

# FOREWORD

It is well established in neuroscience that the young brain is constantly completing a picture of the world, its objects, processes and relationships. How does it do so? By asking questions and going after what seem to be hidden mysteries. If curiosity is a trigger questions are its outcomes.

But not every child gets an opportunity to give a definite form to its questions or share its curiosities. In fact the poorer a child's economic circumstances are, the higher is the incidence of what we might call stimulus poverty- the lack of stimuli in his or her environment. Material poverty is but one reason for stimulus poverty. Children can grow stimulus-poor from any material circumstance.

Anveshana is one more platform Agastya International Foundation has created to address this problem. This event, now 4 years old in Bangalore, completing 2 years in Hyderabad and now expanding to NCR next

year, has a built in opportunity for children to get curious and ask question because it takes them far away from their regular environs thus providing a state of excitation from which questions will result.

Till now we had not created a process to verify if this questioning is happening while children and their guides engage in their projects. Anveshana 2015 set out to correct this.

What you see in this volume are the questions children asked while doing their projects. It is almost certain not all of them could have been answered. Equally, each is a first step in a voyage of discovery that the child has begun.

**AGASTYA INTERNATIONAL FOUNDATION**

S.N	DISTRICT	COLLEGE NAME	SCHOOL NAME	PROJECT TITLE
<b>ENERGY</b>				
1	DAKSHINA KANNADA	VIVEKANANDA COLLEGE OF ENGINEERING, PUTTUR	GOVT JUNIOR COLLEGE HIGH SCHOOL, KOMBATTU, PUTTUR	EXPERIMENTAL ANALYSYS TO EXPLORE HARNESS AND CONSERVE ENERGY FROM ARACA SHEETS AND COCONUT LEAVES BY THE TECHNIQUE OF BRIQUETTING AN ALTERNATIVE ENERGY
2	DAKSHINA KANNADA	Dr.MV SHETTY INSTITITUTE OF TECHNOLOGY	GHS MIJAR	FUTURE SOLAR ENERGY SYSTEM USING MAGNIFICATION
3	DAKSHINA KANNADA	SDM INSTITITUTE OF TECHNOLOGY	SDM HIGH SCHOOL, UJIRE	DESIGN AND DEVELOPMENT OF A NEW ELECTRICAL POWER GENERATION UNIT USING VIBRATIONS OF SHOCK ABSORBER OF AUTOMOBILES
4	MANDYA	PES COLLEGE OF ENGINEERING	CHINMAYA VIDYALAYA, MANDYA	DUAL AXIS SOLAR TRAKING SYSTEM
5	BANGALORE	R V COLLEGE OF ENGINEERING, BANGALORE	MOUNT CARMEL SCHOOL, RAJARAJESHWARI NAGAR	COMPATIBILITY OF VARIOUS MATERIALS WITH BIO-DIESEL
6	BANGALORE	NITTE MEENAKSHI INSTITITUTE OF TECHNOLOGY	ROTARY HIGH SCHOOL VIJAYAPURA	FABRICATION AND PERFORMANCE TEST ON IC ENGINE USING ACETYLENE GAS AS A BASE
7	BANGALORE	SAMBHRAM INSTITITUTE OF TECHNOLOGY	SOUHARDA PUBLIC SCHOOL, BANGALORE	POWERFUL FRIENDLY GREEN HOUSE
8	BELGAUM	HIRASHUGAR INSTITITUTE OF TECHNOLOGY	GHS NIDASHOSHI	PRODUCTION OF FREE ELECRCITY USING NEODYMIUM MAGNETS
9	BANGALORE	M S R I T	MSR HIGH SCHOOL, BANGALORE	GRAVITY POWERED SMART LAMP
10	MYSORE	VIDYA VIKAS INSTITITUTE OF TECHNOLOGY	VIDYA VIKAS HIGH SCHOOL, MYSORE	SMART FENCING SYSTEM
11	BANGALORE	SRI VENKATESWARA COLLEGE OF ENGINEERING	VENKATESHWARA HIGH SCHOOL, BANGALORE	DESIGN AND IMPLEMENTATION OF SMART TWO WHEELER VEHICLE MANAGEMENT SYSTEM FOR IMPROVED ROAD SAFETY
12	TUMKUR	SHRIDEVI INSTITITUTE OF ENGINEERING AND TECHNOLOGY	DONBASCO HIGH SCHOOL, TUMKUR	PORTABLE THERMOELECTRIC REFRIGERTATOR

13	BELLARY	GOVT ENGINEERING COLLEGE HUVINAHADAGALI	GBHS HUVINAHADAGALI	SOLAR THERMOELECTRIC REFRIGERATION
14	SHIMOGA	JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING, SHIMOGA	SI.THERESA ENGLISH SCHOOL, SHIMOGA	SOLAR ENERGY POWERED AIR CONDITIONER
15	MYSORE	VIDYA VIKAS INSTITUTE OF TECHNOLOGY	VIDYA VIKAS HIGH SCHOOL, MYSORE	A BETTER HIGHWAY
16	BELLARY	RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE	VINAYAKA VIDYA SCHOOL, SANDUR	PERFORMANCE EVALUATION OF TURMERIC LEAF OIL AS AN ALTERNATIVE FUEL IN SI ENGINE ON ROAD VEHICLE USING FUEL ENERGIZER
17	BANGALORE	SAPTHAGIRI COLLEGE OF ENGINEERING	GHS BAGALAKUNTE	DESIGN AND FABRICATION OF DYE-SENSITIZED SOLAR CELL USING NATURAL SOURCES
18	BANGALORE	R L JALAPPA INSTITUTE OF TECHNOLOGY	GHS TUBAGERE, DODDABALLAPURA	SOLAR TREE
19	BANGALORE	EAST WEST INSTITUTE OF TECHNOLOGY	BBMP HIGH SCHOOL, MAGADI ROAD, BANGALORE	REPLACEMENT OF CAPACITORS AS BATTERIES
20	TUMKUR	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY	SRIDEVI VIDYA MANDIRA, TUMKUR	WIRELESS POWER TRANSMISSION USING MAGNETIC RESONANCE
21	TUMKUR	HMSIT TUMKUR	MARUTHI VIDYA KENDRA TUMKUR, KENDRIYA VIDYALAYA, TUMKUR	DESIGN AND FABRICATION OF ELECTROMAGNETIC SOLAR INTEGRATED SYSTEM ON HIGHWAYS
22	BANGALORE	SIR MVIT	NAVODAYA VIDYALAYA HIGH SCHOOL, SHIDLAGHATTA	ALGAE LAMP
23	MANDYA	B G S I T	BHAKTHANATHA SWAMY HIGH SCHOOL, BG NAGAR	SOLAR POWERED SMART IRRIGATION SYSTEM
<b>GENERAL</b>				
24	SHIMOGA	JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING, SHIMOGA	GHS THAMMADIHALLI	SINGLE SIM WORK AS MULTI SIM
25	BANGALORE	M S RAMAIAH UNIVERSITY OF APPLIED SCIENCE	GHS YELAHANKA	DESIGN AND DEVELOPMENT OF COCONUT FIBER EXTRACTION MACHINE

FOOD				
26	TUMKUR	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY	KALIDASA HIGH SCHOOL	INVETRO ANTI-HIV ACTIVITY AND CLASSIFICATION OF COUMARINS AND ITS DERIVATIVES
27	TUMKUR	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY	KALIDASA HIGH SCHOOL	ROLE OF VITAMIN-C EXTRACTED FROM PAPAYA LEAF IN DENGUE FEVER
28	HASSAN	VETERINARY COLLEGE	NETAJI PUBLIC SCHOOL, HASSAN	DETECTION OF ADULTERANTS AND PRESERVATIVES IN MILK USING SIMPLE TECHNIQUES
29	TUMKUR	SIDDAGANGA INSTITUTE OF TECHNOLOGY	TVS SCHOOL TUMKUR	EXTENDING THE SHELF LIFE OF CITRUS FRUIT JUICE BY USING CRITICAL ISOLATED FROM MUSHROOM WASTES
30	BAGALKOT	BASAVESWARA ENGINEERING COLLEGE	SI. ANNES HIGH SCHOOL, BAGALKOT	PRODUCTION OF BIO POLYMER BY USING PEELS
31	TUMKUR	AKSHAYA INSTITUTE OF TECHNOLOGY	MARUTHI VIDYA KENDRA TUMKUR, SHARADAMBA HIGH SCHOOL TUMKUR	MULTI PURPOSE AGRICULTURE ROBOTS
32	BANGALORE	SIR MVIT	NAVODAYA VIDYALAYA HIGH SCHOOL, SHIDLAGHATTA	ARTIFICIAL DIET FOR HEALTHY REARING OF SILKWORM BOMBYX MORI
33	BANGALORE	SAPTHAGIRI COLLEGE OF ENGINEERING	GHS BAGALAKUNTE	A MINUTE TESTING OF SOFT DRINKS
34	GADAG	SKSVMACET	GHS BELAHODA	SMART FOOD IN INDIAN RAILWAYS
35	TUMKUR	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY	KALIDASA HIGH SCHOOL	TRITERPENOIDS A PROMISING ANTI CANCER AGENT FROM THE ENDOPHYTIC FUNGI FROM VISCUM ALBUM
AIR				
36	BANGALORE	NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY	VIDYASHILP ACADEMY	EXPERIMENTAL AND ANALYTICAL SIMULATION OF GEOTHERMAL AIR COOLING SYSTEM
WATER				
37	TUMKUR	CHANNABASAVESHWARA INSTITUTE OF TECHNOLOGY	SIDDAGANGA RESIDENTIAL SCHOOL, TUMKUR	PLC BASED ADVANCED WATER DISTRIBUTION SYSTEM

38	BANGALORE	SAPTHAGIRI COLLEGE OF ENGINEERING	GHS BAGALAKUNTE	SNaPs FOR PORTABILITY OF WATER
39	BANGALORE	SAPTHAGIRI COLLEGE OF ENGINEERING	GHS BAGALAKUNTE	DEFLUORIDATION AND PURIFICATION OF HARD WATER USING CANDLE FILTER AND AN ABSORBANT MEDIUM AS DOUBLE FILTERS
<b>WASTE MANAGEMENT</b>				
40	BELLARY	GOVT ENGINEERING COLLEGE HUVINAHADAGALI	TUNGABADRA HIGH SCHOOL, HUVINAHADAGALI	BIO DIESEL EXTRACTION FROM PLASTIC MATERIAL
41	MYSORE	VIDYA VIKAS INSTITUTE OF TECHNOLOGY	VIDYA VIKAS HIGH SCHOOL, MYSORE	WASTE STEAM RECOVERY SYSTEM AND WIRELESS POWER TRANSMISSION
42	BAGALKOT	BASAVESWARA ENGINEERING COLLEGE	St. ANNES HIGH SCHOOL, BAGALKOT	AN EMERGING TECHNOLOGY FOR BIO PLASTIC SYNTHESIS FROM WASTE FLOUR OF FLOUR MILL
43	BANGALORE	R L JALAPPA INSTITUTE OF TECHNOLOGY	GHS TUBAGERE, DODDABALLAPURA	MINI BIO GAS PLANT
44	BELGAUM	SHAIKH COLLEGE OF ENGINEERING TECHNOLOGY	GHS MACHCHE	BIO MASS GASIFIER STOVE USING AGRICULTURAL WASTE
45	DAVANGERE	BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY	STJ HIGH SCHOOL, DAVANGERE	INVESTIGATION ON CONVERSION OF FLOWER WASTES INTO BIOETHANOL AND PERFORMANCE EVALUATION ON SINGLE CYLINDER IC ENGINE
46	DAKSHINA KANNADA	NATIONAL INSTITUTE OF TECHNOLOGY SURATHKAL	GOVT COMPOSITE HIGH SCHOOL, KATIPALLA	MAPPING OF CARBON MONOXIDE AND GREEN HOUSE GASES USING WIRELESS SENSOR NETWORKS
47	TUMKUR	HMSIT TUMKUR	MVK SCHOOL, SOMESHWARA HIGH SCHOOL	DEVELOPMENT AND TESTING OF A LOCAL COMPOSTING INFRASTRUCTURE FOR THE HOME
48	BANGALORE	SIR MVIT	NAVODAYA VIDYALAYA HIGH SCHOOL, SHIDLAGHATTA	FLORAL WASTE AND HERBAL FOLIAGE
49	BANGALORE	SIR MVIT	NAVODAYA VIDYALAYA HIGH SCHOOL, SHIDLAGHATTA	BANANA YARN BAGS, A TOTAL REPLACEMENT FOR HAZARDOUS PLASTIC WASTE