ADMISSION 2 ALUMNI (A2A)
INDIAN COUNCIL FOR CULTURAL RELATIONS

Ref. No.YP4094159423535
21st April 2021 06:20:54

APPLICATION FORM FOR SCHOLARSHIP THROUGH ICCR

Application Made Through : Nepal Consulate General of India Birgunj

1. Full name (IN BLOCK LETTERS) : Mr. BIKI KUMAR SAH KALWAR

2. Gender : Male

3. Date of Birth : 16/1/1998

4. Country : Nepal

5. Country of Residence : Nepal

6. Passport No : 09707245

a) Date of Issue	b) Date of Expiry	c) Place of Issue
12-4-2016	11-4-2026	MOFA Kathmandu

7. Postal Address : Kalaiya, ward number 08, Bara - 44400

a) City	b) State	c) Country	d) Zipcode
Kalaiya	Narayani	Nepal	44400

8.Telephone/Mobile Number

Contact No : + +918978689314

Email Id : vickky.saah@gmail.com

Permanent Unique ID of your country (Excluding Passport No.) : 331055 50268

9. Details of Father/Mother/Guardian

Name	Relation	Occupation	Country
Janak Dhari Sha Kalwar	Father	Pharmacist	Nepal

Address : Kalaiya, ward number 08, Bara - 44400, Contact: +9779811257244, +9779824297842

City	State	Country	Zincode
Kalaiya	Narayani	Nepal	44400

10. Knowledge of English : Yes

Written: Proficient **Spoken: Proficient** **Reading: Proficient**

11. English Proficiency Test : No

12. Essey:

Q4. Describe a problem you've solved... Efficient & Affordable Irrigation. Nepal, a country known for its beauty and abundant water resources, falls under one of the least developed countries in the world and uses age-old traditional methods for agriculture. I have spent a part of my childhood residing at a village home where I got to learn about different aspects of agriculture, the most intriguing one being irrigation. Even with plenty of water bodies, there was no means to automate the process. Monsoon is the essence of Nepal's Rs 3.76 trillion economies, as nearly two-thirds of the farmlands are rain-fed. Due to expensive farming equipment or ignorance of modern methods, only 28% of the total agricultural land is irrigated. Even in such traditional irrigation, water loss is a major problem; mainly due to uncertainty of water requirement for crops. The soil moisture level changes with rainfall and farmers have a limited idea about the change in water requirement for the crops which varies crop-to-crop at each level of the soil. This first-hand experience of a real-world problem led me to think if a better solution can be devised; one that would be efficient and easily accessible to low-income farmers. I set out to solve this problem as part of the Engineering Projects In Community Service program. This project facilitated a smart irrigation system using IoT. It can be summarised as follows: • This project used a Wi-Fi module that connected the system to the internet. • The module controlled a motor and two solenoid valves for supplying water to the field on the data obtained from a water level indicator and two soil moisture sensors which used capacitance to measure dielectric permittivity of the surrounding medium, as a function of the water content. • A water pump connected to a nearby hand pump or water body was controlled via Arduino, the status of which was shown via LCD. • An A.C transformer was used for the power supply. The step-down transformer converted 230V to 12V followed by a bridge rectifier which rectified and converted from AC to DC. The cost of this project was well below three thousand rupees making it very affordable and accessible to all. It has many advantages in long-term use. Chances of crops dying due to over-irrigation become minimal. It increases annual yield and reduces the number of laborers. It helps to avoid wastage of water; improves the quality of crop growth, minimizes runoffs and losses; helps in determining the soil moisture levels accurately, thereby, finding the accurate irrigation requirements at any place. It minimizes the human error element and solves waterlogging due to over-irrigation, thus, protecting plants from degrading. These are the steps I took to identify the solution which helps in efficient and affordable irrigation. In near future, with adequate resources, I aspire to bring this setup to remote areas so that various communities can enjoy its benefits. This, in return, would improve their lifestyle and add to the national economy as well.

13. Course applied for	**Course Type**
Post Graduate	Engineering

14. Univesities/Institutes in India where you wish to seek admission:

Note : ICCR provides scholarships only for courses in central or state goverment universities. Candidates should be very specific and clear about the course of study which he/she wishes to pursue in India. Scholarships are not available to pursue more than one course. Candidates should ensure that the courses listed here are offered by all five Universities listed under S.No.14. The candidates must refer to the University/Institute website to know the eligibility criteria for the courses of their choice. Those seeking admission to agricultural courses must opt for ICAR in the University choice.

Please select Univesrity in order of preference.

Course you wish to study	**University**	**Course Stream**
M.Tech	IIT Kharagpur	MANUFACTURING SCIENCE AND ENGINEERING
M.Tech	Indian Institute of Science, Sir C.V. Raman Avenue, Bangalore	M. Tech (Research) Product Design & Engineering.
M.Tech	IIT Bombay	Manufacturing Engineering
M.Tech	IIT Gandhinagar	Advanced Manufacturing
M.Tech	Delhi Technological University	Production Engineering

Note: Once admission is confirmed, no change in either course or University/Institute will be permitted by the Council.
Allotment of colleges is done by the respective Universities.

15. Previous Educational Qualifications

Certificate/Degree	**Country**	**Name of School/University/Board**	**Year**	**Percentage(%)/Grade**
Grade X (equivalent to Grade X in India)	Nepal	Bharat Baba English Secondary Boarding School	2013	79.75%
Grade XII (equivalent to Grade XII in India)	Nepal	Pentagon International H S School	2015	78.2%
Undergraduate (equivalent to three years course after grade XII in India)	India	National Institute of Technology, Warangal	2020	64.9%

16. Give below the names of two persons who have agreed to testify from their personal knowledge to your character (they must not be related to you and should have direct knowledge of your academic pursuits).

Reference 1

Name	Occupation	Email	Telephone	Postal Address
Dr HARI KUMAR VORUGANTI	ASSOCIATE PROFESSOR	harikumar@nitw.ac.in	8985929103	Department of Mechanical Engineering, National Institute of Technology, Warangal - 506004, TS, INDIA

Reference 2

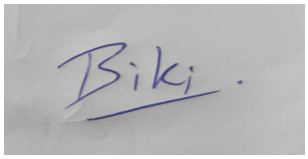
Name	Occupation	Email	Telephone	Postal Address
Dr G NAGA SRINIVASULU	ASSOCIATE PROFESSOR	gns@nitw.ac.in	9440509659	Department of Mechanical Engineering, National Institute of Technology, Warangal - 506004, TS, INDIA

17. Details of close relative(s) or friends, if any, in India.

Name	Relationship	Occupation	Telephone	Email	Postal Address
Niki Kumar Sah Kalwar	Brother	Software Engineer in Bangalore	8431172298		Santhe road, HP gas agency, Kadugodi - 560067

18. Have you travelled or lived in India in the past? Yes
19. Have you ever availed of ICCR Scholarship earlier? No
20. Are you currently a resident in India? No
21. Are you married to an indian national ? No
22. Do you have an International driving licence? No
23. Any Other Information:

Date: 21-04-2021
Place: Kalaiya, Bara, Nepal I hereby declare that the particulars given above are true to the best of my knowledge and belief and that I have understood the financial terms and conditions of the Schholarship Scheme. I hereby undertake to abide by them, and I also undertake to return to my country after completion of my studies in India.



Signature