent a dusty environment. All lawns and hedges are maintained on regular basis to enhance the beauty of the horticulture. Grass between paver stones on footpaths helps in reducing vaporization and provides a green look. The college buildings are surrounded by large open areas with well maintained lawns and plantations.

Planting of trees by the eminent guests and meritorious students is an AKGEC tradition that has led to a green environment all over the campus.

The college has a full fledged horticulture section managed by a trained horticulturist with a fleet of gardeners working under him.



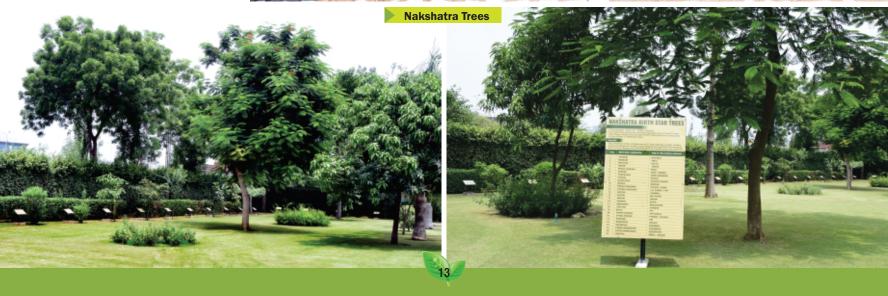




The college Faith Centre has been constructed with large open and green spaces that provide a perfect environment to the students for yoga, meditation and relaxation.

27 Nakshatra trees have been planted along the wall of the Faith Centre to induce a healthy and spiritual environment. In accordance with the Indian Vedas, the Nakshatra plants are associated with the ruling Gods of the various Nakshatras and each human being is influenced with such a plant in accordance with the the Nakshatra under which he is born.





AKGEC participates every year in the annual horticulture competition organized by Land Craft Society under the aegis of GDA and has been regularly getting a number of prizes under various categories.

















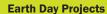


#### **NATURE CLUB**

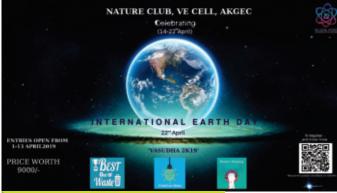
Nature Club, under the aegis of the AKGEC Value Education Cell, is committed not only to spreading awareness about the present precarious situation due to pollution, deforestation, global warming, ozone layer depletion etc., but also motivates students to discover solutions for these problems and for living in sustainable manner while ensuring complementarity with Nature around us.

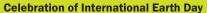
The club celebrates the Earth Day every year on 22nd April. The activities include

- Best out of Waste a learning towards recyclability and reusability
- Poster Making Competition on right utilisation of natural resources, protection of natural resources and enrichment of the natural resources













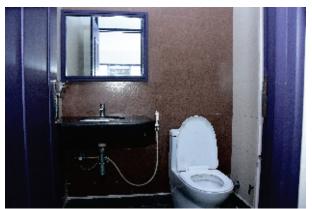
#### **CLEANLINESS & HYGIENE**

High and sustained focus is imparted on good level of cleanliness in all areas of the campus.

The college follows the policy of a clean campus and the students, faculty and staff are encouraged to dispose garbage only in the dustbins. Cleanliness drives through posters and other means are carried out from time to time.

The college maintains a polythene free campus where single use plastic including water bottles etc. are not encouraged.







Toilets are always kept clean by use of standard cleaning materials to ensure high level of hygiene.

**Clean and Maintained Washrooms** 

#### **WASTE MANAGEMENT**

In order to ensure proper waste management, dustbins are placed at convenient locations all over the campus for ease of disposal by the students, faculty and staff. Color coded dustbins are used for recyclable garbage and biodegradable / wet waste. The dustbin stands have been designed in-house for ease of removing and keeping back the dustbins.

The disposal of the waste is managed by emptying the dustbins from various locations in separate rooms demarcated for the purpose - three rooms for dry garbage and two rooms for wet garbage are constructed where garbage is collected.

A private Agency M/s Eco-wise, certified by the Government for waste conversion and disposal, is hired for daily collection and disposal of waste. Eco-wise provides monthly sustainability report on quantum of waste collected, recycled, disposed and CO2 emission avoided.

A 350 kg waste disposal machine has been installed for converting wet waste from hostels, canteens and green plant leaves / twigs into manure to be used for college horticulture.











## **The AKGEC Mantra**

Optimum usage of natural resources used by mankind is the basic need of the day to maintain required balance in nature





SAVE WATER. SAVE LIFE.



# Ajay Kumar Garg Engineering College

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