3.3.1: Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Research Labs

Department	Name of Research Lab	Type of Lab
Civil Engineering	Research Centre	ANU Recognized Research Centre
Computer Science and Engineering	Wireless Lab	ANU Recognized Research Centre
Electronics and Communication Engineering	Antenna Research Lab	UGC/AICTE Funded Lab and ANU Recognized Research Centre
Electrical and Electronics Engineering	Research Centre	ANU Recognized Research Centre
Information Technology	Research Centre	ANU Recognized Research Centre
Mechanical Engineering	Research Centre	ANU Recognized Research Centre
Computer Applications	Research Centre	DST Funded Lab

No of scholars working in each Research Centers :

Research Centre in the Department	No of scholars using this facility	No of PhD's	No of publications in the Last five years
Civil Engineering	13		18
Computer Science and Engineering	28	11	67
Electronics and Communication Engineering	52	5	85
Electrical and Electronics Engineering	31	9	127
Information Technology	35	3	79
Mechanical Engineering	84	7	183
Computer Applications	20	2	56

College has incubation center:

http://rvrjcce.ac.in/naac/documents/c3/3.3.1incubation.mp4

One Faculty Got Patent awarded



Name: Dr. N. Naga Malleswara Rao

Designation: Professor

Department: Information Technology

College: RVR & JC College of Engineering



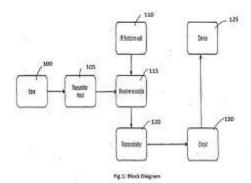


Controller General of Patents, Designs and Trademarks Department of Industrial Policy and Promotion Ministry of Commerce and Industry

	Application Details
APPLICATION NUMBER	201921005023
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	08/02/2019
APPLICANT NAME	 P. BALAMURUGAN DR. M. NAGABHUSHANA RAO DR. N. NAGA MALLESWARA RAO G LALITHA KUMARI Y SUREKHA MISS.K BINDU MADHAVI DR. V. VENKATA RAMANA MR. PRANJALI VILASRAO DESHMUKH MISS. ANIRUDH BHOWMICK PROF. KUMAR BABAN PAWAR MR. RAMESH BABU PITTALA (ASSOCIATE PROFESSOR AND HEAD) DR. SERDAR VURAL UYGUN,PHD DR. RAM GOPAL PROF. DR. SANDEEP KUMAR GUPTA DR. YASPAL SINGH PROF.(DR.)BIPLAB KUMAR SARKAR
TITLE OF INVENTION	I-SWITCH: INTELLIGENT SWITCH USING IR RECEIVER AND IR TRANSMITTER.
FIELD OF INVENTION	ELECTRICAL
E-MAIL (As Per Record)	
ADDITIONAL-EMAIL (As Per Record)	dr.bksarkar2003@yahoo.in
E-MAIL (UPDATED Online)	
PRIORITY DATE	NA
REQUEST FOR EXAMINATION DATE	
PUBLICATION DATE (U/S 11A)	07/06/2019

Application Status

APPLICATION STATUS	Application Published	
		View Documents





FORM 1 PATENTS ACT 1970 THE (39 of 1970) &

(FOR OFFICE USE ONLY)
Application No. 201921005023

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The Patents Rules, 2003
APPLICATION FOR GRANT OF PATENT
(See sections 7, 54 & 135 and rule 20(1)

1. APPLICANTS REFERENCE /
IDENTIFICATION NO. (AS ALLOTTED BY

OFFICE)

2. TYPE OF APPLICATION [Please tick (\checkmark) at the appropriate category]

Ordinary (✓)		Convention	(.)	PCT-NP ()	
Divisional	Patent of	Divisional	Patent of	Divisional	Patent of
()	Addition()	()	Addition()	()	Addition ()

3A. APPLICANT(S):

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PROF. DR. SANDEEP KUMAR GUPTA	INDIAN	(IIT- BHU), SHUKUNTALA PLACE D-59/231-C-B-4-1,NIRALA NAGAR LANE NO :06, SHIVPURVA MAHMOORGANJ, VARANASI -10, UP, INDIA
DR. YASPAL SINGH	INDIAN	FL NO 104, WING-A, BHUGAON, BAVDHAN-411015, PUNE, MH, INDIA

NA

NA

PROF.(DR.) BI SARKAR		INDIAN	IND			·	11015, PUNE, MH,
3B. CATE	GORY OF APP	LICANT [PI	ease ti	ick (√) at the app	ropria	te category	
Natural Perso	n (🗸)		0	ther than Natural	Person (
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				appropriate cate	gory]		
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above?							<u> </u>
If "No",	furnish the d	etails of the	inve	ntor(s) N.A	•		
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PROF.(DR.) E	BIPLAB KUMAR	SARKAR					
FL NO 104, WI	NG-A, BHUGAON	, BAVDHAN-4	11015,	PUNE, MH, INDIA		•	
FILI	,	ENTION	COU	LAIMING PE NTRY, PART V: N.A			PLICATION
Country	Appln .Number	Filir Date	_	Name of the Applicant	Title Inver	of the ntion	IPC (as classified in the convention

NA

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NA

NA

10. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT):

International application number	International filing date as allotted by the receiving office.
NA	NA

11. IN CASE OF DIVISIONAL APPLICATION FILED UNDER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION : N.A

Original (first) application number	Date of filing of Original (first) application
N.A.	N.A.

12. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT: N.A

Main application / patent Number	Date of filing of main application
N.A.	N.A.

13. DECLARATIONS:

(i) Declaration by the Inventor:

(In case the applicant is an assignee: the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period).

We, the above named inventor are the true & first inventor for this invention and declare that the applicant herein is my assignee or legal representative: NA

(ii) Declaration by the applicant/s in the convention country:

(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)

I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are-my/our assignee or legal representative. : N.A.

(iii) Declaration by the applicants:

We, the applicants hereby declare that: -

□ We are in possession of the above-mentioned invention.

The Complete Specification relating to the invention is filed with this application.

- The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by us before the grant of patent to us: N.A.
- ☐ There is no lawful ground of objection to the grant of the patent to me/ us.
- □ We are the assignees or legal representatives of true and first inventors:
- □ The application or each of the applications, particulars of which are given in Para 8 was the first application in convention country/countries in respect of our invention: N.A.
- □ We claim the priority from the above mentioned application filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by us or by any person from which we derive the title: YES
- Our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Para-9: N.A.
- The application is divided out of our application particulars of which are given in Para-10 and pray that this application may be treated as deemed to have been filed on N.A. under sec.16 of the Act: N.A.
- The said invention is an improvement in or modification of the invention particulars of which are given in Para-11: N.A.

14. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

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Item	Details	Fee	Remarks
Complete specification) #	No. of pages: 09	1750	
	No. of claims: 10		
Claim(s)	No. of pages: OL	,	
Abstract	No. of pages: 01		
Drawing(s)	No. of drawings: 67		
	No. of pages: 07		

In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

- (b) Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies)

 N.A
- (c) Sequence listing in electronic form N.A
- (d) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies) N.A
- (e) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority document(s) available to DAS. N.A

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Dated this day of	2 9 2019	•
Q.)	Q-1	C.Q.
P.BADAMURUGAN	dr. m.nacabhushana rao	DR. N. NAGA MALLESWARA RAO
G LALISHA KUMARI	Y SURTIKINA	MISS. ASBINDO MADHAVI
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PROF. DR. SANDEEP KUMAR GUPT	DR. YASPAL SIN	IGH .
PROF.(DR.) BIPLAR LUMAR SARKA	IR	
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FORM 2 THE PATENT ACT 1970

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The Patents Rules, 2003 COMPLETE SPECIFICATION

(See section 10 and rule 13)

1. TITLE OF THE INVENTION:

I-Switch: INTELLIGENT SWITCH USING IR RECEIVER AND IR TRANSMITTER

Name	Nationality	Address
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PROF.(DR.) BIPLAB KUMAR SARKAR	INDIAN	FL NO 104, WING-A, BHUGAON, BAVDHAN-411015, PUNE, MH, INDIA

REAMBLE TO THE DESCRIPTION

PROVISIONAL .	COMPLETE
The following specification describes the	the following specification Invention. Particularly describes the invention and the manner in which it is to be performed.

Field of the invention

This invention relates to an infrared remote control system, allowing the control of more than two appliances from a portable wireless processing device, such as a smart phone, sound, remote, and more particularly to a system which includes a manager computing device with capabilities for receiving ad transmitting IR signals, and having access to a remote database for downloading updated infrared codes.

Background of the Invention

This invention relates generally to infra-red ("IR") remote control devices and, more particularly, to learning types of remote control devices. Infrared remote control transmitters for controlling various functions of television receivers, VCR's, cable decoders and auxiliary equipment have become quite widespread in recent years. The result is often that a user is confronted with a number of different remote controls for controlling various devices made by different manufacturers. Most manufacturers provide transmitters to control their various devices, i.e., TV, VCR, stereo, by reconfiguring the transmitter keyboard with a key or switch or the like, and devices of different manufacturers are controlled with different "dedicated" remote control devices. To minimize the number of individual remote control devices a user requires, "learning" universal remote control transmitters have been developed.

In a common method of setting up and using universal remote controls, the IR function codes that are to be learned are made available from a teaching transmitter. Learning is accomplished by positioning the teaching and learning transmitters such that IR signals from the teaching transmitter are received by the learning transmitter (remote control device). Next, a program is followed which includes sequentially transmitting the IR function codes associated with the keys of the teaching transmitter to the learning transmitter. The learning transmitter stores the detected IR function codes in its memory and essentially re-configures its keyboard so that the appropriate IR function codes may be transmitted to the device to be controlled. Television sets, VCR's, entertainment media, and other devices can thus employ universal or standard remote controls that can be adapted to control various and sundry brands. Thus, universal remote control devices can learn the common process.

Prior Art Statement US6330091B1

Circuitry using infra-red (IR) diodes in remote control units In one embodiment an IR LED is used both as a transmitter diode and also as a receiver diode responsive to light to thereby develop photocurrents and/or voltages for use by external circuitry. In a second embodiment an improved amplifier circuit is provided for an IR LED and IR photo detector diode which is mounted behind, and receives light through, the transmitter IR LED.

S. Pat. No. 5,691,710 issued to Pietraszak et al. and assigned to Zenith Electronics Corp. discloses a self learning IR remote control transmitter of the type mentioned above. U.S. Patent No. 5,255,313 issued to Darbee and assigned to Universal Electronics Inc., and U.S. Pat. No. 5,552,917 issued to Darbee et al. and assigned to Universal Electronics Inc. also discloses universal remote control systems. The present invention provides an improvement to the circuitry of the systems disclosed in the above-mentioned patents.

It is known that, in addition to the ability of light emitting diodes ("LED's") to provide IR signals, LEDs may also have the ability to receive, be sensitive to, and react to incoming light. One such receiver type of IR circuit is disclosed in U.S. Pat. No. 4,933,563 issued to Thus and assigned to U.S. Philips Corp. Some of the embodiments disclosed in the present invention exploit this dual effect or capability of IR diodes to transmit and receive IR signals; this feature minimizes the circuitry used with learning remote controls, and also facilitates the retrofitting of learning capability to existing remote control designs, since no re-tooling of the plastic case is needed to accommodate a separate IR receiver.

WO2012089710A1

It comprises: - a portable wireless processing device (1) for transmitting, to a wireless access point (2), first RF signals containing control data for controlling one or more appliances (4a, 4b) having respective IR receivers; - a wireless access point (2) for receiving said first RF signals and generating there from second RF signals containing control data and transmitting them to a RF-IR transceiver, and - a RF-IR transceiver (3) for receiving said second RF signals, generating IR command signals there from and transmitting said IR command signals the IR receiver of one or more of the appliances (4a, 4b) in order to control them. The wireless access point (2) is a manager computing device having access to a remote updated IR code manufacturer database (5) for downloading updated IR codes and for using them by their inclusion into said second RF signals.

Infra Red Technology (IR) technology for remoting control of home appliances is an extended and consolidated technology. Most of the implementations use a dedicated IR remote controller for each appliance (TV, Video, DVD, etc.), and each remote can only be used for controlling a single appliance. The specific codes and frequencies used in the IR transmission are absolutely incompatible. Manufactures are trying to build universal IR remote controllers proposing the use of a single IR remote for all different appliances, using different methods:

-Programmable IR remote. This means that the IR remote can be configured by the user selecting one of the pre stored devices proposed by manufacturer. Once set the desired device up, the IR remote can only be used with the selected appliance. Multi device IR remote It works like "all in one device", allowing the user to select the desired device to control by pressing the selection keys (TV, DVD, Satellite, HiFi). Once selected the device, the IR remote works only with the selected device. An example of such a scenario is depicted in Figure 2.

- Multi device programmable IR remote. Both of the previous features can be mixed in only one IR remote, allowing the user to configure the collection of appliances to be controlled. Next two patents disclose infrared remote control systems with remote control devices connectable via cable to distributing means for receiving updated control codes. US5228077, which discloses a universal remote control system which includes a universal remote control comprising a data transmission system for coupling a telephone line to a receiving port of said remote control whereby code data can be supplied to a memory of said remote control via a telephone line, in order to upgrade the codes stored therein for creating corresponding infrared signals.

An US5410326 concern to a universal remote control device which is programmed to operate a variety of consumer products is disclosed. The device is connected over a bidirectional link to either a cable converter or a telephone interface for receiving programming information. Infrared codes for operating a virtually unlimited number of devices can be supplied to the device over the bidirectional communications link.

Another patent which discloses a system providing means for upgrading the control codes of a remote control device is US5341 166, which relates to a control system that can be configured to control any one or more devices having dedicated sets of control codes and that includes a decoder and a medium to distribute updated control codes to the decoder. The distribution medium is preferably a VCR tape, but for other implementations of said system some other available medium can be used, such as data which is present within the vertical blanking interval of a television signal broadcast from a particular station or transmitted over the cable network.

There are other proposals which integrate an infrared remote control system into different networks, local and/or external, wirelessly or by cable. Next two patent documents disclose two of said proposals, none of them describing any control codes updating process:

US2009136231 discloses a remote controlling system for controlling a plurality of electronic appliances within a space, such as a home, an office, etc. Each of the electronic appliances includes a respective radiation-based signal receiver. By use of the remote controlling system, a user can conveniently control the electronic appliances

in the situation through a user interface or an external communication network, such as an Internet.

EP1 166248 discloses a remote-control system for controlling a plurality of devices located in different rooms of a structure and areas in the vicinity of the structure comprising: at least one user operated controller for generating wireless command signals encoding data; a control unit for each of the plurality of devices that receives wireless command signals generated by the at least one controller and controls a device responsive to data in a wireless command signal that it receives; a wireless communications network comprising at least one transceiver that transmits wireless command signals from one side to the other of a wall of the structure; wherein the at least one controller transmits command signals that are routed to a control unit of a device of the plurality of devices through the at least one transceiver.

Nowadays, taking advantage of the smart phone features, like connectivity and interaction capabilities, new inventions related to remote controlling are available in the market. The smart phone is the element which the user interacts with. The smart phone is connected to the home network via RF technology (like Wi-Fi), which enables the connectivity with other home network devices via a network element (like a Wi-Fi access point). Another element, connected to the home network, acting as transceiver between

RF and IR, enables the communication with the home appliance via IR. A software application installed in the smart phone emulates the functionality of a conventional IR remote control. The final result is that the user can use his smart phone as a remote to control for home appliances in a conventional way.

Patent number: 10116395

Abstract: A photonic microwave mixing apparatus and method thereof are disclosed. An optical input carrying a frequency-to-be-converted microwave signal is injected into a photonic microwave mixing module of the photonic microwave mixing apparatus, wherein the photonic microwave mixing module includes a microwave mixing laser. The optical power and carrier frequency of the optical input are adjusted so as to place the microwave mixing laser in period-one nonlinear dynamics, and, at the same time, to achieve frequency-unlocking between the oscillation sidebands of the period-one nonlinear dynamics and the modulation sidebands of the optical input. Under such operation, the microwave mixing laser emits a nonlinear wave-mixing optical signal. Properly selecting the frequency components of the nonlinear wave-mixing optical signal through an optical frequency component selector generates an optical output carrying a frequency-converted microwave signal, therefore achieving microwave frequency conversion.

Patent number: 10097640

Abstract: An accessory includes a main body including a communication module configured to communicate with a predetermined network, and a transmission member that includes a window exposed to an outside and configured to pass a predetermined optical signal. The main body further includes an optical signal light-emitting unit located inward of the window of the transmission member and configured to emit the predetermined optical signal in a transmission direction, and a side member defining a circumferential external appearance of the main body and including an inclined surface that slopes with respect to a central axis passing through the main body in a vertical direction and that defines a transmission member location hole configured to receive the transmission member. The window includes a central part parallel with the central axis, and the predetermined optical signal emitted from the optical signal light-emitting unit perpendicularly passes through the central part.

Objective of the Invention

- 1. The Objective of This switch can help provide a better interface to control the electrical and electronics devices on/off through Smartphone, remote, sound.
- 2. Other Objective of This switch will act as the main control mechanism for all the various functions of any electrical or electronics device.
- 3. Other Objective of No need to use separate switches for different functions of any device or to control them in various modes.
- 4. Other Objective of Can be used with any regular electrical or electronics device using the existing wall boards.
- 5. Other Objective of, No mechanical elements are used hence life time of these switches will be greater than the existing mechanical switches.
- 6. Other Objective of No need to install separate switches for the same device to perform different actions, this switch will allow a single command to be transmitted and the device will work accordingly.
- 7. Other Objective of Device can have different additional functions if paired with these switches

Figure Discretion

Fig.1: Block Diagram

Fig.2: Flow Chart

Fig.3: Process diagram

Fig.4 Circuit Receiver and Transmitter

Fig.5: Internal Circuit

Fig.6: IR Moule

Fig.7: Switch Look like That

Summary of the Invention

This invention is to developed in contrast with the limitations of the existing technology where we have to use different types of switches to control the various modes of any electrical or electronics device. With this solution, we aim to provide single interface for all the various modes a device can be operated in to be controlled

using this switch. It uses an IR receiver at the wall board which can receive input from an IR transmitter which can be in a remote or any Smartphone.

This invention provides improved IR diode circuits for use with learning remote controls. In some of the disclosed embodiments, the same IR LED is utilized to transmit and to receive IR signals; and, the inventive circuitry is a component of the IR output circuit for a remote control. In another of the disclosed embodiments, improved circuitry is provided for a transmitter IR LED and a separate receiver IR photo detector diode, and a method if disclosed whereby the IR photo detector can be mounted behind, and receives light input through the plastic encapsulation of, the transmitter IR LED. The foregoing features and advantages of the present invention will be apparent from the following more particular description of the invention. The accompanying drawings, listed herein below, are useful in explaining the invention.

Advantage

- 1. No mechanical elements are used hence life time of these switches will be greater than the existing mechanical switches.
- 2. No need to install separate switches for the same device to perform different actions, this switch will allow a single command to be transmitted and the device will work accordingly.
- 3. Device can have different additional functions if paired with these switches

We claim

- 1. In this Invention is to provide the better faculty for Indian user who operates the switch, the system will use an IR receiver which will be built in the switch and the switch is installed in a wall board. Every switch will be controlled separately and the device connected with the switch receives input from the switch according to the input received by the IR (infra-red "IR") receiver. The user will use a remote, Smartphone and sound having an IR transmitter to transmit the control signal to the switch. The receiver side receives the signal and then processes it to produce an input signal for the device which will then act according to the user signal.
- 2. According to clams 1# the invention is to provide switch on/ off through sound.
- 3. According to clams 1# the invention is to provide switch on/ off through Smartphone.
- 4. According to clams 1# the invention is to provide switch on/ off through remote.
- 5. According to clams 1# the invention, this switch can help provide a better interface to control the electrical and electronics devices.
- 6. According to clams 1# the invention, this switch will act as the main control mechanism for all the various functions of any electrical or electronics device.
- 7. According to clams 1# the invention, No need to use separate switches for different functions of any device or to control them in various modes.
- 8. According to clams 1# the invention, Can be used with any regular electrical or electronics device using the existing wall boards.
- 9. According to clams 1# the invention, No mechanical elements are used hence life time of these switches will be greater than the existing mechanical switches.
- 10. According to clams 1# the invention, No need to install separate switches for the same device to perform different actions, this switch will allow a single command to be transmitted and the device will work accordingly.

Dated this2019 \$ 02 | 19 \$ 02 | 19

P.BALAMURUGAN DR. M.NABABAUSHANA

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G LALITHA KUMARI

Y SUREKHA

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MR. RAMESH BABU PITTALA

PROF. DR. SANDEEP KUMAR GUPTA

DR. YASPAL SINGH

PROF.(DR.) BIPLAB KUMAR SARKAR

Abstract

In India the switching technology is rapidly increase manual to automatic so our invention improves the available status, in this Invention is to provide the better faculty for Indian user who operates the switch. The system will use an IR receiver which will be built in the switch and the switch is installed in a wall board. Every switch will be controlled separately and the device connected with the switch receives input from the switch according to the input received by the IR (infra-red "IR") receiver. The user will use a remote, Smartphone and sound having an IR transmitter to transmit the control signal to the switch. The receiver side receives the signal and then processes it to produce an input signal for the device which will then act according to the user signal.

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DR. YASPAL SINGH

SHEET NO: 01

TOTAL NO OF SHEET: 07

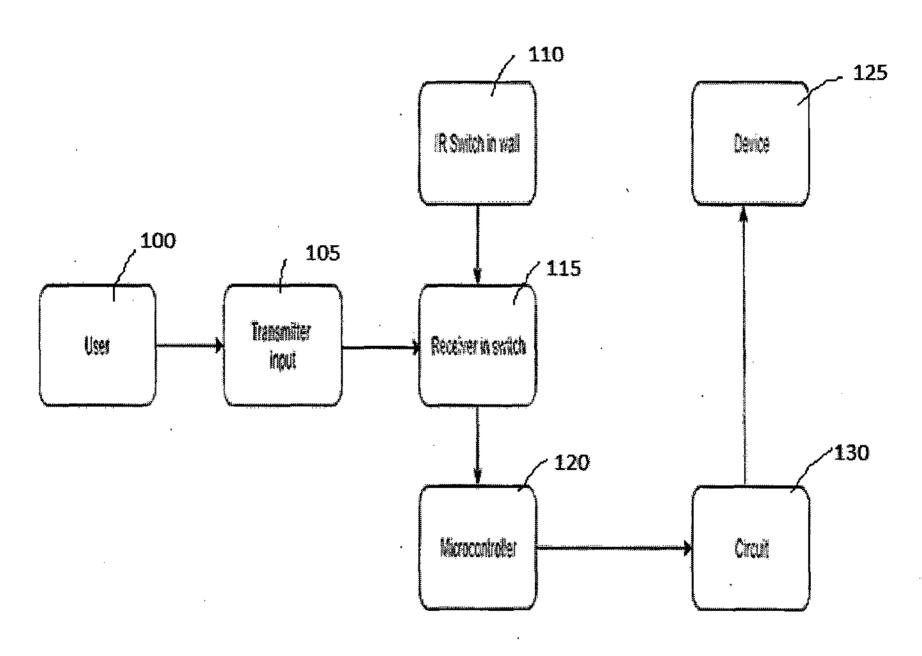


Fig.1: Block Diagram

Y SUREKHA Y SUREKHA M MR. PRANJALI VILASRAO DESHMUKH DR. V. VENKATA RAMANA DR. SERDAR VURAL MISS. ANHAUDH BHOWMICK PROF. KUMAR BABAN PAWAR MR. RAMEST BABU PITTALA

PROF. DR. SANDEEP KUMAR GUPTA) - 2019 DR. YASPAL ŞINGH PROF. (DR.) BIPMAR KUMAR SARKAR

FOR
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DR. YASPAL SINGH

SHEET NO: 02

TOTAL NO OF SHEET: 07

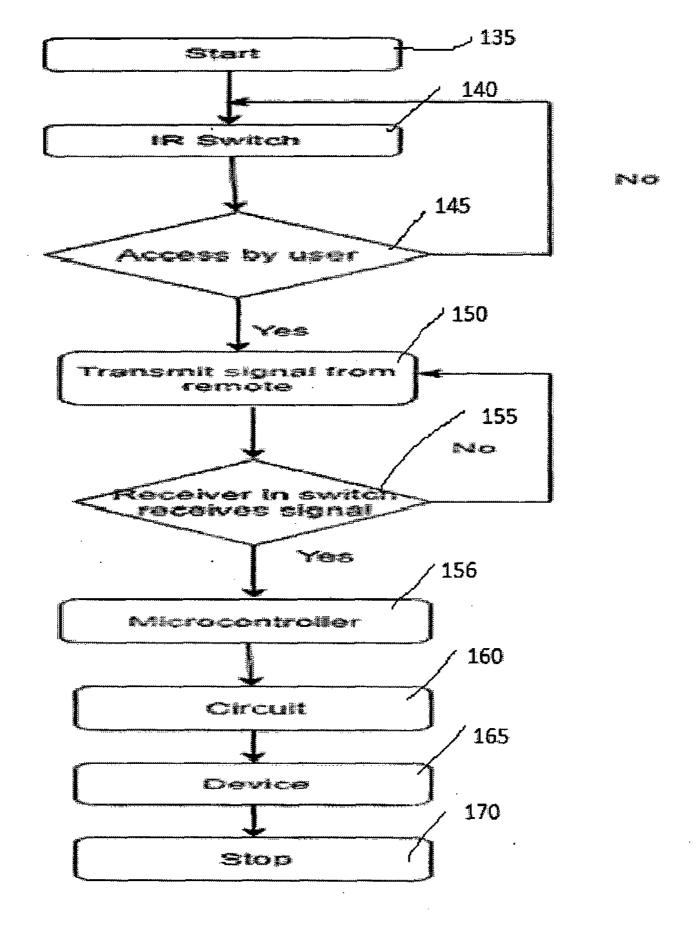


Fig.2: Flow Chart

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DR. SERDAR VURAL MR. RAMESH BABU PITTALA

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PROF.(DR.) BIPLAB KUMAR SARKAR

SHEET NO: 03

TOTAL NO OF SHEET: 07

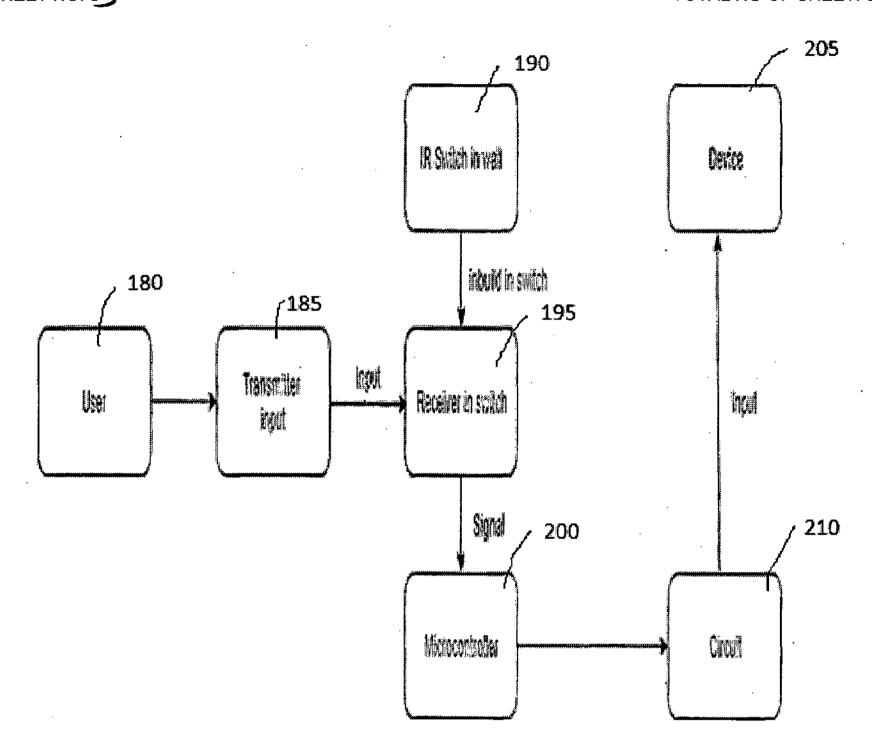


Fig.3: Process diagram

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Y SUREKHA M MR. PRANJALI VILASRAO DESHMUKH

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Page)

08-Feb-2019/7170/201921005023/Form 2(Title

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MR. RAMESH BABU PITTALA DR. YASPAL SINGH

SHEET NO: 04

TOTAL NO OF SHEET: 07

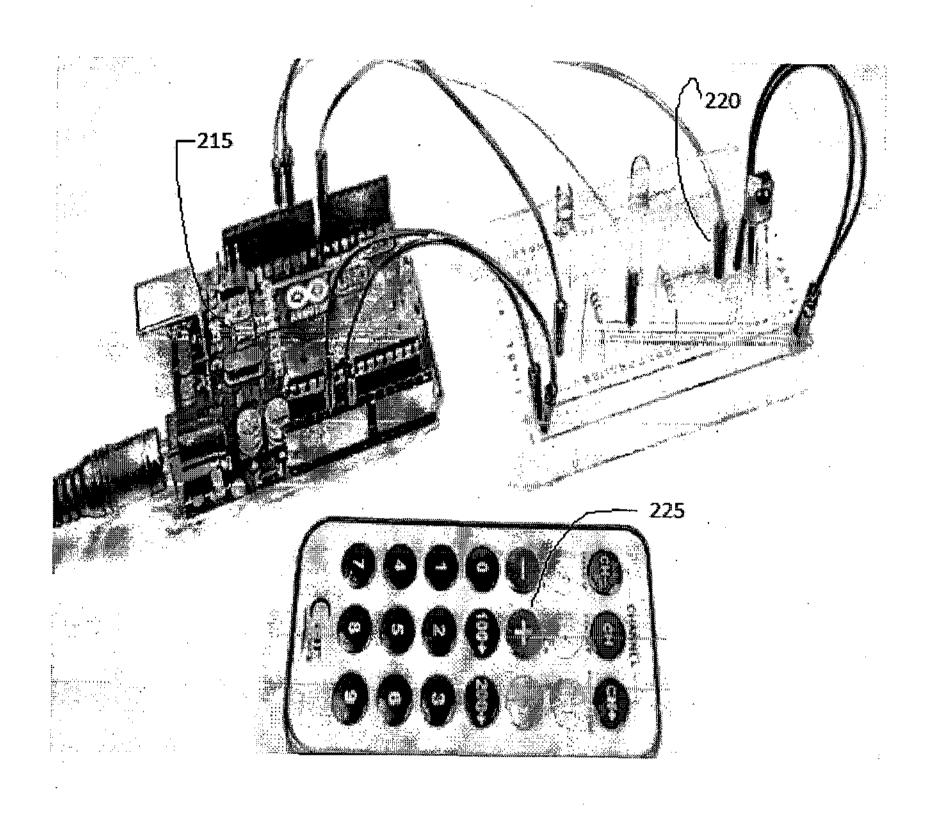


Fig.4 Circuit Receiver and Transmitter

PROF DR SANDZER KUMAR GURTA - 2019

MR. PRANJALI VILASRAO DESHMUKH

PROF. KUMAROBABAN PAWAR

MR. RAMESH BABY PITTALA

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DR. SERDAR VURAL MR. RAMESH BABU PITTALA

DR. YASPAL SINGH

SHEET NO: 05

TOTAL NO OF SHEET: 07

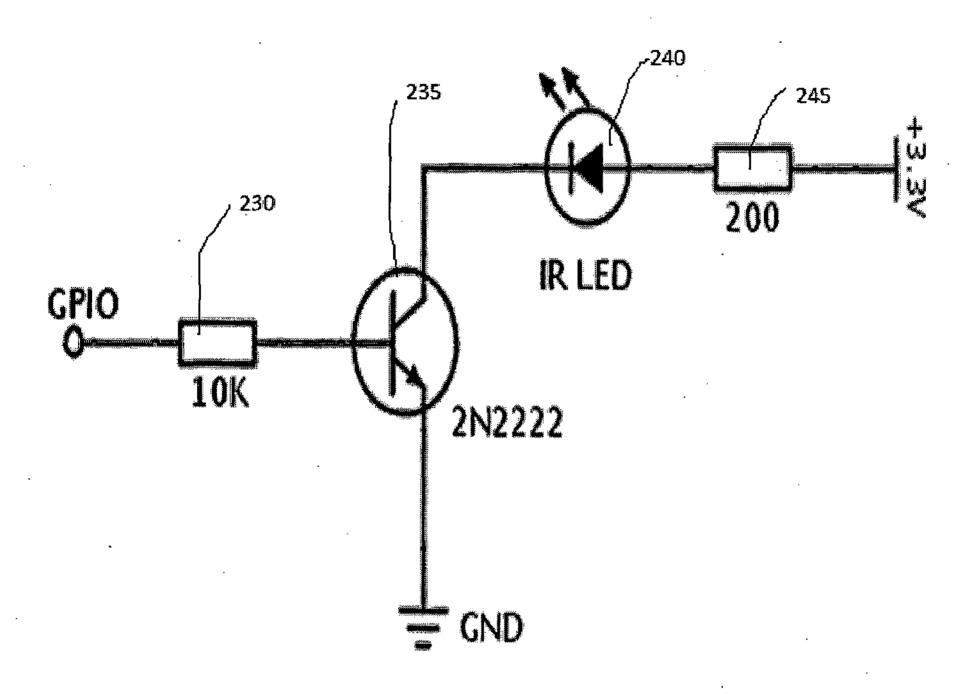


Fig.5: Internal Circuit

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DR. M.NAGABHUSHANA RAO

MISS. K BINDU MADHAVI

MR. PRANJALI VILASKAO DESHMUKH

PROF. KUMAR BABAN PAWAR

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08-Feb-2019/7170/201921005023/Form 2(Title

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PROF. KUMAR BABAN PAWAR DR. YASPAL SINGH

SHEET NO: 06

TOTAL NO OF SHEET: 07

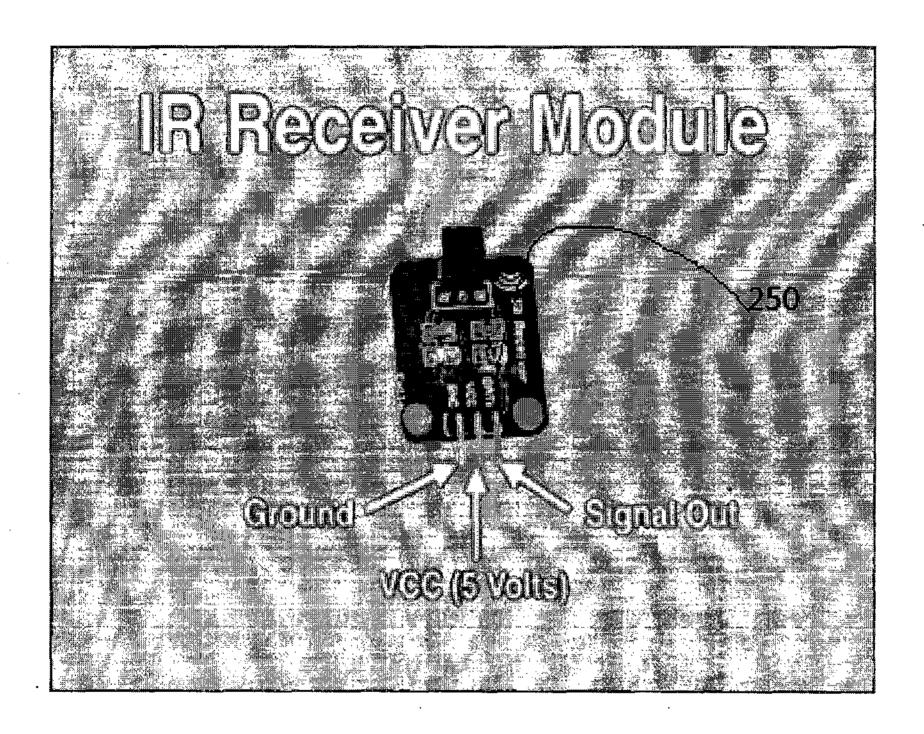


Fig.6: IR Moule

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MISS. ANIRUDIT BHOWMICK

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MR. PRANJALI VILASRAO DESHMUKH

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TOTAL NO OF SHEET: 07

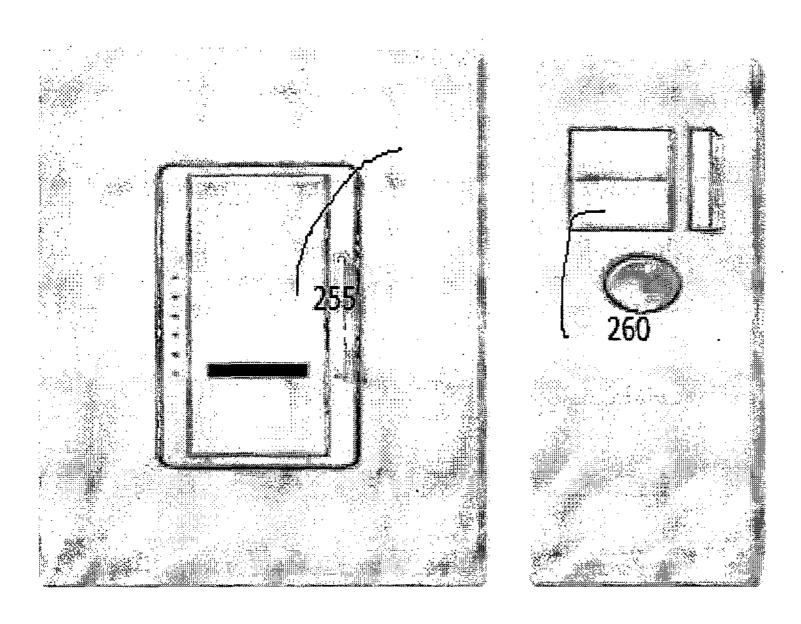


Fig.7: Switch Look like That

Y SURERHA MR. PRATIALE VILASRAO DESHMUKH PROF. KUMAR BABAN PAWAR MISS. ANIKOOH BHOWMICK PROF. DR. SANDEEP KUMAR GUPTA - > (1) 1 9 DR. YASPAL SINGH PROF. (DR.) BIPKOB KUMAR SARKAR

E 3/2040/2019.

FORM 3

THE PATENTS ACT.1970 (39 OF 1970) &



THE PATENTS RULES, 2003

STATEMENT AND UNDERTAKING UNDER SECTION 8

(See section 8: Rule 12)

1. I/We hereby declare:

2.

Name	Nationality	Address
P.BALAMURUGAN	INDIAN	VELTECH RANGARAJAN DR. SAGUNTHALA R&D INSTITUTE OF SCIENCE AND TECHNOLOGY, AVAID-600062 CHENNAI, INDIA
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PROF. DR. SANDEEP KUMAR GUPTA	INDIAN	(IIT- BHU), SHUKUNTALA PLACE D-59/231-C-B-4-1,NIRALA NAGAR LANE NO :06, SHIVPURVA MAHMOORGANJ, VARANASI -10, UP, INDIA

DR. YASPAL SINGH	INDIAN	FL NO 104, WING-A, BHUGAON, BAVDHAN-411015, PUNE, MH, INDIA
PROF.(DR.) BIPLAB KUMAR SARKAR	INDIAN	FL NO 104, WING-A, BHUGAON, BAVDHAN-411015, PUNE, MH, INDIA

- 3. Name, Address and nationality of a joint applicant.
 - (1) That i/we have not made any applicant for the same/ substantially the same invention outside India.

Or

(2) That i/we who have made this application no:......dated......along / joint with made for the same/ substantially same invention, application(s) for patent in the other countries, the particulars of which are given below:

Other countries,	, cite f	Jai cicalai 3	or which are give	ii below.		
Name of country	Date of		Application	Status of the	Date of	Date of grant
	ap	plication	no.	application	publication	
3. Name and addres	ss of	(3) That t	he rights in the a	pplication(s) hav	e/have been assi	gned.
the Assignee		to		***************************************	••	
that I			undertake that	t upto the date	of grant of the	patent by the
controller, i/we would keep him informed in writing						
	corresponding applications for patents filed outside India within six n					thin six months
	from the date of filing of such application.					•
				20 <u>5</u>	102/19	
4. To be signed by the applicant or his						
applicant or his						
authorized registere	egistered					
patent agent.	t agent.					
5. Name of the natu	re	(Brankon	···.)	-
Persion who has sign	ned	BIPLAB KU	JMAR SARKAR	R.K.		
		Patent Ag	ent			
		On behalf	of Applicant			
		То			_	
		The Cont	roller of patent,	•	,	
		The Paten	t office,			
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FORM 9

THE PATENTS ACT, 1970

(39 OF 1970)

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The Patent Rules, 2003
REQUEST FOR PUBLICATION
[See section 11A (2): rule 24A]

के सकत माना पुष्।



1. I/We

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DR. YASPAL SINGH	INDIAN	FL NO 104, WING-A, BHUGAON, BAVDHAN-411015, PUNE, MH, INDIA
PROF.(DR.) BIPLAB KUMAR SARKAR	INDIAN	FL NO 104, WING-A, BHUGAON, BAVDHAN-411015, PUNE, MH, INDIA

2. To be signed by the applicant or his authorized registered patent a	agent
--	-------

Hereby request for early publication of my/our application for patent nd. 21005023Dated 08/02/2019 under section 11A (2) of the Act.

nated t	his	day	, of	. [clas	1	0		20
Dateut	.i 115	,ua	/ OI	*********)4Y./	5, L.I		******	

3. Name of the nature person who has signed.

Singature²
O.V. Sankar

To
The Controller of Patents,
The patent Office,
Atmosphered

Note: For Fee: See First Schedule 2750.00/-

PROF.(DR.) BIPLAB KUMAR SARKAR FL NO 104, WING-A, BHUGAON, BAVDHAN-411015, PUNE, MH, INDIA

Mobile No.: 8059794469

E-mail: dr.bksarkar2003@yahoo.in



8 W/19 58/2019 Date: 8/02/19

To

The Controller of Patents,

The Patent Office,

Mumbai

Sub: Submission of Patent Application with Complete Specification

Title: I-Switch: INTELLIGENT SWITCH USING IR RECEIVER AND IR TRANSMITTER

Applicants: -

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- 2. DR. M.NAGABHUSHANA RAO
- 3. DR. N. NAGA MALLESWARA RAO
- 4. G LALITHA KUMARI
- 5. Y SUREKHA
- 6. MISS. K BINDU MADHAVI
- 7. DR. V. VENKATA RAMANA
- 8. MR. PRANJALI VILASRAO DESHMUKH
- 9. MR. MILIND GUPTA
- 10. PROF. KUMAR BABAN PAWAR
- 11. MR. RAMESH BABU PITTALA
- 12. DR. SERDAR VURAL, UYGUN,PHD
- 13. DR. RAM GOPAL
- 14. PROF. DR. SANDEEP KUMAR GUPTA
- 15. DR. YASPAL SINGH
- 16. PROF.(DR.) BIPLAB KUMAR SARKAR

Sir,

We are submitting herewith following documents towards filing of a patent application

- 1. Form-1(In duplicate)
- 2. Form 2 and Complete Specification (In duplicate)
- 3. Form-3(Statement of Undertaking Under Section 8)
- 4. Form-5(Declaration as to Inventers hip)
- 5. Form-9

You are requested to take the same on record and issue a receipt for the same.

Thanking You, Yours Faithfully,

PROF.(DR.) BIPLAB KUMAR SARKAR

SOCIETY NAME: SOCIETY OF AUTOMOTIVE ENGINEERING (SAE)

S.NO	Academi c Year	Date	Event Name
1.		22-02-2019 To 24-02-2019	Formula Imperial electrical vehicle Champion of champions-2019
2.		22-02-2019 To 24-02-2019	Gokart
3.		22-02-2019 To 24-02-2019	ATV, electrical 2019,
4.	2018- 2019	06-02-2019 To 10-02-2019	Formula imperial -2019, BIC Noida. electrical vehicle
5.		22-01-2019 To 29-01-2019	BAJA 2019, E-BAJA, Natrax Indore.
6.		26-09-2018 To 01-10-2018	QUAD TORC-2018, Bijnor, UP
7.		21-07-2018 To 26-07-2018	Quad bike design challenge 2018, Hyderabad, motor sports 56
8.		16-03-2018 To 19-03-2018	FORMULA KART, DESIGN CHALLENGE, MECOKARTPIO, BANGLORE
9.		12-02-2018 To 16-02-2018	GOKART DESIGN CHALLENGE 2017, Kari Motor speed way. Coimbatore
10.	2017- 2018	25-01-2018 To 28-01-2018	E-BAJA, Natrax Indore
11.		17-01-2018 To 19-01-2018	Hybrid Vehicle Challenge-2018, BIC Noida
12.		03-01-2018 To 06-03-2018	Student Kart design challenge, Gurram guda, Hyderabad
13.		21-07-2017 To 24-07-2017	Quad Bike design challenge
14.	2016- 2017	20-03-2017 To 23-03-2017	FORMULA KART, DESIGN CHALLENGE, MECOKARTPIO, BANGLORE
15.		16-02-2017 To 09-02-2017	ISIE HVC-2017, Buddh International Circuit, Greater Noida
16.		25-01-2017 To 28-01-2017	E-BAJA, Natrax Indore.
17.		14-01-2017 To 17-01-2017	GOKART DESIGN CHALLENGE 2016, Kari Motor speed way. Coimbatore
18.		27-08-2016 To 30-08-2016	QUAD TORC

S.NO	Academic Year	Date	Event Name
19.	2015- 2016	11-03-2016 To	An Orientation workshop for SAE INDIA Supra
		12-03-2016	and Baja Competition
20.		18-02-2016 To	E-BAJA, Natrax Indore.
		22-02-2016	
21.		24-01-2016 TO	ISIE-HVC 2016, RPM International Racing
		29-01-2016	Circuit
22.		01-08-2015 To	QUAD TORC- 2015, Camp wild, Dhauj (Haryana
		04-08-2015	India)
23.	2014-2015	20-02-2015 To	E-BAJA, Natrax Indore.
		22-02-2015	
24.		05-01-2015 To	BAJA STUDENT INDIA, 2015, NIT Jamshedpur,
		11-01-2015	Jarkhand

PROOFS

Academic Year: 2018-2019

Formula Imperial electrical vehicle Champion of Champions-2019



GOKART





ATV, electrical 2019.







Formula imperial -2019, BIC Noida. Electrical vehicle





BAJA 2019, E-BAJA, Natrax Indore.







DEPARTMENT OF MECHANICAL ENGINEERING R.V.R. & J.C. COLLEGE OF ENGINEERING



Chandramoulinguram, Chewdayaram, GUNTUR - 522019

Dt: 7th February, 2018

The principal. R.V.R & J.C Cotlege of Engg., Chowdayaram GUNTUR-522019

Sub: Submission of Invoice - Completion of the Vehicle - Payment - Request

Our Letter dated: 06.01.2018.

With reference to the above, we have purchased Li-ion Battery from TECH Imperial OPC Pvt.Ltd., Noida, U.P. We are very much thankful to the Management for sanctioning financial assistance to a tune of Rs.30,000/- (Rupees Thirty Thousand Only) vide Cheque drawn on Andhra Rank, Chowdavaram Branch, favouring Dr.N.V.V.S.Sudheer, Assoc, Professor, Dept. of M.E.

In this context, we have received a payment Receipt for the Invoice bearing No.INV-000067 dated: 0209.2017 for Rs.96,979,56ps, out of which an emount of Rs.68.000/- transferred through wire and remaining amount of Rs.28,979,56ps was paid in cash. We are herewith enclosing the payment receipt dated: 15.01,2018, for your kind perusal and record(s).

Misseller (Dr.N.V.V.S.Sudheer)

Team Advisor

(Dr.K.Ravindra) Prof., & HOD, M.E.

Dr.KR / dub

Quad bike design challenge 2018, Hyderabad, motor sports 56



Academic Year: 2017-2018

GOKART DESIGN CHALLENGE 2017, Kari Motor speed way. Coimbatore





E-BAJA, Natrax Indore





To
The Principal,
R.V.R.& J.C. College of Engineering,
Chowdayaram,
Guntur 522 019.

Respected Sir,

Sub: Request - Financial Support - F-BAJA Vehicle Challenge 2018 - Reg.

0.4.4

We, Team Falcon Racers of R.V.R & J.C. College of Engineering, have recently participated in Virtual BAJA 2017 (preliminary test for main event) organized by SAE INDIA and secured All India Second Rank. New, we are going to fabricate the vehicle (which we projected in the Virtual Round) to participate in main BAJA 2018 at NATRAX, INDORE on January 25th, 2018.

The estimated cost for fabricating the vehicle (including registration and transport) is Rs.9,95,000/- (Rupees Nine Lakhs Ninety Five Thousand Only). The details of expenditure to be incurred are famished separately. Out of the total cost we (students) are contemplating to bear an amount of Rs.3,00,000/- (Rupees Three Lakhs only) and expecting Rs.1,00,000/- (Rupees One Lakh only) as sponsorships from the Industries

We are glad, if the college authorities able to provide the remaining amount of Rs.5.95.000/- (Rupees Five Lakh Ninety Five Thousand only) to complete our project to participate in the Main BAJA 2018 and we will definitely strive hard to bring laure's to our college.

Siri Register Con Constant Con

Hybrid Vehicle Challenge-2018, BIC Noida









Chowdavaram, 6th January, 2018

To The principal, R.V.R & J.C College of Engg., Chowdavaram GUNTUR-522019

Sir.

Sub: Completion of the Vehicle - Financial Assistance - Request - Reg.

We. Team Falcon Racers of our college, with the kind permission of the HOD, have initiated ourselves for the fabrication of "Hybrid Vehicle" to participate in the "HYBRID VEHICLE CHALLENGE" competitions to be organized by "IMPERIAL SOCIETY OF INNOVATIVE ENGINEERS — ISIE" at Buddh International Circuit, Noida during 17th — 22th January 2018.

In this context, we have tried our level best to secreted the financial assistance from the likes of Auto Mobile outlets in and around Guntur & Vijayawada, Big Industrialists, but of no avail. Hence, our students, who are interested to built-up the vehicle have secreted an amount of Rs.3,70,000/- (Rupees Three Lakh Seventy Thousand Only). The estimated vehicle cost comes to Rs.4.75,000/- (Rupees Pour Lakh Seventy Five Thousand Only). Still, we have to procure Li-ion Battery. The Cost of Li-ion Battery is Rs.96,000/- (Rupees Ninety Six Thousand Only), out of which, we have already paid Rs.66,000/- (Rupees Sixty Six Thousand Only) as advance. Due to shortage of amount in our hands, we couldn't make the payment of remaining amount of Rs.30,000/-.

In this regard, we request you to kindly sanction an amount of Rs.30,000/- for procurement of Li-ion Battery.

Let. Copy is with office

Thanking you Sir.

Yours sincerely, M. Gutth Souce Hosef. TEAM FALCON RACERS (HVC-ISIE)

Academic Year: 2016-2017

Quad Bike design challenge

Chowdavaram, 14-07-17. To The Principal, RVR & JC COLLEGE OF ENGINEERING, Chowdavaram. Sub:Requesting for Transportion charges for Quad vehicle. We team Quad Torc 2k17 as Falcon Racers have manufactured a Quad Bike to attend the competition, Quad Bike design challenge organised by Fraternity of Mechanical & Automobile Engineers. We here by request you for the transporting of the vehicle to Yash Motor Sports Park, Hyderabad. The vehicle must be reported in the pit by 21/07/2017 afternoon. We hereby with due respect request you to provide the charges for transporting the vehicle, with will be to 2009 (Eventy transporting the vehicle with the harmonian) approximately Thanking you sir, Yours sincerely, B.Madhu babu vehicle it is running well greatures topricated (Y14me814) reinally coverden

Formula Kart Design Challenge, MECOKARTPIO, Bangalore

	16/03/2017
	Guntur
To	0,
Th	ne Principal,
	VR&JC College of Engineering,
Ch	nowdavaram.
	Sub: Requesting fund for transportation-FKDC.
S	ir,
R.	This is to bring to your kind notice that Fraternity of Mechanical Automobile Engineers society is organizing Formula Kart Design
	nallenge 2017, from 20 th march, 2017 to 24 th march, 2017. We, the
	ormula kart team of our college are participating in this event.
	In this regard we need to transport our self-fabricated formula
ka	art to the event. The Event is organized in Bangalore which is 640
	n from our college. The transportation cost for the vehicle and
	articipants is around 40,000(forty thousand). Kindly please grant us
th .×	Hope that our request will be processed.
(wy (wo)	Thanking you,
South W	- to all of
Y	The Portion of the Lord A.K. Sri Kalvan VIII. M.C. T.
5341	welvide to challe live for Marie and A.K. Sri Kalyan (YILYME & B.) I CAPTAIN] A.W. Japan (A.) A.W. Japan (A.
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	mode note into

ISIE HVC-2017, Buddh International Circuit, Greater Noida







DEPARTMENT OF MECHANICAL ENGINEERING

R.V.R. & J.C. COLLEGE OF ENGINEERING (AUTONOMOUS)



Chandremouliupuram, Chowdavaram, GUNTUR - 522019

Dt: 02.02.2017

NOTE SUBMITTED TO THE PRINCIPAL:

Sub: Request for sanction of Transportation amount and Driver safety gear amount for HVC –Reg.

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It is to bring to your kind notice that the students of Mechanical Engineering and Electrical Engineering are formed as a Team (27 members) called Falcon Racers for designing and fabrication of Hybrid Vehicle. The students have to participate in the ISIE HVC-17 (Imperial Society of Innovative Engineers Hybrid vehicle Challenge) to be held at Buddh International Circuit, Greater Noida near New Delhi during 16-19th February. 2017. For fabrication of the vehicle, so far, the students have spent an amount of Rs.5.40 Lakhs (27 members Rs.20.000/- each). The students have worked well through-out the day and night for fabrication of the vehicle. Further, they have made a provision for Alcohol Safe Igniter as an innovation in this edition.

Now, the students required to procure Driver Safety Gear, which approximately costs Rs. 75,000/-. Further, we have to transport the vehicle from our college to Buddh International Circuit, Greater Noida, New Delhi. For estimated transportation charges are Rs. 1.20,000/-.

Hence, we request you to kindly sanction the said sum of Rs.1.95,000 (Rupees One Lakh Ninety Five Thousand Only) for procurement of the Driver Safety Gear as well as to meet the transportation charges of the vehicle from our college to the Circuit and to return.

We hereunder furnish the details of fabrication of vehicles, its expenditure and amount(s) received for the vehicle for your kind perusal:-

s.No.	Event and organizer	Place	Total Budget (in Rs.)	Amount sanctioned by college
1.	E-BAJA, SAE India	Indore, Madhya Pradesh		1.80 lakhs + 1 lakh sponsored amount by ITC
2.	Gokart. ISNEE	Coimbatore. Tamilgadu	2.00 lakhs	45,000/-

(Dr.N.V.V.S, Sudheer) '' Faculty Advisor, SAE-INDIA

& withmelus

(Dr.K.Ravindra) Prof., & HOD, M.E

Dr. NVVSS / dvb

K. Suman

amount of P195000 in a

MINI

E-BAJA, Natrax Indore.



The Principal, R.V.R. & J.C. College of Engineering, Chowdeveram, Guntar.

> Sub: Financial support for the on-going live project E-BAJA 2017 -Request - Reg.

Respected Sir,

We, Team Falcon Racers of Mechanical Engineering Department are fabricating and designing an all terrain vehicle to participate, in the event e-BAIA 2017, to be organised by SAE India at Indore during February 2017. For fabrication of the vericle, it is estimated that an amount of Rs 5.58 Lakhs is necessary. As a part of team, we, the members of Team Paleon are investing an amount of Rs.2.5 Lukhs. As per the advice of Sri R.Gopala Krishne garu (our Hon ble Secretary & Correspondent), we approached TC Ltd., (ILTD Division) for funding our venicle, for which, ITC Ltd., has issued a Checue for Rs.1.00 Lekh.

Hence, we request you to kindly support us to complete our fabrication work in time, only sanctioning as the remaining sum of Rs. 1.80 Lakes

Awaiting for your lavourable response in this matter-

Thanking You,

Yours Faithfully.

Pallo not 6 G. Peavern (VILLMEBUD) Submitted

GOKART DESIGN CHALLENGE 2016, Kari Motor speed way. Coimbatore



QUAD TORC



19th August, 2016

to

The Principal,

R V R & J C College of Engineering.

Chowdavaram,

Guntur.

Sub: Requesting financial aid for our project work.

Sir.

We 3rd & 4th B. Tech students around 30 members gathered together and fabricated a All Terrain Vehicle for National event QUAD TORC organising by ISNEE at Champur, Uttar Pradesh on 27th August. So far we have invested our money Rs.3,40,000 for project work which was collected from team members completely. The design and fabrication of our vehicle is done and it is performing well. The travelling charges for vehicle transportation to Chanpur will be around Rs.80,000/out of which we have Rs.30,000 in our hand. So we kindly request you to grant us the remaining amount Rs,50,000 for our transportation charges.

Thanking you,

Yours sincerely.

QUAD TORC P.Prasanth.

Team Faculty advisor: It possible kindly consider (DY NUUS Sudhelm).

Principal:

Academic Year: 2015-2016

E-BAJA, Natrax Indore.





ISIE-HVC 2016, RPM International Racing Circuit



To The Principal, R.V.R. & J.C. College of Engineering, Chowdavaram.

Respected Sir,

Through H.O.D. M.E

We the team falcon racers participating in the ISIE hybrid vehicle challenge event at Bhopal, Madhya Pradesh during 24.01.2016 to 29.01.2016. The design & fabrication of the vehicle was almost completed. So far, we have incurred Rs.3,50.000/- (approximately) for fabrication of the vehicle, which was borne by students of this group.

Still, we have to procure 4 tyres to the vehicle to put the vehicle for the competition. The cost of the same is approximately Rs.16,259/- (including tax). Apart from this, approximately Rs.50,000/- is needed for transport the vehicle to the place of event.

Hence, we request you to kindly sponsor the above amount of Rs.66.259/(Rupees Sixty Six Thousand Two Hundred Fifty Nine Only) and permit us to
participate in the event to be held during the aforesaid period at Bijopal, Madhya
Pradesh.

Kindly do the needful Sir.

Thanking You Sir,

Service of the servic

QUAD TORC- 2015, Camp wild, Dhauj (Haryana India)



Academic Year: 2014-2015

E-BAJA, Natrax Indore.



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Chowdavaram, Dt: 19-08-2015.

To

The Principal, R. V. R. & J. C. College of Engineering, Chowdavaram.

Respected sir,

Sub: Requesting to release the money to start the fabrication-Regd.

We are the students of mechanical department representing our college by the team name FALCON RACERS in SAE BAJA at NATRAX, INDORE during 20th-22rd Feb 2015. As a part of that event our team had won the e-BAJA INITIATIVE AWARD 1st PRIZE and also a cash prize of worth Rs 60,000/-. As the team continues the participation of the event by selecting in the BAJA VIRTUAL round in 3rd place in national level held at CHITKARA UNIVERSITY, chandigarh. Final event is going to held at Natrix, Indore during 18th-22rd Feb 2016.

The fabrication work is going to be started as soon as possible. Total cost estimated for the fabrication and shipment is Rs 4,10,000/-. Team can afford an amount of Rs 1,50,000/-. We had amount of Rs 45,000/- by means of prize money(Rs 30,000/-) and sponsorship(Rs 15,000/- from Mr. Bommidala sri Krishna). Hence we request your honor to kindly grant Rs2,15,000/- for our project and make it a grand success. The details of the cost estimation are enclosed herewith.

Thanking you sir,

Che ming a scramany. The moster

Yours sincerely,

Falcon racers.

G-v-suren dra

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A True

BAJA STUDENT INDIA, 2015, NIT Jamshedpur, Jarkhand



Dr: 15/09/2014

Chowdavaram.

To The Principal, R.V.R & J.C College of Engineering, Chowdavaram,

From FALCON RACERS, Mechanical Engineering, Chowdavaram,

Sub: Request for Funding, for the live project - The design and manufacturing of ATV (All-

We, the students of Mechanical Engineering have formed a team FALCON RACERS. We attended the VIRTUALS PRESENTATION and ONLINE EXAM and selected for the main events EBAJA & BAJA STUDENT INDIA organized by SAEINDIA and DELTA INC at INDORE in FEB & NIT-JAMSHEPUR in JAN respectively. For EBAJA, an electric motor is used in transmission and the transmission kit will be provided by MAHINDRA REVA at worth of Rs 2.85,000/- BALA STUDENT INIDIA is an IC engine based vehicle. In this context the team has to design and fabricate All Terrain Vehicle (ATV) for participating in the final racing

Now our next target is to move on to the fabrication work. Before start of fabrication of the vehicle, many parts are to be ordered. So the team is in great need of money for the project. The Team have already collected a sum of 1,56,200/- (team members funded money) for the projects. A sponsorship of Rs 1,00,000/2 is yet to be collected from Hon, GALLA JAYADEV Cost estimation for the both the events is Rs 8,50,000/-. Hence we request your honour to kindly grant 5,70,000/s-for-our both the projects and make it a grand success. The details of the cost

Expecting your co-operation, Thanking you sit,

Dr. N.V.V.S Sudheer,

Yours obediently, FALCON RACERS. (EBAJA/BSI)

Dr. K. Ravindra. Prof & HOD ME.

Faculty Advisor,

DEPARTMENT OF MECHANICAL ENGINEERING, R.V.R & J.C. COLLEGE OF ENGINEERING, CHOWDAVARAM, GUNTUR - 522019 DETAILS OF STUDENT PROJECTS LIKE, DELTA SHOOT OUT, GOKART CHAMPIONSHIP, BAJA STUDENT, E-BAJA etc.,

S.No	Event Name and place	Organizers	Date	Total expendit ure (Rupees)	Sponsored by the college (Rupees)	Sponsored by the Industries (Rupees)	Prize
1	Delta shoot out, NIT Jamshedpur	Delta Inc.	2013-2014 (22nd-24th January, 2014)	5,00,000	1,50,000	50,000 (pioneer automobiles) 10,000 (JAYA LAK MOTORS)	Acceleration test (40,000)
2	NGKC-2014 National Gokart Championship , Kari Motor speed way. Coimbatore	Indian Society of New Era Engineers (ISNEE)	2013-2014 (17th- 19th, October, 2014)	1,30,000	12,600	College provided own vehicle for transportation	
3	BAJA STUDENT INDIA, 2015, NIT Jamshedpur, Jarkhand	Delta	2014-2015 (5th to 11th January, 2015)	8,50,000	5,00,000	1,00,000 (Amar Raja Batteries)	
4	E-BAJA, Natrax Indore.	SAE India	2014-2015 (20th - 22nd February 2015)				E-BAJA Initiative award 1st Prize of Rs.60,000/-
5	QUAD TORC- 2015, Camp wild, Dhauj (Haryana India)	Indian Society of New Era Engineers (ISNEE)	2014-2015 (1st to 4th August, 2015)	2, 50, 000			
6	E-BAJA, Natrax Indore.	SAE India	2015-2016 (18th - 22nd February 2016)	4,10,000	2,15,000 +55, 000 (Transport)		
7	QUAD TORC		2015-2016, 27th to 30th August 2016)	2,50,000			
8	ISIE-HVC 2016, RPM International Racing Circuit	Imperial Society of Innovative Engineers (ISIE)	2015-2016 (24th -26th January, 2016)	2,85,000	70,000		Runner up award for Skid Pad round

9	E-BAJA, Natrax Indore.	SAE India	2016-2017	5,30,000	1,80,000	1,00,000 (ITC)	
10	ISIE HVC-2017, Buddh International Circuit, Greater Noida	Imperial Society of Innovative Engineers (ISIE)	2016-2017 Feb 16 to !9,2017	4,25,000	1,95,000		
11	GOKART DESIGN CHALLENGE 2016, Kari Motor speed way. Coimbatore	Indian Society of New Era Engineers (ISNEE)	2016-2017 (14th- 17th , January, 2017)	2,00,000	45,000		
12	FORMULA KART, DESIGN CHALLENGE,MECOKAR TPIO, BANGLORE	FRATERNITY OF MECHANICAL & AUTOMOBILE ENGINEERS(FMA E)	2016-17 20-23rd MARCH-2017	1,50,000	46,000		
13	Quad Bike design challenge	FRATERNITY OF MECHANICAL & AUTOMOBILE ENGINEERS(FMA E	2016-2017 21-24th July 2017	2,00,000	20,000		
14	Student Kart design challenge, Gurram guda, Hyderabad	Society of Mechanical and automotive Engineers (SAME)	2017-2018 3rd-6th Januar, 2018	1,20,000	20,000		First in Endurance, Overall third
15	Hybrid Vehicle Challenge-2018, BIC Noida	Imperial Society of Innovative Engineers (ISIE)	2017-2018 17th to 21st January, 2018	4,40,000	30,000		Runner up in endurance and overall fourth
16	E-BAJA, Natrax Indore	SAE India	2017-18 25th to 28th January	9,00,000	5,50.000		Overall fourth place
17	GOKART DESIGN CHALLENGE 2017, Kari Motor speed way. Coimbatore	Indian Society of New Era Engineers (ISNEE)	2017-18 12th to 16th February 2018		46,237		Overall third place
18	FORMULA KART,	FRATERNITY OF	16th to 19th March	50,000	30,0000		Endurance 2nd place

	DESIGN CHALLENGE, MECOKARTPIO, BANGLORE	MECHANICAL & AUTOMOBILE ENGINEERS (FMAE)	2018				and overall third place.
19	Formula imperial - 2019, BIC Noida.	Imperial Society of Innovative Engineers (ISIE)	6th to 10th February - 2019	5,00,000	2,80,000		Runner up (all over India, Prize money, Rs.85,000
20	Formula Imperial electrical vehicle Champion of champions-2019,	APSSDC and Imperial Society of Innovative Engineers (ISIE)	22nd to 24th February-2019	DO	20,000		Second runner up, Rs.20,000/-
21	Quad bike design challenge 2018, Hyderabad, motor sports 56	FRATERNITY OF MECHANICAL & AUTOMOBILE ENGINEERS (FMAE)	21st -26th July 2018	4,50,000	60,000		
22	QUAD TORC-2018, Bijnor, UP	Indian society of new era engineers	26th September to 1st October 2018	DO extra 50,000	73,000		
23	BAJA 2019, E-BAJA, Natrax Indore.	SAE	22nd to 29th January- 2019	9,00,000	5,00,000		
24	ATV, electrical 2019,	APSSDC and Imperial Society of Innovative Engineers (ISIE)	22nd to 24th February-2019	DO			
25	Gokart	APSSDC and Imperial Society of Innovative Engineers (ISIE	22nd to 24th February-2019	2,00,000		1,00,000	Overall champions with prize money of Rs.1,00,000/-

		2015-2	016		
Discipline	Level	Product name	No. of products manufactured	Per unit cost of the product (Rs)	Total revenue generated in rupees
Mechanical Engineering	customized	Electrical Vehicle for competition organized by SAE India	one	7,50,000	
Mechanical Engineering	customized	QUAD BIKE for competition organized by Indian Society of New Era Engineers (ISNEE)	one	2.50.000	
Mechanical Engineering	customized	Hybrid Vehicle organized by ,ISIE-HVC 2016, RPM International Racing Circuit	one	2,85,000	
		2016-2	017		
Mechanical Engineering	customized	Electrical Vehicle for competition organized by SAE India	one	5,30,000	
Mechanical Engineering	customized	Hybrid Vehicle organized by ,ISIE-HVC 2017, RPM International Racing Circuit	one	4,25,000	
Mechanical Engineering	customized	GOKART vehicle, GOKART DESIGN CHALLENGE 2016, Kari Motor speed way. Coimbatore	one	2,50,000	
Mechanical Engineering	customized	FORMULA KART, DESIGN CHALLENGE,MECOKARTPIO , BANGLORE	one	2,25,000	

R.V.R & J.C. COLLEGE OF ENGINEERING, CHOWDAVARAM, GUNTUR - 522019

DEPARTMENT OF MECHANICAL ENGINEERING

DETAILS OF STUDENT PROJECTS LIKE, DELTA SHOOT OUT, GOKART CHAMPIONSHIP, BAJA STUDENT, E-BAJA etc,. DURING THE YEAR 2018-19

SI.	Event Name and	Organizers	Date	Total	Sponsored	Sponsored	Prize
No	place			expenditu	by the	by the	
				re	college	Industries	
				(Rupees)	(Rupees)	(Rupees)	
1.	Formula imperial -	Imperial Society of	6th to 10th	5,00,000/-	2,80,000		Runner up (all over
	2019, BIC Noida.	Innovative Engineers	February -2019				India, Prize money,
		(ISIE)					Rs.85,000
2.	Formula Imperial	APSSDC and Imperial	22nd to 24th	Same	20,000		Second runner up,
	electrical vehicle	Society of Innovative	February-2019	Vehicle			Rs. 20,000
	Champion of	Engineers (ISIE)					
	champions-2019,						
3.	Quad bike design	FRATERNITY OF	21st -26th July 2018	4,50,000/-	60,000		
	challenge 2018,	MECHANICAL &					
	Hyderabad, motor	AUTOMOBILE					
	sports 56	ENGINEERS (FMAE)					
4.	QUAD TORC-2018,	Indian society of new	26th September to	DO extra	73,000		
	Bijnor, UP	era engineers	1st October 2018	50,000			
5.	BAJA 2019, E-BAJA,	SAE	22nd to 29th	9,00,000	5,00,000		
	Natrax		January-2019				
	Indore.						
6.	ATV, electrical 2019,	APSSDC and Imperial	22nd to 24th	DO			
		Society of Innovative	February-2019				
		Engineers (ISIE)					
7.	Gokart	APSSDC and Imperial	22nd to 24th	2,00,000		1,00,000	Overall champions
		Society of Innovative	February-2019				with prize money of
		Engineers (ISIE					Rs.1,00,000

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To The Principal RVB College of Engineering, -522019

Date: 21-01-2016

Sub - Details of Exhibition expenditure incurred on 48th Engineers Day - Reg.

The details of expenditure incurred in organizing the exhibition on 15th and 16 September 2015 on the occasion of 48th Engineers Day organized by Incubation Centre & ISTE Student Chapter is as follows:

SNo	Branch / Section	Expenditure in Rupees
1	EEE	12,128.00
2	CSE	380.00
3	IT	3,770.00
4	CE	19,347.00
5	ECE	23,255.00
6	MECH	21,062.00
7	Chief Guest honorarium	5,000.00
8	Certificates printing (1500 + 1500 + 4200)	7,200.00
9	Tent House	9,370.00
10	Travelling Expenditure car to Vijayawada	2,350.00
11	Travelling expenditure Hyderabad to Guntur (Bus and Flight fares)	3,776.00
12	Video Graph and Photos	1,600.00
13	Mementos	1,500.00
14	Flowers and Bouquets	950.00
15	Flex Banner (6 * 15 & 8 * 3)	1,000.00
16	Canteen	1,498.00
	Total Expenditure	1,14,186.00

I request you to release an amount of Rs. 1,14,186 (One lakh fourteen thousand one hundred and eighty six rupees only) towards the sement of the expenditure incurred for organizing the event.

Thanking You,

PAID THROUGH Cheque No. 146915 Yours sincerely,

Dated 28-01-2016

(Dr. Kota Srinivasu) HOD, Civil Engg.

Enclosures: Receipts

Dt: 21.10.2016.

Note Submitted to the Principal

Sub: SHAR Space Exhibition - World Space Week 2016 - Report & Expenditure - Reg.

This is to submit that with your kind support World Space Week 2016 celebrations have been organized in our campus on 4th & 5th October, 2016. On this occasion Sri Satish Dawan Space Centre (SHAR). Sriharikota, has conducted space exhibition for the students of Schools, Junior colleges and Engineering colleges. As part of this program our college students also exhibited their models to the visitors of the 2 days exhibition.

Around 17,000 visitors from 512 institutes/Schools carne to the campus and visited video presentations, space models, space panels and in-house projects. During this programme a total number 900 certificates and mementos were given by SHAR officials for the top 3 children of 300 schools.

For the inaugural function of the program which was conducted on 4th October 2016, Dr. P. Narasimha Rao, Vice Chairman, APSCHE, attended as a chief guest, and stressed the applications of remote sensing during his speech. Sri V. Kumbhakarnan, Project Manager, SHAR attended as guest of honor and addressed the gathering about space activates at SHAR, Sriharikota. Dr. K. Sambasiva Rao, Rector, ANU, also attended the program as a guest of honor to address the students.

For the valedictory function of the program which was conducted on 5th October 2016, Prof. A. Rajendra Prasad, Vice Chancellor, ANU attended as a chief guest. During his speech, he mentioned that students will be well motivated by organizing such kind of technology oriented exhibitions. Madhusudhan Reddy, Project Manager, SHAR attended as guest of honor and addressed the students. The chief guest and guest of honor along with management members distributed prizes to the students.

In this connection, a total of Rs.3,75,000/- was incurred for the arrangements made for conducting

the above SHAR and Inhouse Exhibition as per the details given below:

S.No	Particulars	Amount	T-4-1
1.	Refreshments for Students	1,95,059.00	Total
2.	Food items for Volunteers, Guests		1 22 22 4 20
3.	Rental for Air Conditioners	36,875.00	2,31,934.00
4.	Rental Charges for Pendals, Steal Tables Side Walls & Decoration	35,000.00	(32,000.00
. 5.	Sweets & Fruits (1380 + 300+960+425+125)	2 102 00	35,000.00
6.	Bouquets (1300-1909)	3,190.00	
7.	Video & Photos		
8.	Flight Charges for Sri P. Narasimha Rao (3663+3925)	7,500.00	
9.	Flexi Prints (576 +3792 +3480)	7,583.00	
10.	Pens for students (5,000+(17,500)	7,848.00	
11.	Rental Charges for Chairs	22,500.00	7
12.	Balloon Gas (6000 + 1000 + 1100)	(2/20().00	
13.	Dinner arranged for SHAR Guests on 05-10-2016	,019.00	
14.	Expenditure incurred for Guests	1 975 000	
15.	Car fuel for receiving guest from Vijayawada and Press reporters	1,875.00	76,020.00
	TOTAL		3,74,954.00

I request you to kindly sanction an amount of Rs.3,74,954/- (Rupees three lakhs seventy four

usand rine hundred and fifty four only) which was incurred for the said program.

Co-Ordinator, WSW-2016.

DT: 30-11-2017

NOTE SUBMITTED TO THE SECRETARY & CORRESPONDENT

It is submitted that a Technical In-house Exhibition was arranged in the Old and New Auditorium on 15-09-2017 in connection on the occasion of Engineer's Day Celebrations and many students have actively prepared models/projects and displayed in the inhouse exhibition.

In this connection, this is to bring to your kind notice that the students who have exhibited their models/projects have requested to reimburse the expenditure incurred in connection with the preparation of the models / projects. The details of amounts to be reimbursed to the students branch-wise are as follows:

SI. No.	Branch	Total amount to be reimbursed to the students (Rs.)		
1	Chemical Engg.	(6,340.80		
2.	Civil Engineering	(A8,576.00°		
3.	CSE	(4,350.00		
4.	ECE	(/43,468.00*		
5.	EEE	/22,269.00 ′		
6.	IT	1,300.00		
7	ME	73,727.00/		
1.	Total	2,00,030.30		

Further, we have to pay an amount of Rs.6,650/- towards rental charges for tables etc., to exhibit the models.

In this connection, it is proposed to give four cash prizes to each department for the best models presented by the students in each branch as mentioned below. (List of prize winners enclosed).

Prize	Prize money	No. of branches	Total Prize money (Rs.)
FIRST	2000/-	7 x Rs.2000	(14,000.00
SECOND	1500/-	7 x Rs.1500/-	(10,500.00
THIRD	1000/-	7 x Rs.1000/-	7,000.00
FOURTH	500/-	7 X Rs.500/-	(3,500.00
FOURTH	Total	35,000.00	
	Total		

	Details of total expenditure	1
1	Reimbursement of expenditure to students for preparation of models / projects	2,00,030.80
2	Tables rental charges etc.	6,650.00
4		35,000.007
3	Prize money to be paid to students	
	Total	2,41,680.80
	Total	11

Hence, it is requested to sanction the total amount of Rs.2,41,680.80 (Rupees two lakhs forty one thousand six hundred and eighty and paise eighty only).

Mercy be some tone as R. 241, 680280

PAID THROUGH

Cheque No. 14184



DT: 10-10-2017

Note Submitted to the Principal:

This is to inform you that the following expenses incurred for organizing Engineers Day Celebrations on 15-09-2017.

	11 - 11 - 11	Amount
.No.	Description of the Expenditure	940.00
	Sweet & Hot	300.00
2.	Purchase of Fruits	400.00
3.	Water Bottles	700.00
4.	Photograph Charges	(800.00
5.	Bouquets	(300.00
6.	Flowers & Garlands	(600.00
7.	Shawl	(1,300.00
8.	Silver Plate Frames	(7,080.00
9.	Participant Certificates	15,300.00
10.	Expenses incurred for accompanying Mr. Sarat Chandra Prasad -Guest	16
11.	Silver Articles purchased from M/s.Sri Sahasra Jewellers, Guntur Total	32,270.00

Kindly sanction the above amount of Rs. 32,270/- and issue cheque for Rs.27,720/- in favour of Dr.A.Srinivasa Prasad, Professor in Civil Engineering and issue cheque for Rs. 4,550/- in favour of M/s. Sri Sahasra Jewellers, Guntur.

(Dr. A.S.Prasad) Professor in CE

11/10/201 Jan Ju'orud R. 32 11/10/201 Jan Ju orud R. 32 11/10/201 Jan Ju

PAID THROUGH Cheque No. 1억.06왕 Dated.... 1억.612미구

EMD Cell Activities

One week training program foundation course in Automobile 2 wheeler for MBTS 3 years polytechnic students. From 30-12-2019 to 04-01-2020



One week training program Expert Automobile 2 Wheeler for GPm 2year polytechnic students from 23-12-2019 to 28-12-2019 in RVRJCCE t-SDI



One week training program Expert for GEC 2year polytechnic students from 23-12-2019 to 28-12-2019 in RVRJCCE t-SDI



One week training program Expert for GEC 2year polytechnic students from 23-12-2019 to 28-12-2019 in RVRJCCE t-SDI



One week training program Expert in Automobile 4 wheeler for Gpm 3 year polytechnic students from 23-12-2019 to 27-12-2019 in RVRJCCE t-SDI



One week training program Expert in Automobile 4 wheeler for Gpm 3 year polytechnic students from 23-12-2019 to 27-12-2019 in RVRJCCE t-SDI



One week training program foundation in Automobile 2 wheeler for GEC 2year polytechnic students from 16-12-2019 to 21-12-2019 in RVRJCCE t-SDI



One week training program Expert Electrical home for MBTS 3year polytechnic students from 09-12-2019 to 14-12-2019 in RVRJCCE t-SDI



One week training program foundation and Expert. Course in Electrical home for KHIT Btech students from 27-1-2020 to 1-02-2020 in RVRJCCE t-SDI



One week training program foundation in Automobile 4 wheeler for MBTS 3 year polytechnic students from 30-12-2019 to 04-12-2020



World skill training program for world skill trianinees IT I Students in Atomobile 4wheeler from 2-01-2020 to 25-01-2020 in RVRJCCE t-SDI



One week training program foundation in R&AC for KHIT3year polytechnic students from 25-11-2019 to 30-11-2019 in RVRJCCE t-SDI



R&AC foundation course training program for Mechanical 2year RVR JC Engineer students from 03-12-2019 to 16-12-2019 In RVRJCCE t-SDI



One week training program foundation In R&AC for KHIT 2year polytechnic students from 3-2-2020 to 8-2-2020 in RVRJCCE t-SDI



One week training program Expert Electrical homefor KHIT 2year polytechnic students from 3-2-2020 to 8-2-2020 in RVRJCCE t-SDI



Ten days training program Foundation and Expert in Automobile 4 wheeler for ongole ITI students from 22-04-2019 to 04-05-2019



One week training program foundation in Automobile 4 wheeler for Gpm 2year polytechnic students from 23-07-2019 to 27-07-2019 in RVRJCCE t-SDI



Industrial training program for KHIT EEE 3 years industrial trainees in Automobile 4 wheeler foundation from 13-11-2019 to 22-11-2019



Internal training program foundation Electrical home for EEE 3year RVR JC Btech students from 2-12-2019 to 17-12-2019 in RVRJCCE t-SDI



One week FDP training program in Automobile 4 Wheeler for Government ITI Faculty from 04-11-2019 to 09-11-2019 in RVRJCCE t-SDI



A total of 91 students of Mechanical III Year and IV/IV Year got Dassault Systems Certification on December 6 2019.



A 3-day FDP was given to the faculty of RVRJCCE in 'ETABS', during Nov 20 –Nov 22, 2019. 25 faculty members were benefitted from the course.



EMDC

1. A Entrepreneurship Awareness Camp held in RVR & JC College of Engineering on 12-09-2019. B.Tech., MBA & MCA students attended this programme.



2. A three-day DST sponsored Entrepreneurship Awareness Camp (EAC) was conducted successfully during February 28 - March 2, 2019 for all the branches of Pre-Final B. tech students. A total of 110 students participated in the camp.



3. A three-day DST sponsored Entrepreneurship Awareness Camp (EAC) was conducted successfully during 20-22 December 2018 for all the branches of registered pre-final students. Mr.KrishNangegadda,Advisor member, APSSDC, Mr. Raghu ram Nagalla, graced the inaugural function and Mr. Naveen, DIC, Guntur, Dr K.Sujatha, Associate Professor, T&P, RVRJCCE,UIF Students of RVRJCCE, Mr. Y Naveen Kumar, Personality Development Trainer ,Hyderabad.



4. A one day Million Minds Speaker Series Session 'Entrepreneurship Journey' was organized for the students of MBA and MCA students on 4 Dec 2018 by EMD Cell. Mr.TarunKakani, CEO Glocal Technologies, Vijayawada handled the session.



5. A one day programme on 'i2E Smart Idea Boot camp' for the third year students of RVRJCCE on Dec.2018 conducted by International Institute of Entrepreneurship Development of APSSDC. Mr.Krish Nangegadda, Advisor member, APSSDC handled the sessions.



6. A Entrepreneurship Awareness Camp held in RVR & JC College of Engineering on 20-12-2018. B.Tech., MBA & MCA students attended this programme.



7. A Debate event competition on topic "Role of youth in Eradication of Corruption" by State Bank of Hyderabad, Guntur branch on 30th October 2015. B.Tech., MBA & MCA students attended this programme.



8. A one-day workshop on "Entrepreneurship Motivation Programme" conducted by Ministry of Micro, Small & Medium Enterprises (MSME) on 29th July, 2016. III-year B.Tech., MCA and MBA students attended this programme.



9. A three-day certification workshop on "Entrepreneurship Awareness Programme" conducted by Ministry of Micro, Small & Medium Enterprises (MSME) on 21 -23 Sept, 2015 III-year B.Tech., MCA and MBA students attended this programme.



10. A one-day symposium on "Internet of Things (IoT)" conducted by Efftronics Systems Pvt. Ltd., Vijayawada on 24th August, 2016 .35 Faculty Members from various departments attended this programme.



11. Inauguration of Entrepreneurship club of RVRJCCE on 27-07-18 ,students and faculty of various departments attended this programme.

