RESUME OF DR. R.P. SAINI

1. Name : **Dr. R.P. Saini**

2. Father's Name : Late Shri Roop Ram Saini

3. Date of Birth : 11th April 1959

4. Postal Address :

Professor,
Alternate Hydro Energy Centre,
Indian Institute of Technology,
Roorkee-247 667, (Uttarakhand), India
Tel. No. (01332)-285841 (O), 274156 (R),
E-mail: rajsafah@iitr.ernet.in
saini.rajeshwer@gmail.com

5. Educational Qualifications :

S.No.	Examination	Year	Board/Univ.	Subject/Specialisation
(i).	Ph.D	1996	University of Roorkee	Mechanical Engineering
(ii).	M.E.	1989	University of Roorkee	Mechanical Engineering
(iii).	B.E.	1982	University of Mysore	Mechanical Engineering

6. Teaching & Research Experience : 33 Years

Course taught/being taught–Hydro Mechanical Equipment (AHN-516), Renewable Energy Resources Development Technology (AHN-513), Energy Conservation and Management (AHN-542), Solar Photo-voltaic Design and Application (AHN-540), Fluid Mechanics (AH-515), Design & Testing of Hydro-mechanical Equipment (AH-524), Design of Hydro Mechanical Equipment (WRN-551), Bridge Course (AH-519) and Institute Elective-Renewable Energy Resources Development Technology (IAH-302)
(Details of teaching engagement at Annexure-I).

7. Research area : **Small Hydro Power**

- Hydro turbine design and performance testing
- Hydro kinetic turbines
- Silt erosion and cavitation in hydro turbines
- Optimal selection of SHP equipment
- Cost optimization of SHP schemes

Solar Energy

- Solar thermal energy utilization - *performance enhancement of solar air heaters.*
- Solar thermal energy storage- *packed bed sensible heat storage system*
- *Sizing of solar photovoltaic systems*

Integrated Renewable Energy Sources

- Modeling of renewable energy systems
- Modeling of hybrid energy systems

8. Research Guidance : Ph.D Thesis guided: Awarded - 21 (Twenty one),
In progress - 08 (Eight)
(Details at Annexure-II)

M.E./M.Tech. Thesis guided:
Completed - 124 (One hundred twenty four),
In progress - 09 (nine)
(Details at Annexure-III)

M.E./M.Tech. Projects guided: 66 (Sixty six)

9. Research Papers Published : Journal - 110 (One hundred seven)
Symposium/Conferences/Seminars - 174
(One hundred seventy four)
Special publications- Book (1 No.)**,** Manuals (2 Nos.),
Guide Book (1 No.)
(Details at Annexure-IV)

Citation Indices :		All	Since 2012
(Status as on 21 June, 2017)	Citations	4165	3529
(Source : Google Scholar Citation)	h-index	34	32
	i10-index	75	69

10. Patents Granted : 02 (two).

(i) A Horizontal Open-Cross Flow Turbine (Patent No. 230527 dated 27.02.2009).

(ii) A Water Mill Used for Grinding Grains (Patent No. 231697 dated 08.03.2009).

12. Consultancy and Sponsored Research Projects. : Consultancy Projects - 226 (Two hundred twenty six)
Research Projects - 17 (Seventeen)
(Details at Annexure-V)

13. International Projects : UNDP-GEF Hilly Hydro project, New Small Hydro Options, R&M DPR with Canada, Training and CIDA – SHP Technology Transfer with CANMET, Canada. Training of SHP Projects in Nepal and Bangladesh, Organization of Courses: Small Hydropower Training Workshop on Capacity Building for Hydro Power Projects Development, Freetown-Seirra Leone and Small Hydropower Training Workshop on Capacity Building for Hydro Power Projects Development, Monrovia-Liberia.

14. **Educational TV Programme**

Technical Expert for the following TV programme developed by AVRC for UGC programme

i. Water Mill - Old but indispensable.
ii. Improved Water Mill - Small but efficient.
iii. Micro Hydro - Need for the hour (Part-I).
iv. Micro Hydro - Need for the hour (Part-II).

15. HONOURS / AWARDS

- "Lifetime Achievement Award" by Venus International Foundation, Chennai (2016).
- "Best Citizens of India Award" – Best Citizen Publishing House-2016
- "Bharat Jyoti Award" – India International Friendship Society-2015
- Chairman, Board of Studies Committee-Institute of Hydropower Engineering and Technology, Tehri (Uttarakhand)
- Best Teacher Award 2012 - Indian Institute of Technology Roorkee
- Star Performer of IIT Roorkee for the year 2003-04.
- Star Performer of IIT Roorkee for the year 2004-05.

16. INSTITUTE AND DEPARTMENT LEVEL RESPONSIBILITIES

Institute Level :

(i)	Member, Institute Academic Programme Committee	2015 - continue
(ii)	Chief Advisor, Hobbies Club	2010- 2011
(iii)	Dy. Chief Advisor, Hobbies Club	2008- 2011
(iv)	Member, Community Dairy Committee of IIT	2006- 2009
(v)	Central Purchase Officer for Bhawan Mess	2006- 2009
(vi)	Chief Warden, Cautley Bhawan	2005- 2009
(vii)	Member, IPR Cell	2005- 2011
(viii)	Member of Advisory committee for department of Continuing Education	2005- 2010
(ix)	Member Board of PGS&R	2003- 2011
(x)	Programme Advisor for PG Students	2002- 2011
(xi)	Warden, Cautley Bhawan	2002- 2004

Deptt./Centre's Level :

(i)	Head, AHEC	Jan. 2012-Jan. 2015
(ii)	O.C. Hydro-mechanical Lab	Aug.2016……
(iii)	O.C. Biomass & Ecosystem Lab	Aug.2016……
(iv)	O.C. Solar Energy Lab	Aug.2016……
(v)	O.C. CADIS Lab. & Publication	Aug.2016……
(vi)	O.C. Examinations and O.C. tour	2007- 2011
(vii)	Staff advisor for Cognizance	2006- 2011
(viii)	O.C. Academic Programme	2004- 2011
(ix)	O.C. Time Table	2004- 2011
(x)	Coordinator for PG Admission	2004- 2011
(xi)	O.C. Administration	2003- 2011
(xii)	O.C. Building	2003- 2011
(xiii)	O.C. Vehicle	2001- 2003
(xiv)	O.C. Hydro-mechanical Laboratory	2001- 2003

17. Membership :

i. Fellow, Institute of Engineers, Roorkee.
ii. Life Member of International Association for Small Hydro, New Delhi.
iii. Life Member of Indian Society for Solar Energy, New Delhi.

iv. Indian Society of Hydrologists, Roorkee.
v. Life Member of Indian Society for Continuing Education, Roorkee.
vi. Life Member, Alumni Association, IIT Roorkee.

18. **International Visits :**

Nepal (1996, 1997, 2000, 2003, 2007 and 2009) **Indonesia** (1998, 2014), **Bangladesh** (1999), **Norway** (2000, 2003), **Czech Republic** (2000), **United Kingdom** (2000), **Canada** (2004), **Croatia** (2004), **Sri Lanka** (Feb.2007, Oct.2007, 2010), **France** (2008) **Italy** (2008) **Slovenia** (2010)**, Switzerland** (2010), **Germany** (2010), **Spain** (2011), **China** (2012), **Sierra Leone** (2013), **Liberia** (2013) and **Kenya** (2013). **(Details at Annexure-VI)**

Annexure-I

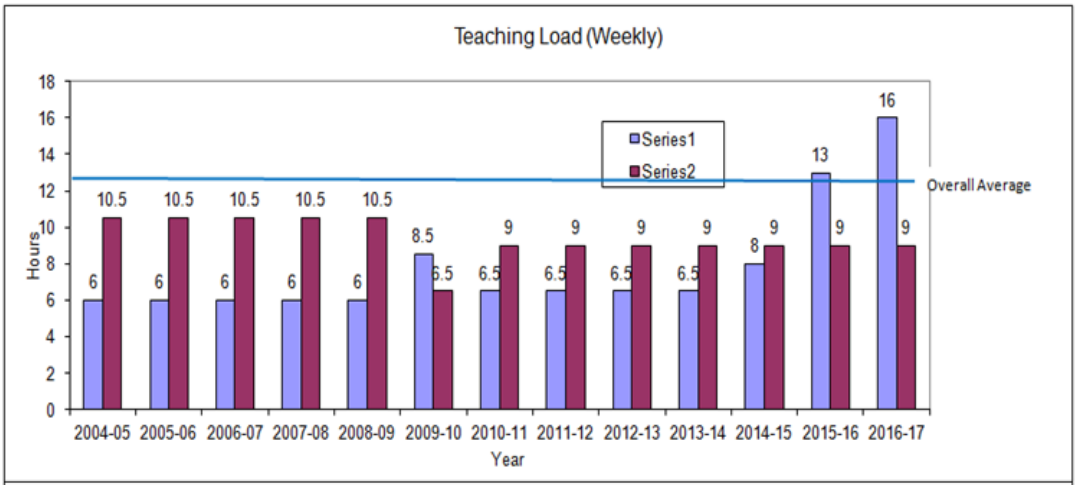
TEACHING ENGAGEMENTS (From 2004)

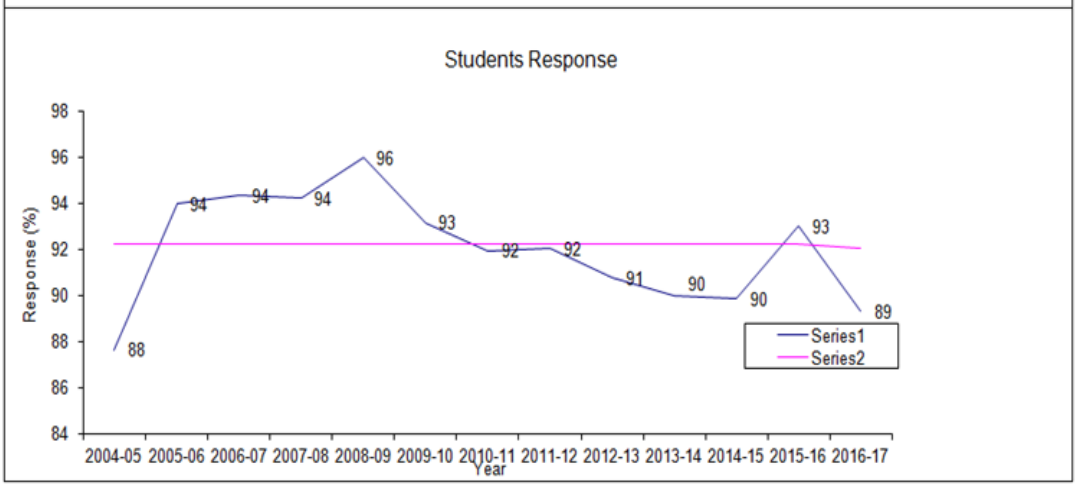
Course No. & Title	No. of Students	Load			Student Response (%)
		L	T	P	
2004-2005					
Autumn Semester					
AH-513 : Renewable Energy Resources Development Technology	14	3	2/2	2/2	84.5
AH-515 : Fluid Mechanics	13	2	-	-	93.2
AH-519 : AHES-Bridge Course	13	3	1	-	87.1
Spring Semester					
AH-516 : Hydro-mechanical Equipment	13	3	2/2	2/2	86.1
AH-524 : Design and Testing of Hydro-Mechanical Equipment	07	3	1	-	89.1
AH-542 : Energy Conservation and Management	13	3	1	-	85.9
2005-2006					
Autumn Semester					
AH-513 : Renewable Energy Resources Development Technology	15	3	2/2	2/2	93.6
AH-515 : Fluid Mechanics	14	2	-	-	99.0
AH-519 : AHES-Bridge Course	14	3	1	-	94.2
Spring Semester					
AH-516 : Hydro-mechanical Equipment	14	3	2/2	2/2	89.0
AH-524 : Design and Testing of Hydro-Mechanical Equipment	06	3	2/2	2/2	99.0
AH-542 : Energy Conservation and Management	14	3	1	-	89.2
2006-2007					
Autumn Semester					
AH-513 : Renewable Energy Resources Development Technology	19	3	2/2	2/2	87.0
AH-515 : Fluid Mechanics	19	2	-	-	94.0
AH-519 : AHES-Bridge Course	19	3	1	-	95.0
Spring Semester					
AH-516 : Hydro-mechanical Equipment	17	3	2/2	2/2	96.0
AH-524 : Design and Testing of Hydro-Mechanical Equipment	11	3	2/2	2/2	97.0
AH-542 : Energy Conservation and Management	10	3	1	-	97.0
2007-2008					
Autumn Semester					
AH-513 : Renewable Energy Resources Development Technology	19	3	2/2	2/2	91.0
AH-515 : Fluid Mechanics	19	2	-	-	95.0
AH-519 : AHES-Bridge Course	19	3	1	-	86.0
Spring Semester					
AH-516 : Hydro-mechanical Equipment	18	3	2/2	2/2	99.0
AH-524 : Design and Testing of Hydro-Mechanical Equipment	10	3	2/2	2/2	97.3
AH-542 : Energy Conservation and Management	05	3	1	-	97.2
2008-2009					
Autumn Semester					

AH-513 : Renewable Energy Resources Development Technology	39	3	2/2	2/2	98.0
AH-515 : Fluid Mechanics	17	2	-	-	98.8
AH-519 : AHES-Bridge Course	15	3	1	-	100.0
Spring Semester					
AH-516 : Hydro-mechanical Equipment	18	3	2/2	2/2	99.7
AH-524 : Design and Testing of Hydro-Mechanical Equipment	10	3	2/2	2/2	95.8
AH-542 : Energy Conservation and Management	17	3	1	-	98.7
2009-2010 **Autumn Semester**					
IAH-02 : Renewable Energy Sources Dev. Technology	24				85.4
AH-513 : Renewable Energy Resources Development Technology	20	3	2/2	2/2	96.2
AH-515 : Fluid Mechanics	14	2	-	-	97.4
Spring Semester					
AH-516 : Hydro-mechanical Equipment	19	3	2/2	2/2	94.8
AH-542 : Energy Conservation and Management	10	3	1	-	92.0
2010-2011 **Autumn Semester**					
IAH-02 : Renewable Energy Sources Dev. Technology	39				95.2
AH-513 : Renewable Energy Resources Development Technology	31	3	2/2	2/2	89.0
Spring Semester					
AH-516 : Hydro-mechanical Equipment	20	3	2/2	2/2	92.3
AH-540 : Solar Photo-voltaic Design and Application	8	3	1	-	91.3
2011-2012 **Autumn Semester**					
IAH-02 : Renewable Energy Sources Dev. Technology	27				90.9
AH-513 : Renewable Energy Resources Development Technology	32	3	2/2	2/2	93.5
Spring Semester					
AH-516 : Hydro-mechanical Equipment	21	3	2/2	2/2	91.8
AH-540 : Solar Photo-voltaic Design and Application	18	3	1	-	91.9
2012-2013 **Autumn Semester**					
IAH-02 : Renewable Energy Sources Dev. Technology	24				90.3
AH-513 : Renewable Energy Resources Development Technology	29	3	2/2	2/2	92.4
Spring Semester					
AH-516 : Hydro-mechanical Equipment	27	3	2/2	2/2	90.0
AH-540 : Solar Photo-voltaic Design and Application	18	3	1	-	90.3
2013-2014 **Autumn Semester**					
IAH-02 : Renewable Energy Sources Dev. Technology	45				76.0 (Faculty Score-

					3.8)
AH-513 : Renewable Energy Resources Development Technology	21	3	2/2	2/2	92.4 (Faculty Score-4.62)
Spring Semester					
AH-516 : Hydro-mechanical Equipment	34	3	2/2	2/2	98.2 (Faculty Score-4.91)
AH-540 : Solar Photo-voltaic Design and Application	33	3	1	-	93.3 (Faculty Score-4.67)
2014-2015 **Autumn Semester**					
IAH-02 : Renewable Energy Sources Dev. Technology	81				78.6 (Faculty Score-3.93)
AH-513 : Renewable Energy Resources Development Technology	41	3	1	2/2	93.6 (Faculty Score-4.68)
AH-542- Energy Conservation and Management	44	3	1	-	92.8 (Faculty Score-4.64)
Spring Semester					
AHN-516 : Hydro-mechanical Equipment	42	3	1	2/2	94.2 (Faculty Score-4.71)
AHN-540 : Solar Photo-voltaic Design and Application	45	3	1	-	90.2 (Faculty Score-4.51)
2015-2016 **Autumn Semester**					
IAH-02 : Renewable Energy Sources Dev. Technology					* Response record was not available at Academic Information System
AH-513 : Renewable Energy Resources Development Technology	44	3	1	2/2	90.0 (Faculty Score-4.5)
AH-542 : Energy Conservation and Management	46	3	1	-	92.2 (Faculty Score-4.61)
WRN-551: Design of Hydro Mechanical Equipment	9	4	3	1	100 (Faculty Score-5.0)
Spring Semester					
AHN-516 : Hydro-mechanical Equipment	39	3	1	2/2	93.5 (Faculty Score-4.675)
AHN-540 : Solar Photo-voltaic Design and Application	62	3	1	-	89.2 (Faculty Score-4.46)
2016-2017 **Autumn Semester**					
IAH-02 : Renewable Energy Sources Dev.	69				82.08

Technology					(Faculty Score-4.104)
AH-513 : Renewable Energy Resources Development Technology	36	3	1	2/2	90.86 (Faculty Score-4.543)
AH-542 : Energy Conservation and Management	34	3	1	-	91.26 (Faculty Score-4.563)
WRN-551: Design of Hydro Mechanical Equipment	5	4	3	1	87.5 (Faculty Score-4.375)
Spring Semester					
AHN-516 : Hydro-mechanical Equipment	31	3	1	2/2	93.7 (Faculty Score-4.685)
AHN-540 : Solar Photo-voltaic Design and Application	31	3	1	-	91.06 (Faculty Score-4.553)





Course taught

A. PG

1. AH-513: Renewable Energy Resources Development Technology
2. AH-515: Fluid Mechanics
3. AH-516: Hydro-mechanical Equipment
4. AH-519: AHES-Bridge Course
5. AH-524: Design and Testing o Hydro-Mechanical Equipment
6. AH-540: Solar Photo-voltaic Design and Application
7. AH-542: Energy Conservation and Management
8. WRN-551: Design of Hydro Mechanical Equipment

B. UG

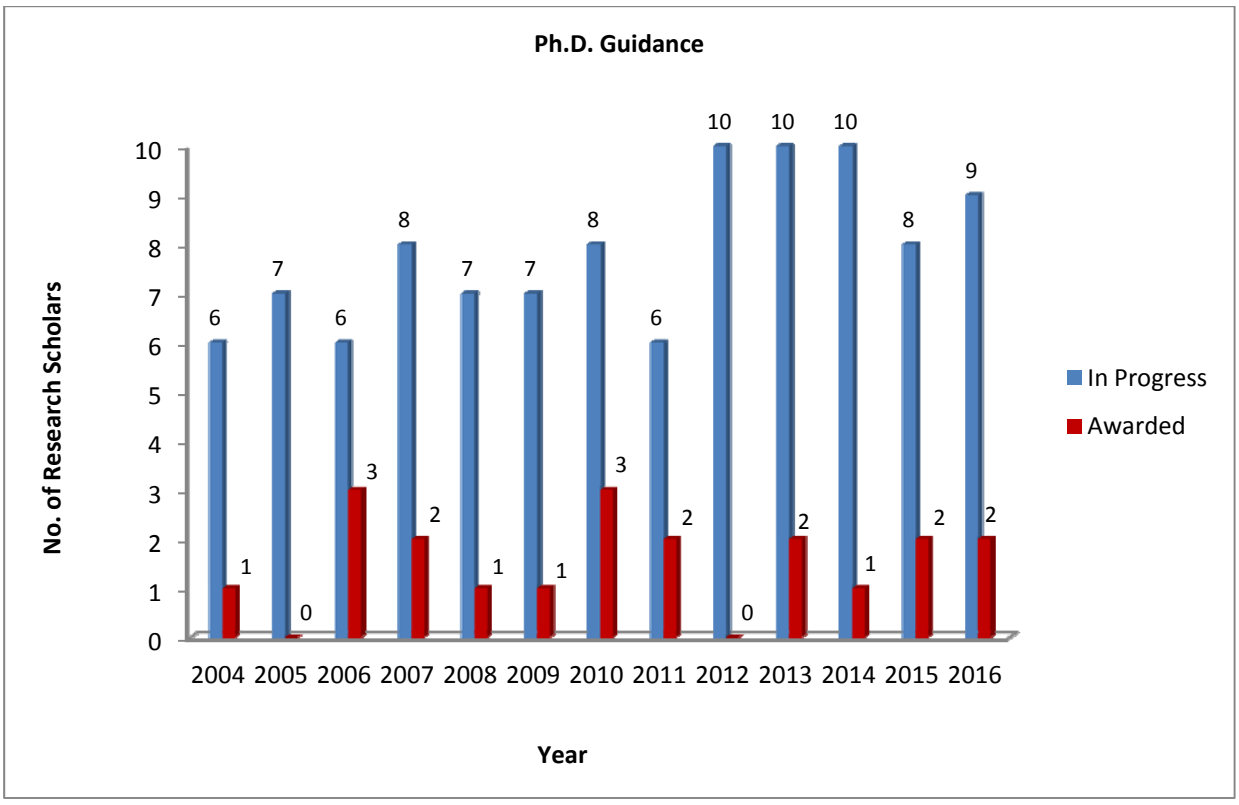
1. IAH-02: Renewable Energy Sources Dev. Technology

Annexure-II

DETAILS OF Ph.D. THESIS SUPERVISED/BEING SUPERVISED

S.No.	Degree	Title of Thesis	Year of Award	Name of Scholar
1.	Ph.D.	Modeling of decentralized Integrated Energy System	2004	E. Fernandez
2.	Ph.D.	Modeling of Integrated Renewable Energy System	2006	Ashok Kumar Akella
3.	Ph.D.	Performance of Packed Bed Energy Storage System for Solar Air Heaters	2006	Ranjit Singh
4.	Ph.D.	Integrated Control of Small Hydro Power Plants	2006	Nand Kishor
5.	Ph.D.	Multi-Phase Induction Generator for Small Hydro Power Scheme	2007	K.B. Yadav
6.	Ph.D.	Efficiency deterioration in Pelton turbines due to sand-particle-led bucket erosion	2007	T.R. Bajracharya, Tribhuvan University, Nepal
7.	Ph.D.	Study of Solar Air Heater with Roughened Absorber Plates	2008	S.K. Saini
8.	Ph.D.	Optimisation of Low Head Small Hydro Power Installations	2009	Sunil Kumar Singal
9.	Ph.D.	Study of Silt Erosion on Pelton Turbine for a Small Hydro Power Plant	2010	Mamta Kumari Padhy (Ms)
10.	Ph.D.	Analysis of Six-Phase Self-Excited Induction Generator	2010	A. Senthil Kumar
11.	Ph.D.	Heat Transfer and Friction Characteristics of Multiple V-Rib Roughened Solar Air Heater	2010	Vishavjeet Singh Hans
12.	Ph.D.	Modeling of Hybrid Energy System	2011	Ajai Gupta
13.	Ph.D.	Development Of Integrated Renewable Energy System For A Remote Area	2011	Kanase-Patil Amarsingh Baburao
14.	Ph.D.	Heat and Fluid Flow in Solar Air Heater Duct with Multi V-Shaped Ribs with Gap	2013	Anil Kumar
15.	Ph.D.	Investigation on Performance of a Packed Bed Solar Energy Storage System	2013	Harmeet Singh
16.	Ph.D.	Investigation of grid connected six-phase induction generator for small hydro power plants	2014	S.N. Singh
17.	Ph.D.	Optimal Planning of Integrated Renewable Energy System	2015	Mohit Bansal
18.	Ph.D.	Investigation of heat transfer enhancement by using V-shaped perforated blocks in rectangular solar air heater duct	2015	Tabish Alam
19.	Ph.D.	Study Of Cavitation In Francis Turbine For Small Hydro Power Plants	2016	Gohil Pankajkuamr Paragbhai
20.	Ph.D.	Evolving optimal integrated renewable	2016	Anurag Chauhan

		energy system model for stand-alone applications		
21.	Ph.D.	Integrated Renewable Energy System for a remote rural area	2017	Rajanna S
23.	Ph.D.	Modeling of Solar Photovoltaic array under non-uniform insolation	Submitted	Sangram Bana
22.	Ph.D.	Optimisation of Solar Photo-Voltaic Tracking System	On going	Mamta Suthar (Ms)
24.	Ph.D.	Investigation on performance of a savonius hydrokinetic turbine	On going	Anuj Kumar
25.	Ph.D.	Heat transfer and fluid flow study in double pass solar air heater duct having discrete-multi V-shaped and staggered ribs	On going	Ravi Kant Ravi
26.	Ph.D.	Study on Solar air heater duct roughened with spherical and inclined rib protrusion	On going	Chandra Prakash
27.	Ph.D.	Solar Energy	On going	Sanat Kumar Patro
28.	Ph.D.	Hydro Turbines	On going	Gaurav Saini
29.	Ph.D.	Performance enhancement of photovoltaic thermal solar collectors by using phase change materials	On going	Ankit Dev



Annexure-III

DETAILS OF M.E. / M.TECH. DISSERTATION SUPERVISED/BEING SUPERVISED

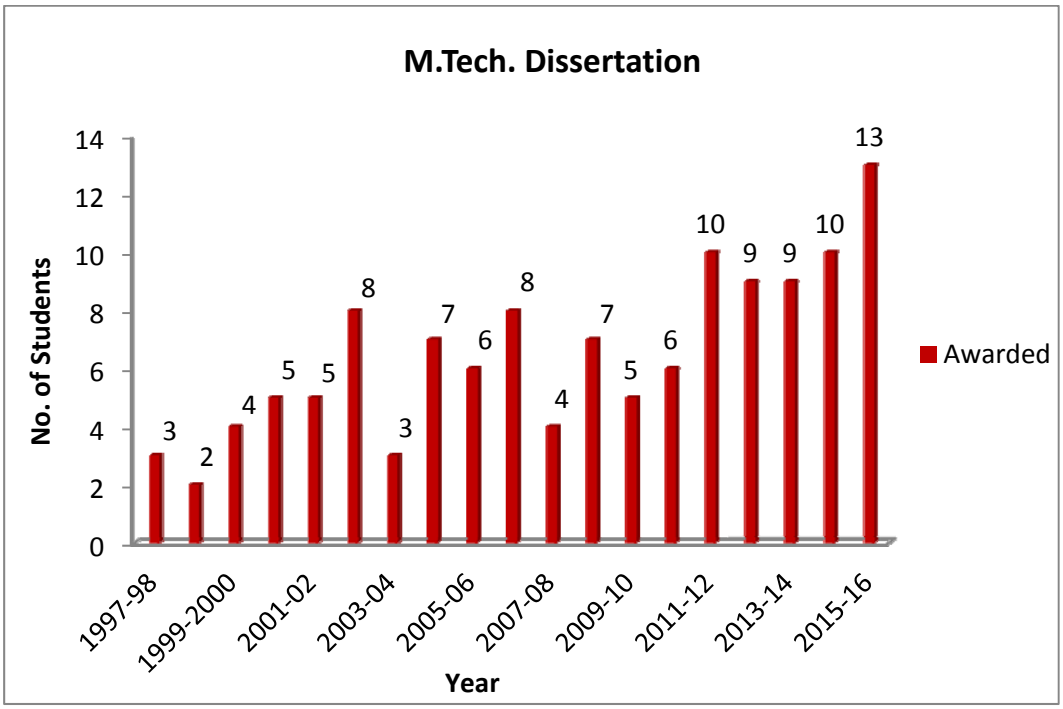
S. No.	Title of Dissertations	Year of Award	Name of Student
1.	Design of A small Hydro Power Plant for Grid Connected and Isolated Mode Operation	1999	Lalnithanga
2.	Development of Integrated Renewable Energy Systems for Village Kanvasharam	1999	Alok Kumar Bharadwaj
3.	Design and Sizing of Photovoltaic System for Remote Area	1999	Vivek Kapil
4.	Design Criteria of SHP Plants with Shunt Load Governor	2000	Lalrinmawia
5.	Optimisation of Renewable Energy Based Power Generation Systems for Remote Area in J&K	2000	Shafat Sultan Marazi
6.	New Design Concepts of Micro Hydro Power Plants	2001	Chandan Prakash
7.	Techno-Economic Study of Solar Photovoltaic Systems in Arunachal Pradesh	2001	Sarsing Gao
8.	Study for Optimal Utilisation of Renewable Energy Sources in A Remote Area	2001	Himani Goyal (Ms)
9.	Development of A Hybrid SPV-Diesel Engine Based Electricity Generation System	2001	Prajjwal Kumar Bhaskar
10.	Development of Efficient Strategy for Performance Evaluation of SHP Hydro Mechanical Equipment	2002	Onkar Nath
11.	Strategies for Development of Mini/Micro Hydro Power in Nagaland	2002	Shanchothung Odyuo
12.	Cost Effective Design of Solar Photovoltaic System for A Remote Area	2002	Bhawesh Agrawal
13.	Development of Standard Sizes of Micro Hydro Turbines	2002	Amit Bajpai
14.	Cost-Effective Design for Micro Hydropower Schemes	2002	Shirish Gupta
15.	Optimum Selection of Hydromechanical Equipment for SHP Stations	2003	Manoj Kumar Jaiswal
16.	Integrated Renewable Energy System for A Remote Hilly Area	2003	Pravin Anirudha Motghare
17.	Design of Water Mills for Multipurpose Applications	2003	Bhupesh Suryabhan Patil
18.	Design of Low Cost Micro Hydro Turbine	2003	Jitendra Singh
19.	Site Efficiency Measurement of Small Hydropower Stations	2003	Rakesh Khatri
20.	Techno-Economic Analysis of Micro Hydropower Equipment	2004	Arun Kumar Tiwari
21.	Model Testing for SHP Hydro Turbines	2004	Debasis Mitra
22.	Optimal Installation of Hydro-Mechanical Equipment for Low Head SHP	2004	Gaurav Sinha
23.	Field Testing of Hydro Mechanical Equipments of SHP Stations.	2004	Prakash Mishra
24.	Study of Thermo Hydraulic Performance of Solar Air Heaters Provided with Artificially Roughned Duct	2004	Varun
25.	Techno-economic Study of Micro Hydro Turbine Governing Systems.	2004	Vivek Agarwal
26.	Optimisation of SHP Schemes in Uttaranchal State	2004	Charlie D. Fulzele
27.	Design of Tower for Windmill Systems and its Cost Effectiveness	2004	Ziaul Badar

28.	Study of system and working parameter for performance enhancement of artificially roughened solar air heater	2005	Jitendra Verma
29.	Development of a model for testing of SHP electro mechanical machines	2005	M. Bala Subrah-manyam
30.	Modeling of hydraulic transients in small hydropower plant operation	2005	Medidi V.M. Kishore
31.	Energy Conservation in Sugar Industry	2006	Vinod Kumar
32.	Flow Analysis of a SHP Station	2006	K. Sridhar Reddy
33.	Impact of Age on Performance for Bio Diesel	2006	R.D. Chauhan
34.	Modification in Centrifugal Pump Used as Turbine	2006	Anees Ahmad
35.	Efficiency Improvement of Micro Hydel Turbine Through Manufacturing Techniques	2006	Rahul Jadhav
36.	Quality Improvements in Wind Energy Generation	2006	Shrinivas U. Jawdekar
37.	Assessment Of A Suitable Site in A Hilly Terrain For Wind Power Generation	2006	Abhishek Kumar Srivastava
38.	Development of Cost Effective Technology for Harnessing Renewable Energy in Remote Area	2007	Bhupender Singh Kaneri
39.	Flow Analysis of Multipurpose Low Capacity Turbines Using CFD	2007	Khalid Razi
40.	Simulation of Variable Speed Small Hydro Power Plant	2007	Manjul Tripathi
41.	Powering of a Remote Area Through Renewable Energy Sources	2007	Suhashini Gudala (Ms)
42.	Performance evaluation of hydro turbine using computational fluid dynamics	2008	Anil Kumar
43.	Analysis of Erosion in Hydro Turbines	2008	Ratnendra Singh
44.	Sensorless maximum power point tracking control of wind energy	2008	Anubhuti Bansal (Ms)
45.	Optimum design of small hydro power plants using bulb turbine	2008	Anurag Kumar
46.	Performance evaluation of pump as turbine	2008	Anurag Shukla
47.	Technical evaluation of wind energy farms	2008	Chetan Bhaskar Meshram
48.	Performance analysis of modified pump as turbine	2008	Rahul Pandey
49.	Doubly FED induction generator control for wind power generation	2008	Sanjai Kumar Yadav
50.	CFD based flow analysis of hilly small hydropower station	2008	Sanjay Jain
51.	CFD based heat transfer analysis of artificially roughened solar air heater	2008	Sharad Kumar
52.	CFD based design modifications in cross flow turbine	2009	Md. Asif Saghir
53.	CFD based impact analysis of cavitation in Francis turbine	2009	Pardeep Kumar
54.	Development of wind energy farm in hilly area	2009	Rinku Saran
55.	Experimental and numerical investigations on flow measurement using clamp-on type ultrasonic flowmeter	2009	Srinivasa Rao Suvvari
56.	Performance evaluation of axial flow pump as turbine	2010	Deepak S
57.	Modification in cross flow turbine for efficiency improvement	2010	Imran Khan
58.	Erosion analysis of hydro turbine materials	2010	Kuldeep Singh Shekhawat
59.	Economic analysis of silt erosion in hydro turbines	2010	Rahul Sinha
60.	Performance evaluation of Pelton turbine using CFD.	2010	Ravindra kumar Singh
61.	Performance analysis of biomass gasifier system	2010	Praful Dinkar Sutkar

62.	Design analysis of Bulb turbine	2010	Vishwendra Singh
63.	Performance analysis of cross flow turbine using a guide tube and a draft tube	2011	Ali Abbas
64.	Hydro numerical modelling of turbines for floating OWC water power plants	2011	Kartik Upadhyay
65.	Study of cavitation effect on hydro turbine materials	2011	Madhava Reddy Pathakota
66.	Study of heat transfer characteristics of a sensible heat storage for solar thermal energy	2011	Nitesh Dutt
67.	A study of sediment transport and its impact on hydro-turbine in hydropower project	2011	Anant Kr. Rai
68.	3 Dimensional finite element analysis of underground power house substructures for medium head project.	2012	Alok Mishra
69.	CFD Based Performance Analysis of Hydro Turbine.	2012	Dig Vijay
70.	Investigation on Combined Effect of Cavitation and Silt Erosion in Hydro Turbines.	2012	Harsh Vats
71.	Optimization of Photovoltaic Based Hybrid System for a Remote Area	2012	Sonal Panwar
72.	Design and development of biomass gasifier system for power generation	2012	Tarang Agarwal
73.	Computer aided design and drafting of anchor blocks for hydro power projects	2012	Anuj Kumar
74.	Effect Of Non-Normality Onto Triggering In Thermoacoustic System	2013	Abhishek Kumar Singh
75.	CFD Based Analysis of Silt Erosion on Pelton Turbine	2013	Arpit Garg
76.	Design of Solar Photovoltaic system for a remote village in Tamilnadu	2013	Chandramohan G
77.	CFD based analysis on Combined Effect of Cavitation and Silt Erosion Kaplan Turbine	2013	Dinesh Kumar
78.	Study of Sensible Heat Storage System for Solar Thermal Energy	2013	Monu Malik
79.	Techno Economic study for maintenance of silt erosion affected hydro turbines	2013	Patel Himanshukumar Nageenbhai
80.	Cavitation Analysis on Propeller Turbine through CFD	2013	Pradeep Kumar Singh
81.	Field Study on Silt Erosion in Hydro Turbines in Run of River Plants	2013	Ram Sevak Kushwaha
82.	Silt Erosion analysis of Kaplan hydraulic turbine by using Computational fluid dynamics	2013	Saurabh Sangal
83.	Investigation of heat transfer augmentation by using arc shaped ribs with gap in a solar air heater duct	2013	Uttara Shakya
84.	Techno-economic analysis of Ultra low and Zero head turbine	2014	Anurag Kumar
85.	Design of Solar Thermal based cooling and heating system	2014	Arvind Gupta
86.	Design of SPV system at MBEYA University	2014	Fadhili Omari Cheo
87.	Development of Savonius type hydro kinetic turbine	2014	Gaurav Saini
88.	CFD Analysis of silt erosion in Pelton turbine	2014	Manoj Kumar
89.	Performance evaluation of Solar air heater duct having described expended metal mesh as artificial roughness	2014	Neha Purohit
90.	Performance analysis of Pump used as turbine having impellor with coating	2014	Yogesh Kumar
91.	Development of Stand-alone Hybrid Energy System for a Rural Area	2014	Ankit Bhatt

92.	Sizing of a hybrid energy system for remote load applications	2014	Ayush Rajoria
93.	Performance evaluation of Savonious type hydrokinetic turbine	2015	Ajay Kumar Verma
94.	Numerical investigation of the effect of draft tube on the performance of a Cross Flow turbine	2015	Charu Mittal
95.	Performance enhancement of solar PV array using active cooling techniques	2015	Keshav Pandey
96.	Performance evaluation of solar photovoltaic system installed in IIT Roorkee campus	2015	Kunwar Sangram Singh Pundir
97.	Improved technique to evaluate performance of solar thermal power plant	2015	Md Zafar Alam
98.	Cost optimization of small hydropower plant using improved particle swarm optimization technique	2015	Pragati Shinde
99.	Techno-economic analysis of solar thermal power plants in India	2015	Raj Kumar Bairwa
100.	Techno economic analysis of pumps as turbine for micro hydro plants	2015	Shivansh Tyagi
101.	Development of hybrid energy system for Fungling town of Taplejung, Nepal	2015	Vidya Prasad Kafle
102.	Development of Improved Receiver Cavity of a Solar Thermal Power Plant	2016	Aditi Garg
103.	CFD Based performance Analysis of coating on francis runner eroded due to cavitation	2016	Amandeep Mehta
104.	Performance Investigation of Parabolic trough Solar Concentrator of a Solar Thermal Power Plant	2016	Deepika Tamta
105.	Experimental Investigation of Hybrid Solar Photovoltaic Thermal Collector	2016	Hitesh Khurana
106.	Development of an efficient hydrokinetic turbine	2016	Jasveer Kaur
107.	Energy and Exergy analysis for heliostat based solar thermal power plant	2016	Manoj Kumar
108.	Experimental study on performance of a double pass solar air heater	2016	Mohd Insha
109.	Experimental investigation of packed bed solar thermal storage having large size packing materials	2016	Saurabh Tiwari
110.	CFD based performance analysis of reaction turbine	2016	Siladitya Bag
111.	Development of an Efficient Latent Heat Thermal Energy Storage for Solar Thermal Power Plant	2016	Sonu Kumar
112.	Experimental Investigation on a Solar Thermal Energy Packed Bed Sensible Head Storage Combined with latent Heat Storage	2017	Abhishek Gupta
113.	Experimental Investigation of a Packed Bed Thermal Energy Storage System with Different Heat Transfer Fluid	2017	Ambuj Punia
114.	Performance Analysis of CST Based Plant	2017	Gaurav Gangwar
115.	Performance Investigation of a Hybrid SPV Thermal Collector Having Turbulators in the Air Duct	2017	Joshi Ram
116.	Numerical Analysis for Performance of a Parabolic Solar Concentrator	2017	Kovid Saini
117.	Development of Standard Models of Cross Flow Turbine for Hilly Area in Myanmar	2017	Maung Phyoe Wai Aung
118.	Development of a Small Size Solar Thermal Cooling Unit	2017	Nishab Ali

119.	An Efficient Methodology for Wind Potential Assessment for Andhra Pradesh	2017	Penugonda Sunil Babu
120.	Numerical Analysis Based Performance Evaluation of Pump as Turbine	2017	Satish Chand
121.	Evolving an Efficient Strategy for Performance Analysis of a Solar Thermal Power Plant	2017	Shrinkhla Kanojiya
122.	Development of an efficient latent heat storage system	2017	Siddhi Arya
123.	Performance Analysis of a Phase Change Material Storage System for Solar Thermal Application	2017	Sneha Murali
124.	Investigation of Cavitation in Hydro Turbines	2017	Yatish Kaushal
125.	Experimental study of silt erosion in hydro turbine	Ongoing	Abhishek Rajput
126.	Experimental study of performance of hydro kinetic turbine	Ongoing	Ajay Kumar
127.	Simulation of hybrid PV-DG	Ongoing	Divyakshi Aeron
128.	Selecting materials for sensible heat solar thermal storage	Ongoing	Dwijesh Kumar Singh
129.	Analysis of building energy consumption and energy savings through solar energy	Ongoing	Saroj Man Tamrakar
130.	Study of detection techniques used for cavitation in hydroturbines	Ongoing	Shivendra Pratap
131.	Study of system parameters of savoneous type hydrokinetic turbines	Ongoing	Sourish Singha
132.	Impact of solar photovoltaic technology on poverty reduction in Mbeya City Tanzania	Ongoing	Widson Kibasi
133.	Performance Evaluation of Hydro Turbine in Field	Ongoing	Desh Deepak Verma



M.E. / M. Tech. Theses

Completed - 124 (One hundred twenty four)
In progress - 09 (Nine)

Annexure-IV

DETAILS OF RESEARCH PUBLICATIONS OF DR. R.P. SAINI

Citation Indices		**All**	**Since 2012**
Status on 21 June, 2017	Citations	4165	3529
(Source : Google Scholar Citation)	h-index	34	32
	i10-index	75	69

RESEARCH PUBLICATIONS OF DR. R.P. SAINI

A. PAPERS PUBLISHED IN RESEARCH JOURNALS

1. **Saini R.P.** and Saini J.S., "Investigation of economic parameters of hydraulic air compressor for ultra low head hydro power", Journal of Institution of Engineers (I)-CV, Vol. 72, pp.66-69, July 1991.

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C. SPECIAL PUBLICATIONS

Books

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Annexure-V

DETAILS OF CONSULTANCY/SPONSORED RESESARCH PROJECTS

A. Consultancy Projects

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
1.	Project Execution 3 demonstration project – UNDP	UNDP	4.50	4 yrs	Completed
2.	Preparation of Pre-feasibility Reports, Survey & Investigation and DPRs of SHP in WB-WBSEB	WB-WBSEB	135.85	5 yrs	Completed
3.	Water Mill Installation - UNDP	UNDP	6.25	4 yrs	Completed
4.	Concurrent Engineer for the 3 MW Rajwakti SHP in Chamoli District (Uttaranchal)-IREDA	IREDA	1.00	2 yrs	Completed
5.	RLA/LE-Studies for Dhakrani and Dhalipur Hydro Power Stations in Uttaranchal – BHEL	BHEL	10.00	3 yrs	Completed
6.	To Work as expert organisation for SHP development in Uttaranchal, Govt. of Uttarachal	Uttaranchal, Govt	45.00	3 yrs	Completed
7.	Survey, Inspection and testing for R&M of Mohammadpur Power station at U.G.C. – Govt. of Uttaranchal	Uttaranchal, Govt	4.02	3 yrs	Completed
8.	Testing of Performance of Rajwakti SHP station, Chamoli	Him-Urja Pvt. Ltd., N.Delhi	0.15	3 Months	Completed
9.	RLA testing/surveys/ study and preparation of DPR for Nirgajni project Lucknow	NEDA	11.50	2 yrs	Completed
10.	Identification, Survey, Installation, commissioning and Testing of Improved Water Mills in District Tehri Garhwal (Uttaranchal)	UREDA	6.67	1 ½ yrs	Completed
11.	Performance testing of Manal SHP station in Himachal Pradesh	Himalayan Crest Power Ltd	5.0	1 yr.	Completed
12.	Performance testing of Sahyadri Station in Karnataka	Sahyadri Power Co. Pvt. Ltd.	2.0	1 yr.	Completed
13.	Performance testing of TB dam project SHP station in Karnataka	NCL Energy Ltd.	9.0	½ yr.	Completed
14.	DSI and preparation of DPR for 3 SHP in Maharashtra-MEDA	MEDA, Maharashtra	12.50	4 yrs	Completed
15.	CIDA – India Small Hydro Technology Transfer Project	CIDA, Canada	8.32	2 ½ yrs	Completed
16.	Testing /Surveys/Study for	UPJVNL, UP	8.5	2 yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	RLA/CE and preparation of DPR for R&M of 3 SHP station on UGC/UPJVNLtd.				
17.	Canal Based SHP Development-DSI & DPR	NEDA, UP	21.5	2 yrs	Completed
18.	Technical Support for Execution of Niti SHP Project by Village Samithi	UREDA, Dehradun	2.5	1 ½ yrs	Completed
19.	Performance testing of Babanpur SHP station	Kotla Hydro Power Ltd.	3.0	½ yr.	Completed
20.	Performance testing of Varahi SHP station	Sandur Power Co. Ltd.	9.0	½ yr.	Completed
21.	Performance testing of Sagur proj. SHP station in Karnataka	SLS Power Industries Ltd.	5.0	1 yr.	Completed
22.	Performance testing of Mandigere SHP station in Karnataka	Bhoruka Power Corp. Ltd.	5.0	1 yr.	Completed
23.	Performance testing of Chunchi Doddi SHP station in Karnataka	Sai Purthi Power Pvt. Ltd.	5.0	1 yr.	Completed
24.	Performance Testing of Khauli SHP Station (2x6 MW), Khauli, District Kangra (HP)	VA Tech Escher Wyss Flovel Ltd., Faridabad	9.0	2 yrs.	Completed
25.	Testing of Ranganathwwamy Hydro Project (3x8.25 MW) in Karnatka	Pioneer Power Corp. Ltd., Hyderabad	9.0	1 ½ yr	Completed
26.	Performance Testing of Tuipui SHP Station (2x250 kW), Distt. Champhai, Mizoram	Power & Electric Dept., Mizoram	3.0	1 yrs	Completed
27.	Performance Testing of Lower Meenmutty SHP (3.5 MW) in Karnataka	KSEB, Kerala	5.0	2 yrs.	Completed
28.	Performance Testing of Somanamarandi SHP Station (1x6 MW), Narayanpur, District Raichur, Karnataka	Narayanpur Power Co. Pvt. Ltd., Bangalore	9.0	2 yrs.	Completed
29.	Performance Testing of Neria SHP Station (2x4500 kW) Neria, District Dakshin Kannada (Karnataka)	Bhoruka Power Corpn., Bangalore	9.0	2 yrs.	Completed
30.	Performance Testing of Marhi Hydel Power Project 5MW in HP	Sai Engineering Foundation, Shimla	5.0	1 ½ yr.	Completed
31.	Performance Testing of Chayadevi SHP Station (2x12 MW) in Karnataka	Bhoruka Power Corp. Ltd., Bangalore	9.0	1 ½ yr	Completed
32.	Performance Testing of Debal SHP Station (2x2.5 MW) Debal, District Chamoli (Uttarakhand)	Chamoli Hydro Power Pvt. Ltd., Hyderabad	5.0	1 ½ yr	Completed
33.	Performance Testing of Patkari	Patkari Power P. Ltd.,	9.0	1 ½ yr.	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	Hydro Electric Plant	Shimla			
34.	Specifications for Remote Village Electrification of SHP Biomas Gassifier & Solar	MNRE, New Delhi	7.0	3 yrs.	Completed
35.	Performance Testing of Hemagiri in Karnataka	Thrishul Power Pvt. Ltd., Bangalore	5.0	3 ½ yrs.	Completed
36.	Performance Testing of Babehali hydro Elictric Plant (2.7 MW) in Punjab	Gill Power Generation Company (P) Ltd. Gurdaspur	5.0	4 yrs.	Completed
37.	Performance Testing of MGHE Tail race Project (2x11MW) in Karnatka	Amburthirtha Power P. LtD., Banglore	9.0	3 yrs.	Completed
38.	Performance Testing of Sikasar Hydro Project (2x3.5MW) in Raipur	CSEB, Raipur	9.0	1 yr.	Completed
39.	Performance Testing of Sarbari Small Hydro Electric Project 4.5 MW Near Kullu	Hydrowatt Ltd., Mumbai	5.0	2 yrs.	Completed
40.	Performance Testing of Baner-III Small Hydro Electric Project 5 MW in HP	Vamshi Hydro Energies P. Ltd., Gurgaon	5.0	3 yrs.	Completed
41.	Performance Testing of IKU-II small hydro electric project (2x2.5MW) in Himachal Pradesh	Vamshi Hydro Energies P. Ltd., Gurgaon	5.0	2 yrs.	Completed
42.	Performance Testing of Akkihebbal SHP Project (2x2.5MW) at Distt. Mandya, Karnataka	Cauvery Hydro Energy Ltd., Banglore	5.0	3 ½ yrs.	Completed
43.	Performance Testing of Upper Awa Hydro Project (2x2.5MW) Near Patparganj, HP	Astha Projects (India) Ltd., Hyderabad	5.0	3 yrs.	Completed
44.	Performance Testing of Taraila Hydro Electric Project (5MW) at Distt. Chamba, HP	Ginni Global Ltd., New Delhi	5.0	3 yrs.	Completed
45.	Performance Testing of Brahmganga HEP (2x2.5MW) at Distt. Kullu, HP	Harisons Hydel Const. Co. Pvt. Ltd., Kullu	5.0	3 yrs.	Completed
46.	Commissioning of Hanumanganga SHP project Phase-II (1.95MW) in Uttarakhand	Regency Aquaelctro & Motelresorts Ltd, Paonta Sahib, H.P.	5.0	2 ½ yrs.	Completed
47.	Performance Testing of Loharkhet small hydropower project (4.8 MW) in Uttarakhand	Parvatiya Power (P) Ltd., Raipur (C.G.)	5.0	3 yrs.	Completed
48.	Performance Testing of Canal Based Sidhana HEP (1x1200 kW) Sangrur, Punjab	Aqua Power Pvt. Ltd, Chandigarh	5.0	2 yrs.	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
49.	Performance Testing of Sahu small hydro power project (2x2.5 MW) in himachal Pradesh	Himkailash Hydro Power Pvt. Ltd, Hyderabad	5.0	4 yrs.	Completed
50.	Performance Testing of Sattegala SHP Station (4x1.563 MW) in Karnataka	Bhoruka Power Corporation Ltd, Bangalore	10.0	3 yrs.	Completed
51.	Project Report Remote Village Electrification of SHP Biomas Gassifier & Solar	MNRE, New Delhi	14.3	3 yrs.	Completed
52.	Assessment of the damages in Kosi Hydel power station, Kataiya, Bihar	BSHPC, Patna	1.0	3 yrs.	Completed
53.	Performance testing of Chunchi Doddi SHP station in Karnataka	Sai Purthi Power Pvt. Ltd.	5.0	1 yr.	Completed
54.	Performance testing of Kholi SHP in HP	VA Tech. Escher Wyss Flovel Ltd	9.0	1 ½ yr.	Completed
55.	Performance testing of Shaoke MHP in Punjab	Kotla Hydro	3.0	2 yr.	Completed
56.	Performance testing of Lohgarh Power House in Punjab	Aqua Power Ltd	5.0	2 yr.	Completed
57.	Performance Testing of Killa Power House in Punjab	Kotla Power Ltd	5.0	2 yr.	Completed
58.	Performance Testing of Rani Avanti Bai Sagar (2x5000 kW) in Madhya Pradesh	VA Tech Escher Wyss Flovel Ltd., Prithla	9.0	1 yr.	Completed
59.	Measurment of Head and Discharge at Different Locations of Bassi Power Station	HPSEB, Palampur	12.0	1 yr.	Completed
60.	Performance Testing of TOSS Mini Hydel Power Project (5 Mw) In Himachal Pradesh-	Toss Mini Hydel Power Project, New Delhi	6.0	3 yrs	Completed
61.	Performance testing of generating equipment at Aleo Manali SHP (3 MW) in HP	Aleo Manali Hydropower Pvt. Ltd., Noida	1.5	3 ½ yrs	Completed
62.	Performance testing of Serlui SHP Station (2x250+ 1x500kW), Distt. - Aizawl, Mizoram	Executive Engineer P&E, Generation Division, Aizwal	3.0	3 ½ yrs	Completed
63.	Performance Testing of Nagavali SHP (1.725 MW), Vijaynagram, (Andhra Pradesh)	Sardar Power Ltd., Hyderabad	5.0	3 ½ yrs	Completed
64.	Performance Testing of 2x3.5 MW Ullunkal SHP Station (Kerala)	Energy Development Company Ltd., Kolkata	10.0	3 ½ yrs	Completed
65.	Performance testing of 5x4 MW Samal SHP, Distt. Angul, Orissa	Andritz Hydro P. Ltd., Palwal (Haryana)	10.0	3 ¼ yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
66.	Performance testing of 3x7.5 MW Bhilangana SHP, Distt. Uttarkashi, (Uttarakhand)	Andritz Hydro Private Ltd, Palwal (Haryana)	10.0	3 ¼ yrs	Completed
67.	Performance testing of Agunda Thati SHP project (3MW), Distt.Tehri Garhwal, (Uttarakhand)	Gunsola Hydro Power Gen. Pvt. Ltd., Dehradun	6.0	3 yrs	Completed
68.	Performance testing of 3x2 MW Kanchanguda Mini Hydel Scheme Distt. Bellary (Karnataka)	Pusala Power Projects Pvt. Ltd,Hyderabad	10.0	3 yrs	Completed
69.	Performance testing of 2 x 2.5 MW Upper Tarailla SHP in Dist.Chamba,(HP)	AT Hydro Pvt. Ltd,Hyderabad	6.0	3 yrs	Completed
70.	Performance testing of 2 x 2.5 MW Tarela- II SHP in District Chamba, (HP)	Cimaron Construction (P) Ltd, Hyderabad	6.0	3 yrs	Completed
71.	Performance testing of 1.90 MW Baragran Small Hydro Electric Project in Himachal Pradesh	KKK Hydro Power Ltd Faridabad	6.0	3 yrs	Completed
72.	Performance testing of 1MW SHP on Lower Baijnath Kuhl, Vill. Sehar, Kangra (HP)	Changer Vidyut Kranti Pvt. Ltd., Palampur (HP)	4.0	3 yrs	Completed
73.	Performance testing of 2x2.5 MW Luni-III SHP in Himachal Pradesh	Sri Sai Krishna HydroEnergies Pvt. Ltd., Hyderabad	6.0	2 ½ yrs.	Completed
74.	Performance testing of 2x2.5 MW Luni-II SHP in Himachal Pradesh	Sri Sai Krishna HydroEnergies Pvt. Ltd., Hyderabad	6.0	2 ½ yrs.	Completed
75.	Performance testing of SHP on Terkiana Head Works on Western Bein/Mukerian Hydel Channel–II (650kW) in Punjab	Atlantic Power Private Limited, Chandigarh	4.0	2 ½ yrs.	Completed
76.	Testing of Micro Turbines (07 Nos.)	Different Turbines Manufacturers in India	2.3	2 yrs	Completed
77.	SHP Expert Organisation related support to Uttarakhand	Deptt. Of Energy, Govt. of Uttaranchal, Dehradun	45.00	4 yrs	Completed
78.	Preparation of Status Inventory of SHP Station in the Country	MNRE, New Delhi	23.9	4 yrs.	Completed
79.	Performance testing of Someshwara SHP station in Karnataka	Pioneer Genco Ltd.	9.0	1 yr.	Completed
80.	Performance Testing of Drinidhar Small Hydro Electric Project 5MW in HP	Vamshi Industrial Power Ltd., New Delhi	5.0	3 yrs.	Completed
81.	Preformance testing of Upper Khauli SHP (2x2.5 MW) in District Kangra (HP)	Vamshi Industrial Power Ltd., Gurgaon	6.0	3 yrs	Completed
82.	Performance testing of Korba	Boving fouress P. Ltd.,	4.0	3 ¼ yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	MHP (1 x 850 kw) in District Raipur Chhattisgarh	Bangalore			
83.	Performance testing for Micro Hydel Power House (2x850kW) at GGSSTP, Ropar	PSEB, RHPH, Ropar	4.0	3 yrs	Completed
84.	Performance Testing of 2x7.5 MW Varahi Tail Race Mini Hydel Scheme-II, Udupi District, Karnataka	Sandur Power Company Ltd., Bangalore	10.0	3 yrs	Completed
85.	Performance testing of Channuwala MHP (1x900 kW) on Abohar canal in Ludhiana, Punjab	Abohar Power Generation Private Ltd., Noida	4.0	3 ¼ yrs	Completed
86.	Performance testing of Khanpur MHP (2x550 kW) on Abohar canal in Ludhiana, Punjab	Abohar Power Generation Private Ltd., Noida	4.0	3 ¼ yrs	Completed
87.	Performance testing of Sudhar MHP (2x700 kW) on Abohar canal in Ludhiana, Punjab	Abohar Power Generation Private Ltd., Noida	4.0	3 ¼ yrs	Completed
88.	Performance testing of 12 MW Varahi Irrigation weir left band HEP near Siddapur village of Udupi District Karnataka	M. D., Shamili Hydel Power Project Pvt. Ltd., Udupi, Karnataka	10.0	3 yrs	Completed
89.	Performance testing of Deogar (1.5 MW) Hydro Project in Maharastra	Gadre Marine Export, Mirkarwada, RATNAGIRI	4.0	3 ¼ yrs	Completed
90.	Performance testing of H. Malligere Mini Hydel Project (750 kW SHP) in Mandya District, Karnataka	Venika Green Power Pvt. Ltd., Bangalore	4.0	5 ½ yrs	Completed
91.	Performance testing of Rivised Sonawade Hydro Electric Project (2x2 MW), Distt. Sangli, Maharashtra	Mahati Hydro Power Projects Pvt. Ltd., Pune	6.0	3 ¼ yrs	Completed
92.	Performance Testing of Gurahan Small Hydro Project (1.5 MW) in Mandi Dist. HP	Director Sarabai Enterprises Pvt. Ltd. Solan (HP).	4.0	3 yrs	Completed
93.	Preformance Testing Of Jaldhaka Hydro Project Stage (3x9 MW) in District Darjeeling, West Bengal	Andritz Hydro Private Ltd. , Haryana	12.0	3 yrs	Completed
94.	Preformance Testing Of Chandani Small Hydro Project (2x1.5 MW) Distt. Sirmour (HP)	Himalayan Crest Power (P) Ltd. , New Delhi	6.0	3 yrs	Completed
95.	Performance testing of Nira Deoghar HEP (2x3 MW), Distt.Pune, (Maharastra)	Celerity Power Pvt. Ltd., Mumbai	10.0	3 yrs	Completed
96.	Performance testing of Kadamane -2 SHP (2x7.5	Andritz Hydro Private Limited , Dist. Palwal	10.0	3 yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	MW), Distt. Hassan, Karnataka				
97.	Performance testing of Daman Ganga-I (3 MW) SHP Projects in Dist. Valsad Gujrat	Tarini Infrastructure Ltd. , New Delhi	6.0	3 yrs	Completed
98.	Performance testing of Kasari SHP (1x2.5MW) at Village Dhom-Blhwadi Dist. Satara , Maharastra	Vishwaj Energy Pvt. Ltd. , Pune	6.0	3 yrs	Completed
99.	Performance Testing of Palor-I SHP (2x1.5 MW), Distt. Sirmour (H.P.)	Manglam Energy Dev. Co. Pvt. Ltd., New Delhi	6.0	3 yrs	Completed
100.	Performance Testing of Karjan SHP (2x1.5 MW) in Gujrat	Oreva Energy Pvt. Ltd., Gujrat	6.0	3 yrs	Completed
101.	Performance Testing of Manjanadka SHP (2x5 MW), Karnataka	Bhoruka Power Corporation Ltd. , Bangalore	10.0	3 yrs	Completed
102.	Performance testing of Andhara Stage-II Project (2x2.5 MW) (H.P)	Gowthami Hydro Electric Co. Pvt. Ltd., Secunderabad	6.0	2 ½ yrs	Completed
103.	Testing of Micro Turbines (03Nos.)	Different Turbines Manufacturers in India	1.2	1 yr	Completed
104.	Performance testing of Perla SHP (24 MW), Karnataka	AMR Power Pvt. Ltd., Hyderabad	10.0	2 ½ yrs	Completed
105.	Performance testing of Pahalgam SHP (3 MW), J&K	J&K State Power Development Corporation Ltd., Srinagar	6.0	2 ½ yrs	Completed
106.	Performance testing of Marpachoo SHP (0.75 MW), J&K	J&K State Power Development Corp. Ltd., Srinagar	4.0	2 ½ yrs	Completed
107.	Performance Testing of Yettinahole MHP (3 MW) in Karnataka	M.D. Mysore Mercantile Co.Ltd., Bangalore	6.0	2 ½ yrs	Completed
108.	Performance Testing of Igo Marcellong SHP (3 MW) in Jammu & Kashmir	J&K State Power Development Corp. Ltd., Srinagar	6.0	2 ½ yrs	Completed
109.	Performance Testing of Chirchind SHP (5 MW) in District Chamba (HP)	Chamba Hydro Power Ltd., Bhopal	6.0	2 ½ yrs	Completed
110.	Performance Testing of Maujhi –II SHP (5 MW) in District Kangra (HP)	Dharamshala Hydro Power Pvt. Ltd., Hyderabara	6.0	2 ½ yrs	Completed
111.	Performance Testing of Binua Parai SHP (2x2.5 MW) in District Kangra, (HP)	Anubhav Hydel Power Pvt. Ltd., Hyderabad	6.0	2 ½ yrs	Completed
112.	Performance Testing of Gaj-II SHP (2x750 kW) in Himachal Pradesh	Raheja Hydero Power Pvt. Ltd., Haryana	4.0	2 ½ yrs	Completed
113.	Performance Testing of Brenwar SHP (7.5 MW) in District Budgam (J&K)	P&R Engineering Services Pvt. Ltd., Chandigarh	10.0	2 ½ yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
114.	Performance Testing of Dhom SHP (4 MW), Distt. Satara, Maharastra	Vishwaj Energy Pvt. Ltd., Pune	6.0	3 yrs	Completed
115.	Performance Testing of Mussapur (2x700 kW) SHP in Haryana	Puri Oil Mills Ltd., New Delhi- 58	4.0	4 yrs	Completed
116.	Performance Testing Of Upper Joiner (4 X 3MW) SHP Station In Himachal Pradesh	Tejas Sarnica Hydro Engineers Pvt. Ltd., Hyderabad	10.0	2 yrs	Completed
117.	Performance Testing of Bhilangana-III (3x8) Hydro Electric Project in Uttarakhand	Abohar Power Generation Pvt. Ltd., Noida	10.0	3 yrs	Completed
118.	Performance Testing of Beaskund (9 MW) SHP at vill. Palchan, Dist. Kullu, Himachal Pradesh	Kapil Mohan & Asso. Hydro Power Pvt. Ltd., Chandigarh	10.0	3 yrs	Completed
119.	Performance Testing of Haftaal SHP (1 MW) in Jammu Kashmir	J&K State Power Development Corp. Ltd., Srinagar	4.0	3 ½ yrs	Completed
120.	Performance Testing of Bhadarwah SHP (1.50 MW) in Jammu Kashmir	J&K State Power Development Corp. Ltd., Srinagar	4.0	3 ½ yrs	Completed
121.	Performance Testing of Tarela III SHP (2x2.5 MW) in Dist. Chamba, Himachal Pradesh	Tarela Power Ltd., Hyderabad	6.0	3 yrs	Completed
122.	Performance Testing Of Aniyur Mini Hydel Scheme (2x3 MW) in Karnatana	Prasanna Power Ltd., Bangalore	10.0	2 yrs	Completed
123.	Performance Testing of Pench RBC SHP (2x700 kW) at Parseoni The., Dist. Nagpur, Maharashtra	SMS Vidhyut Pvt. Ltd., Parsodi, Nagpur – 440022	4.0	3 ½ yrs	Completed
124.	Performance Testing Of 2nd Unit Of Toss HEP (5 MW) in Himachal Pradesh	Toss Mini Hydel Power Project, New Shimla (Himachal Pradesh) /Toss Mini Hydel Power Project, New Delhi	6.0	2 yrs	Completed
125.	Performance Testing of Sumez SHP (2x7 MW) Project in Himachal Pradesh	Ranga Raju Warehousing Pvt. Ltd., Hyderabad	10.0	3 ½ yrs	Completed
126.	Performance Testing of Kadavi Hydro Electric Project (1.5 MW) in Dist. Kolhapur, Maharashtra	Shree Tatyasaheb Kore Warana Sahakari Navashakti Nirman Sansthan Ltd., Warananagar, District – Kolhapur	4.0	3 ½ yrs	Completed
127.	Performance Testing Of Kumbhi Hydro Electric Project 2.5 MW Lakmapur Village, Kolhapur Dist.	Shree Tatyasaheb Kore Warana, Sahakari Navshakti Nirman Sanstha Ltd.,	6.0	2 yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
		Warananagar			
128.	Performance Testing Of Nandigama-III (1.6 MW) SHP at Nelakondapally Village, Kammam District, A.Pr.	Joint Managing Director, Kallam Spinning Mills Ltd., Chowdavaram, Guntur	4.0	2 yrs	Completed
129.	Performance Testing Of Chitri Hydro Electric Project 2.0 MW Rajewadi, Kolhapur Dist.	Shree Tatyasaheb Kore Warana, Sahakari Navshakti Nirman Sanstha Ltd., Warananagar	4.0	2 yrs	Completed
130.	Performance testing of Brahl SHP (4MW) in Dist.Kangra, Himachal Pradesh	Sodhi Brothers Hydro Power Pvt. Ltd., Dist. Kangra, HP	6.0	2 yrs	Completed
131.	Performance testing of Birahi Ganga SHP (7.2MW) at Vill. Birahi, Dist. Chamoli Uttrakhand	M/s Birahi Ganga Hydro Power Ltd., Nehru Place, New Delhi	10.0	2 yrs	Completed
132.	Performance Testing Of Jirah SHP (4MW) at Village Toss, Dist. Kullu, Himachal Pradesh	Kapil Mohan & Associates Hydro Power Pvt. Ltd., Chandigarh	6.0	2 yrs	Completed
133.	Performance Testing Of Dehar-II (1.5 MW) SHP In District Chamba, Himachal Pradesh	Saini Techno Constructs (P) Ltd., 236, Bajri Co. Burmah Shell Road, Pathankot	4.0	2 yrs	Completed
134.	Testing of Micro Turbine at AHEC (NEPeD)	CERES, NEPeD, Kohima (Nagarland)	0.50	1 yrs	Completed
135.	Performance Testing of Khukhni Hydro Electric Project (2x700 kW) in Haryana	Puri Oil Mills Ltd., New Delhi	4.0	3 ½ yrs	Completed
136.	Performance Testing of Chakshi Hydro Electric Project (1x2000 kW) in HP	Puri Oil Mills Ltd., New Delhi	4.0	3 ½ yrs	Completed
137.	Performance Testing of Sechi HEP (2x2.25 MW) in Village Samej, Dist. Kullu, Himachal Pardesh	M/s Kirloskar Brothers Ltd. Baner, Pune , Maharashtra	6.0	3 yrs	Completed
138.	Turbine Flow Measurement for PG Test at Periyar Vaigai II (2x1.25 MW) Hydel Project Theni District in Tamil Nadu	Kirloskar Brothers Ltd., Baner, Pune	6.0	3 yrs	Completed
139.	Turbine flow measurement for Balsio Hydro Project (5 MW) in Chamba, Himachal Pradesh	Ginni Global Ltd, New Delhi	6.0	3 yrs	Completed
140.	Efficiency Testing of 4th unit of Jaldhaka Hydro Project Stage-I (9MW) in district Darjeeling, West Bengal	Andritz Hydro Pvt. Ltd., Vill. Prithla, Distt. Palwal (Haryana)	9.0	3 yrs	Completed
141.	Performance testing of 3 x 4 MW Lower Kolab Small Hydro Electric Project at	Meenakshi Power Ltd. Hyderabad	10.0	3 ¼ yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	Udeygiri District Malkangiri, Orissa				
142.	Performance testing of 2 x 12.5 MW Middle Kolab Small Hydro Electric Project at Tentullgumma District Koraput, Orissa	Meenakshi Power Ltd. Hyderabad	10.0	3 ¼ yrs	Completed
143.	Performance testing of Brindawan (2x6 MW) SHP Station, Near Mysore, Karnataka State	Director, Atria Brindavan Power Ltd., Bangalore	10.0	3 yrs	Completed
144.	Performance testing of Sonna SHP (3X3.5 MW) at Devanagaon, Bijapur Dist., Karnataka	Jasper Energy Pvt. Ltd., Hyderabad	10.0	3 ½ yrs	Completed
145.	Performance Testing of Phatakwadi SHP (2x4 MW) in Dist. Kolhpur, Maharashtra	DM Corporation Pvt. Ltd., Kolhapur, Maharashtra	10.0	3 ½ yrs	Completed
146.	Performance Testing of Brandavan Tailrace Scheme (2x2 MW) in Karnataka	Atria Brindavan Projects Ltd., Bangalore	6.0	3 ½ yrs	Completed
147.	Efficiency Testing of the Generation Unit of Bassi Hydropower Station (4x16.5 MW) in Mandi Distt. Himachal Pradesh	Andritz Hydro Pvt. Ltd., Village Prithla, Palwal	15.0	3 yrs	Completed
148.	Performance Testing of Ghanvi-II SHP (2x5 MW + 10% COL) in Distt. Shimla (HP)	Andritz Hydro Pvt. Ltd., Vill: Prithla, Distt: Palwal (Haryana)	10.0	2 ½ yrs	Completed
149.	Performance Testing of Tangling HEP (2x2.5 MW) in District Kinnour, Himachal Pradesh	Sai Engineering Foundation, New Shimla	6.0	3 yrs	Completed
150.	Performance tesing of 1x6 MW Harangi Stage-II HEP, Dist. Kodagu, Karnataka	Energy Development Company Co., Faridabad, Haryana	10.0	2 ½ yrs	Completed
151.	Performance testing of 2x2 MW Horizontal Pelton Turbine at Panvi Himachal Pradesh	Kirloskar Brothers Ltd., 'Yamuna', Baner, Pune	6.0	2 ½ yrs	Completed
152.	Performance testing of 2x1.75 MW SHP Balij ka Nallah, Chamba District, Himachal Pradesh	Batot Hydro Power Ltd., Fort Mumbai	6.0	2 ½ yrs	Completed
153.	Potential Assessment of Wind, Hydro and Solar Power of Boutique, Hotel in Sindudurg	Fomento Knowledge-Minerals and Metals, Fomento Knowledge Center, Panjim, Goa	2.5	4 yrs	Completed
154.	Performance Testing of Dikleri Hydro Power Project (2 MW) in Distt. Chamba (HP)	The Manimahesh Hydel Power Project, Co-operative Society	4.0	4 yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
		Ltd. (Regd.) Chamba, Chamba, (HP)			
155.	Performance testing of Binwa-IV (4 MW) SHP at Vill. & P.O. Harer, The. Bijnath, Dist. Kangra, HP	Director, Bhavani Renewable Energy Pvt. Ltd, New Delhi	6.0	4 yrs	Completed
156.	Performance Testing of Athwattoo Small Hydel Project (2x5 MW) in Jammu & Kashmir	Magpie Hydel Construction Operation Ind. Pvt. Ltd., Srinagar	10.0	2 ½ yrs	Completed
157.	Performance Testing Of Indira Sagar (3x5MW) Left Bank Canal Head Hydro Power Project	Project Division, Bharat Heavy Electrical Limited, Bhopal	10.0	2 ½ yrs	Completed
158.	Performance Testing of Belij SHP (5 MW) at Dunali Village, Distt. Chamba, Himachal Pradesh	Belij Hydro Power Pvt. Ltd., Hyderabad (Andhra Pradesh)	6.0	3 yrs	Completed
159.	Performance testing of Ghanvi-I (2x11.25 MW) near Rampur Bushr., Shimla Dist., H.P.	Andritz Hydro Pvt. Ltd, District Palwal (Haryana)	10.0	3 ½ yrs	Completed
160.	Performance testing of Tangmarg Small Hydel Project (3x3.33 MW) in J&K	Director, Magpie Hydel construction Operation Industries Pvt. Ltd., Srinagar, J&K.	10.0	3 ½ yrs	Completed
161.	Performance Testing Of Bhaba MHP (2x2.5 Mw) Near Kafnoo, Katgaon Of Kinnour Dist HP	Andritz Hydro Pvt. Ltd., Vill: Prithala, Distt. Palwal (Haryana)	6.0	3 yrs	Completed
162.	Performance Testing Of Hullahalla Mini Hydel Scheme (12MW) at Mandya Distt. Karnataka	M/S Limbavali Power Private Limited, Jaya Nagar, Banglore	10.0	3 yrs	Completed
163.	Turbine Flow Measurement for PG Test at Periyar Vaigai I (2x2 MW) Hydel Project Theni district, Tamil Nadu	Kirloskar Brothers Ltd., Baner, Pune	6.0	3 ½ yrs	Completed
164.	Performance Testing of 1x4.8 MW Veer NLBC Hydro Electric Project Veer Village, Taluka – Purandar, District Pine, Maharashtra State	Mahati Hydro Power Projects Pvt. Ltd., Pune	6.0	3 ½ yrs	Completed
165.	Performance Testing of Somavathi Mini Hydel Scheme (3x2 MW) near Samse Village, Mudigere Taluk, Chikmangalore District, Karnataka	SRM Power Pvt. Ltd., Bhoopsandra, Sanjaynagar, Bangalore	10.0	2 ½ yrs	Completed
166.	PG test at Periyar Vaigai III (2x2 MW) Hydel Project Theni	Kirloskar Brothers Ltd., “Yamuna”	6.0	2 ½ yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	district in Tamil Nadu	Baner, Pune			
167.	Performance Testing of 708 kW Agraharar SHP Scheme – Near Agrahara Village Raichur District, Karnataka	Managing Director, Sarovara Energy Pvt. Ltd., Bellary Road, Hebbal, Bangalore	4.0	3 yrs	Completed
168.	Performance Testing of 550 kW Agraharar SHP Scheme – Near Kardigudda and Ramdurga Village, Raichur District, Karnataka	Managing Director, Sarovara Energy Pvt. Ltd., Hebbal, Bangalore	4.0	3 yrs	Completed
169.	Performance Testing of Peechi SHEP (1x1.25) in Distt. Thrissur (Kerala)	Kerala State Electricity Board, Pattaom, Thiruvanthapuram (Kerala)	4.0	3 yrs	Completed
170.	Performance Testing of Rayabasavanna Canal MHP (1.4 MW) at Tungabhadra Dam, Bellary District (Karnataka)	Khandaleru Power Company Ltd., Abids, Hyderabad	4.0	4 yrs	Completed
171.	Performance Testing of Gonal (5 MW) SHP-III on Devapur Nala, Gonal Vill., Yadgir Dist. Karnataka	South West Hydro Power Pvt. Ltd., Bangalore	6.0	3 yrs	Completed
172.	Performance testing of Poozhithode (3x1.6 MW) SHP, Kozhikkode District, Kerala	Kerala State Electricity Board Ltd., Moolamattom P.O., ldukki Dist., Kerala	6.0	3 ½ yrs	Completed
173.	Performance testing of Jogini (2x8 MW) SHP, Distt. Shimla, Himachal Pradesh	Gangdari Hydro Power pvt. Ltd., Jubilee Hills, Hyderabad, Telangana	10.0	3 ¼ yrs	Completed
174.	Performance Testing of Gangani SHP (8 MW) in Uttarakhand	Regency Gangani Energy Pvt. Ltd., Paonta Sahib	10.0	3 ¼ yrs	Completed
175.	Performance testing of Aleo-ll (4.80 MW) SHP in Manali, Himachal Pradesh	Aleo Manali Hydropower Pvt. Ltd., Noida, U.P.	6.0	3 yrs	Completed
176.	Performance testing of Gautami-Godavari Small Hydro Electric Project (1x1200 KW) at Beze Tal- Trimbak, Distt. Nashik, Maharashtra	Director, Samvat Systems Pvt. Ltd., Erandwane, Pune	4.0	3 yrs	Completed
177.	Small Pico Hydro Turbines Performance Testing at AHEC (Cross Flow & Pelton turbine)	Naveen Engineering Works, Jalahalli Bangalore	1.5	3 yrs	Completed
178.	Performance Testing of 14 MW (2x7 MW) Nanti Khad, Teh. Rampur, Distt. Shimla (HP)	Managing Director, Suryakanta Hydro Engineers Pvt. Ltd., Madhapur, Hyderabad	10.0	3 ½ yrs	Completed
179.	Performance testing of Tulang	Himachal Hydel	6.0	3 ¼ yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	(3 MW) SHP in Dist. Chamba, Himachal Pradesh	Projects Private Ltd., Sector 14, Panchkula, Haryana			
180.	Performance Testing of Jatashankari SHP (2x3.5 MW) on River Jatashankari in District Korba, Chhattisgarh	Shalivahana Green Energy Ltd., , S.D. Road, Secunderabad	10.0	3 ¼ yrs	Completed
181.	Performance Testing of Jogni-II Hydro Electric Project (5 MW) in Distt. Shimla (Himachal Pradesh)	Director (Electrical), New Shimla, Shimla	6.0	3 yrs	Completed
182.	Performance Testing Of Motighat SHP (2 x 2.5MW) at Munsyari, Pithoragarh, Uttrakhand	Himalaya Hydro Pvt. Ltd., Jubilee Hills, Hyderabad	6.0	3 yrs	Completed
183.	Performance testing of Ranja-Ala-Dunadi HEP (15 MW) Dist. Kishtwar, J&K	Choudhary Power Projects Pvt. Ltd., Ext., Trikuta Nagar, Jammu	10.0	3 yrs	Completed
184.	Performance testing of Ranni – Perundau SHEP (2x2 MW), Kerala	Kerala State Electricity Board Ltd., Moolamattom, ldukki, Kerala	6.0	3 ¼ yrs	Completed
185.	Performance testing of Daman Ganga Stage II (2.6 MW) SHP in Dist. Valsad, Gujarat	Tarini Infrastructure Ltd., New Delhi	6.0	3 yrs	Completed
186.	Performance testing of Baner II (2x3 MW) SHP in Dharamshala Tehsil, Dist. Kangra, HP	Prodigy Hydro Power Pvt. Ltd., Bangalore	10.0	3 yrs	Completed
187.	Performance testing of Baragaon SHEP (3x8 MW) in Distt. Kullu, Himachal Pradesh	Kanchanjunga Power Company Pvt. Ltd., Noida	10.0	2 ½ yrs	Completed
188.	Performance testing of 2x2.25 MW Charmadi SHP at Belthangadi Taluk in Karnataka	Trinethra Energy Convertions Ltd., Banglore	6.0	3 ¼ yrs	Completed
189.	Performance Testing of Dhelabagh SHP Station (2x500 kW) in Bihar	BSHPC, Patna	3.0	3 yrs	Completed
190.	Performance Testing of Nasirganj SHP Station (2x500 kW) in Bihar	BSHPC, Patna	3.0	2 yrs.	Completed
191.	Performance testing of Shirkhanda SHP (2x350kW), Bihar	BSHPC Ltd. Patna	4.0	3 yrs	Completed
192.	Performance testing of Triveni SHP (2x1500 kW), Bihar	BSHPC Ltd. Patna	6.0	3 yrs	Completed
193.	Performance testing of Ubahrah (2x1200 kMW) in	Shakti Hydro Electric Co. Pvt. Ltd., New	6.0	3 yrs	Completed

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	Distt. Chamba (HP)	Delhi			
194.	Performance Testing of Wanakbori (1.0 MW) Small Hydropower Project in Gujarat	Oreva Energy Pvt. Ltd., Ahmadabad	4.0	3 yrs	On going
195.	Performance testing of Gosang MHS (2x250 kW) in Arunachal Pradesh	Pangin EM Division DHPD, Pangin, Distt. East Siang, Arunachal Pradesh	4.0	3 ½ yrs	On going
196.	Performance testing of Suman Sarwari SHP (2x2.5 MW) in Kullu, H.P	Director, Usaka Hydro Power Pvt. Ltd., Functional Industrial Estate, Patparganj, New Delhi	6.0	3 ½ yrs	On going
197.	Performance Testing of Hamal SHP (2x1 MW) in Chopal, Distt. Shimla (H.P)	Managing Director, Hamal Hydel Ltd., Devi Nagar, Paonta Sahib, Distt. Sirmour (H.P)	4.0	3 ¼ yrs	On going
198.	Performance testing of 1.5 MW Hemavathy SHP Project at Hassan District of Karnataka	Flax Hydro Energy Pvt. Ltd., Kachiguda ‘X Road, Hyderabad	4.0	3 ¼ yrs	On going
199.	Performance testing of Patgaon HEP (2.5 MW) at Patgaon, Kolhapur, Maharashtra	Shree Tatyasahed Kore Warana Sahakri Navshakti Nirman Sanstha Ltd., Tal. Panhala, Dist. Kolhapur, Maharashtra	6.0	3 yrs	On going
200.	Performance testing of (i) Bazgo (2 x 150 kW), (ii) Hunder (2 x 2 MW) and (iii) Sumoor (2 x 250 kW) SHP Projects, JKSPCC, Choglamsar, Leh	Electric Project Division, Generation Wing Jammu, JKSPDC, Choglamsar,Leh	12.0	4 yrs	On going
201.	Performance testing of Lower Jhelam Hydropower project (LJHP) Baramulla (3x35 MW) Under Generation Wing Kashmir, JKSPDC	Chief Engineer, Generation Wing Kashmir, Power Development Corporation Bemina, Srinagar	20.0	3 ½ yrs	On going
202.	Performance testing of Upper Sindh Hydropower project (USHP)-II Kangan (3x35 MW) Under Generation Wing Kashmir, JKSPDC	Chief Engineer, Generation Wing Kashmir, Power Development Corporation Bemina, Srinagar	20.0	3 ½ yrs	On going
203.	Performance testing of Karnah Hydro Electric project (2x1 MW) Under Generation Wing Kashmir, JKSPDC	Chief Engineer, Generation Wing Kashmir, Power Development Corporation Bemina,	4.0	3 ½ yrs	On going

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
		Srinagar			
204.	Performance testing of Upper Sindh Hydropower project (USHP)-I Sumbal (2x11.3 MW) Under Generation Wing Kashmir, JKSPDC	Chief Engineer, Generation Wing Kashmir, Power Development Corporation Bemina, Srinagar	10.0	3 ½ yrs	On going
205.	Performance testing of Ganderbal Hydro Electric project (2x4.5 MW +2x3 MW) Under Generation Wing Kashmir, JKSPDC	Chief Engineer, Generation Wing Kashmir, Power Development Corporation Bemina, Srinagar	10.0	3 ½ yrs	On going
206.	Performance testing of Masli Small Hydro Electric Project (5 MW) in Tehsil-Chirgaon, Distt. Shimla (HP)	NSL Masli Power Generation (P) Limited, Shimla (HP)	6.0	3 yrs	On going
207.	Performance testing of Dummagudem (6x4 MW) SHP on Godavari River at Dummagudem Village, Bhadrachalam taluk, Khammam District, Telangana	SLS Power Corporation Ltd., Mahalakshmipuram, Bangalore	10.0	3 yrs	On going
208.	Performance testing of Yeleru Reservoir Stage II (1 x1.50 MW) SHP at Yeleswaram Village Pathipadu Taluk, East Godavari District, Andhra Pradesh	Manihamsa Power Projects Ltd., Maseb Tank, Hyderabad	4.0	4 yrs	On going
209.	Performance testing of Pench LBC (2x2200 kW) SHP at Navegaon Khairy, The, Parseoni, District Nagpur, Maharashtra	SMS Vidhyul Private Limited, Parsodi, Nagpur	6.0	3 ½ yrs	On going
210.	Performance testing of (i) Chenani Stage-I (5x4.66 MW), (ii) Chenani Stage- II (2x1 MW), (iii) Chenani Stage-III(3x2.5 MW),(iv)Bhaderwah (3x0.5 MW), Power plants of JKPDC	Generation Wing Jammu, Power Development Corporation Jammu	28.0	2 ½ yrs	On going
211.	Performance Testing of Micro Hydro Turbines at AHEC (Pelton and Water Wheel)	National Innovation Foundation India, Satellite, Ahmedabad	1.5	2 ½ yrs	On going
212.	Performance testing of Kurtha (5 MW) SHP in Chamba District of Himachal Pradesh	K.B. Lal Chopra & Co., Mohali	6.0	3 ½ yrs	On going
213.	Performance testing of 1 x 3.0 MW +33% COL Shaung	FLOVEL Energy Private Limited,	6.0	3 ½ yrs	On going

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	Small Hydro Electric Power Plant	Mathura Road, Faridabad			
214.	Performance testing of Kurmi SHP (8 MW) capacity, Village Phancha, Shimla, Himachal Pradesh	Kurmi Energy Private Limited, Chandigarh	10.0	2 ½ yrs	On going
215.	Performance Testing of Hetawane SHP (1x1500 kW) HEP, Tal-Pen, Dist, Raigad Maharashtra	Aarti Hydro Power Pvt. Ltd., Ichalkaranji-Dist. Kolhapur	4.0	3 ½ yrs	On going
216.	Performance Testing of Meenvallom SHP (2x1500 kW) at Meenvallom in Plakkad Dist., Kerala	Palakkad Small Hydro Co. Ltd., Palakkad–Kerala	6.0	3 ½ yrs	On going
217.	Performance testing of 24 MW Tunga MHS at (Tunga River) Upper Tunga Dam Site, Gajanur Village Shimoga Tq & Dist. Karnataka	Brindavan Hydropower Pvt. Ltd., Gajanur Village, Shivamogga, Karnataka	10.0	3 ½ yrs	On going
218.	Performance testing of Simla HEP (5 MW) in Distt. Shimla, Himachal Pradesh	Sai Engineering Foundation, New Shimla, Shimla-(H.P)	6.0	3 ½ yrs	On going
219.	Performance testing of Baner Sangam Small Hydro Electric Project (5 MW) in Himachal Pradesh	Yogindera Power Ltd. Teh. & Distt-Kangra- (H.P)	6.0	3 ½ yrs	On going
220.	Performance testing of Vilangad (3 x 2.5 MW) SHP in Kozhikode District of Kerala	Kerala State Electricity Board Ltd., Kozhikode, Kerala	10.0	3 ½ yrs	On going
221.	Performance Testing of Kurhed SHP (4.5 MW) Near Holi in Chamba District. Himachal Pradesh	Himachal Hydel Projects Pvt. Ltd., Panchkula	6.0	3 yrs	On going
222.	Performance Testing of Thangarabalu MHS (24.750 MW) near Yalagundhi village, Lingasugur Taluk, Raichur District., Karnataka	Kare Power Resources Pvt. Ltd., Vittal Mallya Road, Bengaluru	10.0	3 yrs	On going
223.	Performance Testing of Small Hydro Power Station (3MW) in District Satara, Maharashtra	Avalon Power Pvt. Ltd., Kolhapur (Maharashtra)	6.0	3 yrs	On going
224.	Performance testing of Dunali SHP 5 MW, Distt. Chamba, Himachal Pradesh	Jala Shakti Ltd., Dunali, Distt Chamba (H.P)	6.0	3 yrs	On going
225.	Efficiency testing of Periyar	Andritz Hydro Pvt.	12.75	3 yrs	On going

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
	Hydropower Station (4x42 MW) Tamilnadu after RMU	Ltd., Village Prithla, District Palwal, Haryana			
226.	Performance testing of Mini Hydel Project of 1.2 MW (Gangrel Dam) Near Gangrel Village Dhamtari Dist of Chhattisgarh State	Savitri Power Projects Pvt. Ltd, Begumpet, Hyderabad - 500 016	4.0	3 yrs	On going

B. Research Projects

S. No.	Title	Name of Sponsoring Agency	Amount (Rs. in lacs)	Duration	Status
1.	Development of water mill for hilly area	AICTE, New Delhi	6.00	3 Yrs	Completed
2.	Development Of Standard Water Mills in Uttaranchal, TIFAC-DST	TIFAC-DST, New Delhi	15.46	3 Yrs	Completed
3.	Water Mill – UNDP	UNDP, New Delhi	7.00	4½ Yrs	Completed
4.	Monitoring of execution of demonstration project-UNDP	UNDP, New Delhi	7.50	3 Yrs	Completed
5.	Unelectrified villages-surveys, potential sources and electricity demand	UREDA, Dehradun	28.00	2 Yrs	Completed
6.	DPR on enhancement of Livelihood Activities through existing Micro Hydro Power Station in UA (Distt. Chamoli & Bageshwar)	MNRE, New Delhi	99.7	5 Yrs	Completed
7.	Strengthening of test facilities & networking of institutions for performance & R&M related testing of SHP stations	MNRE, New Delhi	250.0	6 Yrs	Completed
8.	Training of Trainers on Small Hydro by Alternate Hydro Energy Centre, IIT Roorkee (Equipment Support for Training of ITI Trainers)	MNRE, New Delhi	15.40	1½ Yr	Completed
9.	Setting up of Small Hydro Hydraulic Turbine R&D laboratory at AHEC, IIT Roorkee	MNRE, New Delhi	2282.21	3 Yrs	On going
10.	FIST support to AHEC to strengthen the research and teaching on Hydropower Generation – DST New Delhi	DST, New Delhi	92.00	5 yrs	On going
11.	Development of Efficient Cross Flow Turbine for Hilly Region	MNRE, New Delhi	38.24	3 Yrs	On going
12.	Rural Technology Action Group (RUTAG) IIT Roorkee for the State of Uttarakhand	DST New Delhi	89.52		On going
13.	Development of Laboratory for Sediment Monitoring and Impact Analysis Studies in Hydro Power Plant	MNRE, New Delhi	305.15	3 Yrs	On going
14.	Testing and Development of Multi-Purpose Hydraulically Operated Bio Residue Briquetting Machine	Uttarakhand Van Vikas Nigam, Dehradun	4.80	2 Yrs	On going
15.	Sustainable Technologies for Distributed Level Application and Energy Support to Rural Development	DST, New Delhi	29.91	3 Yrs	On going
16.	Development and implementation of 100 kW through surface water velocity driven hydrokinetic turbines-Varun III	Uttarakhand Jal Vidyut Nigam Limited, Dehradun	418.90	3 Yrs	On going
17.	Mini/Micro Turbine for Hydro Power Generation Application in India	MHRD and M/s Eaton Technologies Pvt. Ltd., Pune and IIT Madras	26.65	3 Yrs	On going

Annexure-VI

INTERNATIONAL VISITS

Following International visits were made;

1. **Nepal** for preparation of state of art report on Hydraulic Machines used in Micro Hydro Power Stations (1996).

2. **Nepal** for participation in exhibition for demonstration of Micro Hydro Power Plants model (1997).

3. **Indonesia** for participation in a workshop on Small Hydro (21-28 July, 1998).

4. Dhaka, **Bangladesh** as resource person for International Course on Small Hydro Power Development (5-9 May, 1999).

5. Kathmandu, **Nepal** for conducting International Course on Small Hydro Power Development (17-22 Apr., 2000).

6. **Norway** Visit to manufacturers and SHP projects sites (study tour), (3-24 June, 2000).

7. **Czech Republic** Visit to manufacturers and SHP projects sites (study tour), (3-24 June, 2000).

8. **United Kingdom** Visit to manufacturers and SHP projects sites (study tour), (3-24 June, 2000).

9. International Centre for Hydropower, Trondheim, **Norway** for training on Hydro Power Development (2-19 June, 2003).

10. Bhutwal, **Nepal,** for "Inspection of Equipment at manufacturing Unit", (21-24 Sept., 2003).

11. CANMET, **Canada** for training on Micro Hydro (25 March-04 Apr., 2004).

12. **Croatia** for paper presentation in International Conference (10-17 May, 2004).

13. Tribhuvan University, Kathmandu, **Nepal** for participation in workshop on "NUFU Supported Doctoral Research at the Institute of Engineering" (3-4 Oct., 2007).

14. **Sri Lanka** to attend meeting at Colombo/Kandy for organization of Conference (Feb. 2007).

15. Kandy, **Sri Lanka** for conducting International Conference "Hydro Sri Lanka" (22-24 Oct.2007).

16. **France** to attend International Conference IGHEM-2008 (Sept.2008).

17. Milan, **Italy** to attend International Conference IGHEM-2008 (3-6 Sept., 2008).

18. Kathmandu**, Nepal** For inspection of turbines (25-26 March 2009).

19. Colombo, **Sri Lanka** Workshop on Low-Head Hydro Technology (Feb.18-20, 2010).

20. **Sri Lanka** to participate and present in the low head hydropower workshop under renewable energy for rural economic development (RERED) project (Feb 17-18, 2010).

21. **Slovenia** to visit technical institutions and laboratories of hydraulic turbine testing (26 Sept.-03 Oct., 2010).

22. **Switzerland** to visit technical institutions and laboratories of hydraulic turbine testing (26 Sept.-03 Oct., 2010).

23. **Germany** to visit technical institutions and laboratories of hydraulic turbine testing (26 Sept.-03 Oct., 2010).

24. Seville, **Spain** to attend Joint MICINN-DST Workshop on Renewable Energy (27 Feb.-06 March, 2011).

25. Beijing, **China** to attend a Seminar on Small Hydro Projects (21-24 Oct., 2012)

26. UNIDO, Free Town, **Sierra Leone** to organize training workshop on hydropower project development in Sierra Leone (July, 2013)

27. UNIDO, Monrovia, **Liberia** to organize training workshop on hydropower project development in Liberia (Dec. 2013)

28. Surabaya, **Indonesia** to deliver lectures in the training programme on "Renewable Energy : Micro Hydro for Rural Development" (22-29 Sept. 2014)