



ARIIA

ATAL RANKING OF INSTITUTIONS ON INNOVATION ACHIEVEMENTS



MHRD
Ministry of Human
Resource Development
Government of India

Submitted Institute Data for Atal Ranking of Institutions on Innovation Achievements (ARIIA) - 2019-20

Institute Name: Mahendra College of Engineering [ARI-C-37074]

Pre-Qualifier (Basic Data Requirement For Financial Year (2018-19))

Name of the Institute/ University/ Group of Institutions and any Autonomous Body (Incubation Unit/Research Park etc.) located within same campus	Total Annual Expenditure of Institute/ University/ Group of Institutions/ any Autonomous Body (Incubation Unit/ Research Park etc.) located within same campus (Rupees in Figure)	Total Annual Income of Institute/ University/ Group of Institutions/ any Autonomous Body (Incubation Unit/ Research Park etc.) located within same campus (Rupees in Figure)	Balance Sheet, Income & Expenditure (or) Payment & Receipt Account for FY 2018-19 (Only PDF)
Mahendra College of Engineering	80739241.00	91081715.00	Document Uploaded in ARIIA DSP
Total (Rupees in Figure)	80739241.00	91081715.00	

Institute Type : Colleges/Institutes (Private / Self Financed)

Total Student Base (Enrolled Full Time) for all the Academic Programs Offered by Institute/University (Academic Year 2018-19) := 1649

Total Faculty Base (Full Time) Engaged in Teaching and Research at Institute/University (Academic Year 2018-19) := 201

Program Conducted by Institute Related to IPR, Entrepreneurship / Start-ups & Innovation

Name of Program (Full Name)	Program Theme	Program Type	Program Category	Organizing Department / Centre / Student Body Name	Program Start Date	Program End Date	Program Duration(in Days)	Program Location	Internal Participants (Student)	Internal Participants (Faculty)	External Participants (Student)	External Participants (Faculty)	Total Number of Participants	Had institute spent expenses either from own resource/ received fund to organise the program/activity/event?	Total Expense Amount Incurred by Institute to Organise the Program (In Rupees)
Entrepreneurship awareness camp	Entrepreneurship/Startup	awareness camp	Institute Lead Activity	Department of Mechanical Engineering	11-02-2019 00:00:00	13-02-2019 00:00:00	3	Within Campus	75	4	15	2	96	Yes	10000
Entrepreneurship awareness camp	Entrepreneurship/Startup	Awareness Camp	Institute Lead Activity	Department of Mechanical Engineering	27-08-2018 00:00:00	29-08-2018 00:00:00	3	Within Campus	70	3	20	2	95	Yes	10000

Participation / Representation of Students and (or) Faculties in Events / Programs related to IPR, entrepreneurship / Start-ups & Innovation organized by reputed external institutions or agencies at national or international level

Name of Program (Full Name)	Program Theme	Program Type	Organizing Agency / Institute Name	Organizing Agency Type	Program Start Date	Program End Date	Program Duration(in Days)	Participants (Students)	Participants (Faculty)	Total Number of Participants	Awards/Recognitions/Achievements	Award / Position / Recognition Secured	Title of Innovation / Start-up Secured the Award / Recognition	Had institute spent expenses either from own resource/ received fund towards sending delegation to participate/represent the	Total Expense Amount Incurred by Institute? (In Rupees)
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Participation / Representation of Students and (or) Faculties in Events / Programs related to IPR, entrepreneurship / Start-ups & Innovation organized by reputed external institutions or agencies at national or international level

														program/acti vity/event?	
Top Management Meeting	Entrepreneurship/Startup	innovation and Entrepreneurship ecosystem in Salem region	Sona College of Technology	Educational Institute	25-06-2018 00:00:00	25-06-2018 00:00:00	1	5	1	6	No	---	---	Yes	6000
The Great Idea Challenge 1.0	Entrepreneurship/Startup	skill development	ATIK Energy Solutions	Corporate / Industry Association	31-05-2019 00:00:00	02-06-2019 00:00:00	3	10	1	11	No	---	---	Yes	5500

Courses on Innovation, IPR and Entrepreneurship Development Offered During the Academic Period 2018-19

Title of Course/Subject Offered	Program Theme	Type of Course	Level of Course	Program Start Date	Program End Date	Program Duration(in Days)	Mode of Delivery	Total Enrolment Number	Total Number of Students Completed	Total Numbers of Contact Hours of Course
Professional Ethics in Engineering	IPR	Elective/Core Credit Course	Bachelor	19-12-2018 00:00:00	22-03-2019 00:00:00	94	Offline	57	52	45
Professional Ethics in Engineering	IPR	Elective/Core Credit Course	Bachelor	19-12-2018 00:00:00	22-03-2019 00:00:00	94	Offline	24	16	45

Innovation, Pre-Incubation & Incubation Centre/Facilities exists in campus

Name of Centre	Type of Facility	Year of Facility Creation	Facility Location / Address	Facility Incharge	Carpet Area of Facility	Had institute spent expenses either from own resource/received fund towards Establishment/Operation of Pre-Incubation & Incubation Centre/Facilities?	Had institute Generated Income either from Services Offered by Pre-Incubation & Incubation Centre/Facilities?												
MSME Business Incubation Centre	Incubation Unit	2018	Mahendra College of Engineering, Attur Main Road, Minnampalli, Salem 636106	<table border="1"> <tr> <td>Facility Incharge Name</td> <td>Dr S Balamurugan</td> </tr> <tr> <td>Facility Incharge Email</td> <td>hodmech@mahendracollege.com</td> </tr> <tr> <td>Facility Incharge Phone</td> <td>9994921548</td> </tr> </table>	Facility Incharge Name	Dr S Balamurugan	Facility Incharge Email	hodmech@mahendracollege.com	Facility Incharge Phone	9994921548	15920 Sq. Ft.	<table border="1"> <tr> <th colspan="2">Yes</th> </tr> <tr> <td>Annual Capital Expenditure (In Rupees)</td> <td>700000</td> </tr> <tr> <td>Annual Operational Expenditure (In Rupees)</td> <td>100000</td> </tr> </table>	Yes		Annual Capital Expenditure (In Rupees)	700000	Annual Operational Expenditure (In Rupees)	100000	No
Facility Incharge Name	Dr S Balamurugan																		
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Annual Operational Expenditure (In Rupees)	100000																		

Grants / Funds Received by Pre-Incubation & Incubation Centre / Facilities exists in Campus

Name of Centre	Source of Grant / Fund	Agency Name	Agency Type	Had Received Grants / Funds by Pre-Incubation & Incubation Centre / Facilities exists in Campus?	Total Grants / Funds Received by Pre-Incubation & Incubation Centre / Facilities exists in Campus (In Rupees)
MSME Business Incubation Centre	Institute's Own Fund / Resource	---	---	No	---

Idea / Prototype / Innovation have received Grant / funding from Pre-Incubation / Incubation Centre / Facilities

Name of Idea / POC / Innovation / Prototype Received Funding / Grant from Centre	Name of Centre	Stage of Innovation (TRL Stage)	Innovation Developed by	Year of Innovation / Project Started	Type of Innovation	Current Status Pre-Incubation/Incubation Support Received	Current Status of Innovation, Stage of TRL it has reached	Had Centre/institute provided any Financial support (either own resource or fund received from agencies) in terms of Seed Grant/Fund Support to Idea / Prototype / Innovations Development during the financial period 2018-19	Had the Idea/Prototype/Innovations raised any Seed fund/Angel Investment/VC during the period of receiving pre-incubation/incubation support at your Pre-incubation/incubation or institute during the financial period 2018-19	Had the Incubation Centre/institute received any income/revenue from Idea/Prototype/Innovations for the pre-incubation/incubation support and the services offered by Pre-incubation/incubation or institute during the financial period 2018-19?										
Domicile Dialyzer	MSME Business Incubation Centre	TRL 3 : Applied research. First laboratory tests completed; proof of concept.	Student	2019	Non-IP / Non-Patented Technology	Still Under Development Process	TRL 1 : Basic research. Principles postulated and observed but no experimental proof available.	No	No	No										
											Principal Innovator									
											Name		Type		Gender		Email		Contact	
											Abinaya P S		Student		Female		kkaaviyakanth@gmail.com		9597364480	
											Co-Innovator									
Name		Type		Gender		Email		Contact												
Maruna M		Student		Female		-		6385775862												
Kamila Banu S		Student		Female		-		9940750458												
Polymeric Heart valves by Graphene Nano Composite	MSME Business Incubation Centre	TRL 0 : Idea. Unproven concept, no testing has been performed.	Student	2019	Non-IP / Non-Patented Technology	Still Under Development Process	TRL 0 : Idea. Unproven concept, no testing has been performed.	No	No	No										
											Principal Innovator									
											Name		Type		Gender		Email		Contact	
											P J Vaishnave		Student		Female		vaishjay98@gmail.com		9944344554	
											Co-Innovator									
Name		Type		Gender		Email		Contact												
K.Mohanapriya		Student		Female		-		8072251584												
M.Mounica		Student		Female		-		7010252671												
Development of Indigenous device for detection of Polycystic Overian Disease by Exhaled Breath Analysis	MSME Business Incubation Centre	TRL 0 : Idea. Unproven concept, no testing has been performed.	Student	2019	Non-IP / Non-Patented Technology	Still Under Development Process	TRL 0 : Idea. Unproven concept, no testing has been performed.	No	No	No										

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Collagen Extraction for wound healing from ceam- A Novel Combination of organic materials	MSME Business Incubation Centre	TRL 0 : Idea. Unproven concept, no testing has been performed.	Student	2019	Non-IP / Non-Patented Technology	Still Under Development Process	TRL 0 : Idea. Unproven concept, no testing has been performed.	No	No	No																									
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Start-ups have received Grant / funding from Pre-Incubation / Incubation Centre / Facilities

Name of Start-up Received Funding / Grant from Centre	Name of Centre	Year of Registration	Registered as	Start-up with Corporate Identification Number (CIN)	Start-up Founded by	Type of Innovation	Current Status Pre-Incubation/Incubation Support	Has the Start-up Grown to a stage of Employment Generation to 10	Had Centre/institute provided any Financial support	Had the Start-up raised any Seed fund/Angel Investment/VC	Had the Incubation Centre/institute Received any
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Start-ups have received Grant / funding from Pre-Incubation / Incubation Centre / Facilities

				Registration			Received	Numbers or an annual Turnover to Rs. 50 Lakhs during the financial year 2018-19	(either own resource or fund received from agencies) in terms of Seed Grant/Fund Support to Start-up during the financial period 2018-19?	during the period of receiving pre-incubation/incubation support at your Pre-incubation/incubation or institute during the financial period 2018-19?	income/revenue from Start-up for the pre-incubation/incubation support and the services offered by Pre-incubation/incubation or institute during the financial period 2018-19 ?
Walls In Deep	MSME Business Incubation Centre	2018-19	One Person Company	NIL	Student	Service Based Business Solution	Receiving Incubation Support from Incubation Unit	No	No	No	No
Founder											
Name			DIN Number		Type		Gender		Email		Contact
Mohamed Shahid			12345		Student		Male		wallsindeep@gmail.com		9842244929

Co-Incubation Partnership

Type of Partnership	Partnership Institute Name	Type of Support Offered	No. of Student Projects/ Ideas / Innovation / Startups Supported	Date of MOU / Agreement Signed on
Incubation Services/Support Received from Other Institute/Incubator	Kalam Institute of Health Technology	Incubation	4	02-11-2018
Incubation Services/Support Received from Other Institute/Incubator	Caliber Embedded Technologies Private Limited	Pre-incubation	5	26-06-2018

Technology Commercialization / Transfer

Name of Technology Licenced / Transferred / Commercialized	Technology Type	Type of Transfer	Patent / Licence Number	Patent / Licence Holder		Centre / Department of Origin of Licence	Licence Transferred to		Had institute spent expenses either from own resource/received fund to organise the program/activity/event?	Total Annual Income Received from Technology Transfer/Licensing (In Rupees)
A protective mobile Case	IP/Patented Technology	One-time transfer/Licensing	201841046519A	Patent/Licence Holder name (Institute Co-ownership is Must)	Dr S M Kamali	Department of Electrical and Electronics Engineering	Licence Transferred to	Institute	No	---
				Contact number of license holder	9443477637		Name of Industry/Start-up/Agency Received License/Technology	Allinnov Research and Development private limited		
				Email of Licence holder	kamalinalladurai@gmail.com		Address of Agency	Krishnagiri		
				Gender	Female		Contact Number of Agency	8489970504		
							Email of Agency	anbarasu@alinnov.org		

Technology Commercialization / Transfer

System for optimizing 8 D audio signals in a pair of 3D Spectacles	IP/Patented Technology	One-time transfer/Licensing	201941002364	<table border="1"> <tr> <td>Patent/Licence Holder name (Institute Co-ownership is Must)</td> <td>Dr H Lilly Beaulah</td> </tr> <tr> <td>Contact number of license holder</td> <td>9487792406</td> </tr> <tr> <td>Email of Licence holder</td> <td>lbeulah@gmail.com</td> </tr> <tr> <td>Gender</td> <td>Female</td> </tr> </table>	Patent/Licence Holder name (Institute Co-ownership is Must)	Dr H Lilly Beaulah	Contact number of license holder	9487792406	Email of Licence holder	lbeulah@gmail.com	Gender	Female	Department of Computer Science and Engineering	<table border="1"> <tr> <td>Licence Transferred to</td> <td>Institute</td> </tr> <tr> <td>Name of Industry/Start-up/Agency Received License/Technology</td> <td>Allinnov Research and Development Private Limited</td> </tr> <tr> <td>Address of Agency</td> <td>Krishnagiri</td> </tr> <tr> <td>Contact Number of Agency</td> <td>8489970504</td> </tr> <tr> <td>Email of Agency</td> <td>anbarasu@allinnov.org</td> </tr> </table>	Licence Transferred to	Institute	Name of Industry/Start-up/Agency Received License/Technology	Allinnov Research and Development Private Limited	Address of Agency	Krishnagiri	Contact Number of Agency	8489970504	Email of Agency	anbarasu@allinnov.org	No	---
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Email of Agency	anbarasu@allinnov.org																									
Horizontal Axis CAM guided telescopic Blade Yaw controlled wind mill	IP/Patented Technology	One-time transfer/Licensing	201841033956	<table border="1"> <tr> <td>Patent/Licence Holder name (Institute Co-ownership is Must)</td> <td>Dr M Suganthi</td> </tr> <tr> <td>Contact number of license holder</td> <td>9443304386</td> </tr> <tr> <td>Email of Licence holder</td> <td>msuganthi@gmail.com</td> </tr> <tr> <td>Gender</td> <td>Female</td> </tr> </table>	Patent/Licence Holder name (Institute Co-ownership is Must)	Dr M Suganthi	Contact number of license holder	9443304386	Email of Licence holder	msuganthi@gmail.com	Gender	Female	Department of Electronics and Communication Engineering	<table border="1"> <tr> <td>Licence Transferred to</td> <td>Industry</td> </tr> <tr> <td>Name of Industry/Start-up/Agency Received License/Technology</td> <td>abc india</td> </tr> <tr> <td>Address of Agency</td> <td>salem</td> </tr> <tr> <td>Contact Number of Agency</td> <td>1100110101</td> </tr> <tr> <td>Email of Agency</td> <td>asjjs@abc.com</td> </tr> </table>	Licence Transferred to	Industry	Name of Industry/Start-up/Agency Received License/Technology	abc india	Address of Agency	salem	Contact Number of Agency	1100110101	Email of Agency	asjjs@abc.com	No	---
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Declaration

To,
The ARIIA Committee
MHRD's Innovation Cell
New Delhi

Joint Declaration by the Head of the Institute and Nodal Officer

Dear Sir,

Herewith, myself Dr. N.MALMURUGAN (Head of Institute) and Mr. N.MOHANASUNDARARAJU (Nodal Officer) jointly declaring on behalf of our institute is that all the information submitted are true and correct to best of our knowledge.

Thank you

The Head of Institute

N.Malar
30.10.2019

Dr. N.MALMURUGAN
Head of the Institution,
Mahendra College of Engineering,
Salem, Tamil Nadu

Nodal officer

N.Mohanasundararaju
30/10/19

Mr. N.MOHANASUNDARARAJU
Nodal Officer,
Mahendra College of Engineering,
Salem, Tamil Nadu