



Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

**APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES**

Date of Application:22-12-2020

Department	MECHANICAL ENGINEERING	Application No.	202020168
Area of Research	MANUFACTURING ENGINEERING WITH ENERGY DISSIPATION	Research Mode	PART TIME

**Name** :ARUN KUMAR G

**Date of Birth / Age** :31-05-1989 / 31 Years

**Gender** :MALE

**Category** :OC

**e-Mail ID** :mechakg@gmail.com

**Mobile** :8547081280



<b>Father's/Husband's Name</b>	GOPALAKRISHNA PILLAI	<b>Father's/Husband's Occupation</b>	BLIND EX-SERVICEMEN
<b>Family Income</b>	250000	<b>Residential Type</b>	RURAL
<b>Birth Place</b>	KATTANAM	<b>Mother Tongue</b>	MALAYALAM
<b>Religion</b>	HINDU	<b>Martial Status</b>	MARRIED
<b>Aadhaar No.</b>	541502817385	<b>PAN No.</b>	BIEPG7203A
<b>Physically Challenged</b>	NO	<b>Type of Disability</b>	-
<b>Address for Communication:</b> KUNNUTHARAYIL HOUSE KOMALLOOR PO KATTANAM ALAPPUZHA DISTRICT KERALA INDIA Pin-690505		<b>Permenant Address:</b> KUNNUTHARAYIL HOUSE KOMALLOOR PO KATTANAM ALAPPUZHA DISTRICT KERALA INDIA Pin-690505	

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
BE	MECHAICAL ENGINEERING	ANNA UNIVERSITY	2010	72%	FIRST	REGULAR
ME	THERMAL ENGINEERING	ANNA UNIVERSITY	2012	8.25	FIRST	REGULAR

Experience					
Organization	Designation	Experience From	Experience TO	Work Nature	
ARCHANA COLLEGE OF ENGINEERING	ASSISTANT PROFESSOR	2012-06-01	2013-01-05	TEACHING	
TRAVANCORE ENGINEERING COLLEGE	ASSISTANT PROFESSOR	2013-01-17	2015-05-29	TEACHING	
MAHAGURU INSTITUE OF TECHNOLOGY	ASSISTANT PROFESSOR	2015-06-01	2020-12-22	TEACHING	

Payment Details				
Transaction ID	Reference	Date of transaction	Amount	Status

202020168_201223210111	VSBI9588442182	23-12-2020	600	SUCCESS
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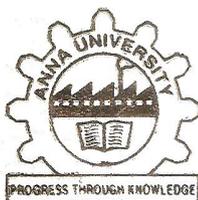
# RESEARCH PROPOSAL

Heat Source of any welding technique can be simulated for research by using different types of heat equation. This is currently using worldwide for research purposes for simulation of welding and other heat using engineering techniques. This heat equations contains certain heat source parameters which indicates the shape of the welding area and position. The value of these parameters had been developed with certain empirical relations. But to avoid complexities, assumed values are used currently for simulation. Recent researches had proved that, this cannot give accurate results during simulation and can deviate from the actual weld conditions and will lead to inaccuracy of simulation. The heat Source parameters can vary from material to material, input conditions, velocity of weld etc. So, for ensuring accuracy of simulation, accurate Weld parameters have to be used.

In this research, I am focusing to find the accurate heat source parameters of a range of materials such as dissimilar metal welding process. so as to find the relation of heat source parameters with its material properties, size or thickness of the specimen, input voltage and current.

The Welding method proposing is a hybrid technique incorporating Conventional TIG Welding with arc welding. The combination of the above will give a hybrid Welding technique with can be expected to give high thermal efficiency and position so the dissimilar metals depth to width ratio. The research will give light to improve the accuracy of the current research methods by overcoming the thermal efficiency losses

# Anna University



Reg. No.97606114008/RG

*The Syndicate of the Anna University hereby makes known that*  
**ARUN KUMAR G** *has been admitted to the* **DEGREE OF BACHELOR OF ENGINEERING** *in* **MECHANICAL ENGINEERING** *under the*  
*Faculty of Mechanical Engineering, having completed the prescribed programme of study and having been certified by the duly appointed examiners to be qualified to receive the same, and has been placed in* **FIRST CLASS** *at the Examination held in* **APRIL 2010.**

*Given under the Seal of the University*



Chennai 600 025

India

December 2010

GUM211409716

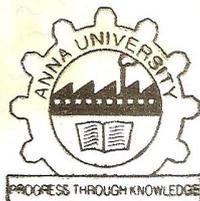
Controller of Examinations

Registrar

Vice-Chancellor

EBR987D9FEF790CFAC8E816C78E63

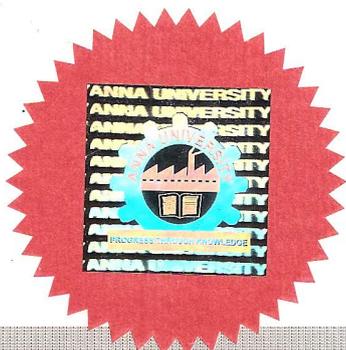
# Anna University



Reg.No. 40110414002/RG

*The Syndicate of the Anna University hereby makes known that*  
**ARUNKUMAR G** *has been admitted to the* **DEGREE OF MASTER OF ENGINEERING** *in* **THERMAL ENGINEERING** *under the Faculty of Mechanical Engineering, having completed the prescribed programme of study and having been certified by the duly appointed examiners to be qualified to receive the same, and has been placed in* **FIRST CLASS** *at the Examination held in*  
**JUNE 2012.**

*Given under the Seal of the University*





**ANNA UNIVERSITY CHENNAI, CHENNAI - 600 025**  
**B.E. DEGREE EXAMINATIONS**  
**CONSOLIDATED STATEMENT OF MARKS**

Roll No. BT096030

AT09H15895

By person

NAME OF THE CANDIDATE		PROGRAMME & BRANCH		REGISTRATION NO.	DATE OF EXAMINATION	REGISTRATION	MARKS OBTAINED	MARKS AVAILABLE	PERCENTAGE	GRADE
ALUN KUMAR G		B.E. Mechanical Engineering		97906154008	April 2010	2004	3414	1000	34.14	C
SEM	COURSE CODE	SUBJECT TITLE	MAX	US	MARKS OBTAINED	MARKS AVAILABLE	PERCENTAGE	GRADE	REMARKS	
										MARKS OBTAINED
01*	CE13001	Engineering Chemistry	100	50	062	120	51.67	B		
01*	EE13002	Basic Electrical and Electronic Engg	100	50	039	120	32.50	C		
01*	08E1301	Engineering Graphics	100	50	037	120	30.83	C		
01*	CE13002	Computer Programming	100	50	038	120	31.67	C		
01*	ME13001	Technical English	100	50	037	120	30.83	C		
01*	MA13005	Engineering Mathematics - I	100	50	054	120	45.00	B		
01*	ME13001	Manufacturing Technology - I	100	50	065	120	54.17	B		
01*	PE13001	Engineering Physics	100	50	056	120	46.67	B		
01*	CE13003	Engineering Physics Laboratory	100	50	074	120	61.67	B		
01*	PC13001	Physics and Chemistry Laboratory	100	50	062	120	51.67	B		
01*	EE13013	Electrical Drive and Controls	100	50	070	120	58.33	B		
01*	MA13001	Mathematics - III	100	50	051	120	42.50	C		
01*	ME13001	Engineering Thermodynamics	100	50	057	120	47.50	C		
01*	ME13002	Fluid Mechanics and Machinery - II	100	50	060	120	50.00	C		
01*	ME13003	Manufacturing Technology - II	100	50	060	120	50.00	C		
01*	ME13004	Applied Engineering Mechanics	100	50	064	120	53.33	C		
01*	EE13014	Electrical Engineering Lab	100	50	092	120	76.67	A		
01*	ME13005	Fluid Mechanics and Machinery Lab II	100	50	084	120	70.00	A		
01*	CE13005	Manufacturing Technology Lab II	100	50	082	120	68.33	A		
01*	EC13004	Electronics and Microprocessors	100	50	060	120	50.00	C		
01*	MA13013	Probability and Statistics	100	50	051	120	42.50	C		
01*	ME13013	Thermal Engineering	100	50	064	120	53.33	C		
01*	ME13012	Kinematics of Machinery	100	50	062	120	51.67	B		
01*	ME13011	Engineering Materials and Metallurgy	100	50	059	120	49.17	C		
01*	CE13021	Strength of Materials Lab	100	50	096	120	80.00	A		
01*	EC13003	Electronics and Microprocessors Lab	100	50	079	120	65.83	A		
01*	ME13004	Thermal Engineering Lab I	100	50	079	120	65.83	A		
01*	CE13001	Environmental Science and Engineering	100	50	066	120	55.00	C		
01*	ME13001	Dynamics of Machinery	100	50	053	120	44.17	C		
01*	ME13002	Design of Machine Elements	100	50	058	120	48.33	C		
01*	ME13003	Gas Dynamics and Jet Propulsion	100	50	073	120	60.83	A		
01*	ME13004	Applied Metrology and Measurements	100	50	077	120	64.17	A		
01*	ME13005	Applied Hydraulics and Pneumatics	100	50	093	120	77.50	A		
01*	ME13006	Dynamics Lab	100	50	093	120	77.50	A		
01*	ME13007	Metrology and Measurements Lab	100	50	093	120	77.50	A		
01*	ME13008	Computer Aided Machine Drawing Practice	100	50	071	120	59.17	C		
01*	ME13009	Heat and Mass Transfer	100	50	076	120	63.33	C		
01*	ME13010	Design of Transmission Systems	100	50	088	120	73.33	A		
01*	ME13011	Automobile Engineering	100	50	058	120	48.33	C		
01*	ME13012	Power Plant Engineering	100	50	058	120	48.33	C		
01*	ME13013	Principles of Management	100	50	071	120	59.17	C		
01*	ME13014	Thermostatical Machine Processes	100	50	071	120	59.17	C		
01*	CE13012	Communication Skills Laboratory	100	50	083	120	69.17	A		
01*	ME13015	Thermal Engineering Lab - II	100	50	074	120	61.67	B		

\* Annual Pattern is followed in the First Year of study and Semester Pattern is followed from Second Year onwards.  
 \*\*Grade of Student\*\*\*  
 Classification: **FIRST CLASS**  
 Total Marks (Sum total in 8th semester) : **3414 / 10000**  
 Percentage (rounded to nearest integer) : **34**





**ANNA UNIVERSITY, CHENNAI - 25**  
**M.E DEGREE EXAMINATIONS**  
**CONSOLIDATED STATEMENT OF GRADES**



Sl. No. : **CSG 14865**

A125034580815G

Folio No. AUTC111581

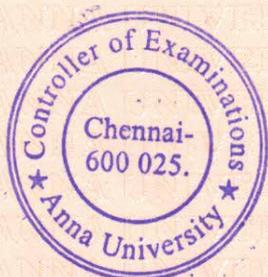
NAME OF THE CANDIDATE		ARUNKUMAR G		REGISTER NO.		40110414002 (1004083)	
DATE OF BIRTH		31-MAY-89		GENDER		MALE	
MONTH & YEAR OF LAST APPEARANCE		June 2012		COLLEGE OF STUDY		ADHIPARASAKTHI ENGINEERING COLLEGE	
REGULATIONS		2010		PROGRAMME & SPECIALIZATION		M.E. Thermal Engineering	

SEM. NO.	COURSE CODE	COURSE TITLE	CREDITS	LETTER GRADE	GRADE POINT	MONTH & YEAR OF PASSING
01	281106	Applied Mathematics for Thermal Engineers	4	D	6	JUN 2011
01	223101	Advanced Heat Transfer	4	C	7	JAN 2011
01	223102	Advanced Thermodynamics	4	B	8	JAN 2011
01	223103	Advanced Engineering Fluid Mechanics	3	B	8	JAN 2011
01	223104	Fuels and combustion	3	A	9	JAN 2011
01	223080	Refrigeration Systems Design	3	B	8	JAN 2011
01	223151	Thermal Engineering Lab	1	A	9	JAN 2011
02	223205	Cogeneration and Waste Heat Recovery Systems	3	B	8	JUN 2011
02	223206	Instrumentation for Thermal Systems	3	B	8	JUN 2011
02	223207	Environmental Engineering and Pollution Control	3	C	7	JUN 2011
02	223071	Renewable Energy Systems	3	B	8	JUN 2011
02	223072	Advanced Internal Combustion Engineering	3	B	8	JUN 2011
02	223086	Advanced Power Plant Engineering	3	C	7	JUN 2011
02	223291	Seminar I	1	S	10	JUN 2011
03	223074	Cryogenic Engineering	3	A	9	DEC 2011
03	223079	Industrial Refrigeration Systems	3	B	8	DEC 2011
03	223085	Energy conservation in Thermal Systems	3	B	8	DEC 2011
03	223292	Seminar II	1	S	10	DEC 2011
03	223398	Project work (Phase I)	6	S	10	DEC 2011
04	223498	Project Work (Phase II)	12	A	9	JUN 2012

\*\*\* End of Statement \*\*\*

**Cumulative Grade Point Average : 8.25**

**Classification : FIRST CLASS**



Medium of Instruction : **ENGLISH**

Chennai - 25.  
Date :19/10/2012



*(Signature)*

**CONTROLLER OF EXAMINATIONS**



Om Sakthi

# ADHIPARASAKTHI ENGINEERING COLLEGE

MELMARUVATHUR - 603 319, KANCHEEPURAM DIST. TAMILNADU, INDIA.

Approved by AICTE & Affiliated to Anna University Accredited by National Board of Accreditation (NBA)



## TRANSFER CERTIFICATE

TC. No. METE02	Register No. 4110414002	Admission No. 10METEG02
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- Name of the student as entered in S.S.L.C. Book : ARUNKUMAR G 
- Father's Name : Gopala Krishna Pillai
- Nationality, Religion & Caste : Indian Hindu Nair
- Date of Birth as entered in S.S.L.C. Book : 31-05-1989  
Thirty First-May-Nineteen Eighty Nine
- Date on which he / she was admitted into the College : 30-08-2010
- Date on which he / she left the College : 10/04/2012
- Class in which he / she was studying at the time of leaving the College : ME Thermal Engineering IV Sem
- Whether he / she has paid all fees or other dues to the Institution : Yes
- Whether the student was in receipt of any Scholarship (Nature of the Scholarship to be specified) : No
- Conduct and Character : Good
- Date on which application for transfer was made by the pupil or the Parent / Guardian : 3 DEC 2012
- Reason for applying for the Certificate : Course Completed
- Date of the Transfer Certificate : 3 DEC 2012

STATION : Melmaruvathur

DATE : 3 DEC 2012



*P. Jayashan*  
PRINCIPAL

ADHIPARASAKTHI ENGINEERING COLLEGE  
MELMARUVATHUR  
KANCHEEPURAM DISTRICT  
TAMILNADU



## TRAVANCORE ENGINEERING COLLEGE

Approved by AICTE / Affiliated to the University of Kerala  
(An ISO 9001:2008 Certified Institution)

A. Sainulabdeen Poonthottam  
Chairman  
0447801404

Roadvila, Cheriyaavelinalloor P.O., Oyoor, Kollam Dist., PIN-691516, Kerala, S. India  
Phone: 0474-3263179, 3263180, 3240888, 3240281, Fax: 0474-2407235  
website: tec-engg.com, e-mail: tecoyoor@gmail.com, principal.tec@gmail.com

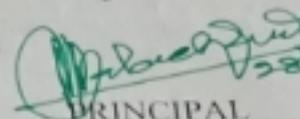
Ref. E/005/2015

Date: 28.09.2015

### EXPERIENCE CERTIFICATE

Certified that Sri. Arun Kumar G had worked as Asst. Professor in Mechanical Engineering department of this college with effect from 17.01.2013 till he resigned from the college on 29.05.2015.

During the period of duty his work and conduct were found good.

  
PRINCIPAL

To,

Sri. Arun Kumar G  
Kunnutharyil House  
Komalloor .P.O  
Charummoodu  
Allappuzha-690505



Copy to:-

HOD (ME), Personal File, SF, O/C



## ARCHANA COLLEGE OF ENGINEERING

(Affiliated to University of Kerala, Approved by AICTE, New Delhi.)  
Ulavukkadu, Palamel, Nooranadu P.O., Alappuzha Dist, Kerala 690504.  
Phone: 0479 2388081, 688, 060, 2387397, 385 Fax: 0479-2388165.  
Web: archanacollegeofengineering.org email: archanacollegeofengineering@gmail.com

04-01-2017

**Dr.R.A.JAIKUMAR** M.E,Ph.D  
Principal

### TO WHOM-SO-EVER IT MAY CONCERN

It is our pleasure to write on behalf of **Mr.ARUN KUMAR.G** has worked as Assistant Professor in the Department of Mechanical Engineering in our College from 01/06/2012 to 05/01/2013.

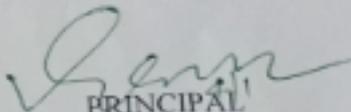
He is professionally sound, hard working and a devoted staff. He has the motivation to take initiative tasks and we are gratified that he has been helpful in the advancement of our organization.

Moreover, I would like to reflect over his conduct during his stay with us. During his service he has been found sincere, reliable, trustworthy, sociable, pleasant and open to challenges He has a genial temperament and can efficiently work in a team.

All of our staff members are pleased with him and feels comfortable in teaming and coordinating with him for the realization of organizational goals and objectives. He would be a good asset to any organization.

I wish him all the best in his future endeavor.



  
PRINCIPAL  
Principal

Archana College of Engineering  
Palamel, Nooranad P.O.,  
Alappuzha Dist., Kerala-690504

आयकर विभाग  
INCOME TAX DEPARTMENT



भारत सरकार  
GOVT. OF INDIA

ARUNKUMAR G  
GOPALAKRISHNAPILLAI  
31/05/1989



Permanent Account Number

**BIEPG7203A**

Signature



He is licensed to drive throughout India, vehicle of the following description

Class of Vehicle	With effect from	Issuing Authority
M/C with gr	18/03/2008	ALA, MV
LMV	18/03/2008	ALA, MVK



Date of First Issue : 18/03/2008  
Badge No. & Date :

*Aunk. n.*

Signature of Holder

*ALA, MVK*  
*18/03/08*

S. DEVANAND  
Asst. LA, MAVLIKKARA

A1828181  
NIC

INDIAN UNION  
KERALA STATE  
DRIVING LICENCE



No.: 31/1005/2008      Date: 18/03/2008

Name : ARUNKUMAR G  
SW/D of : GOPALAKRISHNA PILLAI  
Address : KUNNUTHARAYIL  
KOMALLOOR P O  
CHARUMMOOD  
MAVELIKARA

Date of Birth : 31/05/1989

Blood Group :

Category

Non-Transport

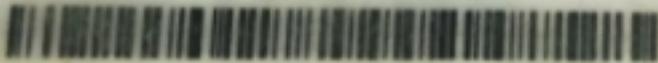
Transport

Valid from

18/03/2008

Valid To

17/03/2028



ANNEXURE-I

CERTIFICATE FROM THE ORGANISATION WHERE THE CANDIDATE IS EMPLOYED

Certified that Mr./Ms./Mrs. Arun Kumar G is employed as Assistant Professor (Designation) in the Mechanical department (Department/Division Name) of Mahaguru Institute of Technology (Institution/Industry Name).

We have no objection in forwarding his/her application for the Ph.D. Research Programme.

FOR FULL TIME:

The candidate will be sanctioned leave for the duration of the research programme and will be relieved from duty from \_\_\_\_\_ to \_\_\_\_\_ to undertake the full time research work in the University.

FOR PART TIME:

The candidate will be permitted to undertake part time study in the University/College and will be allowed to be present for discussions with the supervisor, attending course works, conduct of experiments and participations in seminars and related presentations. Further the required facilities at our organization will also be provided to the candidate for doing research.

Date: 28.12.2020

Signature of the Head of Organization with office seal

