

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

Institute Name: National Institute of Technology Hamirpur [ARI-U-0189]

Awareness / Training / Programmes organized by the Institute

Total Annual Expenditure Incurred towards Organizing Awareness, Workshop, Seminars, Training programs etc. related to promote innovation, IPR and Entrepreneurship Development

Financial Year	Program Type	Name of Program	Program Theme	Program Duration	Program Conducted	Participants Details			Expenditure Incurred		
						Number of Internal Participants	Number of External Participants	Total Number of Participants	Institute Own / Internal Fund (in Rs.)	Sponsorship / External Fund	Total Expenditure Incurred
2015-16	Awareness / Motivational Programs	Exhibit of societal Inclusion	Innovation	10-Apr-2015 to 11-Apr-2015 (2 Days)	Within Campus	21	0	21	35291.00	0.00	35291.00
2016-17	Awareness / Motivational Programs	Exhibit of societal Inclusion	Innovation	08-Apr-2016 to 09-Apr-2016 (2 Days)	Within Campus	21	0	21	34160.00	0.00	34160.00
2016-17	Awareness / Motivational Programs	Exhibit of societal Inclusion	Innovation	08-Apr-2017 to 09-Apr-2017 (2 Days)	Within Campus	27	2	29	0.00	33262.00	33262.00
2017-18	Workshops / Training / Seminars / Conferences	Integrating renewable energy source in deregulated power sector	Innovation	23-May-2016 to 28-May-2016 (6 Days)	Within Campus	6	19	25	165027.00	0.00	165027.00
2017-18	Awareness / Motivational Programs	Exhibit of Societal inclusion	Innovation	06-Apr-2017 to 06-Apr-2017 (1 Days)	Outside Campus	8	0	8	0.00	24032.00	24032.00
2017-18	Workshops / Training / Seminars / Conferences	Recent Trends in chemical sciences and Engineering	Innovation	13-Oct-2017 to 14-Oct-2017 (2 Days)	Within Campus	21	20	41	45279.00	141751.00	187030.00
2017-18	Workshops / Training / Seminars / Conferences	Emerging Electrical Storage Application	Innovation	11-Dec-2017 to 16-Dec-2017 (6 Days)	Within Campus	41	11	52	0.00	458565.00	458565.00
2017-18	Awareness / Motivational Programs	Exhibit of Societal inclusion	Innovation	06-Apr-2018 to 07-Apr-2018 (2 Days)	Within Campus	30	0	30	0.00	15080.00	15080.00

Institute's Participation in Events / Programmes organized by the External Agencies

Total Annual Expenditure Incurred towards Supporting Students and Faculties to Participate/Present in National and International Level Innovation and Start-up Events/Competitions/Hackathons etc.

Financial Year	Program Type	Program Theme	Name of Event	Organizing Agency / Institute Name	Level of Event	Type of Participants	Nos of Participants	Achievements (Awards/Recognitions/Prize, If any)	Expenditure Incurred		
									Institute Own / Internal Fund (in Rs.)	Sponsorship / External Fund	Total Expenditure Incurred

Institute's Participation in Events / Programmes organized by the External Agencies

Total Annual Expenditure Incurred towards Supporting Students and Faculties to Participate/Present in National and International Level Innovation and Start-up Events/Competitions/Hackathons etc.

2015-16	Exhibitions of Innovative Products / E-Summits / Tech-Fests	Entrepreneurship/S tartup	Festival Of innovation	NIF Ahmdabad	National	Both	2		2682.00	0.00	2682.00
2015-16	Hackathons/Competition/Boot-Camp/Exchange Programs	Innovation	Zonal NASA Convention	ITM Gawalior	National	Student	35		0.00	0.00	0.00
2016-17	Exhibitions of Innovative Products / E-Summits / Tech-Fests	Entrepreneurship/S tartup	Festival of innovation	NIF Ahmdabad	National	Both	1		4933.00	0.00	4933.00
2016-17	Hackathons/Competition/Boot-Camp/Exchange Programs	Innovation	SUPRA	SAE INDIA	National	Student	25		250000.00	60000.00	310000.00
2017-18	Exhibitions of Innovative Products / E-Summits / Tech-Fests	Entrepreneurship/S tartup	Festival of innovation and entrepreneurship	NIF Ahmdabad	National	Both	2		10422.00	0.00	10422.00
2017-18	Hackathons/Competition/Boot-Camp/Exchange Programs	Innovation	Zonal Nasa Convention	Faculty of Architecture, Jaganath University	National	Student	32		0.00	0.00	0.00

Pre-Incubation and Incubation facilities exist in-campus

Total Annual Expenditure Incurred towards Creation of Pre-Incubation and Incubation Facilities in Campus

Financial Year	Name of Centre	Type of Facility	Year of Facility Creation	Facility Location / Address	Facility Incharge Name	Facility area in Sq Ft	Operational Cost of Centre (in Rs.) (Construction Cost is excluded)		
							Institute Own / Internal Fund (in Rs.)	Sponsorship / External Fund	Total Expenditure Incurred
2017-18	Empanelled Incubator Centre, Uncer CM's Startup / Innovation Project/New Industries Scheme, NIT Hamirpur (HP)	Pre-Incubation	2018	NIT,Hamirpur	Dr. Pamita Awasthi	692	0.00	4000000.00	4000000.00

Fund supported to convert ideas to Innovations & Start-ups

Total Annual Fund Supported towards Conversion of Ideas to Innovative Solutions and Start-ups at the Institute Level

Financial Year	Category	Name of Idea / Project / Innovation / Startup	Applicant Type	Academic Year of Study	Project Completion	Core Team Size (Nos)	Fund Supported				Current Status (as of 31st March 2018)
							Institution Own Seed Fund	Seed Grant from Funding Agency	Angel / Venture Capital Fund	Total Supported Amount	
2015-16	Idea to PoC / Prototype / Innovation	Smart Solar Panel	Student	Bachelor	Successfully Completed	5	0.00	71606.00	0.00	71606.00	Technology Development/Pre Incubation Phase
2015-16	Idea to PoC / Prototype / Innovation	Multi function Grain Cleaning Machine	Student	Bachelor	Successfully Completed	3	0.00	63531.00	0.00	63531.00	Technology Development/Pre Incubation Phase

Fund supported to convert ideas to Innovations & Start-ups

Total Annual Fund Supported towards Conversion of Ideas to Innovative Solutions and Start-ups at the Institute Level

2015-16	Idea to PoC / Prototype / Innovation	Electronic Support system for people with speech impairment	Student	Bachelor	Successfully Completed	5	0.00	50429.00	0.00	50429.00	Technology Development/Pre Incubation Phase
2015-16	Idea to PoC / Prototype / Innovation	A PET Structure on Green Fuel	Student	Bachelor	Successfully Completed	11	0.00	97936.00	0.00	97936.00	Technology Development/Pre Incubation Phase
2015-16	Idea to PoC / Prototype / Innovation	Mobile Autonomous robot for indoor and outdoor use	Student	Bachelor	Successfully Completed	3	0.00	89954.00	0.00	89954.00	Technology Development/Pre Incubation Phase
2015-16	Idea to PoC / Prototype / Innovation	10T Enabled Energy Management System Design and implementation	Student	Bachelor	Successfully Completed	2	0.00	73472.00	0.00	73472.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Cost effective Motirized tricycle for Differently abled individuals	Student	Bachelor	On Progress	7	0.00	33700.00	0.00	33700.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Integrated Energy Efficient and Eco- Friendly Home Heating System	Student	Bachelor	On Progress	4	0.00	59000.00	0.00	59000.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Wind Energy Driven Passive Solar Tracking System	Student	Bachelor	On Progress	7	0.00	20300.00	0.00	20300.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Smart Shoe	Student	Bachelor	Successfully Completed	3	0.00	35800.00	0.00	35800.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Entertainment without Language Barrier	Student	Bachelor	Successfully Completed	2	0.00	21583.00	0.00	21583.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Window Washer for Glass Buildings	Student	Bachelor	On Progress	1	0.00	48150.00	0.00	48150.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Design Development and testing of a novel multistage parabolic solar collector	Student	Bachelor	Successfully Completed	3	0.00	24403.00	0.00	24403.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Digitization of local markets and develop a network between customer and shops (VAIOTI)	Student	Bachelor	On Progress	4	0.00	58845.00	0.00	58845.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	RFID Based Out Pass Solution	Student	Bachelor	Successfully Completed	5	0.00	5009.00	0.00	5009.00	Technology Development/Pre Incubation Phase
2017-18	Idea to PoC / Prototype / Innovation	Avalanche Rescue Belt	Student	Bachelor	On Progress	2	0.00	17600.00	0.00	17600.00	Technology Development/Pre Incubation Phase

Intellectual Properties Filed

Total Annual Expenditure Spent towards Patent filing of Innovative Technologies with Institute having Ownership

Financial Year	Title of Patent	Patent Application No	Inventors Type	Type of Patent Application Filed	Current Status (as of 31st March 2018)	Amount Spent towards Patent Filing (in Rs.)		
						Institution Own Fund	Sponsorship / Grant Fund	Total Amount Spent towards Patent Filing (in Rs.)
2015-16	Software Implementation of Hostel and Public Building Room Allotment with virtual tour	1109/DEL/2012	Faculty	National	Application Published	0.00	0.00	0.00
2016-17	Automatic wall painting system	201611015615A	Faculty	National	Application under Examination	55000.00	0.00	55000.00
2016-17	Novel Addressing techniques of objects in IOT Networks	201711026861	Faculty	National	Application under Examination	10000.00	0.00	10000.00
2017-18	System and method for filtering of packets based on the identity of the device	201711034847	Faculty	National	Application under Examination	10000.00	0.00	10000.00
2017-18	Two stage solar Furnace	201811002851	Faculty	National	Application under Examination	10700.00	0.00	10700.00
2017-18	Three stage parabolic dish collector cum reciever	201721036668	Faculty	National	Application under Examination	10700.00	0.00	10700.00

Innovations Commercialized and IP Licensed

Total Annual Expenditure Incurred and Revenue Generated from IP Commercialization and Licensing at Institute Level (Excluding Consultancy and Testing Services)

Not Applicable!

Grant / Fund Generated / Received by Institute to support Innovation & Start-up

Total Annual Grant / Fund Generated / Received / Mobilized from Govt., Non Govt. and Private Agencies towards Creation of Pre-Incubation and Incubation Infrastructure and Facilities in Campus

Financial Year of Fund Generated	Grant Agency Type	Grant Agency Name	Total Grant Period (in Years)	Total Grant Allocated Amount (in Rs.)	Total Grant Received Amount (in Rs.) (as of 31st March 2018)	Purpose of Grant Utilization (Multiple options can be selected)	Purpose of Grant Utilization (Other)
2017-18	Government	Govt. of Himachal Pradesh	03	9000000.00	4000000.00	Pre-Incubation & Incubation Facility/Infrastructure Creation, Pre-Incubation & Incubation Activities in Campus, Training and Capacity Development on Innovation/Startup	---

Venture Fund / Investment mobilized to support Innovation & Start-up

Total Angel/Venture Fund Mobilized Annually towards Investment Commitment/Support Innovators/Start-ups incubated at Institute

Not Applicable!

Revenue Generated from Incubation Services offered by the Institute

Total Revenue Generated Annually from the Incubation Services offered and Equity/Share hold in Incubatees/Spinoffs

Not Applicable!

Infrastructures & Facilities to Support Innovations and Start-ups

Advanced Infrastructure																			
Advanced Lab Infrastructure/Facilities available to Support Innovation and Start-Up																			
Yes																			
If Yes, Type of Lab Infrastructures / Facilities Available (Multiple Options can be Selected)																			
Bio-Design Centre, Other																			
List Maximum Five Advanced Labs Infrastructures Available in your Campus																			
<table><tr><th>Name of the Centre</th><th>Sector Focus of Centre (Separate Multiple Sectors with Comma ",")</th><th>Name of the Centre In charge</th><th>Email of the Centre In charge</th></tr><tr><td>Climatology Lab</td><td>Energy Efficiency and Sustainable design</td><td>Dr. Amitava Sarkar</td><td>amitava@nith.ac.in</td></tr><tr><td>Empanelled Incubator Centre</td><td>Technical Scientific monitoring</td><td>Dr. Pamita Awasthi</td><td>pamita@nith.ac.in</td></tr><tr><td>TIFAC Centre of Relevance and Excellence</td><td>Facilitate innovators to get field training to set up world class infrastructure related to identifi</td><td>Dr. R K Jarial</td><td>jarial@nith.ac.in</td></tr></table>				Name of the Centre	Sector Focus of Centre (Separate Multiple Sectors with Comma ",")	Name of the Centre In charge	Email of the Centre In charge	Climatology Lab	Energy Efficiency and Sustainable design	Dr. Amitava Sarkar	amitava@nith.ac.in	Empanelled Incubator Centre	Technical Scientific monitoring	Dr. Pamita Awasthi	pamita@nith.ac.in	TIFAC Centre of Relevance and Excellence	Facilitate innovators to get field training to set up world class infrastructure related to identifi	Dr. R K Jarial	jarial@nith.ac.in
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Pre Incubation Centre Available in your Campus																			
Pre-Incubation Centre																			
Yes																			
Type of Centre (Multiple options can be selected)																			
Innovation Cell/Startup Cells																			
List Maximum Five Pre-Incubation Centre Available in your Campus																			
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Incubation Unit/Acceleration Centre/ Research Park / STEP																			
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Student Projects recognized at National / International Level

No of Innovative Student Projects Recognized Nationally/Internationally with Prestigious renounced Agencies/Awards

Financial Year of Award Received	Name of the Award / Program	Awarding Agency Name	Type of Award	Current Status (as of 31st March 2018)	Total Team Size (Student + Faculty)
2015-16	ARM University Worldwide Education Program	ARM	National	Technology Development/Pre Incubation Phase	4
2015-16	Birla white Yuva Ratna Award 2015	Birla white	National	Graduated Startup	2
2016-17	Analog Devices University Program	Analog Devices India	National	Technology Development/Pre Incubation Phase	6
2017-18	Supra 2018	SAE INDIA	National	Graduated Startup	25

Innovations to Startups

No of Successful Conversion of Innovations initiated by Students/Alumni/Faculties converted to Enterprise/Start-ups made at Institute

Not Applicable!

Co-Incubation Partnership

Co-incubation Partnership made with other Institutions either to offer incubation support (or) to receive incubation support

Not Applicable!

Courses on Innovation, IPR and Entrepreneurship Development

Short Term Certificate Courses, Regular Academic Programs and Courses offered at Institute on Innovation, IPR and Entrepreneurship Development for Students, Faculties and Start-ups

Academic Year	Title of Course	Subject Focus of Course	Type of Course	Mode of Delivery	Duration of Course / Subject (Minimum 30 Contact Hours)	Total Enrollment for the Course	Total Nos. Completed the Course
2015-16	Sustainable built environment issues and options	Design thinking	Bachelor	Classroom	40	22	22
2017-18	Short term course in 2D drafting	Cognitive skill Development	Bachelor	Classroom	40	28	28

Faculty with Entrepreneurial Experience

Regular Faculties Engaged in Teaching with Experience in Innovation Design, IPR, Business Modelling, Entrepreneurship Development, Start-up, etc.

Academic Year	Faculty Name	Department	Years of Experience in Start-up / Entrepreneurship	Area of Expertise (Multiple Options can be Selected)	Level of Involvements as	Is Faculty, a Founder/Director of any Start-up	Name of the Start-up (Multiple Startups can be mentioned with Comma)	Director Identification Number (DIN)
2015-16	Dr Puneet Sharma	7	Architecture	Innovation Design	Mentor	No	---	---
2017-18	Dr Bhanu Marwaha	12	Architecture	Innovation Design	Mentor	No	---	---

Innovation in Governance

Best Innovative Solutions Developed In-house for Improving Governance of Your Institution

Financial Year	Categories	Title of the Innovation	Brief About Solutions / Approaches Developed and Deployed in Your Institute	Total Project Amount (in Rs.)	Revenue Generated (in Rs.)	Impact created (No. of Direct Beneficiaries/Users)
2015-16	Energy Conservation	Performance Evaluation of Hygienic Solar Steam Generating Cooking Systems in Neelkanth Hostel of NIT Hamirpur for Fuel saving	Solar system with utilization of the technology we are able to save 1.5 to 2 LPG gas commercial cylinders per day which translates into a saving of about 40000 to 50000 per month	1067000.00	45000.00	500

Innovation in Governance

Best Innovative Solutions Developed In-house for Improving Governance of Your Institution

2017-18	Water Conservation and Management	Rain Water harvesting system	Rain water harvesting system for Lecture hall complex, faculty houses and student activity centre. Rain water is being collected and used for watering of green lawns, playground, flower beds etc	5000000.00	150000.00	3500
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Responsibility for accuracy and authenticity of data lies with the concerned institution.