

3.3.1. Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

- The institution provides a conducive environment for promotion of Innovation and Incubation. All required facilities are provided and guidance is extended to the students and faculty. Students and faculty are encouraged to actively involve in the application of pharmaceutical sciences for societal needs. Necessary support is provided for documentation, publication of research papers and also for obtaining patents.
- Awareness meets, workshops, seminars and guest lectures on Entrepreneurship are organized. Students are provided opportunities to directly interact with outstanding entrepreneurs excelling in their field. Product service training is provided for creating awareness on marketing the products. Entrepreneurship skills course for 30 hrs is included in curriculum.
- One patent was got awarded to the faculty in the year 2021 and 36 patents were published.

Patent Granted: 01

Sl. No.	Applicant Name	Title	Patent No.	Date
01	Prof. Rama Rao Nadendla	Formulation of glimepride controlled release transdermal patches by using natural polymers	364724	15/04/2021

Patent Published: 36

Sl. No.	Applicant Name	Title	Application No.	Date
01	Prof. Rama Rao Nadendla	Method for quantification of pifenidone, a covid-19 anti-fibrotic agent, by sensitive analytical techniques	202141010468	23/04/2021
02	Prof. Rama Rao Nadendla	Method for estimation of anti-parkinsonian drugs carbidopa, levopoda and entacapone, by RP-JPLC	202141013956	10/06/2021
03	Prof. Rama Rao Nadendla	Title : Method for quantification of Favipiravir by RP-HPLC	202141015629	23/04/2021
04	Prof. Rama Rao Nadendla	Method for development of rivapoxaban oral suspension	202141017058	23/04/2021

Sl. No.	Applicant Name	Title	Application No.	Date
05	Prof. Rama Rao Nadendla	Method for colorimetric estimation of Favipiravir in pharmaceutical formulation using different reagents	202141017984	30/04/2021
06	Dr. Rama Rao Nadendla	Method for formulation development of rivaroxaban effervescent granules	202141018196	30/04/2021
07	Dr. Rama Rao Nadendla & Darsi Eswar Tony	Muscle strength maze, equipment to assess the physical activity of rodents in diet induced hyperlipidemia	202141018515	30/04/2021
08	Dr. Rama Rao Nadendla	Novel UV-spectroscopic approach for quantification of simvastatin and sitagliptin in bulk and pharmaceutical formulation	202141017534	23/04/2021
09	Dr. Rama Rao Nadendla & Satyanarayana Julluru	Method for formulation development of rivaroxaban powder oral suspension	202141017499	23/04/2021
10	Vadlamudi Pallavi	Title : Design, Development and characterization of transdermal delivery system of saxagliptin for the treatment of diabetes mellitus	201841040263	01/05/2020
11	Dr.S.T.V.Raghavamma	Sun protective formulation comprising of natural essential oils thereof	201741032967	22/03/2019
12	Bodepudi Srikanth	Design and development of floating tablets of Losartan potassium	201941000177	11/01/2019
13	Shaik Munwar	Synthesis and characterization of novel 2-hydroxy-1,2-diphenyl ethanone derivatives	201841038442	19/10/2018
14	Arulsamy Elphine Prabahar	Synergistic herbal extract formulation for the management of diabetes mellitus and detoxification	201741015402	09/11/2018
15	M.Sai Kusuma	Synergistic anti-inflammatory activity of aerva lanata, boerhavia diffusa and murraya koenigii	201741016259	16/11/2018
16	Dr.N.L.Prasanthi	A multi herbal formulation for tooth care and a process for preparation thereof	201741032950	13/12/2019
17	Dr.S.S.Mani Kiran	Herbaceutical fast dissolving oral film for diabetes	201741043189	13/12/2019
18	D.Ramya Sri	Method development and validation for the estimation of rosuvastatin by RP-HPLC method in bulk and Pharmaceutical Dosage form	201841017137	08/11/2019
19	A.Naga Jyothi	Simple simultaneous RP-HPLC method for the estimation of amlodipine and indapamide	201841017975	15/11/2019

Sl. No.	Applicant Name	Title	Application No.	Date
20	G.Pavani	Stability indicating RP-HPLC method for the estimation of saroglitazar in bulk and pharmaceutical dosage form	201841017977	15/11/2019
21	P.Pavan Naga Sai	Integrated LC-UV-IR-NMR-Mass device for the separation, detection, characterization and quantification	201841018701	22/11/2019
22	P.Sivappa Naidu	Estimation of fingolimod in its pharmaceutical dosage forms by validated RP-HPLC method.	201841023362	27/12/2019
23	A.Krishna Priya	Method development and validation for the estimation of lacosamide and its related substance injection formulation by RP-HPLC method in bulk and Pharmaceutical dosage form	201841026605	24/01/2020
24	K.Chandralekha	Integrated SFC-IR-NMR-MASS device for the separation detection, characterization and quantification	201841040692	01/05/2020
25	Shaik Mastan vali	Method development and validation for simultaneous estimation of fenofibrate and simvastatin	201841040687	01/05/2020
26	Bhumireddy Koteswari	Synergistic herbal extract formulation for the management of anti-fungal and anti-oxidant on human body	201841040697	01/05/2020
27	Shaik Reshma	Formulation and evaluation of candesartan cilexetil oral dissolving films	201841040689	01/05/2020
28	Pichikala Mounika	Synergistic herbal extract formulation for the management of anti-inflammatory and anti-oxidant of human body	201841040698	01/05/2020
29	Mamillapalli Bhargavi	Anti-diabetic activity of quinazole derivative in alloxan induced rats	201841041596	08/05/2020
30	Naidu Ayesha	Fabrication and evaluation of orogel containing ferrous fumarate	201841041591	08/05/2020
31	Ravula Sriharsha	Extraction and isolation of cardio protective amygdalin glycoside malus domestica seeds	201841041593	08/05/2020
32	Maram Murali Krishna	Design and invitro evaluation of different viscosity grades of HPMC polymers with bees wax beads	201841043471	22/05/2020
33	Inapakolla Gayathri Tejaswi	Synergistic herbal extract formulation for the management of anti-inflammatory and anti-oxidation of human body	201841043446	22/05/2020

Sl. No.	Applicant Name	Title	Application No.	Date
34	Sivaram Teja	Anti-bacterial and anti-fungal activity of herbal extract formulation and its evaluation	201841043475	22/05/2020
35	Lalitha Mistry	Synthesis of novel substituted benzimidazole derivatives as mannich bases and their anti bacterial activity	201841041583	08/05/2020
36	Navya Devi Reddy and Om Sai Nidubrolu	Safety device for I.V.cannula to truncate the formation of blood clot	201841045755	11/09/2020

- Institute is recognized as a host centre of Micro, Small and Medium Enterprises - MSME (HIBIAP002115), development of cost effective society related projects are encouraged. The said business incubator developed herbal hair oil, herbal mouth ulcer gel, herbal pain balm etc...
- Chalapathi established “Chalapathi Institute’s Enrich-Entrepreneurial research and incubation centre in health care in October-2020 in association with OPEX Startup accelerator Pvt. Ltd., with the following **Objectives** :
 - To encourage students especially from Pharmaceutical Science as well as allied Healthcare sector to look towards entrepreneurship as a part of their professional career.
 - To Motivate, Inspire and thus aid the students bring out-of-box innovations that will work as a viable StartUps in future.
 - Their Innovations and Ideas can be turned into viable working Business Model.
 - To help the students and institution to scale their ideas and startup at National Level, through Nationwide project outreach programmes.
 - To offer students residing especially in rural background of Andhra Pradesh a chance to not just showcase their ideas but to also scale them to the position of commercializing into a Startup.
 - To orient them about the changing scenarios, patterns in Healthcare sector, the services sector in Healthcare that, will be become the next big thing, from which new-age StartUps and from which Unicorns will be born.
 - During this course period, handholding will be provided at every baby step in order to launch the StartUp.

- Financial support is extended to the students for exhibiting their models at the Idea generation contests, competitions held by other organizations. Students are provided with an opportunity to acquire skills for commercialization of their product. The local entrepreneurs are invited to address the students and inspire them.
- The center is developing students for entrepreneurship and Start-up providing guidance on project report preparation, financial assistance, market survey and marketing of product. Entrepreneurship awareness workshops have been organized in collaboration with OpEx. Seminar and workshop have been organized by the center for the students to give them an idea to manage and run their entrepreneurial venture. The center motivates students to incubate their start ups in the campus by offering current developments technology.
- The institute has developed several research labs in the respective area of research. These include.
 - Chalapathi drug testing laboratory
 - Industrial Pharmacy laboratory
 - Preclinical testing facilities.
 - Advanced pharmacology laboratory
 - Medicinal plant garden

Industry-Institute Partnership Cell

The cell facilitates interaction with industries and corporate establishments for the following activities:

- Training programme on interview skills, communication skills and personality development by E-cell IIT Kanpur.
- CRT-Soft skill programme includes (Ice breaker, self motivation, career planning and JAM, resume/CV writing/interview skills and group discussions.
- Career guidance activity-SAS software.
- Webinar on interview skills conducted by Rubicon, Chennai
- Career guidance by Synergy School of Business, Hyderabad
- Interactive session (webinar) on interview skills
- Lecture on medical coding
- Career opportunities in clinical trials and pharma industry.
- Opportunities with SAS programme.
- Academic guidance in pharmacy education
- Pharma marketing
- Opportunities with SAS programme
- Career guidance and abroad education

- Career guidance activity – overseas education
- Awareness programme on abroad education – study in USA, CANADA, Australia
- Career guidance on Higher Education in abroad
- Overseas education and career guidance
- Awareness programme – Abroad education
- Higher education / Career planning
- Training on personality development and employability skills.
- Training programme on personality development and employability skills, Corporate jargons and public speaking.
- Training on personality development and employability skills (Presentation skills, e-mail etiquette) Grooming, body language
- Time management, listening skills.
- Tension-how to overcome, speaking skills
- Life skills (English and communication skills)
- Skill development programme – safety by design
- Communication skills and interview skills

Research:

- The institute has a well-defined and published research promotion policy, faculty members are encouraged and financially supported to guide research, A good number of students have registered for Ph.D., programmes and the number are increasing every year.
- Seed funding is provided to pursue specific research programs. Central facilities and advanced research centres and Laboratories have been established that are accessible to all. It is ensured that they are optimally utilized.
- The institute has recognized research centre and this would be an added advantage to the students and faculty to develop their prototypes.
- During the last five years **23** Ph.D.'s are produced by the research center established in the college and **14** research scholars are working actively in these research centers under **09** recognized guides.
- A core team with 9 members including students coordinators, advisory board, mentor board were setup. About 10 startup master classes, IDEATHON, few review meetings on prototype products were organized.

The multi-disciplinary and inter-disciplinary focus on research makes this institute unique. Some of the unique areas identified by the institute and work ongoing include :

- Phytochemical, Pharmacological and Toxicological Evaluation of selected Phytocompounds for the treatment of common dermatological disorders
- Neuropharmacological evaluation of leaf extracts of *clerodendrum serratum* for memory enhancement activity by *in-vivo* and *in-vitro* methods on rodents.
- Bioanalytical method development and validation of some selected drugs in serum by LC-MS/MS.
- Structure based design of proliferator activated receptor- γ (PPAR- γ) modulators as emerging anti-diabetics.
- Formulation and evaluation of anti-depressant like effect of *plumeria alba* flower extract in stress depression model rats.
- Interventions impact on burden and risk factors in caregivers of psychiatric patients.
- Analytical method development and validation of some antiviral pharmaceutical formulations.
- A prospective descriptive observational study on clinical manifestations of chronic liver disease patients in a tertiary care hospital.

Intellectual Property Rights Cell (IPR):

Objectives:

- The primary objective of the interdisciplinary course based on introductory of skill development programs at the UG and PG levels is to create IPR literates by exposing students to operational concepts in IPR.
- The linked object is to give the students an opportunity to apply the concepts they learnt to their own research problems and plan their respective research strategies to avoid “rediscovering the wheel” and at the same time initiate the protection of the Intellectual Property created during their research to aid in speedy transfer to application centers / industries for commercialization.