GITAM: Progress Report on Industry, Innovation, and Infrastructure (SDG 9)

GITAM strives hard to address the issues of society at large, viz: natural calamities, climate change, food, agriculture, healthcare, renewable & non-renewable energy resources, anthropological, linguistics, human resources, defense etc., through multidimensional research in GITAM, as sponsored by various government funding agencies such as DST, UGC, DBT, CSIR, MoES, MoEFCC, DRDO, DAE, BARC, NABARD, ICMR, WNRF, ICPR, AYUSH etc.

Funded Research Projects during 2019-20 and 2020-21

GITAM conducted 39 research projects with a funding of 10.5 crores INR in 2019-20 and 5.1 crores INR in 2020-21

The University encourages the faculty members to take interest and initiative in undertaking consultancy assignments which help to improve the interaction between the industry and the University. The nature of consultancy assignments undertaken by various departments of the University include preparation of detailed project reports, health assessment of structures, topography surveys, condition monitoring, soil & sludge analysis, bioremediation, the effect of nano-particles in lubricants, evaluation of heat transfer, analysis of water samples, air and noise levels, ambient air quality monitoring, fly-ash utilization, vendor perception surveys, etc.

Consultancy projects during 2019-20 and 2020-21

GITAM faculty has undertaken 15 consultancy projects worth 15,26,100 INR in 2019-20 and 15 consultancy projects worth 15,15,030 INR in 2020-21.

****

The University has started an Intellectual Property Rights (IPR.) Cell associated with National Research Development Corporation (NRDC), New Delhi. The IPR policy document has been formulated, enunciating clear guidelines to promote research and consultancy and facilitating researchers registering their patent rights. The IPR cell is responsible for encouraging faculty to file for patents. Faculty Development programs are regularly organized to create awareness on patenting.

Patents Granted : 2019-20 and 2020-21

1. Patent Number:318766;
   Date Of Certificate Issue:22/08/2019;

Title of Invention: METAL-ORGANIC FRAMEWORK MATERIALS FOR GAS STORAGE

2. Patent Number:333489;
   Date Of Certificate Issue:28/02/2020;
   Title of Invention: PROCESS FOR PRODUCING AN AMINO ACID
3. Patent Number:343246;
   Date Of Certificate Issue:4/08/2020;
   Title of Invention: A NOVEL COMPOUND WITH ANTI-CANCER PROPERTIES

Details about some of the patents published relating to sustainability Development Goals are furnished below:

S.No.	Name of the Faculty	Invention	Patent Details
1	Dr. MANJUNATHAM	SUSTAINABLE LIGHTWEIGHT GREEN CONCRETE PREPARATION USING PVC WASTE POWDER	INA 202141042740
2	Dr.Imandi Sarat Babu	A METHOD FOR GREEN POWER PRODUCED IN MFC VARIOUS MICROORGANISMS	INA 202141033914
3	Dr. KVGD. Balaji (DistinguishedProfessor)	ISSE- BUILDING MANAGEMENT: INTELLIGENT BUILDING MANAGEMENT SYSTEM FOR SMART ENERGY GRID.	INA 202141026964
4	Dr. V. D. N. Kumar	Sustainable and Effective Treatment Technology for Removing Organic Pollutants in Wastewater Treatment using Nanobubbles	INA 202141040195

Research Infrastructure:

GITAM has many research Centers and Laboratories which are used to experiment and elaborate the research where society can benefit a lot. The following are the URLs:
https://research.gitam.edu/#research-centres,
https://research.gitam.edu/gis-vsp,
https://research.gitam.edu/gss-blr

The centre for Food Processing Technology has formulated a millet-based therapeutic diet having a lower glycemic index and made it available to Anganwadi workers for distribution. The centre has also developed a healthy drink rich in Calcium, Zinc and Iron for the benefit of children suffering from malnutrition.

The students of the Civil Engineering department have developed an eco-friendly technology for converting vegetable wastes from GITAM Hostel kitchens into a nutrient-

rich fertilizer by vermin-composting.

Startups nurtured and established

The Venture Development Centre of GITAM University nurtured a startup named "HydroGravitricity" that aims at generating electricity from grey water as a renewable energy solution for people living in buildings with a minimum height of 40 feet. This is a startup of low-carbon technology. This start-up won a price worth of $12000 and launched its business and made big hotels, huge residential appartments as their clients.