ACTIVITIES OF THE INNOVATION & INCUBATION CENTRE FOR THE YEAR 2020-2021

ACTIVITY REPORT



SINCE 1951

INNOVATION & INCUBATION CENTRE

JAMAL MOHAMED COLLEGE

(Autonomous)

College with Potential for Excellence
Accredited (3rd Cycle) with 'Å Grade by NAAC
DBT Star Scheme & DST-FIST Funded
(Affiliated to Bharathidasan University)
Tiruchirappalli – 620 020

Innovation and Incubation Centre Activities

Activity 1 - Industry Institute Collaboration / MOU signed during the year 2020-

2021 Department of N&D and Jamal Innovation and incubation center in Collaboration with KS foods of Nilgiris for Technology Transfer.

Date & Place: 22.02.2021 & Nilgiris

| Name of the Company / Institute and Address | Date of MoU | Duration | Purpose of Collaboration | Activities conducted during the year | No. of students / teachers participated |
|---|----------------|----------|-----------------------------|--|--|
| M/S. KS foods, 4/14H, Ketchigatty Village, Kannerimukku (Post) Kothagiri, The Nilgiris – 643217. | 22.02.2021 | 3 years | Technology Transfer | New Product formulation (Health mix) made out of local millets in Udhagamandalam Nutrient analysis and shelf-life was carried out. | 20 teachers 50 students |



Principal is presenting the Technology Transfer Certificate to M/S. KS foods, Kothagiri, Tamil Nadu.

As research leads to the enrichment of the teachers' knowledge and understanding, the college management encourages the faculty members to carry out original research by providing cash incentives for the publication of research articles in the peer reviewed reputed journals approved by the UGC and for the publication of books with ISBN. A cash incentive of Rs. 1000/- is given for each publication in Web-of-Science/Scopus indexed journals and Rs. 500/- for the publications in other UGC CARE List journals. An incentive of Rs. 2000/- is given for publication of a book and Rs. 10000/- for patent. Monetary incentives are also given to the research guides for the guidance and supervision of M.Phil. and Ph.D. scholars pursuing both full-time and part-time research work.

The college publishes an Interdisciplinary referred journal entitled 'Jamal Academic Research Journal (JARJ) and a Peer reviewed science journal entitled 'Journal of Advanced Applied Scientific Research (JAASR) to promote research publications by the faculty members.

The students are also encouraged to carry out socially relevant research projects under the guidance of a faculty advisor and the college management provides a seed money of Rs. 10,000/for each such project.

To promote innovation and startups, an Innovation and Incubation Center has been constituted in the college as the per the norms and guidelines of the Institution Innovation Council, MHRD, Government of India.

Faculty members are encouraged to submit research project proposals to various funding agencies such as DST, DBT, UGC, etc. and necessary infrastructure facilities are provided by the college authorities for all the sanctioned projects.

To coordinate all the research activities in the college, a separate cell for research, under a senior faculty member as Dean, has been set up. The services of a senior prominent scientist have also been availed for providing research guidance and counselling to our faculty members.

Facilities Created

A FTIR spectrometer and a FT Raman spectrometer are versatile instruments for obtaining the infrared and Raman spectra of samples, digitizing the information and displaying the spectra in real time. Both these instruments complement each other and therefore help in identifying the functional groups present in a given sample and other allied information.

Photographs of the Fourier Transform RAMAN spectrometer (Bruker - model MULTIRAM) installed using the DST-FIST Fund.

A. The FT-IR Spectrometer (Model ALPHA II, Bruker-Germany)

a. Entire Unit

b. IR Spectrometer unit





b. Installation, Training and Utilization of the Instrument





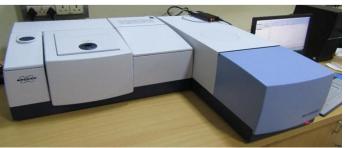


B. MultiRAM Bruker of FT Raman Spectrometer

a. Entire Unit



b. Proximal view of the unit



c. Interferogram

d. Tools Box for MultiRAM Bruker

e. Installation and Utilization of the Instrument



Funding:

With a view to utilize the DST-FIST Funds granted judiciously, a Common Instrumentation Centre has been set up in the college. A Fourier Transform Infrared Spectrometer and a Fourier Transform Raman Spectrometer have been purchased and installed in this common facility using the DST-FIST Fund. It is pertinent to point out at this point that though the DST-FIST fund sanctioned under the equipment head was for Rs. 60 lakhs/- only, the college management has borne an additional expenditure to the tune of Rs. 11 lakhs for this purpose.