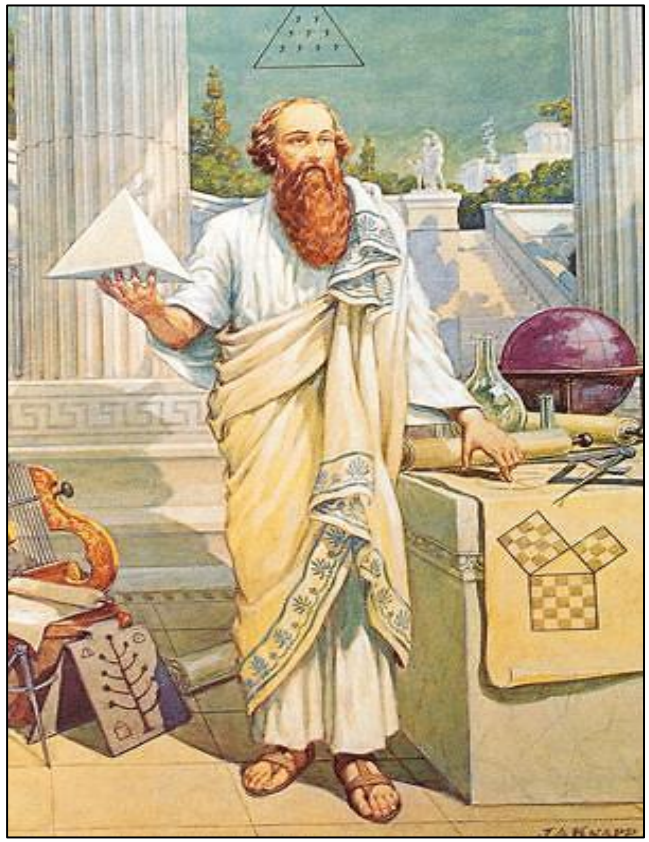
PHARMA 1 HUMANITAS THE ENERGY OF PYTHAGORAS

Science, engineering, and technology applied to the nanoscale is called nanotechnology. Our plans include establishing a few facilities to do research in this field for nanoproducts, new patents, and strategic marketing planning. We are working in progress to use in future the Nanotechnology,because has the potential to transform in a better sustainable planet in ways that are unimaginable in the coming years. Nanotechnology it is the term used to describe a broad range of materials and technologies that have one thing in common: they are ten thousand times too small to be seen.



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ENERGY ENERGY

ENERGETICAL SCENARIO OF WORK IN HEALTHCARE SECTOR:

1) **THE MOTOR MAGNETIC GENERATOR ARE NOT AVAILABLE TO SALES IN THE MARKET BUT WE HAVE AN ALTERNATIVE.**
2) **THE KEY OPTION IT IS TO SALES OF ENERGY BATTERY STORAGE SYSTEM, ELECTRIC POWER THERMAL GENERATOR,PHOTOVOLTAIC PANELS AND BALLAST-COMPATIBLE LED TUBES COMPATIBLE IN HEALTHCARE SCENARIO.PHARMA1HUMANITAS HAS DEVELOPED A WIDE RANGE OF SOLUTIONS WITH HEAVY FUEL OIL AND NATURAL GAS GENERATORS, TO ENSURING RELIABLE ELECTRICITY SUPPLY, PARTICULARLY DURING EMERGENCIES, NATURAL DISASTERS, OR IN OFF-GRID OR ISOLATED ENVIRONMENTS.**

1. Advantages of a Hybrid Diesel Generator-Photovoltaic System for Hospitals:

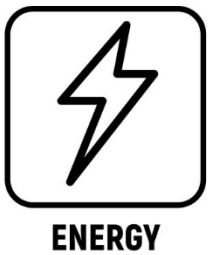
- ✓ **Ensuring Critical Operations:** In case of grid failure or force majeure event, hospitals must continue to operate 24/7, particularly in intensive care units (ICU), operating theaters, and other critical care departments. A 50–150 MW EPTG system could provide backup power to support vital systems, including life-support devices, ventilators, diagnostic equipment, and refrigeration for vaccines and medications.
- ✓ **Grid Independence:** Larger hospitals or regional healthcare hubs may benefit from an independent power supply, which reduces reliance on an external power grid.
- ✓ **Storage and Load Balancing**: In regions where renewable sources are used alongside EPTGs, the thermal generator can serve as an energy buffer, providing power when solar or wind energy is unavailable (e.g., at night or during calm weather), thus supporting hospitals' energy needs continuously.

✓ District Energy Systems for Healthcare Campuses:

- **District Heating and Cooling:** A large-scale electric thermal generator can provide district heating and cooling systems to large healthcare campuses or hospital complexes. Thermal energy can be stored in large tanks or other medium for later use, providing space heating in cold climates and cooling in hot climates.
- **Steam Supply for Medical and Sterilization Processes:** Hospitals often require large amounts of steam for autoclaving (sterilization of medical equipment), heating, and even certain treatment procedures (e.g., heat therapy). EPTGs can provide a continuous supply of steam and hot water, ensuring that these critical operations are not interrupted.

✓ Healthcare Facility Energy Management:

- **Cogeneration or Combined Heat and Power (CHP):** A combined heat and power (CHP) system is a configuration where an EPTG is used to generate both electricity and useful thermal energy (such as steam or hot water). Hospitals could use such systems to increase the overall energy efficiency of their operations, reducing energy costs and lowering their carbon footprint. In some hospitals, the simultaneous production of heat and power could enable more efficient operation of the HVAC (heating, ventilation, and air conditioning) systems, medical sterilization processes, and other energy-intensive operations.
- **Microgrid Integration:** EPTGs can be a key part of a hospital's microgrid, where the hospital acts as an isolated, self-sustaining energy unit. A microgrid ensures that the hospital can continue operating even when the larger grid fails, increasing the hospital's energy security



Large-scale electric power thermal generators are ideal for use in healthcare facilities that need reliable, sustainable, and continuous energy, particularly those with 50–150 MW of capacity. They can be extremely important for grid independence, disaster recovery, and the dependable provision of vital healthcare services. EPTGs can assist guarantee that hospitals and healthcare systems continue to deliver vital services, even in the most difficult situations, whether they are utilised for cogeneration, backup power, or integration with district energy systems.

AVAILABLE NOW

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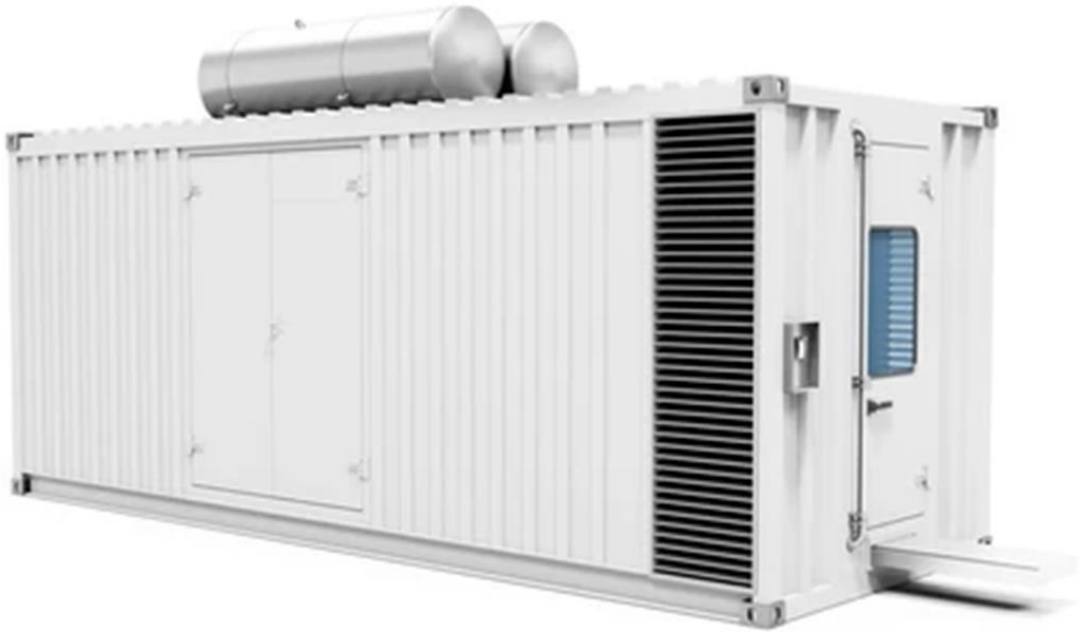
AN ALTERNATIVE IT IS TO SUPPLY THIS TYPE OF THIS GENERATOR



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Ballast-compatible LED tubes are an excellent choice for hospitals and mobile clinical in emergency healthcare scenarios due to their ease of installation, energy efficiency, durability, and enhanced lighting quality. In fast-paced, resource-constrained environments like emergency response centers or mobile clinics, the ability to quickly replace fluorescent tubes with LED alternatives (without rewiring) ensures continuous operations and reduces downtime. Additionally, their long lifespan, low maintenance requirements, and energy savings make them a practical and sustainable lighting solution for healthcare facilities during critical situations. By using ballast-compatible LED tubes, healthcare teams can quickly set up a lighting system that is energy-efficient, portable, and low-maintenance. These lights can run on backup generators or solar power, making them ideal for such scenarios.

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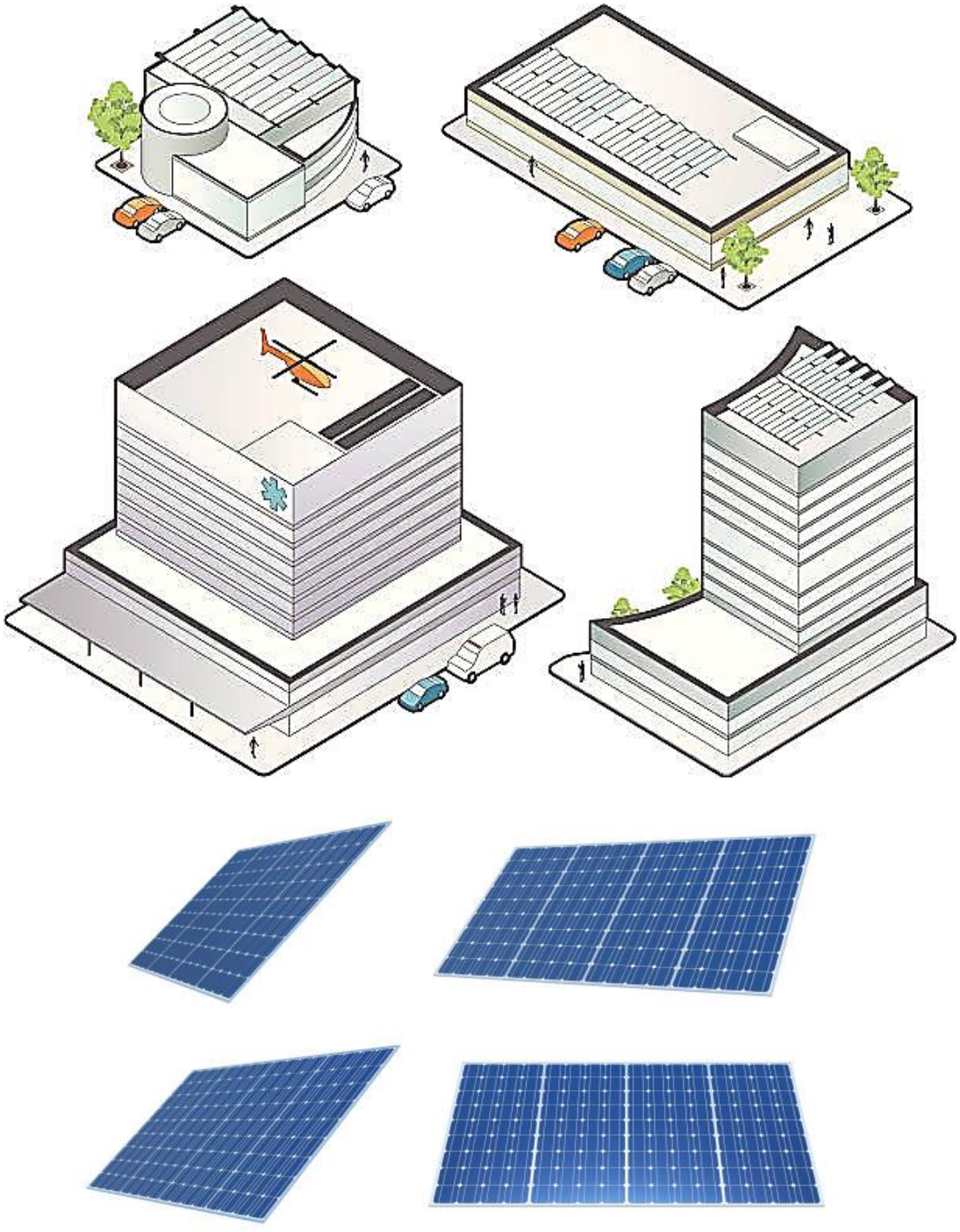
HEALTH – BEAUTY- HI-TECH

AVAILABLE NOW

Battery storage systems are available to supply this a powerful and sustainable solution for both hospitals and rural villages in healthcare emergencies and remote areas. They provide reliable backup power, enable integration with renewable energy, reduce energy costs, and improve resilience during disasters or grid failures. By storing energy and releasing it when needed, battery storage ensures that healthcare facilities—whether large hospitals or mobile clinics—can operate without interruption, even in the most challenging environments. These systems are not just a step towards energy independence but also contribute to long-term sustainability, improving the overall healthcare infrastructure in rural and underserved areas.

3D FUTURE PHOTOVOLTAIC PANELS IN HOSPITAL COMPLEX



IN RURAL OR OFF-GRID AREAS, ESPECIALLY WHERE HEALTHCARE SERVICES ARE LIMITED, INTEGRATING SOLAR ENERGY (VIA PHOTOVOLTAIC (PV) ARRAYS) WITH CONTAINERIZED ENERGY STORAGE SYSTEMS CAN PROVIDE A RELIABLE, SUSTAINABLE, AND AUTONOMOUS POWER SUPPLY FOR MOBILE CLINICS. THIS SETUP IS PARTICULARLY USEFUL IN EMERGENCY MEDICAL SCENARIOS IN REMOTE REGIONS WHERE THE ELECTRICAL GRID IS UNRELIABLE OR ABSENT.

- **Hospital Power Demand:** A typical hospital can consume between 1 MW and 5 MW depending on its size, the number of beds, equipment, and whether it operates at full capacity (e.g., intensive care units, operating rooms, emergency departments). For a large hospital or a healthcare facility, the demand could be even higher. 300W×5hours=**1.5kWh/day per panel**

Now, to meet a 3 MW demand for the hospital:

3,000kW÷1.5kWh/day per panel=2,000 hospital photovoltaic panels needed.

This gives a basic idea of the solar panel count, but in practice, the system is usually designed with more panels to account for efficiency losses, shading, and other environmental factors.

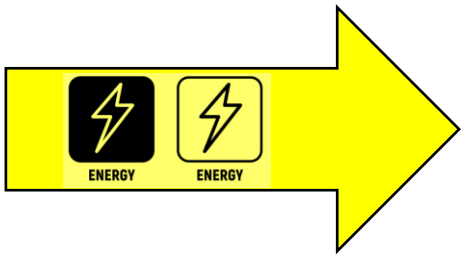
System Size in MW (for Solar Panels)

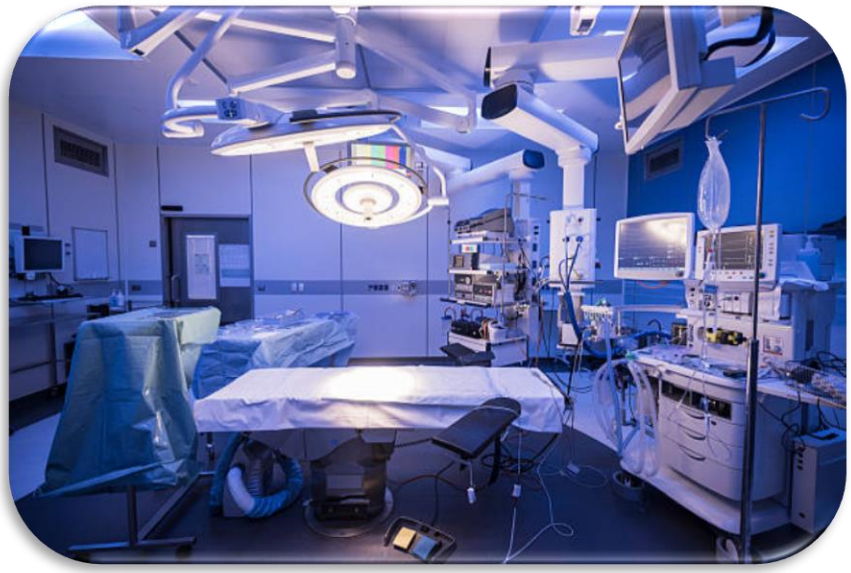
To generate 3 MW (for a 3 MW hospital), considering average daily sunlight:

3,000kW÷5hours of sunlight=600kW of solar panels needed to supply power during peak demand.

In terms of installed capacity (since panels only generate power during daylight):

- For full autonomy, a 1.2-2 MW PV system (or even larger) may be required, depending on factors like grid stability and backup power.





EPTG and PV System Integration

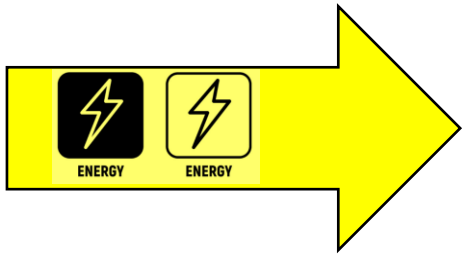
- The 50-150 MW EPTG can play a dual role in this setup:
  - Base Load Power: It can provide continuous, 24-hour power to the hospital, which is especially important for critical medical equipment.
  - Peak Power Support: During sunny days, the PV system can reduce the load on the EPTG by providing part of the energy required by the hospital, thus reducing diesel or thermal fuel consumption.

Total Capacity Needed

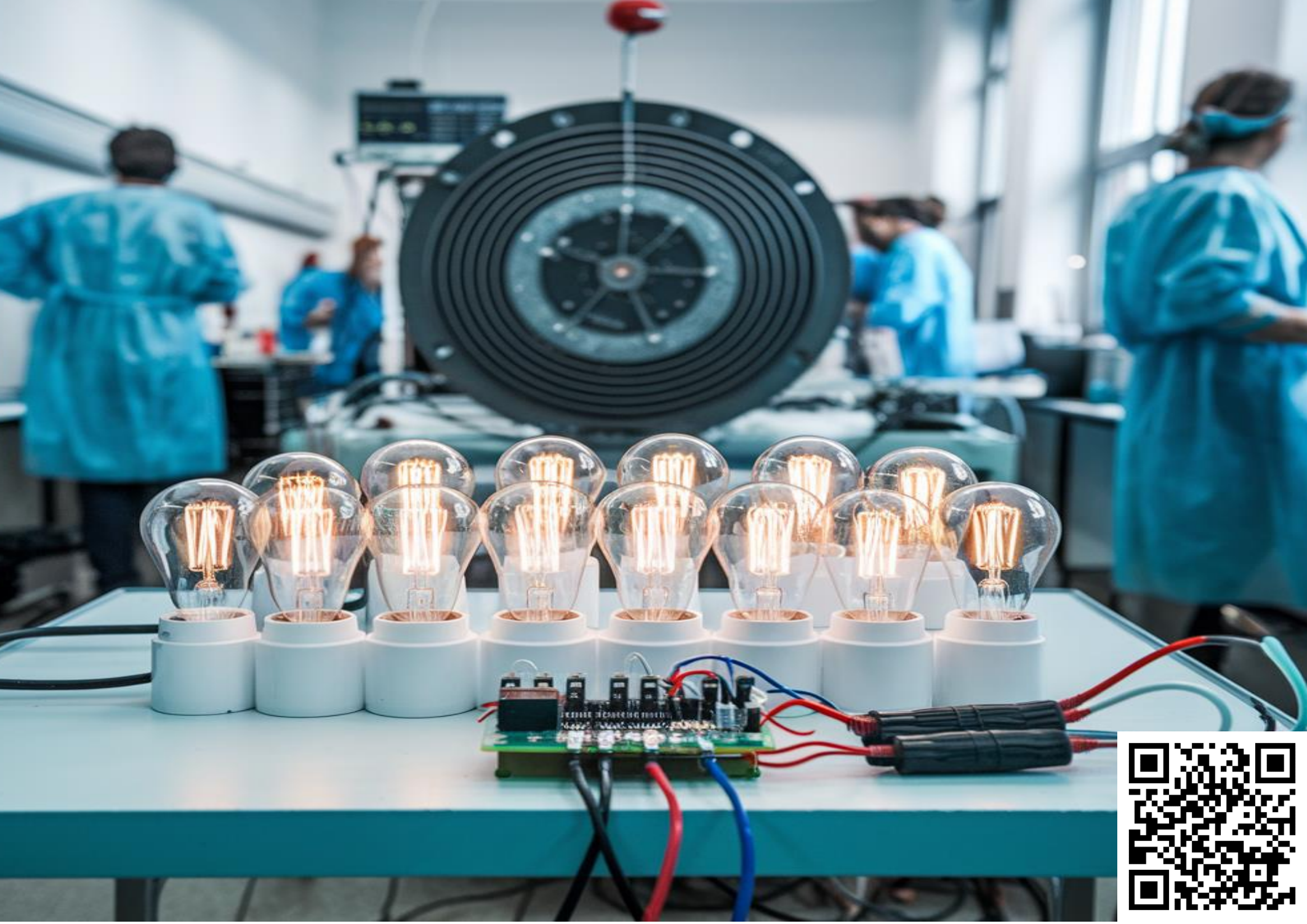
1. EPTG + Solar Power: If the hospital needs 3 MW of power at all times, and the solar array can cover about 1-2 MW of that demand during the day, the EPTG system will need to generate the remaining power, especially at night or during cloudy days.

EPTG System Size:

- A 50-150 MW EPTG is generally much larger than what a single hospital would need. However, for larger healthcare facilities or a group of hospitals (e.g., a network of hospitals or a regional hospital), this system could cover multiple facilities and provide energy security in case of grid outages or natural disasters.
- 50-150 MW EPTG system would easily cover the energy needs of multiple hospitals. For instance, if a hospital needs 5 MW, then a 50 MW generator could support 10 such hospitals or a large healthcare complex with sufficient reserve capacity.




BY THE WAY THE MAGNETIC GENERATOR WILL BE A SYSTEM THAT IN FUTURE MAYBE WILL PRODUCE ELECTRICITY AUTONOMOUSLY, WITH USING ENERGY STORAGE SYSTEM,POWER SYSTEM AND BATTERY STORAGE UNIT.WE CREATE CLEAN ENERGY PROTECTING THE ENVIRONMENT AND WITHOUT CO2 EMISSIONS.



FUTURE PROJECT FOR GENERATE A BRIGHTER FUTURE TO IMPROVE THE AFRICAN SCHOOL & HEALTH-CARESYSTEM New high power density efficient power converters have been developed for emerging applications (renewable energy, smart power grid, smart buildings, rural development, and so forth) thanks to recent advancements in semiconductor devices, soft magnetic materials, and controllers. However, the design of the modern technology-based power converters tailored to specific applications includes multiphysics challenges including intricate trade-offs between cost, size and weight, efficiency, and dependability. Thus, in order to develop the next generation of power converters, there has been a lot of interest recently in the extensive multiphysics work in the areas of new power electronic converter topologies, switching and control, signal integrity, protection and condition monitoring, and design and optimization of magnetic components.

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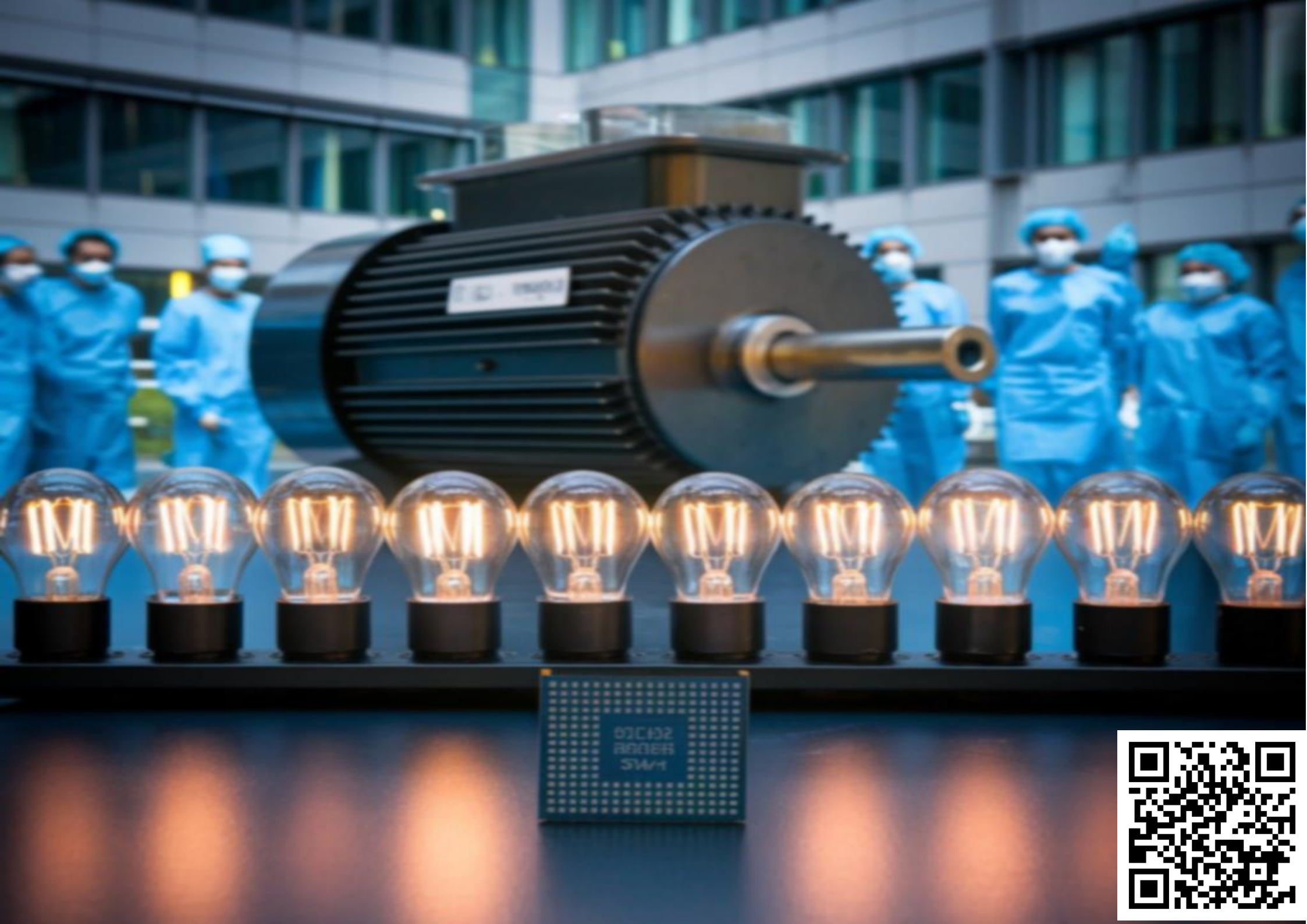
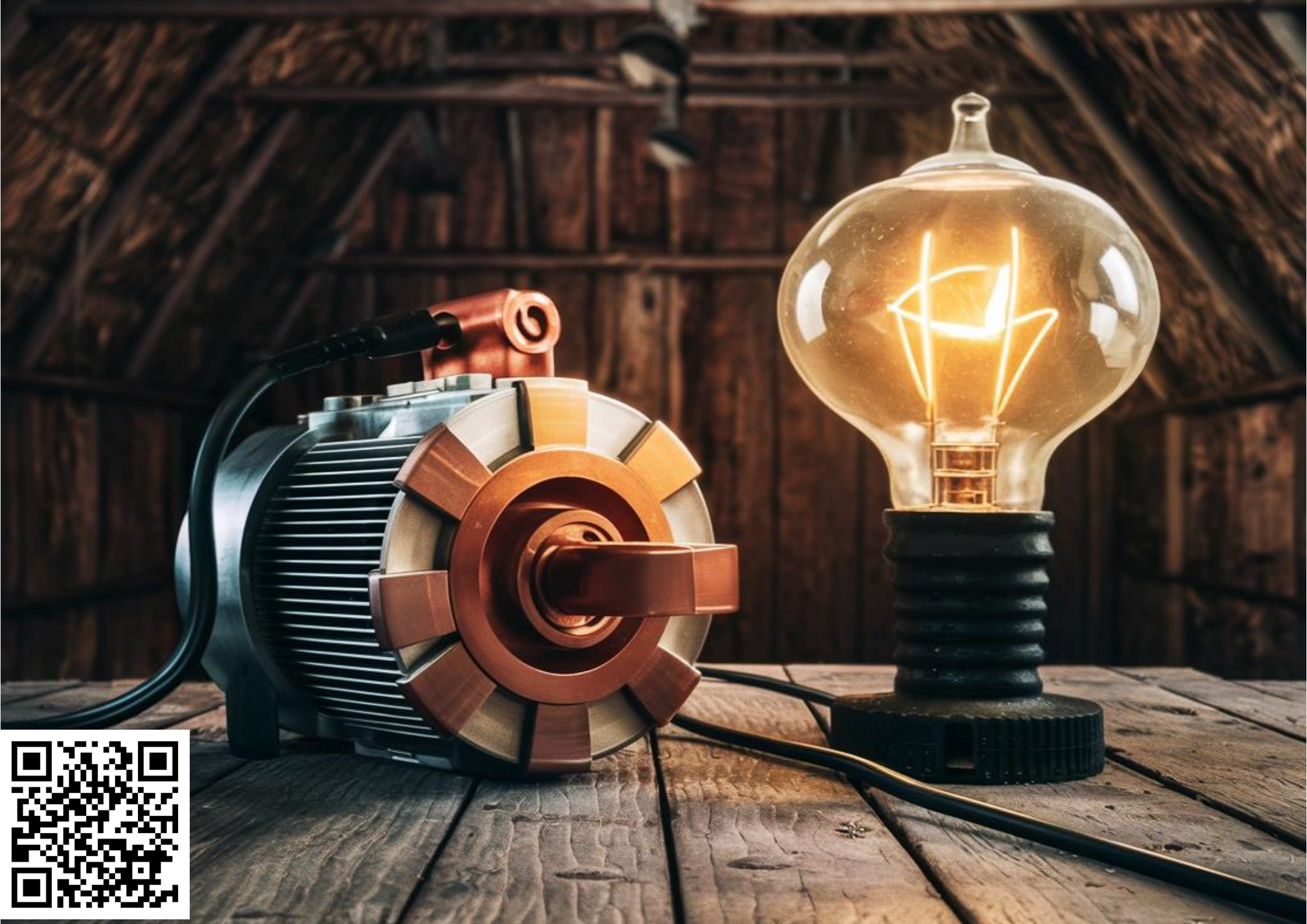
- ✓The ability to construct lone generators with ***40kwe<x>+100 kwe*** of power
- ✓They might be put in containers and connected in series until the required power output is achieved.
- ✓They run without the need of fuel or materials;
- ✓ The advantages of induction motor devices are robustness, economy, low maintenance and simplicity of construction.Use in periferical locations that has not energy infrastructures






HEALTH
INSURANCE
NANO
FUTURE TECHNOLOGIES
3D
AI
BIG
DATA

AT THE MOMENT WE ONLY SELL SPECIAL LED,GENERATORS & PHOTOVOLTAIC PANELS FOR HEALTHCARE SECTOR. THE PERMANENT MAGNET MOTOR IS NOT YET ON THE MARKET FOR SALE. WE HAVE ONLY STARTED A RESEARCH AND DEVELOPMENT,THE ENCOURAGEMENT OF RESOURCE EFFICIENCY AND THE TRANSITION TO A LOW-CARBON AND CLIMATE RESILIENT IN FUTURE VILLAGES PRESENT IN SOME AREA IN: AFRICA ALL INTELLECTUAL PROPERTY RIGHTS IN THE REALISATION OF THIS PROJECT ARE RESERVED TO PHARMA1HUMANITAS HOLDINGS LTD.

SPECIAL ORDER

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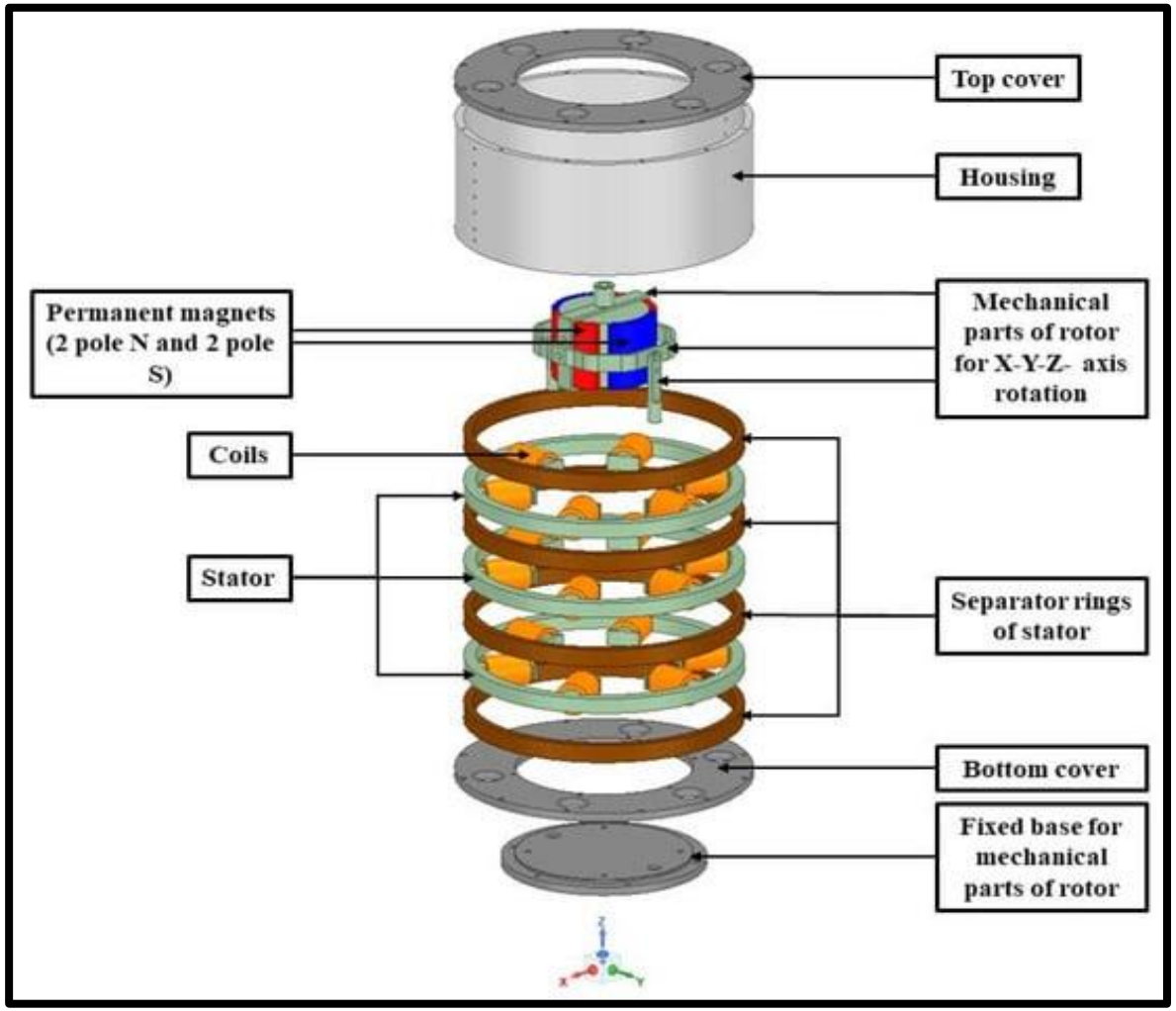
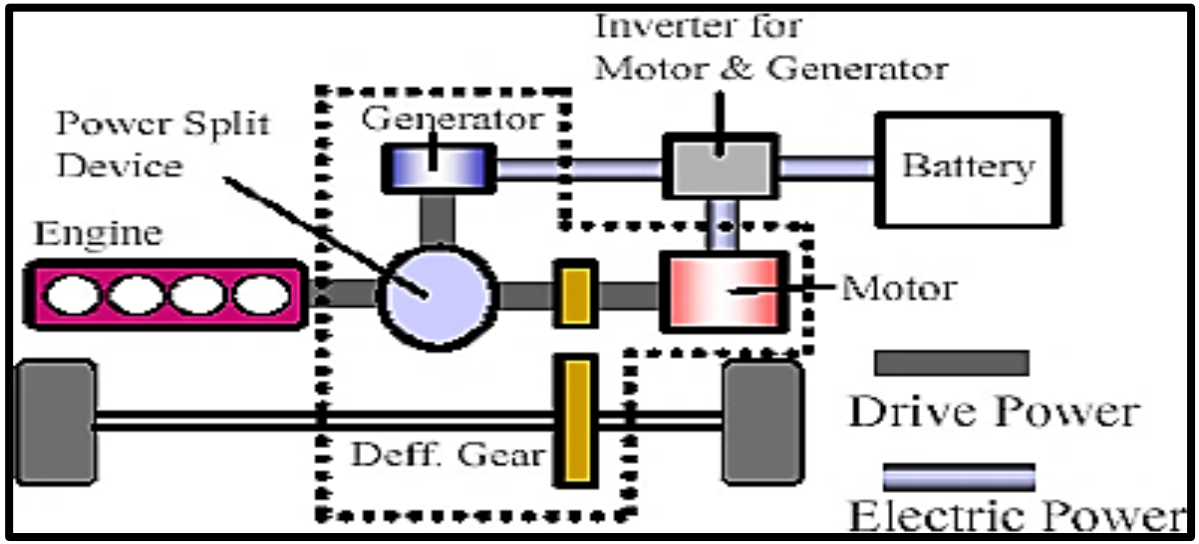




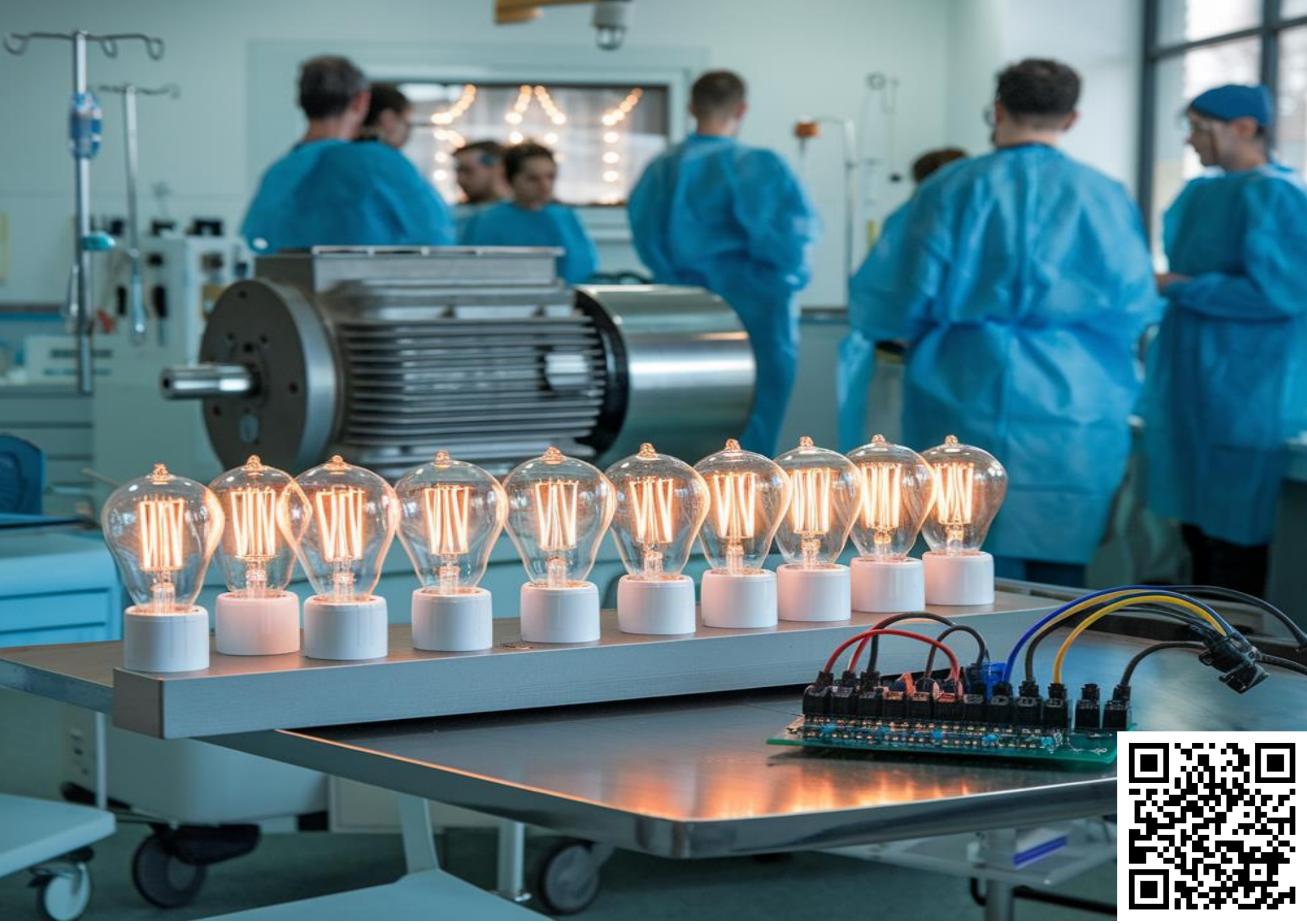
Pharma1humanitas holdings lt are working in progress,because this product of motor permanent magnet are not available to sales;only under special order will be available maybe.

Pharma1humanitas holdings ltd are working in progress for use in future nanotechnology to produce light in hospital areas and African rural villages will be an innovative approach that can address both energy efficiency and sustainability challenges. Here's how nanotechnology can be leveraged for this purpose:

1. Nanomaterials in Solar Cells:

- **Solar Panels with Quantum Dots:** Quantum dots, a type of nanomaterial, can be used to create highly efficient solar panels. These panels can convert sunlight into electricity more effectively than traditional materials. In rural African villages, where access to electricity is limited, these solar panels can provide a sustainable and low-cost energy source for lighting.
- **Perovskite Solar Cells:** Another application is the use of perovskite materials at the nanoscale to create flexible and lightweight solar cells. These can be installed on rooftops of hospitals or distributed in villages to power LED lights, reducing reliance on traditional energy sources.

2. Nanophosphors for LED Lighting:Energy-Efficient LEDs: Nanotechnology can enhance the efficiency and color quality of LED lights using nanophosphors. These are nanoparticles that convert light from a blue LED into a broad spectrum of light, mimicking natural sunlight. In hospitals, this can improve patient comfort and health outcomes. In rural areas, it can provide long-lasting, bright light with minimal power consumption.



- **Customized Lighting Solutions:** Nanotechnology can enable the development of LEDs with specific light wavelengths that are more suited for medical environments, promoting healing and reducing eye strain for both patients and medical staff.

3. Nanogenerators for Off-Grid Power:

- **Piezoelectric Nanogenerators:** These devices can harvest mechanical energy from everyday activities, like walking or wind, and convert it into electricity. In rural areas, these nanogenerators maybe could be use in future to power small lighting systems, providing a sustainable light source without the need for large infrastructure investments.
- **Triboelectric Nanogenerators:** Similar to piezoelectric generators, these devices can generate electricity from friction and vibrations. In hospitals, they could be maybe integrate in future into floors or other surfaces to generate power for lighting from the movement of people and equipment.

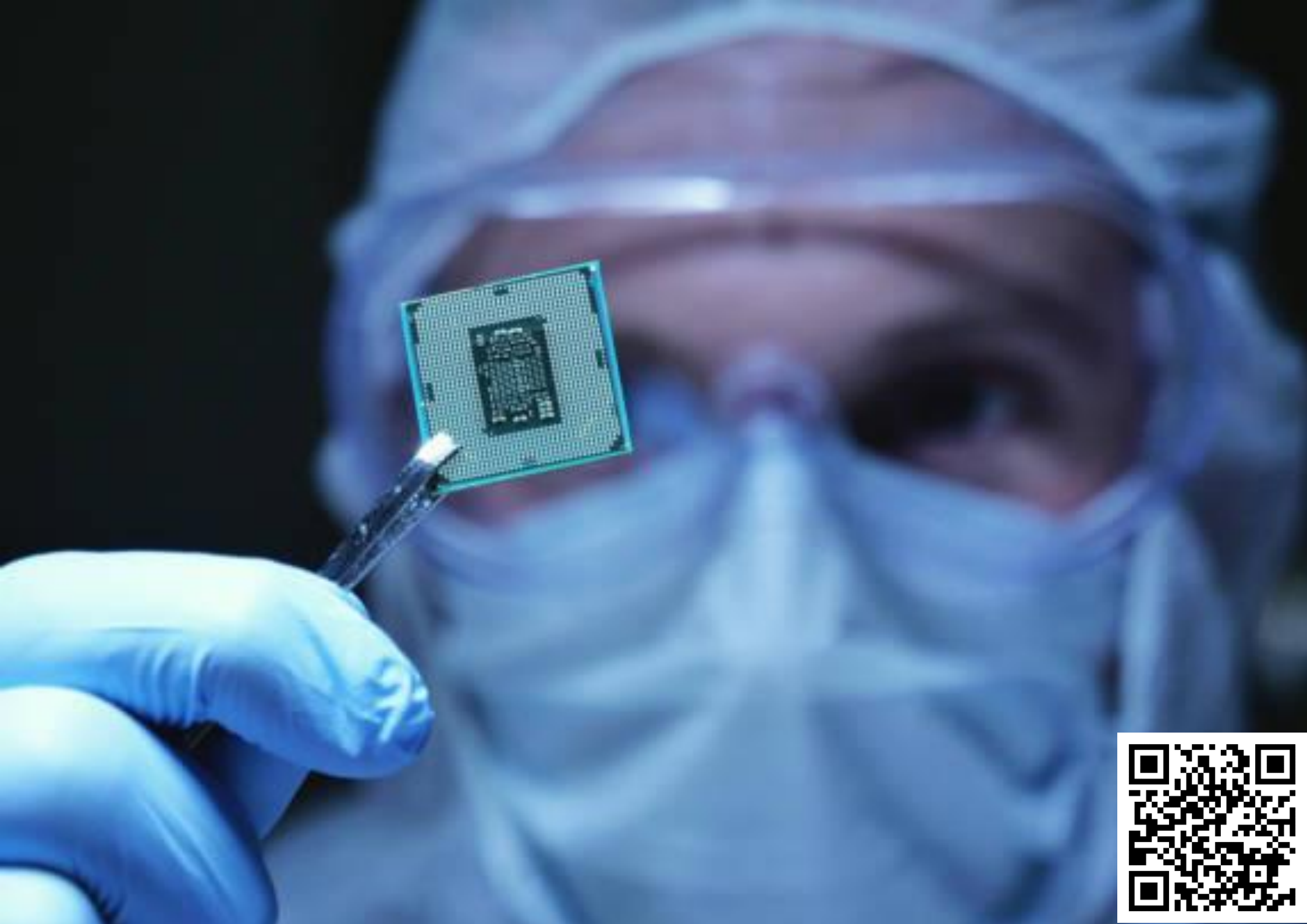
4. Nanobatteries for Energy Storage:High-Capacity Nanobatteries: Energy storage is crucial for areas with intermittent power sources, like solar energy. Nanotechnology can improve battery capacity and charging speed, making it possible to store solar energy during the day and use it for lighting at night. These nanobatteries could be vital for rural clinics and villages where reliable lighting is needed after dark.

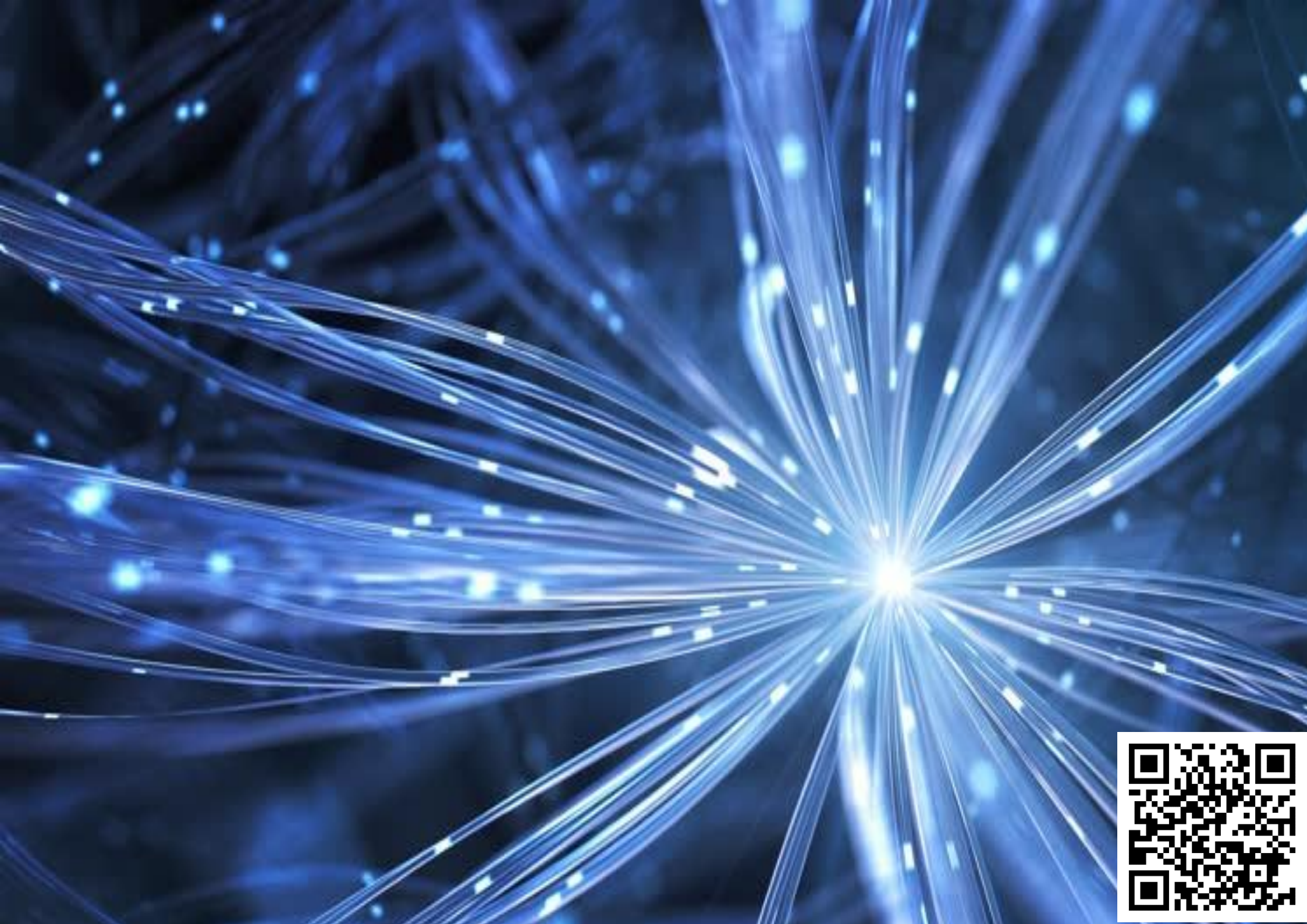
- **Flexible and Wearable Energy Storage:** Nanotechnology also enables the creation of flexible and even wearable batteries, which can be easily transported and used in rural settings to power LED lights and other small devices.

5. Nanocoatings for Enhanced Durability:

- **Self-Cleaning Surfaces:** Nanotechnology can create self-cleaning and anti-corrosive coatings for solar panels and lighting fixtures, ensuring they last longer and require less maintenance. This is particularly useful in remote or resource-limited areas where maintenance can be challenging.
- **Anti-Microbial Coatings:** In hospital settings, nanocoatings can be applied to lights and other surfaces to reduce the spread of bacteria and viruses, contributing to a safer environment.

6. Bio-Inspired Nanomaterials:Bioluminescent Nanoparticles: Inspired by nature, such as the light produced by fireflies, nanotechnology can create bioluminescent materials that produce light without electricity in humanitarian scenario. These could be used for low-level ambient lighting in rural areas or to provide emergency lighting in hospitals.





Our sustainable energy innovation tecnology is created by the PHARMA1HUMANITAS HOLDINGS LTD is to implementation a permanent magnet with a new engineering process considerably improved, of a new humanitarian,research and development methodology. Our group improve the sustainable approach in the design of rural development programs.

The technological and energy innovation of our team of experts,plays a central role in the development

of the economy to the benefit of both the citizens present in outlying villages and consumers to whom it enables better access to goods and services. Innovation, moreover, in the long run can help to increase employment but above all it diversifies it.

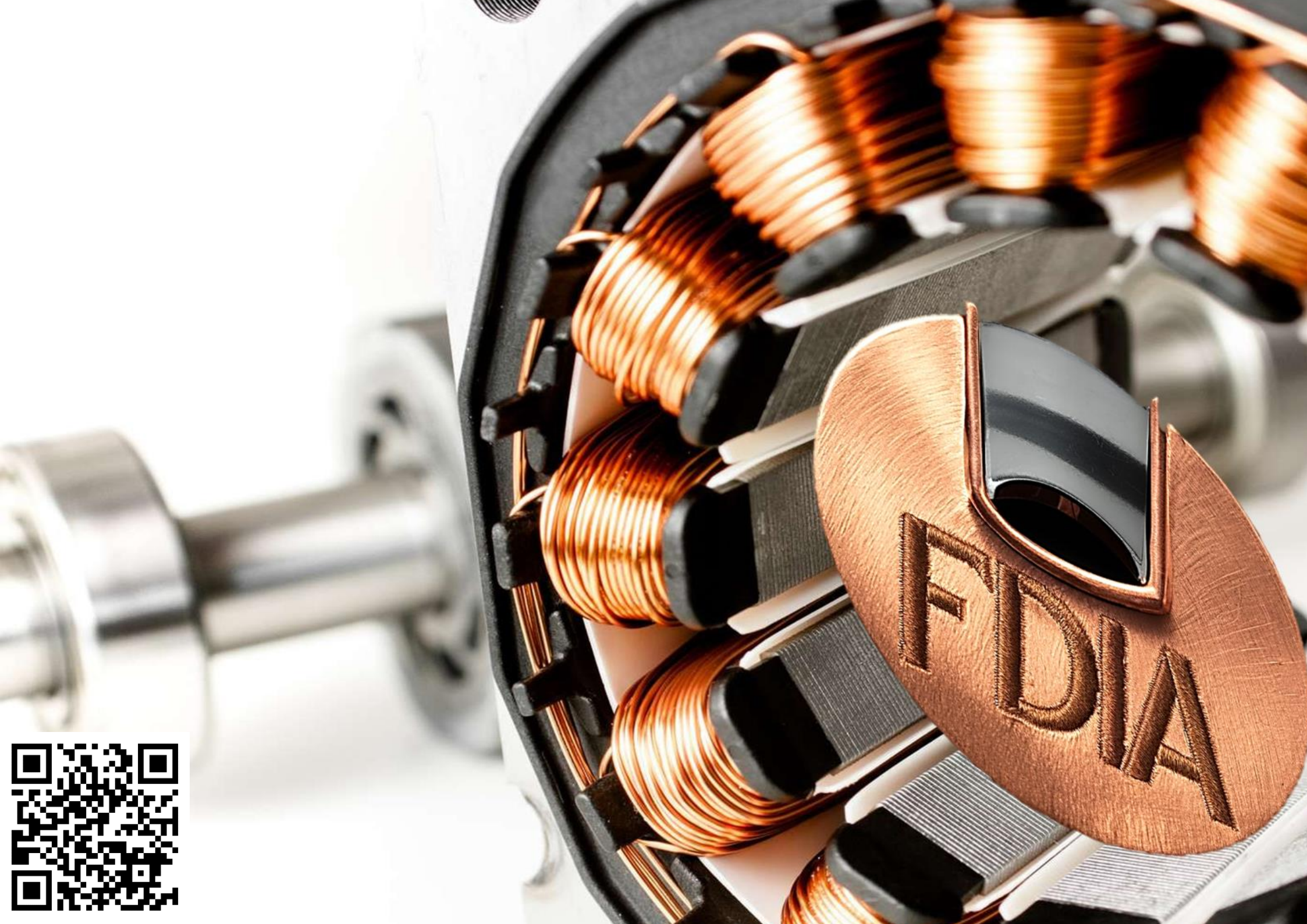
Electricity is a versatile but vital energy source. Because it is needed for refined power equipment such as computers,light and medical machinery, when it is used for less-refined needs such as heating

it should be used as efficiently as possible.


FDIA


FDIA

The components that make up metallic coatings will be nickel, copper, tin (which will be apply as a thin layer on the surface of sheet metal iron), or a mixture of the three. This group also contains metal ion deposits, such as those of aluminum.Especially appropriate when tolerances aren't allowed to be pushed too far. The factory has not yet been built but we have started our research and development study for the production of clean energy. This preliminary project ideated by by the President owner of pharma1humanitas company.Our innovative energetical permanent magnete will be maybe in future a solution for many countries in the Africa where electricity is difficult to obtain and this creates many additional humanitarian help and rural & urban development.This future project scenario will be ideal to water supply, lighting, heating, cooking, food storage, telecommunications in some African villages to be defined the area of future work.


FDIA

PHARMA1HUMANITAS ENERGY magnetic generator is essentially a generator with permanent magnets that rotates synchronistically with the help of an electric motor that runs on the generator's own energy. The promotion of social integration, the reduction poverty and economic development in rural areas. The idea of designing and producing electric generation equipment, based on the principle of magnetic instability, at economical industrial costs compared with other sources of generation, and especially "CO2 free," was born and has been implemented for some time.It was first experimentally verified and then a small production of electric generators was started, to test the feasibility of electro generation. The success of this action, which lasted a decade, led to the patenting and realization of a variable-size device, with an electrical power useful to the utility up to a maximum of about40 kWe, extending with new upgrades to about 100 kWe per individual device. In the field of technology, efforts can be made to provide support in standards formation, materials testing and patent innovation.The creation of the future plant production in the host country causes an inflow (positive balance) in the direct investment component of the capital account and therefore tends to improve the balance of payments of the African country.

The applications are many, such as:

- ✓ Telecommunication station,
- ✓ Water treatment systems.
- ✓ Power supply to isolated sites and african villages,homes.
- ✓ Rural villages
- ✓ Hospitals,
- ✓ School,
- ✓ Power systems
- ✓ Electricity transmission lines
- ✓ And any other sector where electricity is used.

Integrating permanent magnet motors into rural development in Africa, particularly for powering hospitals and villages, could offer a sustainable solution to the region's energy challenges. Here's a breakdown of how this could be implemented:

1. Permanent Magnet Motor Technology:

- **Definition**: Permanent magnet motors use magnets to produce a magnetic field that drives the motor. Unlike traditional motors, they don't require electricity to create the magnetic field, making them more efficient.
- **Energy Efficiency**: These motors are highly efficient, reducing energy consumption and making them ideal for areas with limited access to electricity.
- **Applications**: When connected to renewable energy sources like wind or solar, these motors can generate electricity for various needs.

2. Powering Hospitals:

- **Reliable Power Supply**: Hospitals require a consistent and reliable power supply for lighting, medical equipment, refrigeration, and other essential services. A combination of solar panels, wind turbines, and permanent magnet motors could ensure a steady supply of electricity.

- **Emergency Power**: In areas where power outages are common, these systems can act as backup power sources, keeping critical equipment operational.

3. Village Electrification:

- **Lighting**: Villages can benefit from small-scale power generation systems using permanent magnet motors, providing consistent lighting for homes, streets, and community centers.
- **Economic Development**: Access to electricity enables economic activities such as small businesses, education, and access to information, which can drive overall development.

4. Renewable Energy Integration:

- **Solar and Wind Power**: Pairing permanent magnet motors with renewable energy sources can reduce reliance on fossil fuels and create sustainable energy solutions tailored to the specific needs of rural African communities.
- **Energy Storage**: To ensure continuous power supply, energy storage systems (like batteries) can be integrated, storing excess energy generated during the day for use at night or during low production periods.

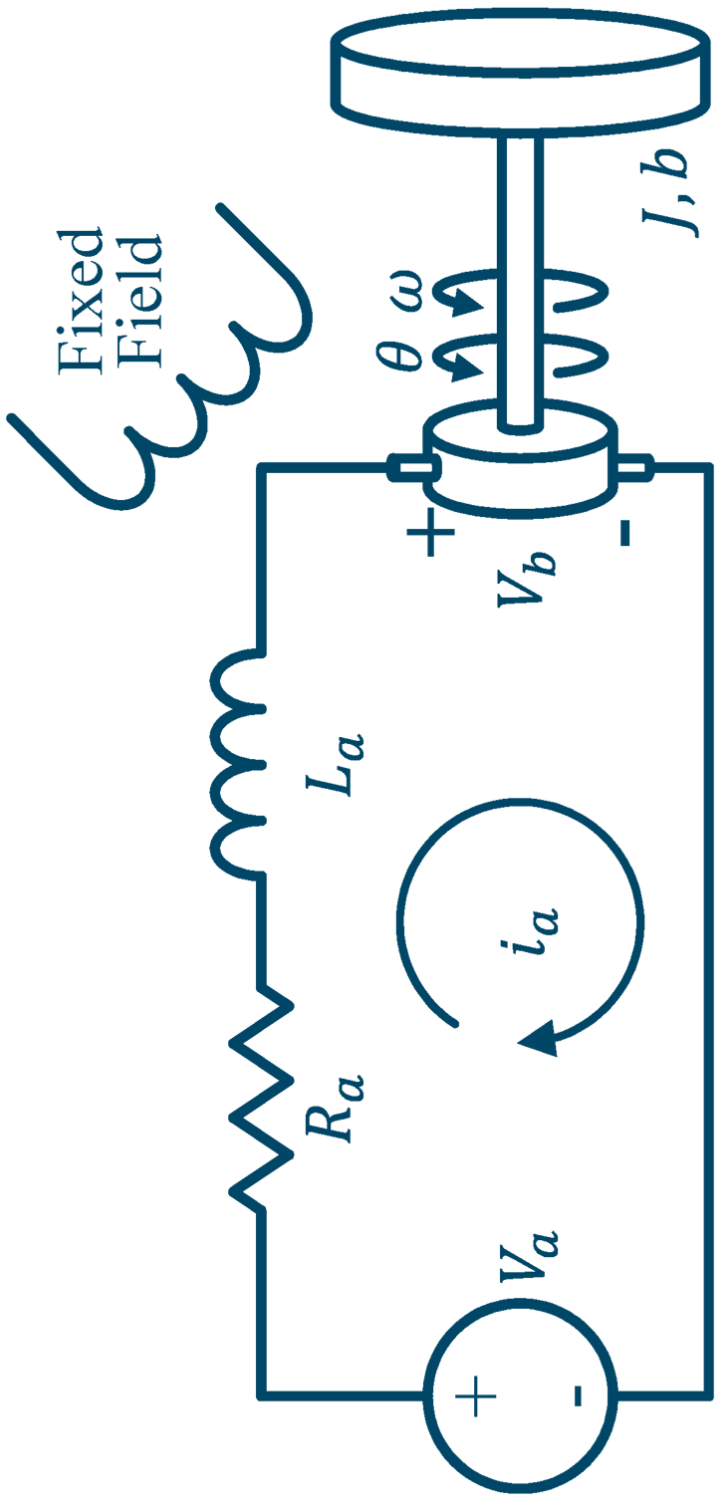
5. Community Training and Involvement:

- **Local Training**: Providing training to local communities on the maintenance and operation of these systems is crucial. This could involve setting up local workshops or partnering with technical schools.
- **Job Creation**: The development of these systems can create jobs in installation, maintenance, and operations, contributing to the local economy.

6. Sustainability and Scalability:

- **Long-Term Viability**: By focusing on sustainable energy sources and efficient technology, these projects can be scaled to other regions, reducing dependency on external energy sources.
- **Scalable Solutions**: Small systems can be expanded as the village grows, with the possibility of integrating more advanced technologies over time.

Permanent magnet synchronous motors (PMSMs) will be use in the renewable energy sector due to their high-power density, large torque-to-inertia ratio, high reliability, etc. This project involves emerging control feasibility studies of the salient PMSMs. The optimization algorithms, such as adaptive velocity particle swarm optimization (AVPSO) and genetic optimization (GA) algorithms, are also presented, including the optimization procedures. The advanced control strategies like improved field-oriented control (FOC) and model-predictive control (MPC). Model optimization algorithms and predictive methods have been used to develop control and planning strategies in electric power systems and machine drives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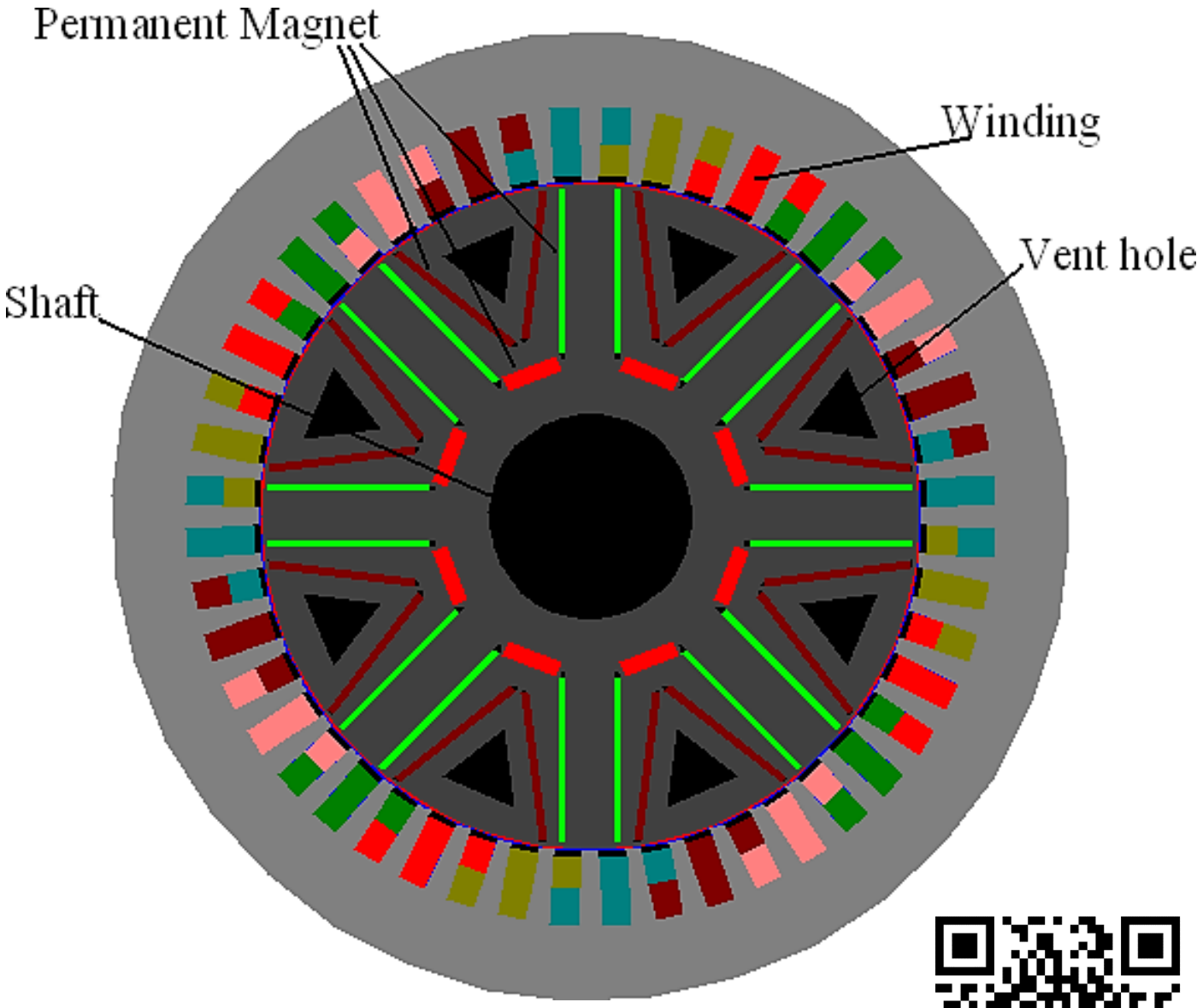
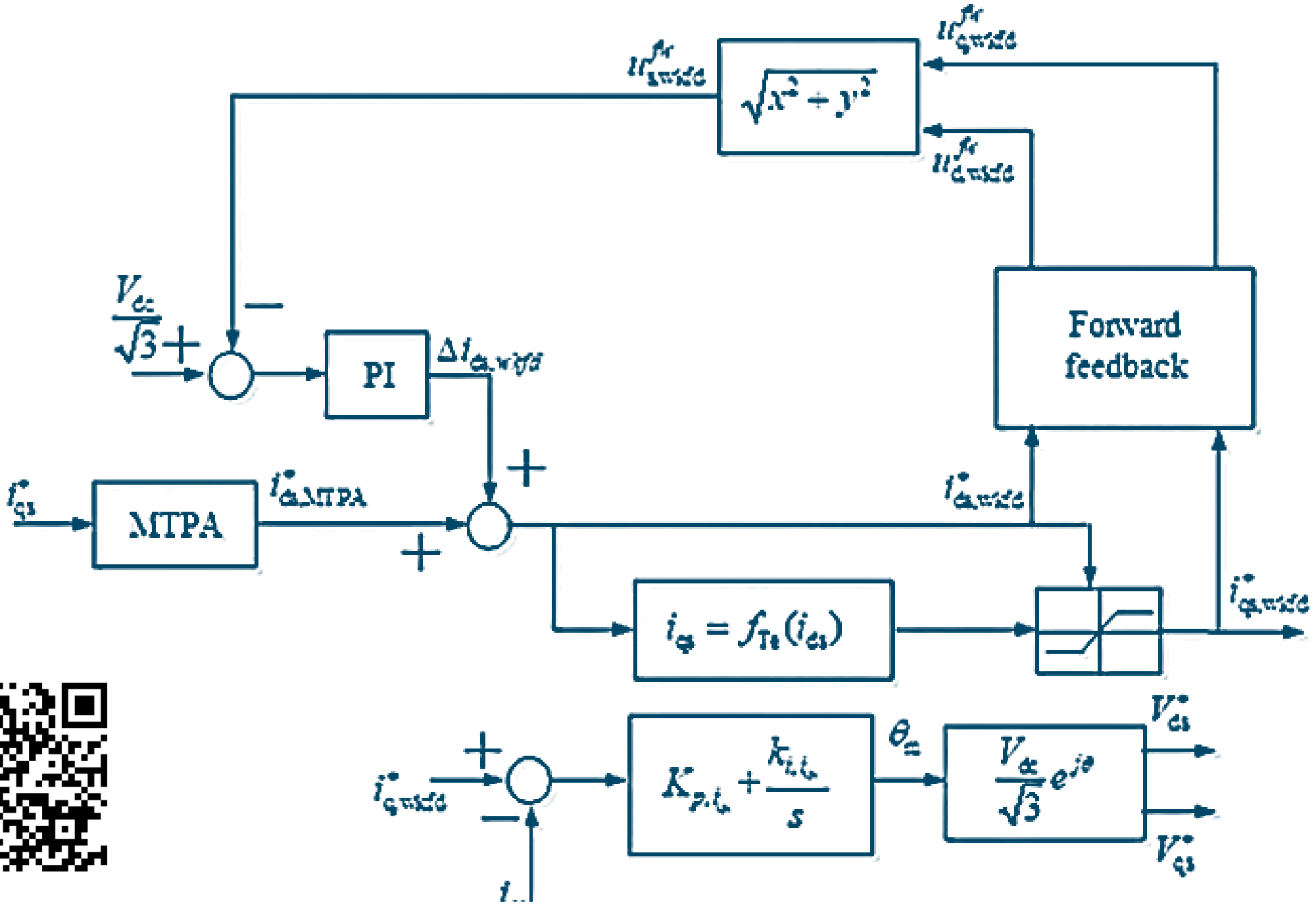
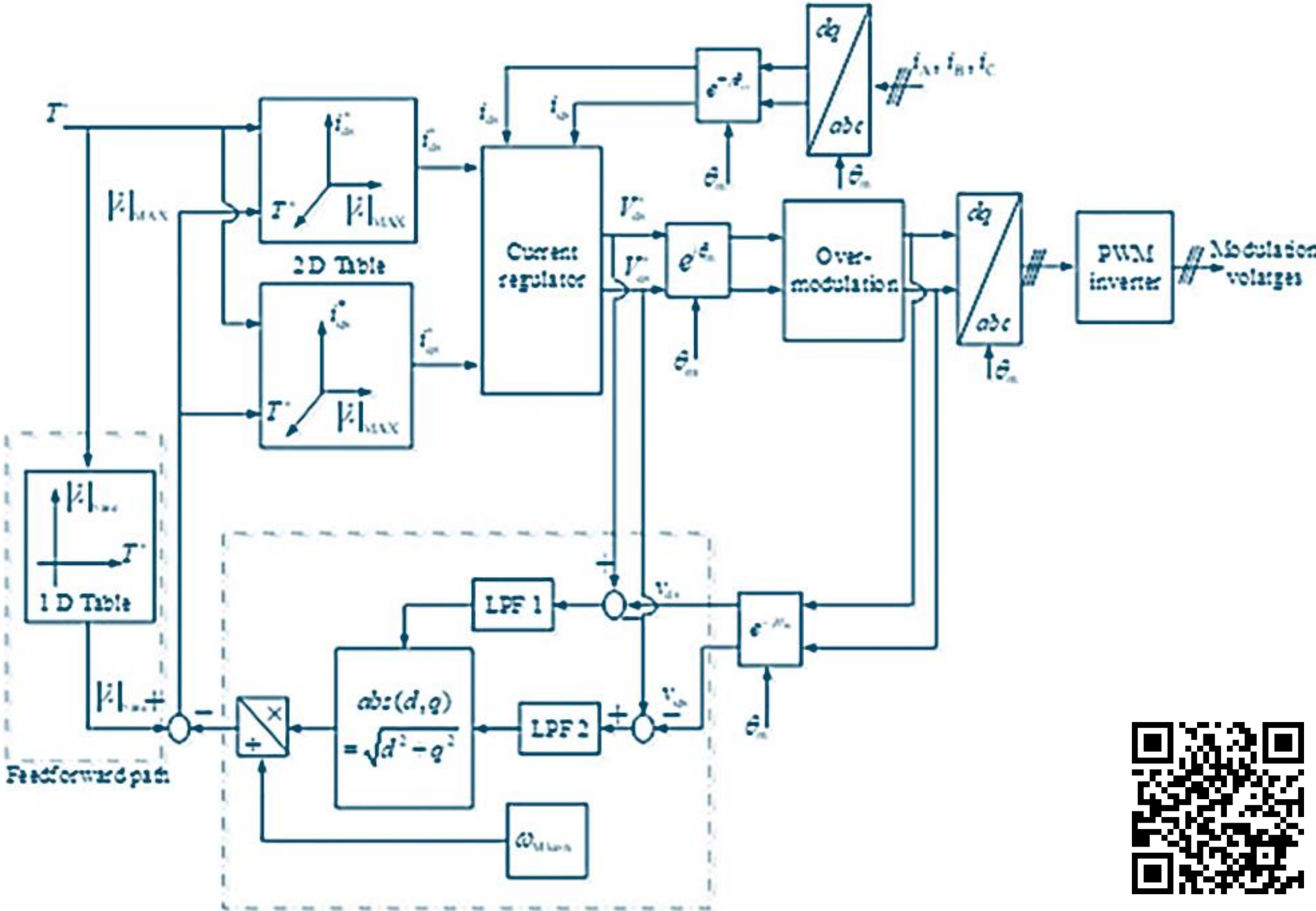
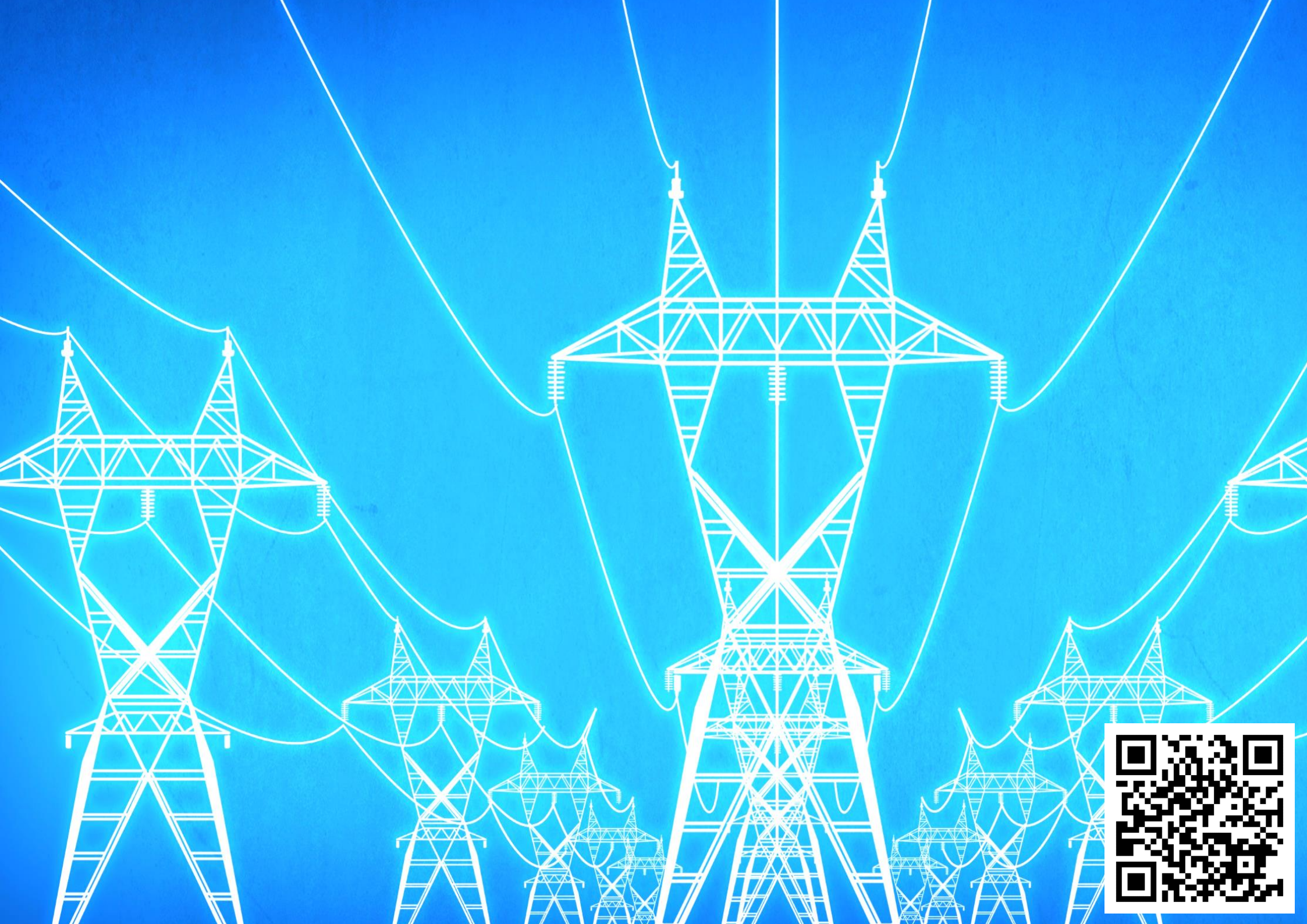

Permanent Magnet
Winding
Vent hole
Shaft

CLEAN ENERGY FROM PERMANENT MAGNETS




2D Table
Current regulator
Over-modulation
PWM inverter
1 D Table
LPF 1
LPF 2
Feedforward path



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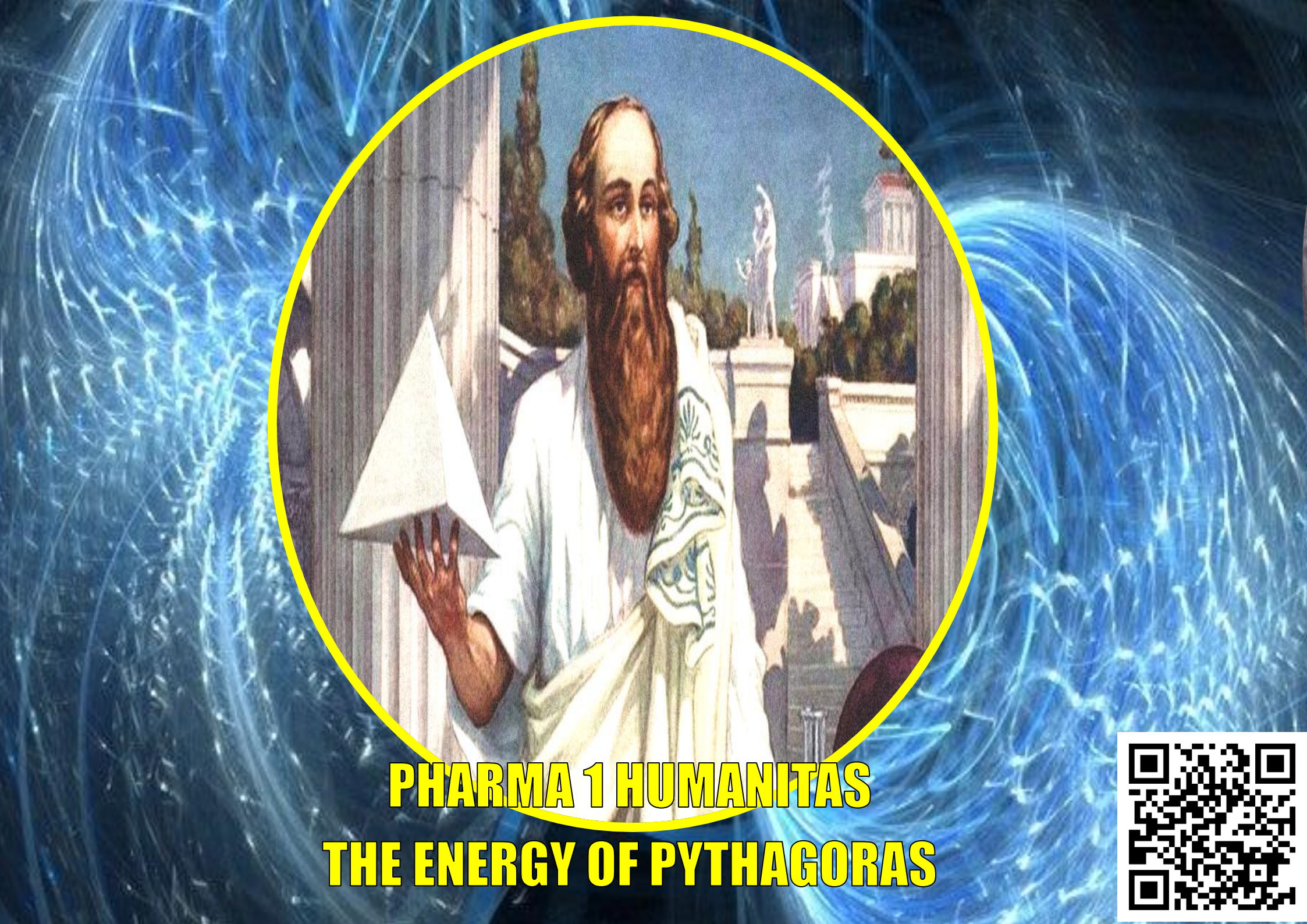
THE ENERGY OF PYTHAGORAS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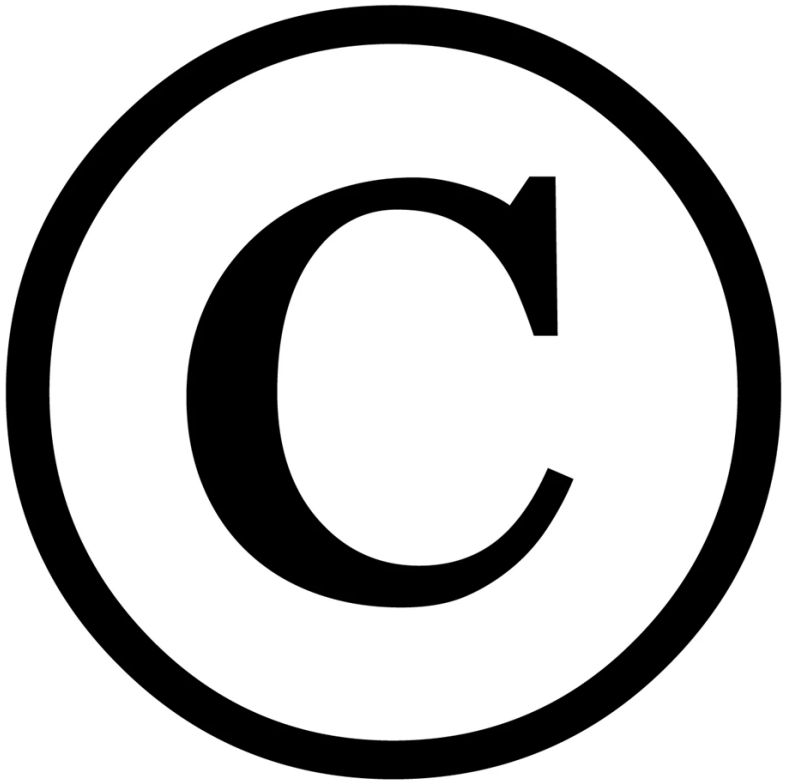
Website:www.pharma1humanitas.com

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