

Incubation and Technology Transfer Center

Aim	To provide an effective and facilitating bridge between Alagappa University's Research Laboratories/Facilities and National Research Institutes/Industry
	To provide technical Expertise/Skills/Guidance

Objectives	Optimizing Technological Research projects for facilitating collaborative projects
	Access/Services to common facilities within the University
	Innovative problem solving consultancy with Industry
	Support services for start-up companies for a stipulated period
	Technology transfer trainings at the Specialized facilities

Name	Designation & Dept./Division/College.	Status
Faculty	Dr. K. Balamurugan Professor, Department of Biotechnology	Coordinator
Faculty	Dr. B. Dharmalingam Professor, Alagappa Institute of Skill Development	Member
Faculty	Dr. J. Wilson Assistant Professor, Department of Bioelectronics and Biosensors	Member
Faculty	Dr. M. Ayisha Millath Assistant Professor, Alagappa Institute of Management	Member
Student Representative	Ms. Sharika R Research Scholar, Department of Biotechnology	Member

Range of Activities	Department level Meetings to bring out lists of available technologies/skills
	Interaction with Selective Faculties
	Interaction with visiting Scientists from India and abroad
	Generation of Data Bank- Department wise for National Research Development Corporation to include in the “National Technology Data Bank”
	ITT centre Coordinator’s visit to Industries at Chennai and Bangalore
	Signed MoA with ITC LSTC Ltd, Bangalore with a Budget for Rs. 82.35 Lakhs. Already received the First Year amount of Rs. 31.41 lakhs for the Department of Biotechnology
	Short-listed Industries for sending Second Year PG students for 2 to 3 months trainings
	Reintroduction of IUCN red listed vulnerable medicinal plant at Western Ghats indicating the transfer of laboratory technology to the field trails
	Steps taken to have collaborative projects with <ul style="list-style-type: none"> • National Institute of Ocean Technology (NIOT), Chennai • Central Food Technological Research Institute (CFTRI), Mysore • National Institute of Pharmaceutical Education and Research (NIPER), Kolkata
	Processing of MoU with NIPER, Kolkata for collaborative research activities on Teaching and Research
	Provided Technology transfer training to Scientists from NIOT and CFTRI at Science Campus
	Preparing application to submit to NITI Aayog (National Institution for Transforming India), Govt. of India to upgrade established Incubation centre to ‘ATAL INCUBATION CENTRE’
	To be recognized in National Level steps taken to include one lab from each Science Department under the Summer Research Fellowship programme of Indian Academy of Sciences (IASc-INSANA-NASI)
	Provided training to ACCET Staff members and outgoing B.E. students at Alagappa Institute of Skill Development center
	Provided technical trainings to PG students of affiliated college of Madurai Kamaraj University at the Department of Animal Health and Management
	Provided training in Food Processing at the Department of Women’s Studies
	Provided Technology transfer training to Research Scholars from Thappar University, Pattiala, Punjab at the Department of Biotechnology
	Collaborative projects initiation by the Department of Bioinformatics between ALU and Indian Institute of Science, Bangalore & ALU and Indian Institute of Technology Madras.
Submission of collaborative research projects from Department of Bioinformatics along with Sri Ramachandra University-Chennai, International Centre for Genetic Engineering and Biotechnology-New Delhi, Indian Institute of Technology – Guwahati, National Chemical Laboratory-Pune and CDRI-Lucknow.	
Once in a year Technology Transfer Training workshops in association with M/s. Schrodinger Inc, USA for a minimum 100 participants from various reputed Institutes/Universities at the Department of Bioinformatics.	

Activities Carried out by the Alagappa University on Technology Transfer

Reintroduction of IUCN red listed vulnerable medicinal shrub *Nilgiriathusciliatus* into its natural habitat, the Nilgiris – A success story from Alagappa University

Dr.M.Ramesh, Research Scholar R.Rameshkumar and Dr.S.Karutha Pandian, Professor and Head of Department of Biotechnology developed 1000 plants of vulnerable and IUCN Red Listed medicinal shrub *Nilgiriathusciliatus* through micropropagation technique in the laboratory by receiving research grant from Department of Science and Technology (DST), New Delhi. On 28.03.2016, Prof.S.Subbiah, Vice – Chancellor of Alagappa University and Registrar i/c Dr. V. Balachandran handed over these 1000 to Mr. V.Asokan, Regional Manager, TAFCORN, Karaikudi and Forester Mr. R.Thiyagarajan for plantation into its natural habitat, The Nilgiris.



On 28.03.2016, Prof.S.Subbiah, Vice – Chancellor of Alagappa University and Registrar i/c Dr. V. Balachandran handed over these 1000 plants to Mr. V. Asokan, Regional Manager, TAFCORN, Karaikudi and Forester Mr. R. Thiyagarajan for plantation into its natural habitat, The Nilgiris (**Fig. a & b**). These plantlets were transported to The Nilgiris and handed over to the Foresters of the Tamil Nadu Forest Department, District Forest Office, South Division, The Nilgiris (**Fig. c**).

Technology Transfer/Trainings to other Research Institutions

Technology transfer training at the Department of Biotechnology:



A. Dr. Shiburaj S (left), Senior Scientist from Microbiology Division, JNTBGRI, Palode, Trivandram, Kerala – 695 562 visited Department of Biotechnology, Alagappa University during 27 June to 05 July 2016 for learning Genomic DNA library construction technology. **B.** Dr. Ganesh Kumar A (Project Scientist-I) and Dr. Venkatesh S (Research Associate) (right) from Marine Biotechnology Department of NIOT, Pallikaranai, Chennai – 600 100 visited Science Campus, Alagappa University during 17 June to 02 July 2016 and had discussion with Prof. K. Balamurugan, Coordinator, Incubation and Technology Transfer center- Alagappa University for initiating collaborative network with ongoing Development of Potential Drugs from Ocean (DPDO) [Deep Sea Microbiology project] of NIOT with Alagappa University. **C.** Dr. Anitha J, Assistant Professor, Department of Bioinformatics, Karpagam University, Coimbatore had undertaken 60 days training under the Indian Academy of Sciences Summer Research Fellowship Programme (IASc-INSA-NASI Summer Research Fellowship) at the Department of Biotechnology, Alagappa University during 02 May 2016 to 30 July 2016. **D.** Mr. Ulaganathan S, Second Year M. Sc., Life Sciences, School of Life Sciences, Bharathidasan University had undertaken 56 days training under the Indian Academy of Sciences Summer Research Fellowship Programme (IASc-INSA-NASI Summer Research Fellowship) at the Department of Biotechnology, Alagappa University during 10 May 2016 to 05 July 2016. **E.** Dr. Balasubramani, Professor, Department of Vegetable Crops, Horticultural College and Research Institute, Tamilnadu Agricultural University, Periyakulam 625 604 visited Science Campus, Alagappa University along with Students for learning *C. elegans* related basic techniques on 10 May 2016. **F.** Mr. Vivek Sharma and Mr. Kulwinder Sran, Research Scholars from Department of Biotechnology, Thapar University, Patiala, Punjab visited Department of Biotechnology for learning *C. elegans* related experiments and to analyse their biopolymer samples from 21 Oct 2016 to 10 November 2016.

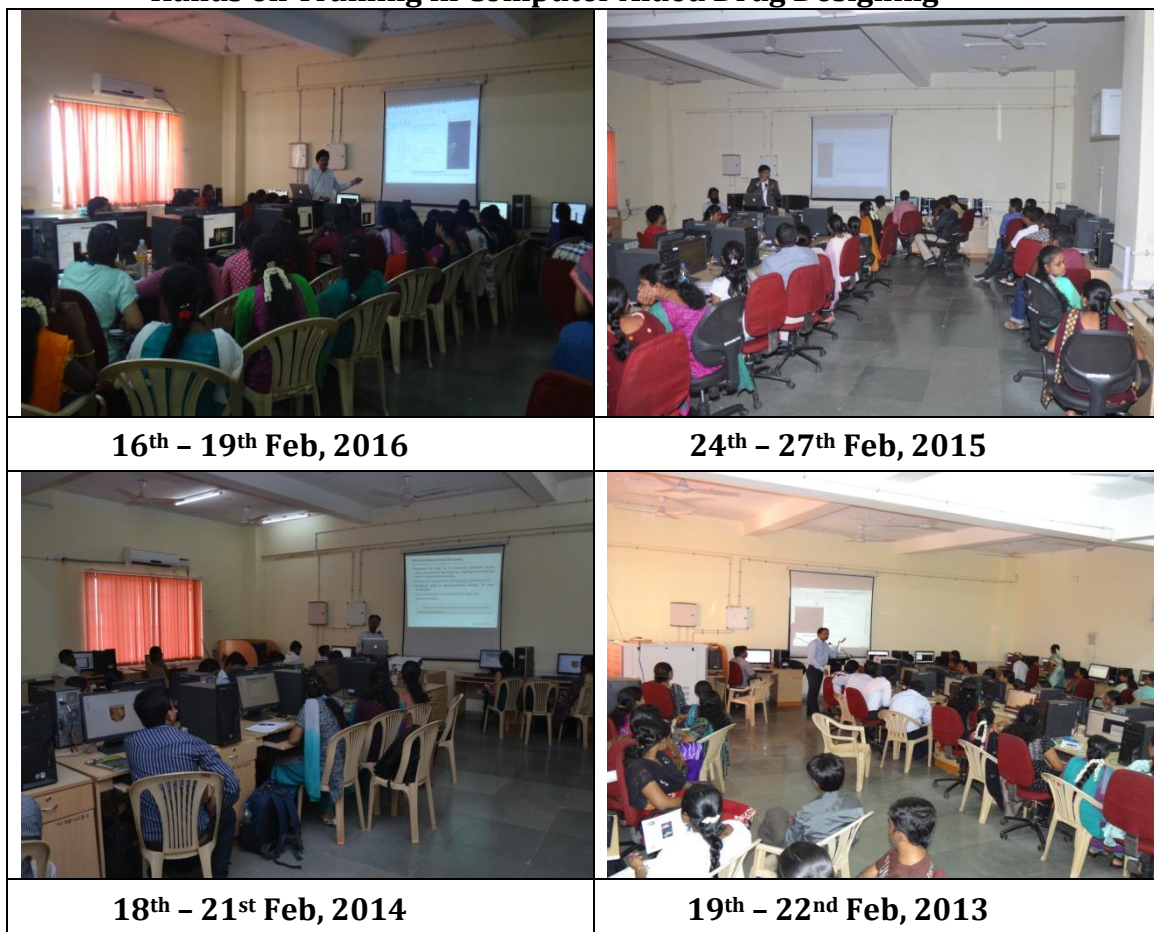
Industrial collaborative project initiative at the Department of Biotechnology:



A and B: Mr. Sumeet Malhotra and his team from ITC –limited, Bangalore visited Department of Biotechnology, Alagappa University and had discussion with Prof. S. Karutha Pandian, Head, Department of Biotechnology and Prof. K. Balamurugan, Coordinator, Incubation and Technology Transfer Center for initiating collaborative project with Alagappa University on 28 April 2016. (Subsequently an MoA has been signed with Alagappa University on 29 June 2016 with an total budget of Rs. 82.35 lakhs). **C and D:** Dr. M. K. Chandrababu, Senior Scientist from Center Leather Research Technology, Guindy, Chennai having discussion with Prof. S. Karutha Pandian, Head of the Department of Biotechnology and Prof. K. Balamurugan, Coordinator: Incubation and Technology Transfer Centre, Alagappa University on 28.04.2016 in connection with transferring laboratory techniques and products to the Industrial partners. **E and F:** Dr. Godfred Ponraj, Senior General Manager- Marketing, TIL Biosciences [Animal Health Division of Tablets (India) Ltd.], Chennai 600 008) visited the Science Campus on 03 Dec 2015 (Left) and 02 June 2016 (Right) and had discussion with Dr. A. Veeraravi, Asscoiate Professor, Department of Biotechnology for collaborative project. He also expressed his willingness to have the Science Department PG students during their summer vaccation for two months training at the Industry for the benefit of the Faculty of Science Students of Alagappa University. The criteria for the same may be framed in due course of time by the Incubation and Technology Transfer Centre, Alagappa University.

Technology Transfer Training at the Department of Bioinformatics

Hands on Training in Computer Aided Drug Designing



A. Dr. Arockiasamy Arulandu (Group Leader, Membrane Protein Biology Group, ICGEB-New Delhi) along with his student visited the Department of Bioinformatics for collaborative research discussion on 6th November 2016. **B.** Students (Ms. M. Pavithra, Ms. G. Rubha Shri and Ms. R. Yuva Devi) from URCW-Karaikudi have undergone training from 15th April to 31st May 2016 in Structural Biology Lab at the Department of Bioinformatics. **C.** Ms. Saritha from REC-Chennai undergoing six months (from 10th August 2016 onwards) training in the field of Structural Biology at the Department of Bioinformatics.

List of beneficiaries visited Department of Bioinformatics for Research Training and technical exposure during the period 2011 - 16.

S. No	Name	Institution	Duration
1.	Ms. S. Yogapriya	Bharathidasan University	22 nd May – 30 th Aug, 2012
2.	Ms. B. Dhivya		
3.	Ms. M. Nishadevi	PSR Engineering College	10 th Dec 2011– 30 th Apr 2012
4.	Ms. K. Rajakumari		
5.	Mr. N. Saravanakumar		
6.	Mr. M. G. Karthick		
7.	Ms. M. Ranjani	Bharathidasan University	01 st Feb – 31 st May, 2012
8.	Ms. K. Nalini		
9.	Ms. R. Arul Salomee Kamalabi		
10.	Ms. P. Ilakkiya		
11.	Mr. RY. Ramanathan	SRM University	01 st Nov – 31 st Dec, 2012
12.	Ms. J. Shivashankari	SASTRA University	27 th Dec 2012 – 30 th Apr 2013
13.	Dr. Prema	Govt. Arts and Science College for Men-Kumbakonam	23 rd May 2013
14.	Ms. M. Gowri	Sri Ramachandra University	17 th – 30 th Jul 2013
15.	Mr. U. Dinesh Babu	SASTRA University	14 th – 30 th Aug 2013
16.	Dr. N. Ramesh Kannan	Srimad Andavan Arts and Science College	21 st - 31 st Jan 2014
17.	Mr. S. Ramkumar	Bharathiar University	21 st – 30 th Aug 2014
18.	Ms. Mathangi Ravi	Sri Ramachandra University	21 st – 27 th Aug 2014
19.	Ms. Ritu	SRM University	17 th – 23 rd Mar 2015
20.	Ms. M. Pavithra	Dr. Umyal Ramanathan College for Women	15 th Apr – 31 st May 2016
21.	Ms. G. Rubha Shri		
22.	Ms. R. Yuva Devi		
23.	Ms. P. Poornima Devi	Seethalakshmi Ramaswamni College	02 nd – 22 nd Feb 2016
24.	Ms. D. Pradiba	Kamaraj College of Engineering and Technology	30 th Mar – 1 st May 2016
25.	Ms. Rumila NishaFelicita	Lady Doak College	20 th – 22 nd Apr 2016
26.	Mr. Rahul Kanumuri	Indian Institute of Technology- Madras	18 th – 31 st May 2016
27.	Mr. Arun Prasad		
28.	Ms. S. Sudharsana	VIT University	2 nd – 7 th Jun 2016
29.	Mr. Biswath Gorey	SASTRA University	14 th Jul 2016
30.	R. Radeesh Kumari	N. I. University	14 th – 24 th Jul 2016
31.	Mr. Chandru	Madras University	01 st – 05 th Aug 2016
32.	Mr. A. Dhanasezhian	University of Madras	02 nd – 06 th Aug 2016
33.	Ms. P. Saritha	Rajalakshmi Engineering College	10 th Aug 2016– Till date
34.	Ms. K. Sri Nava Janani		
35.	Ms. V. Poornima	Bharathiar University	17 th - 28 th Aug 2016
36.	Ms. V. Sharmila		
37.	Mr. Muthu Sankar	International Centre for Genetic Engineering and Biotechnology	31 st Oct 2016 – Till date

Technology Transfer Training on Food Processing at the Department of Women Studies



Provided training in Food Processing at the Department of Women's Studies (sponsored by HRD scheme of National Mission on Food Processing. Ministry of Food Processing Industries, Government of India) during February- May 2014 for the Women entrepreneurs to start new ventures in food processing. Hands on training classes were conducted on food grains like millets, Fruit squash, Jam, Variety of Pickles, Preparation of masala powders, etc., In addition, field visits were arranged by the Department of Women Studies for the trainees to get exposed with different food processing centers.

Technology Transfer Training on Mechatronics at the Alagappa Institute of Skill

Development center



Training on “Mechatronics” to ACCET Staff members and outgoing B.E. students at the Alagappa Institute of Skill Development center, Alagappa University starting from May 2015 for specific periods by collecting course fees from the TEQIP funds of Department of Technical Education, Tamilnadu.

Technology Transfer Training at Department of Animal Health and Management



Technical Trainings to the PG students from Ayya Nadar Janaki Ammal College, Sivakasi affiliated to Madurai Kamaraj University on Basic microbiology, Molecular Biology, Immunology and Aquatic animals culture and maintenance at the Department of Animal Health and Management, Alagappa university during 01.02.2016 to 31.04.2016.

Technology Transfer training at the Alagappa Institute of Management



Short-term certificate course was conducted on “Webdesigning, Image Editing & Office Automation Skills” for 15-days (02-16 May 2014) at Computer Centre, Alagappa Institute of Management. 28 participants – Diploma, ITI students got Training on Web page creation, Hyperlink creation, Photoshop editing, Multilayer Image creation and Coreldraw. During 12-27 November 2015 another short-term certificate course “Animation & Graphics Skills” was conducted on Graphics, Corel draw, 2D & 3D Animation for 16-days.

Technology Transfer by the Department of Bank Management

- Public sector Banks utilized the students of Department of Bank Management for 45 days under their ‘Internships Program’.
- Periodical visits by Bankers and Insurers to the Department for two-way learning process.

Technology Transfer Training by the Department of Nanoscience and Technology

- Dr. K. Amudhavalli, Associate Professor, Dpet of Physics, VOC college, Tuticorin visited Department of Nano Science and Technology for performing thin film coating experiments using the CH instrument and had training at Dr. P. Shakkthivel’s lab during the month of January 2013.

Technology Transfer Training by the Department of Bioelectronics and Biosensors

- Ms. K. S. Paripoorani and Ms. T. Valliammai from SRM University [B. Tech (Biotechnology)], Chennai visited Department of Bioelectronics and Biosensors for technology transfer training in the area of Biosensors during the Nov-Dec 2013.

Expertise Available with Various Departments of Alagappa University

Incubation and Technology Transfer Center

S. No.	Name of the Department/ Faculty	Available Technology/ Skills	Funding Agency, if any involved	Routine/ Novel	Access/ Services	Consultation for Industry	
1	Biotechnology	Rapid & Accurate detection of Group A Streptococcus through PCR method	-	Novel	Both	Yes	
2		Environmental impact monitoring through microbial indicators	-	Novel	Both	Yes	
3		Multiplex PCR for Gene expression analysis			Routine	Both	Yes
4		Model system (<i>C. elegans</i>) based active principle analysis			Routine	Both	Yes
5		Model system (<i>C. elegans</i>) based toxicity analysis			Routine	Both	Yes
6		Model system (<i>C. elegans</i>) based genomic and proteomic analysis			Routine	Both	Yes
7		Model system based anti-aging analysis			Routine	Both	Yes
8		Human/Animal Cell culture based analysis			Routine	Both	Yes
9		Production of natural steroids using Plant system			Routine	Both	Yes
10		Plant tissue culture of commercially important plants			Routine	Both	Yes
11		Shrimp farming			Routine	Both	Yes
12		Shrimp Hatchery			Routine	Both	Yes
13		Mass cultivation of Spirullina			Routine	Both	Yes
14		Fin fish seed production			Routine	Both	Yes

15	Biotechnology	Ornamental fish culture (marine and Fresh water)		Routine	Both	Yes
16		Cultivation of Cyanobacteria		Routine	Both	Yes
17		Phytochemical Analysis		Routine	Both	Yes
18		Enzyme inhibition Assays		Routine	Both	Yes
19		Biochemical Analysis		Routine	Both	Yes
1.	Industrial Chemistry	Waste from Wealth: Bioethanol from Thippi	Salem-Dharmapuri Chamber of Commerce	Novel	Access	New Industry has to be setup
2.		Conducting polymer based primer for Al structures	DRDL, Hyderabad	Novel	--	DRDL usage
3.		Monitoring the contents of primer by a simple FT IR method	BHEL, Tiruchirappalli	Novel	--	BHEL, Tiruchirappalli
4.		Conducting polymer based primer for Iron structures	BHEL, Tiruchirappalli	Novel	--	BHEL, Tiruchirappalli
5.		Electrochemical treatment of distillery effluent	--	Novel	Access	Distillery industries
6.		Electrochemical treatment of dyehouse effluent	--	Novel	Access	Dyeing industries
7.		Pt – WO ₃ / C Nano composite Anode Electrocatalyst for fuel cell application.	--	Novel	Access (Patent filled)	Fuel cell industries
8.		Pt – WO _x – TiO ₂ / C Nano composite Anode Electrocatalyst for fuel cell application	--	Novel	Access (Patent filled)	Fuel cell industries

9.	Industrial Chemistry	Lithium ion batteries	--	Novel	Access	Battery industries
10.		Electrodeposition technology	--	Novel	Access	Plating industries
11.		Facemask material with improved bacterial filtration efficiency	--	Novel	Access (Patent filled)	Face mask producing industries
12.		Military textiles	--	Novel	Access	Military
13.		Smart Textiles	--	Novel	Access	Fabric industries
14.		Electrochemical sensing of pollutants	--	Novel	Access	Monitoring of pollutants in Industries
15.		Biofinishing of textiles	--	Novel	Access	Fabric industries
16.		Antibacterial and antifungal coating on textiles	--	Novel	Access	Medical Fabric industries
17.		Host-guest sensing of carcinogenic substances	--	Novel	Access	Monitoring of carcinogens from industries
18.		Lead-acid battery	--	Novel	Services	Battery industries
19.		Cancer Biomarkers	--	Novel	Access	Medical
20.	Photocatalysis	--	Novel	Access	Chemical industries	
21.	Liquid Crystals	--	Novel	Access	Sensor and TV industries	
1	Economics and Rural Development	Economic evaluation of micro-irrigation system	Ministry of Agriculture, Government of India, New Delhi	Routine	Water saving; productivity gains; NPV; BCR	Ministry of Agriculture and other bodies/industries relating to micro-irrigation
2		Financial viability of micro-irrigation system	Jain Irrigation Systems Ltd., (world 2nd largest)	Routine	Project evaluation	All micro-irrigation manufacturers; lending agencies; Government bodies

			micro-irrigation company) Maharashtra			
3	Economics and Rural Development	Member of the sub-group of the Committee on Statistics of Agriculture and Allied Sectors	Ministry of Statistics and Programme Implementation, Government of India, New Delhi	Routine	Water and agriculture data services	Ministries pertaining to agriculture, water and rural development
4		Member of the Working Group on Terms of Trade between the Agriculture and Non-Agriculture Sectors	Ministry of Agriculture, Government of India, New Delhi	Routine	Agriculture trade related services	Ministry of Agriculture; Ministry of commerce and industry; other bodies related to trade in agriculture
5		Water sector analysis	International Water Management Institute, Colombo, Sri Lanka	Routine	Demand and supply of water; indirect impact of irrigation	World Bank; Asian Development Bank; Ministry of Water Resources; Ministry of Agriculture
6		Impact of NREGS on wage rate and welfare	ICRISAT, Hyderabad.	Routine	Socio-economic	Ministry of Rural Development, State

					evaluation of NREGS	departments related to agriculture and rural development
1	Physics	Unidirectional crystal growth	-	Novel	Access	-
2		Thin films	-	Novel	Access	-
1	Bioinformatics	Protein Purification	Generated funds from Consultancy Academic Projects	Routine	Cloning, Purification (FPLC) and Crystallization Facilities.	Yes
2		Small molecule and Macro molecular structure elucidation of Human diseases related targets		Routine	Structural and Functional elucidation.	Yes
3		Lead candidates screening from Marine and Plant sources		Routine	Molecular modeling (Commercial and other open source software) for lead molecules identification.	Yes
4		Identification of novel lead molecules with better therapeutic potential		Routine	Involved training of many students and teachers from various university/institutes to access	Yes
5		Molecular modeling and Biologics Drug discovery		Routine	Involved training of many students and teachers from various university/institutes to access	Yes

1	Animal Health and Management	Shrimp and Fish disease diagnosis technology	-	Routine	Access	-
2		Fish and Shrimp pathogenic bacteria identification	-	Routine	Access	-
3		Treatment procedure for shrimp diseases	-	Routine	Access	-
4		Active principles from marine plants – Isolation technique	-	Routine	Access	-
1	Bioelectronics and Biosensors	Non-enzymatic sensor development for diabetic monitoring	ICMR	Novel	Access	Available
2		DNA sensor development using thiol monolayer for disease diagnostics	DST	Novel	Access	Available
3		DNA sensors based on conducting polymer	UGC	Novel	Access	Available
4		Metal oxide sensor for neuro transmitter sensing	BRNS	Novel	Access	Available
1	Nano Science & Technology	Plastic Solar Cells	DST	Novel	Access	Available
2		H ₂ gas/ storage	UGC	Novel	Access/ Services	Available
3		Paper fillers cathode materials for super capacitors Li-ion cells magnetic structures	NIL	Novel	Access/ Services	Available
4		Plant tissue culture	UGC	Novel	Access/ Services	Available
5		Dye degeneration	NIL	Novel	Access/ Services	Available
6		Medicinal plant cultivation	NIL	Novel	Access/ Services	Available

1	Energy Science	Fabrication of dye-sensitized solar cells	-	Novel	Access	Yes
2		Development of eco-friendly corrosion protection coatings	-	Novel	Access	Yes
3		Bio-plastic production from industrial wastes	-	Novel	Access	Yes
4		Bio-decolourisation of textile industry effluent and bio-diesel production by micro algae	-	Novel	Access	Yes
1	Oceanography and coastal area studies	Seaweed training programme	-	Routine	Services	Yes
2		Lab to Land programme - Sea ranching	-	Routine	Services	Yes
3		Crab fattening	-	Routine	Services	Yes
4		Open sea farming- Marine organisms	-	Routine	Services	Yes
5		EIA –Studies	WAPCOS	Routine	Services	WAPCOS- Govt. India
6		EIA –Studies- SSCP	DCI	Novel	Access	Govt. India
7		Marine conservation	UNDP-GEF-GOMBRT	Routine	Services	UNDP-GEF-GOMBRT
8		SCUBA- Diving	UGC-MRP	Routine		
9		ERADAS-GIS Software	UGC	Routine		
1	Bank Management	Banking Technology & Inclusive Banking	-	Novel	Field Survey & Training	Yes (Banking sector & Insurance sectors)

1	Alagappa Institute of Management	E-Com Lab	AICTE	Novel	Access	Yes Training programs for clients like Bank, FDP, etc.,
2		EDP Center	AICTE & State Government	Novel	Technology Entrepreneurship Training	Yes (For DIC, TIIC & Banks)
1	International Business & Commerce	International Business Expertise	-	Novel	Exim Consultancy	Yes (SME Clients)
2		Social Economic approach to Management (SEAM)	-	Novel	SEAM Consultancy	Yes (Society & SME Clients)
1	Mathematics	Optimizing techniques for inventory of two commodities	No	Routine and Novel	Yes	Yes
2		Stochastic Modeling	No	Routine and Novel	Yes	Yes
3		Integral transforms tool for signal and image processing	No	Routine and Novel	Yes	Yes
4		Latex (A markup language)	No	Routine	Yes	Yes
5		Expertise in coaching PG Maths students to get through in competitive examinations	No	Routine	Yes	Yes
6		Expertise in functional analysis, topology and fuzzy mathematics	No	Routine	Yes	Yes
1	Alagappa University College of Education	Assistive Technology Devices for Visual and Hearing Impairment	UGC	Routine	Access	Assistance to special needy
2		Physiotherapy Materials	UGC	Routine	Access	Useful for children with locomotor disability

Future plan

- **'Technology Expo'** at Alagappa University [Exhibition of Available Technologies/Skills for Entrepreneurs/Industries/Corporates].