



acem

# Newsletter 2021 Spring Issue

## Engineering, Education and the Pandemic: WHERE IS THE WORLD HEADED?



On June 22, 2020, Advanced College of Engineering and Management (acem) hosted a webinar in partnership with U.S. Embassy, Kathmandu Nepal, on "Post Covid Prospects in Engineering and Education. Engineering, Education and the Pandemic: Where is the World Headed?"

Dr. Henri P. Gavin, Professor in the Department of Civil and Environmental Duke University, USA and Dr. Bevlee Watford, Professor of Engineering Education in the College at Virginia Tech, USA, were the speakers in the webinar, which was moderated by Mr. Karl Rogers, Cultural Affairs Officer, U.S. Embassy, Kathmandu, Nepal. The webinar covered the trends in education, engineering, and discussions on the influence the current global crisis might have on both.

Mr. Ramesh Silwal, Chairman, acem, and President of HISSAN, talked about the current situation of COVID 19, and how the gap between haves and have-nots will increase due to COVID in his opening remarks. He also highlighted how COVID will enhance the proactiveness and problem-solving capacity of people along with the boom in engineering sectors in Nepal.

Dr. Watford spoke about how international students have plummeted due to COVID as embassies are closed, visas are not issued. Engineering applies to everything technical hence it is an appropriate field to follow, she explained and encouraged students to pursue engineering. She also shared how Virginia Tech has been supporting students and enabling them to be successful.

Likewise, Dr. Gavin said that engineering is a problem-solving field. He added that the best decisions can lead to bad outcomes but that can teach us problem-solving. He also talked about the value of inclusion and how talent has no race, no gender, and is not to a certain group of people. Excluding people is the loss of ideas he said, as far as bringing students from diverse parts of the world is concerned.

There were discussions on how COVID has shifted the nature of the network, the importance of studying engineering now, how solutions are being planned for future classes, emerging trends in engineering due to COVID, and why universities need to be more inclusive.

After a round of Q and A, Mr. Kapil Dev Regmi, Executive Director, acem, thanked the experts and the participants of the webinar along with the U.S. Embassy for the partnership. He said the hour-long webinar was quite informative and thought-provoking. He also added that the pandemic has taught us a new way of living and we have no better option but to adapt to the changes quickly.



### ADVANCED ENGINEERING SIGNS MoU WITH TURKISH AIRLINES

on February 3, 2021. Mr. Kapil Dev Regmi, the Executive Director signed on behalf of acem, and Mr. Abdullah Tuncer, General Manager of Turkish Airlines signed on behalf of Turkish Airlines. The MOU highlights the possible collaborations for mutual advancements in the future.

acem and Turkish Airlines co-operation have decided to facilitate effective utilization of the intellectual capabilities of the faculty of acem, providing significant inputs to them in developing suitable teaching/training systems, keeping in mind the needs of the industry. The promising graduates from the institution could play a key role in technological up-gradation, innovation,

and competitiveness of an industry. Both parties believe that close co-operation between the two would be of major benefit to the student community to enhance their skills and knowledge.

Mr. Regmi appreciated the keen interest of Turkish Airlines to work closely with the academia of Nepal. In the same way, Mr. Tuncer welcomed the efforts of acem to make it an internationally competitive organization.

Furthermore, industry and institution interaction gives an insight into the latest developments/requirements of the industries. Turkish Airlines encourages the faculty and students of acem to visit its group companies of the airlines in Turkey.



Advanced College of Engineering and Management (acem) has signed MoU with Turkish Airlines at college premises

## Webinar Special

# POST COVID PROSPECTS IN ENGINEERING

Advanced College of Engineering and Management (acem) hosted a webinar on “Post Covid Prospects in Engineering: Academic and Professional” on June 15, 2020. The webinar was graced by Prof. Dr. Sushil Bajracharya, Acting Dean, IOE, Pulchowk, Mr. Himal Karmacharya, President, Leapfrog, Ms. Abhigya Pokharel, Sr. Project Manager, Ncell, Axiata, and Mr. Ashish Garg, Head, Infrastructure Committee, CNI as panelists. The webinar was moderated by Ms. Sadichha Shrestha, former Miss Nepal.

Mr. Ramesh Silwal, Chairman, acem, and President of HISSAN, talked about the current situation of COVID 19, and its impact on students of Engineering in the opening remarks. He also highlighted the importance of ‘Doing more with less’ in this current situation and how this challenge can open doors to new opportunities.

Prof. Dr. Sushil Bajracharya shared his insights on the impact of COVID 19 on engineering students, strategic plan for recovery along with action plan, and way forward in days to come.

Mr. Himal Karmacharya spoke about how the technology sector is the least affected during this pandemic. He said we should never let a crisis go to waste and how we are in shortage of software engineers.

## POST COVID PROSPECTS IN ENGINEERING

Monday, June 15<sup>th</sup>, 2020

### FEATURED PANELISTS



Prof. Dr. Sushil Bajracharya  
Acting Dean, IOE, Pulchowk  
Mr. Ashish Garg  
Head, Infrastructure Committee, CNI  
Mr. Himal Karmacharya  
President, Leapfrog  
Ms. Abhigya Pokharel  
Sr. Project Manager, Ncell, Axiata

### MODERATOR



Ms. Sadichha Shrestha  
MBA, AIT (Miss Nepal 2010)

Mr. Ashish Garg shared about the impacts of COVID 19 on the engineering industry. He talked about the changes we should expect post-COVID 19 and also its brighter side.

Ms. Abhigya Pokharel, talked about the VUCA (Volatile, Uncertain, Complex, and Ambiguous) situation that we are experiencing for the past couple of months since the pandemic. She also spoke about changing consumer behavior and how it is affecting the business model.

After a round of Q and A, Kapil Dev Regmi, Executive Director, acem, shared that acem has taken the initiative to bring industries to classroom and take classroom to industries. He also said that the pandemic has opened Pandora's Box and we need to adapt to the changes quickly.



## Industry Partnership: Strengthening bonds

acem shares strong bond with various industries of Nepal from manufacturing to service sector mainly focusing to IT, Constructions, Hydropower and Robotics and Automation like ERMC (the biggest consulting group working internationally for World Bank, Asian Dev Bank and Nepalese Government Projects), World Link Communications (one of the largest Internet Service Provider of Nepal), e-Sewa (Strongest Digital Payment Service for Nepal), Leapfrog (Software company working for the USA), Stars Scholars' Network (International Academic Network based on USA), Rite Pros (Software development and technology consulting firm), Federation of Contractors Association of Nepal (Association of Nepalese Contractors), Solu Hydropower (Biggest Hydropower Company of Nepal in Private Initiative), Kashmir World Foundation (Innovative Technology Solution Provider, USA), SICHER (IT consulting, product engineering, and training services provider, headquartered in Silicon Valley, California, USA), Fuse Machine (AI based IT company focusing Education in USA and Nepal), Goethe Institute, (A German Language Institute, Germany), Sheshkant Foundation (Engineering Work-Center, German and NREN Funded Project), BKOL (A Class Construction Company of Nepal), Hama Group of Industries (Steel Manufacturer), Nepal Bank Limited (Oldest Financial Institution of Nepal), Robotics Association of Nepal (Drone and Robotics based Institution), Merojob.com (HR Company, Nepal), NREN (Nepal Research and Education Network, Nepal) to name a few. acem develops a network between the public and private sectors – locally, nationally, and internationally, bringing industries to the classroom and taking classes to industries.

# AN INTERVIEW with

## Roland Schäfer, Ambassador of Germany to Nepal



### 1. Learning a new language is always an added benefit. How can learning the German language add value to a student (or any person in general)?

I am always struck by the Nepali ease with languages. Nepalis are multilingual almost by birth. In most cases, there is a language for family and village, another one for administration and studies, regional languages are very close - and English is learned for jobs in Kathmandu and abroad. Especially young people have to translate a lot, helping out parents or grandparents.

Studies show that once your brain is used to it, you pick up new languages quite easily. At least that is my own experience with the four and a half languages I speak and love.

### 2. What can a student expect or prepare for to acquire higher education in Germany?

Let me follow on right from your first question: Why should a gifted and intelligent Nepali limit herself to only one international language? That would limit your choices for international studies and professional life in a rather silly way.

Good to know: If I make the extra effort to learn German, I get something very tangible in return. The German language gives me access to a first-class higher education or professional technical job training unique in the world - without a fee! Let the ones who only learn English ask their parents to come up with the hefty sums for years of study! Learning German is for those who are really clever. If you are bright and ready to make that extra effort, you can save your parents a lot of money. Paying for your travels, housing, and upkeep during studies is already a lot, but why add education fees?

"Studies show that once your brain is used to it, you pick up new languages quite easily."

Some people think that if you want a good education for yourself, you or your parents will have to pay for it. That is not how the Germans think and operate.

That is why the German state invests so heavily in its higher education, making it practically free of educational fees for German students. You can take advantage of it! It's a great opportunity! Not only engineers, but even scholars of Sanskrit go to Germany, because there, research is top!

And then there is the professional technical education in Germany. A German firm hires a young person and trains her for three years. This is deemed so precious that the apprentice gets a small but interesting salary during this time. Only some time of the week is spent at school, the rest is hands-on. Hands-on but linked to the latest technology, mind you! Another advantage: You are in the midst of the European Union! The labor market, the market for products is larger than Germany. You will be part of a much bigger enterprise than just one country.

I am glad to note that with the Goethe Zentrum Kathmandu, to name only the most prominent, there is an excellent institution to teach German. They cooperate with reputed Nepali academics who have studied in Germany, such as NEGAAS, the Nepali-German Academic Association, as coaches for life and study in Germany. Very useful links in Nepal, too!

### 3. How can Nepal be of any help to Germany?

Politically, we share so many values. Both Germany and Nepal are placed in a geopolitically challenging environment, and we both have learned the value of a multilateral order based on rules. In this, we are allies and trusted friends.

If Nepal finds its own way to complete the peace process of 2006, if it finds a way to do justice to the victims of civil strife and ensure access to justice for every woman, child, and Dalit in Nepal, it will automatically help Germany and the European Union in promoting that common world order.

And as I said earlier, German industry and job training is not only an offer to Nepalis. Those who will come to my country will be important ambassadors for our business and industry in Asia, I am sure.

### 4. How would you sum up your experiences of living in Nepal so far?

It's all about the people. First of all: Kindness. That is what I will surely remember and also miss most. The smile, the grace in greeting you, confident but frank. I have never had such a consistent feeling of welcome anywhere else in the world. I am most grateful for this.

My second take-away is again about the Nepali people. It's their industrious skills, coupled with trading skills. Newari and other popular art, agriculture in the hills and the plains, knowledge of plants – these are so many historic strengths which can translate into modern production – even in the internet industry!

In my heart, I would wish to see more recognition for these traditional skills and their modern value. I also would love to see the migrant laborers better recognized for their skills, their devotion to their family, and the international experience they bring.

### 5. What attracts Germans to Nepal?

I think it is Nepal's landscape that beckons the eyes, but Nepal's people that conquer the hearts. Especially, we Germans relate easily to clever makers of things, and we like their pride and frankness. If these two qualities are coupled with grace and elegance (not something Germans are so reputed for), then we are just floored. Many, really so many Germans have come to love Nepal, keep long-term private relations and surely, are much better ambassadors than myself!

## Poem

Rusha Bhattarai,  
BCT 'B';  
Batch-2076



# Women: A WARRIOR

We do not need to be told that we're any less than a man.  
We do not need to be told to not go outside when it's dark.  
Remember women,  
you weren't born to serve men.  
Do not let your existence go in vain.  
Remember women,  
you are a life-giver and a lifesaver.  
Women, the moment you become yourself and  
speak to yourself is the day you own yourself.  
The day you stand for yourself is the day you be yourself.

One day, I was walking in the midst of the night,  
I hear them mock.  
I had that short office uniform worn to stand strong.  
No, I wasn't asking for it.

Remember women,  
you weren't born to please men.  
Remember women,  
do not let your existence go in vain.

We don't get to choose what is done to us,  
we only get to choose how long it's done to us.  
My soul gets to choose what I want to do for myself.  
Well, only my soul does, my body belongs to my parents,  
my elders, my society, and every other who decides for me.  
Well, I'm not asking for it.

When I was 18, my mother told me to wear long.  
Besides that, I was told to stand strong.  
At the age of 19, my school skirt was sexualized,  
my character was visualized.  
Well, I wasn't asking for it.

Storms hit you, words hit you harder.  
Well, the only man I trust is my father.  
He told me that the tides had been calling my name.  
It's only happening for a little amount of fame.

I stand strong.  
Well, sometimes I may be wrong.  
But I'm not asking for it  
and I'll never be asking for it.

Remember women,  
You're always strong.  
You're always strong.

## काव्य-वाटिका

### जिन्दगीको रहस्य

-सरोज खनाल  
बिसई  
व्याच-२०७४



ऊ घाटाको व्यापारी उमेर बेचेर सपना किन्दै थियो त्यसै ।  
जसरी समय जिन्दगी बेचेर मृत्युको बाटो हिँडै थियो त्यसै ॥

भन्नेले त मृत्यु शाश्वत कुरा हो रमाउनुपर्छ भन्थे खै किन ?  
तर पनि मृत्यु उसको भाग्यमा मित्र बनेर चिन्दै थियो त्यसै ॥

मृत्युको पनि अनेक भेष हुँदोरहेछ यो जगतमा फेरि अचेल ।  
किन देवताका लागि आफ्नो कुल निमोठेर हिँडै थियो त्यसै ॥

कसलाई उछिनु, कसलाई के छोडेर आउने होला यो समयले ?  
जसरी जीवन छोडेर उमेरको आत्मा मृत्यु गदै थियो त्यसै ॥

होस् मृत्युको कला कसैले नसिकाओस् आज र भोलिलाई ।  
बल्ल ऊ सपनाको राजमार्गमा सवार गर्ने चिन्दै थियो त्यसै ॥

# WISHES

Bikash Kr. Karn  
BCE  
Batch-2073



I have some lines not just to impress.  
From the bottom of my heart, it's time for me to express.  
Not expectations, all are my wishes.  
I hope you too will not want these moments to miss.  
I don't want to be late because it's now or never.  
I wish to be the one you want to be with forever.

In the evening I'll ask you for a walk.  
And we'll have a lot of talks.  
I will ask you to put your hand in mine.  
I wish all this to happen if you're fine.  
I don't have a bike and I don't know to ride.  
I want to live every second when you walk by my side.

Lying down in the open sky, I'll count the flaws of the moon.  
Hope these days come very soon.  
Our first call lasted nine minutes and forty-one.  
I think of you all the time and it's not yet done.  
You're nine out of ten in romance.  
With you, I would love to have a dance.

My one hand in yours and the other on your waist.  
I dance terribly but I won't care about the rest.  
I want to be with you in your tough days and night.  
I wish for your phone call after you turn off your light.  
I will hold you and hold you very tight.  
And whisper, "We're together it will be alright".  
Looking into your eyes I'll ask you for a kiss.  
These are some precious moments I don't want to miss.  
If in this life you can't be mine, I'll wait for another.  
We'll have a great time and will fight the odds together.  
In the other life, I wish to be your guy.  
I'll never let you go or say "Good Bye"!!!

## दाग

-ऋतु पौडेल  
बिईएक्स  
व्याच-२०७४



तिम्री छोरीको चरित्रमा दाग लाग्यो अरे आमा  
भन्छन् ममाथि बँसको उन्माद जाग्यो अरे आमा ।  
सेतो कपडाखै हुन्छ भन्थ्यौ नि केटीको इज्जत  
त्यो कपडामा अब कालो टाटो बस्यो अरे आमा ॥

शरीरसँग खेल्नेलाई त कानुन बन्दैछ रे आमा  
फाँसीको सजाय दिनुपर्छ त्यस्तालाई भन्दै छन् रे आमा ।  
मेरो मनसँग दैनिक खेल्छन् तल्लाघेरे काकी अचेल  
भावनासँग खेल्नेलाई कुनै कानुन किन छैन ? बोल न आमा ।

जबर्जस्ती उसले गन्यो, इज्जत मेरो लुटियो रे आमा  
राजनीतिक आड पाएर दुई दिनमै ऊ त छुट्यो रे आमा ।  
धिक्कार छ आमा तिम्री छोरी यो समाजलाई आज  
जसले अपराधी छोडी पीडकलाई कलझुको टीका लगाउँछ आमा ??

# CLUBS DIVERSITY AT acem

Experiencing Engineering at acem is experiencing life in the wider level. acem is redefining the student learning experience. Students can be a part of these clubs based on their interests, where students can explore several dimensions of engineering and push their limits. Thus, we are launching the following clubs:

- i. ARC (Advanced Robotics Club)
- ii. Grow Entrepreneurs
- iii. Gamification Club
- iv. AI Club
- v. CESS (Civil Engineering Student Society)
- vi. AEES (Advanced Electrical Engineering Society)
- vii. PACE (Project Association for Computer & Electronics)
- viii. Living Lab
- ix. Cyber Defender's Club
- x. Engineers without Borders
- xi. Readers' Club
- xii. Mix and Mingle Club
- xiii. The Flourish Club
- xiv. Learning Language Club
- xv. Go green Club
- xvi. Club Creative
- xvii. The Leaders' Club
- xviii. Toastmasters Club
- xix. The Healers' Club
- xx. The Athletes Club



Sundar Neupane  
BEL,  
Batch- 2074

## AN ART OF OPERATION

### END OF LOAD-SHEDDING

Load-shedding extending up to 18 hours had been a persistent problem in Nepal for decades. When Kulman Ghising was appointed as Managing Director of the Nepal Electricity Authority (NEA), steps taken by him for load-shedding management were:

#### Management of Supply

He started his first step for load-shedding management by managing the available power within the country. He started to observe the powerhouses, not in terms of power but in terms of energy. None of the powerhouses at that time were running in their full capacity. He estimated the full capacity and made a plan to optimize the available resources. As IPPs (Independent Power Producers) contribute more than 50% of the total available power inside the country, he encouraged them to produce more and more electricity. Similarly, he imported the necessary power from India to fulfill the demand.

#### DEMAND SIDE MANAGEMENT

This demand management was the main key to the removal of load-shedding. He balanced the supply of electricity on the network with the electrical load by adjusting or controlling

the load rather than the power station output. For this management, he wanted the peak demand of the country so during the first year of his tenure he didn't publish the notice for the public regarding less consumption of the electricity on the night of Laxmi Puja. The peak demand of load at that time was 1600 M.W. The electricity available in the country was only 300 M.W. Management was tough but collective efforts from NEA, Ministry of Energy, and Nepal Government made it possible. For this management, he first cut the power of the industries lines at peak load. Secondly, he launched awareness campaigns regarding not to use more electricity at peak time. By doing this he reduced the peak load to 900 M.W. After all this load wasn't in control of supply. Further, he connected all the IPPs to the national grid. By optimizing all the NEA hydro powers and by synchronizing the IPPs hydro powers to the national grid he increased the supply to 570 M.W. Importing around 300 M.W. from India made it possible to remove load-shedding in Kathmandu city initially. After he declared Kathmandu as a load-shedding free city, he noticed a 100 M.W. decrease in the peak load. During

the load-shedding period, people used to store energy i.e. they used inverters, batteries. This had created an unbalanced load curve.

After successful removal of load-shedding in Kathmandu, step by step he removed the load-shedding of other big cities and finally made Nepal load-shedding free. Upper Trishuli 3A (60MW) and Kulekhani III (14 MW) helped him to make nation load-shedding free.

#### OPERATION AND MAINTENANCE

Replacement of old transformers, maintenance of distribution lines, substations, powerhouses, etc. work was conducted in day-to-day supervision by him. Supervision by higher authority personnel daily helped the work to be finished on time. This operation and maintenance part was the core part for the optimization of hydro powers and to reduce transmission and distribution losses.

#### Reduction of Technical and Non-Technical Losses

At the start of Ghising's tenure, the power leakage stood at 25.78% which has now dropped to 15.27%. The power utility has made a net profit of Rs. 5 billion.

# Unforgettable milestones of the 20th century

Baradan Rayamajhi  
BCE  
Batch- 2073



Considered to be the "Golden Era of Science and Technology", the 20th-century events changed the world in unprecedented ways. Not only was it known for the advancement and development of Science, but the 20th century was also dominated by the series of horrific events that heralded significant changes in world history to redefine an era. The World Wars and other wars and post-war conflict, identification of diseases, nuclear weapons, space exploration, nationalism and decolonization, developments of infrastructures, poverty reduction, population growth, and environment degrades for the sake of development are other that occurred in the century. These advancements have played a significant role in people's lives that has shaped the 21st century into what it is today. Some events of the 20th century are as below:

1. 1901: Marconi transmits radio signals across the Atlantic
2. 1903: Wilbur and Orville, commonly known as the Wright brothers fly the first powered airplane.
3. 1905: Albert Einstein presents "Special theory of Relativity" soon followed by "General theory of Relativity"
4. 1913: Henry Ford produces the model T car with his assembly line.
5. 1914: Beginning of World War I.
6. 1917: The Russian Communist Revolution ends with the overthrowing of the Czar in place of a new government system: Communism
7. 1918: End of World War I.
8. 1920: Outbreak of Spanish flu.
9. 1928: Alexander Fleming discovers the first antibiotic penicillin.
10. 1927-1928: First electronic television was invented.
11. 1929: The US stock market crashes overnight, leading to the great depression.
12. 1933: Adolf Hitler rises to power in Germany, the Nazi party takes control.
13. 1939: First jet airplane takes flight.
14. 1939: Beginning of World War II.
15. 1941: Attack on Pearl Harbor by Japanese troops.
16. 1944: D-Day invasion marks the beginning of the end of World War II in Europe.
17. 1945: the US drops an atom bomb on Hiroshima and Nagasaki. Japan surrenders to end World War II.
18. 1945: UN was officially established.
19. 1946: ENIAC accelerates digital computing.
20. 1948: Invention of transistors.
21. 1949: North Atlantic Treaty Organization (NATO) was established.
22. 1953: Detailed study on the structure of DNA.
23. 1955: World's first proven vaccine for polio invented.
24. 1957: Soviet launch Sputnik, first space satellite. The space race begins.
25. 1961: Yuri Gagarin becomes the first man to travel in space.
26. 1963: Martin Luther King Jr. speech in which he called for civil and economic rights and to end racism in the US.
27. 1969: American astronaut Neil Armstrong becomes the first human to walk on the moon.
28. 1969: The first internet was used.
29. 1977: American scientist develops a computer chip.
30. 1977: First mass-market personal computer launched.
31. 1981: Deadly AIDS virus identified.
32. 1986: Chernobyl disaster (Nuclear Disaster).
33. 1989: World Wide Web (www) revolutionizes the world.
34. 1990: Reunification of East and West Germany.
35. 1991: USSR dissolved into 15 countries.
36. 1993: Apartheid ends. South Africa to treat races equally.
37. 1997: Pathfinder lands on Mars and brings back astonishing photos.
38. 1997: Scientists develop a clone sheep, Dolly using the process of nuclear transfer.

From at least 4000 years, there is importance of Pi

Yet, here you are who even can't say HI!

Represented by greek letter 'π' and spelled as 'Pi'

Also referred as Archimedes constant OH! MY

Ancient civilization, including Egyptians made fair approximation of Pi

Yeah! Yet, here you are who can't even say her HI!!!!!!

3.14159265358979323846264338327950288419716939937510

This is up-to 50 decimal place value of Pi

You ignored values yeah? Maybe that is the reason why!

You can't even say her HI!

Sorry Bro! I can feel you,

She is much more complicated than Pi.

π



Sachin Koirala  
BEX  
Batch-2074

# Life after Pandemic

The golden sun rays along with the chirping of the birds enter through the cracks and gaps of the wooden window, as I try to wake up from the deep slumber after a pretty hectic day, a usual scenario. Children are rushing towards the sound of their school vans. All the vendors and street shop owners are getting ready for yet another day. The government officials and professionals are thinking about new plans and policies to implement and the people are going about their lives amidst the hustle and bustle of the city. Some are just waking up to survive the day while others are making plans for the day not wary of what is about to happen next. Everyone is running, rushing, and speeding as usual.

"Oh, what a good day to start with!" I tell myself as I get electrified by a sudden jolt of hot tea. I pause for a moment and then I take a look at the surrounding cautiously. I don't hear the laughter of children and the sound of their school vans, no hustle, and bustle of people. The only thing audible is silence. Well, everything has become a sweet fairy-tale now. The definition of reality has changed in such a way that I hardly can distinguish real from unreal. One thing is sure, the physical distancing has allowed us to spend ample time with family and connect with other people virtually in the meantime, which poses a question: who are we much closer to? The pandemic has largely changed the way we look at our lives. If the pandemic persists, millions of service jobs will vanish which will hugely affect the labor market. We hardly know how long the country will be able to handle this unyielding attitude of the virus, fingers crossed.

Replica Rasaili  
BCT,  
Batch-2074



I, for one, am very much optimistic about it. On the safer side, social distancing has allowed people to focus on creative and innovative approaches leading to the digitization of everything ranging from education, health systems to the economy defining reality in a whole different way. The pandemic is also encouraging the technological shift in many ways like the focus on the cashless economy, the shift to remote work, etc. The technologies will make our lives convenient but boring since we will miss the rush of the cities no matter how mundane they appeared to be. The post-COVID-19 world is very much uncertain but productive and innovative, most likely. Virtual communication will replace the conventional form of communication as we all are seeing the changes from now itself. People are taking online classes from their homes via Zoom, Google meet, etc. Although the majority of the students in Nepal are deprived of this privilege, let's hope it will be the new education system where everyone is equally eligible. This pandemic has taught us that materialistic life is just an escape from ourselves.

Life after a pandemic is going to be difficult for us to get accustomed to the change during the initial phase but it's certainly not impossible to cope with. Everything is going to settle down slowly and steadily. Even the deadliest diseases and calamities have not weakened humanity to date, it is just a phase. I hope this pandemic changes us for the better. The best is yet to come.

**Member of  STAR SCHOLARS NETWORK**



The Society of Transnational Academic Researchers (STAR Scholars Network) is an international forum of scholars that advances global social mobility by using research and advocacy. acem is proud to be a member of STAR Scholars Network.

Its mission is to carry out scholarly research and publication related to international education, exchange programs, academic mobility, and employability. STAR Scholars Network envisions a humane world to fulfill their mission by creating dialogue forums of exchange through activities such as conferences and consultation.

Under the leadership of current president Dr. Uttam Gaulee, STAR Scholars network is contributing to the quality enhancement initiatives in universities in the developing world including South Asia. Dr. Gaulee shared, "I am glad acem has become an institutional member of STARS Scholars Network. This will definitely add a lot of value to acem college and I look forward to working with acem in different avenues in coming days."



# अविस्मरणीय साइकल यात्रा

-अनमोल श्रेष्ठ  
बिईएल  
ब्याच-२०७४



‘शान्ति र संविधान स्थापना, साइकल यात्रा’द्वारा युवाजागण, तराईको भौगोलिक अध्ययनजस्ता मूल उद्देश्यका साथ बुनेको देशदर्शन अभियानको सपना साकार पार्न मैले साइकल यात्रा गर्ने योजना बनाएँ। सोहीअनुसार नेपालको तराईको भूभागलाई प्रत्यक्ष स्पर्श गर्दै मेरो प्रिय साइकलसँगै म १०२४ किलोमिटर दूरी पार गर्न सक्रिय रहें। मेची-महाकाली साइकलयात्राका लागि मार्ग-तालिका तयार पारी त्यसैअनुसार २०७२ साल वैशाख ५ गते काँकडिभट्टाको मेची पुलबाट मेरो यात्राको नवीनतम सुरुवात भयो। त्यस दिन मेरी नगरका नागरिक समाज, विभिन्न सङ्घसंस्था, पत्रकार, सुरक्षानिकाय सबैको उपस्थितिमा नेवारी परम्पराअनुसार विधिवत् रूपमा करिब बिहान ९ बजे मैले खुसी, उत्साह, चुनौती र अठोटको यात्रा सुरु गरें। दोस्रो दिन इटहरी हुँदै पश्चिमी गन्तव्यतिर लाग्नुपर्ने थियो। यात्रामा अवरोध गर्ने बेमौसमी भरीलाई विफल पार्दै म अघि बढँ। मातातीर्थ आँसीका शुभअवसरमा आमाका निम्ति मायाको चिनो बाटैमा किनेर इटहरीमा आमाको आशीर्वाद थापी सोही दिन म आफ्नो गन्तव्यतर्फ लागेँ।

तेस्रो दिनको यात्राका ऋममा भिन्न उद्देश्य लिएर यात्रामा निस्केका भक्त खवाससँगको मीठो अनुभव सायासाट अनि कञ्चनपुरमा त्यहाँका सङ्घसंस्था र जनसमुदायले फूलमाला र अबिरका साथ दिएको स्वागत-सम्मानले मलाई देश र समुदायप्रति थप जिम्मेवार बन्ने प्रेरणा मिल्यो। मनभित्रको कल्पनालाई विपनामा परिणत गर्दै सिराहाको लाहान महोत्सवसमा प्रमुख जिल्ला अधिकारीद्वारा प्रशंसा-पत्रसहित सम्मानित हुने अवसर जुन्यो। राजमार्गका महत्त्वपूर्ण स्थान, विभिन्न समुदायका कला-संस्कृतिलाई आँखीभ्यालमा सजाउँदा-सजाउँदै कति वेला यात्राको आधा दूरी पार गरी नवलपरासी आइसकेछु, पतै पाइँन्। यात्राका ऋममा साना केटाकेटीहरूले ‘कुहिरे’ तथा ‘टुरिस्ट’ भनेर सम्बोधन गर्दाको मेरो हाँसो अनि म नेपाली बोल्दा

आश्चर्यले ढाकिने उनीहरूको मुहार ! साँच्चै ती पलहरू निकै अविस्मरणीय नै रह्यो। दुम्कीवासको सात किलोमिटर ठाडो उकालो अनि बुटवल पुग्न सात किलोमिटरअगावै सानो सहर प्रवेश गर्नासाथ मानिसको होहल्ला र बाकलो समूहलाई सडक छेउछाउमा देख्दा कतै कुनै दुर्घटना भयो कि भन्ने शङ्का मनमा पन्यो। तर पनि भूकम्प गएको थाहा भयो र महसुस पनि भयो। तर, मेरी-काली साइकलयात्रा पूरा गर्ने मेरो दृढ अठोट र सपनालाई महाभूकम्पले भत्काउन सकेन।

यात्राका ऋममा २०६६ सालमा मेरी-काली उल्टै साइकलयात्रा गरेका साइकल यात्रीसँग बाटैमा जम्काभेट भएर उनीसँग अनुभव सायासाट गरियो। साइकलयात्राको मर्म बुझेर उनले मलाई बाटाखर्च पनि दिए। यसरी महाकाली गड्डाचौकीको अन्तिम गन्तव्यमा वास बस्न पुगेँ। त्यहाँ अन्तिम यात्राको सम्मानसहित भोलिपल्ट महाकालीपारिका चाँदनी-दोधारा जोड्ने नेपालको सबैभन्दा लामो १.३ किलोमिटरको भोलुङ्गे पुल पार गरी दुईओटा गाउँ अवलोकन गरें। त्यसपछि एकदिनको बसयात्राबाट गृहनगर इटहरी फकँदा विभिन्न सङ्घसंस्था, पत्रकार, बुद्धिजीवी र नागरिकबाट स्वागत तथा सम्मान ग्रहण गर्ने अवसर पाइयो। ‘जीवन घाम्छायाको यात्रा हो।’ भनेखाँ ती पन्थ दिने यात्राका दिनहरूमा मैले दुःखसुख, गाहोसाहो सबै भोने सौभाग्य पाएँ। त्यस्ता समस्याहरूलाई दृढ अठोटका साथ पार लगाउन सकिन्छ भन्ने कुरा बुझेँ। इच्छासँगसँगै उपायको पनि खोजी हुँदौरेहेछ भन्ने महसुस भयो। मेरी-काली पार गर्दा पूर्वीतराईभन्दा पश्चिमी तराईको समुदाय विकास र शिक्षाबाट अलि पिछिएको पाएँ। मेरो साइकल यात्राबाट मजस्ता युवाहरूको सोच परिवर्तन गरी दिगो विकासका लागि युवाजागरण अपरिहार्य रहेछ भन्ने थाहा भयो। जयनेपाल !

## विपति नै अनुभवको मुहान रहेछ ।

-आस्था दाहाल  
बिसिई  
ब्याच-२०७४



अनुभव एउटा यस्तो शक्तिशाली शब्द हो जसलाई मानिसले जुन प्रकारले भोग्न चाहन्छ त्यही प्रकारले भोग्न सकछ। हाल कोरोना भाइरसले विश्वभरिका मानवजातिमा त्यस्तै अनुभव मिसिएको त्रास फैलाएको छ। म पनि एउटा साधारण परिवारमा हुर्किएकी एक आम नेपाली हुँ। बैड्क्रमा कार्यरत मेरा दाइलाई कोरोना सङ्घरूपण देखिएलगातै उहाँलाई आइसोलेसनमा बस्न होटल पठायाँ हामीले। बुबा निजामती कर्मचारी भएकाले हामी सरकारी क्वार्टरमा बस्थ्याँ। उहाँ राजस्व कार्यालयमा कार्यरत हुनुहुन्थ्यो जहाँ दिनमा दुई सयभन्दा बढी मानिसको आवतजावत थियो। ‘अरुलाई कोरोना लाग्यो रे अहो !’ भनेर डराउँदा-डराउँदै आपनै घरभित्र कोरोना आइपुग्दा भस्कियाँ हामी। सरकारले कोरोना सङ्घरूपण देखिएलगातै उहाँलाई आपनै घरमा बस्न आदेश जारी गरेको भए पनि हामी आफ्नो घर छाडेर जान बाध्य भयाँ। म, आमा र बुबा फेरि अर्को होटलमा गएर बस्याँ। हतारमा निर्णय भएका कारण केही जोर कपडा, एउटा कापी र पेन लिएर हामी निस्कियाँ। पाँच दिनपछि स्वाब दिँदा म र मेरी आमालाई पनि सङ्घरूपण पुष्टि भयो। त्यही पनि मेरा बुबालाई घर जान दिइएन। पाँच दिनपछि फेरि उहाँले स्वाब दिँदा सङ्घरूपण नदेखिएपछि उहाँ घर जानुभयो। हामी सामान्य परिवारका थियाँ। उता दाइ होटलमा। यता बुबा होटलमा। अनि त्यही समय ब्रेन ट्युमर

भई बिलुभएकी हजुरआमाको उपचार र काजकिरियाका कारण पैसाको अभाव थियो। धेरैतिर बुझेपछि नागार्जुन आइसोलेसनका बारेमा थाहा पाएँ। जहाँ खाने र बस्ने सुविधा थियो। हाम्रा लागि त्यो ठाउँ एउटा राहतको विषय बन्यो। चारजनाको हाम्रो परिवार तीनितर छरियो। सामान चाहिँदा लगिदिने मान्छे केही बाँकी रहेन घरमा। एउटा कापी र पेन लिएर हिँडेकी म सङ्घरूपण पुष्टि हुनुभन्दा पन्थ दिन अधिबाटै बिरामी भएँ। खोकी, टाउको दुःखाइ र ज्वराको कारण पहिले नै कति कक्षाहरू छुटिरहेका थिए मेरा। कक्षामा बस्ने पनि मोबाइल सोभो गरी हेन नसकेर ढलिकएर अँग्खा चिम्लिँदै शिक्षक बोलेको सुन्थै। आइसोलेसनमा गएपछि मसँग सामग्री पनि केही थिएन। अनि शारीरिक कमजोरीले कक्षामा बस्ने आँट नै आएन। मेरा केही मित्रले कलेजलाई खबर गरिदिए। मजस्ता मेरै कक्षाका तीनजना थियाँ। लगातार विद्यार्थी कक्षामा नबस्दा पनि एकचोटि कलेजबाट फोन आएन। उल्टै शिक्षकहरूबाट परीक्षा लिइँदै थियो। विद्यार्थी कुन अवस्थामा छ ? थाहा छैन। तर पनि परीक्षा महत्त्वपूर्ण छ। यति बुझेँ मैले पनि-शैक्षिक संस्थाको जिम्मेवारी पढाउनु र परीक्षा लिनुमात्रै हो। चाहे उसको विद्यार्थी उठन नसक्ने अवस्थामा नै किन नहोस् ? म मेरा शिक्षकहरूप्रति

आभारी पनि छु। उहाँहरू कक्षाको भिडियो गुगल कक्षामा राखिदिनुहुन्थ्यो जसका कारण मैले पछि घर आएर पढ्ने मौका पाएँ। मेरी आमा सुगर, प्रेसर, थाइराइड, नसा सबै रोग भएकी मान्छे ! तर पनि आत्मबल सायद बलियो रहेछ र कोरोनालाई जिल्लुभयो। फलफूल, प्रोटीन, भिटामिन, बेसारपानी, योगा यी सबैका कारण त्यति गाहो भएन हामीलाई। एकातिर रोग अनि अर्कातिर गाउँले जीवन भोग्याँ। पानी ओसार्ने, एकचोटि थापेर दिनभरि पुच्याउने, दूरी कायम गरी छतमा भेला भएर गफ गर्ने आदि गर्दागर्दै बाहु दिन कटेको पतै भएन। त्यसपछि फेरि स्वाब दिएर नेपेटिथ आएपछि आमा र म घर आयाँ। उता दाइ पनि आउनुभयो। दसेँका दिन परिवार बल्ल भेट गर्न पायाँ। कोरोनाबाट बच्ने सबैभन्दा ठूलो उपाय आत्मविश्वास र शरीरको राम्रो ख्याल नै रहेछ। अनि पैसाले पनि कसैको ज्यान बचाउन ठूलै भूमिका खेल्दौरेहेछ। सम्पन्नहरूले त सहजै उपचार गराउन सक्लान्। तर, त्यही ठाउँमा एउटा गरिब के गर्ने ? खान-लाउनसमेत दिनरात मिहिनेत गर्न पर्नेले अस्पतालको शुल्क कसरी तिर्ने ? के गरिबको ज्यानचाहिँ मूल्यहीन नै हो त ? यस्ता अनेकौँ प्रश्न छन् मनमा। तर, पनि म एक आम नेपाली। मेरो प्रश्नको जवाफ कसले दिने ?

# acem signs MoU with fuse | machines



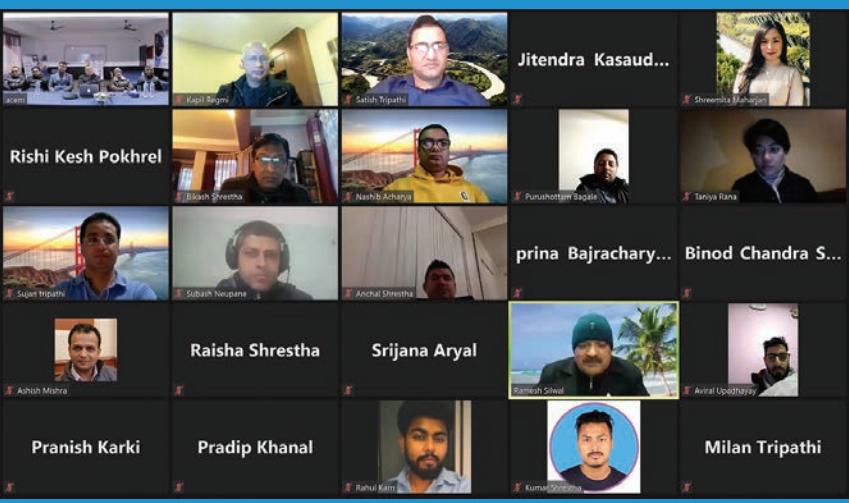
Advanced College of Engineering and Management (acem) signed MoU with Fusemachines Nepal at college premises on February 10, 2020. Mr. Kapil Dev Regmi, Executive Director signed on behalf of acem, and Mr. Mukunda Joshi, Managing Director - South Asia on behalf of Fusemachines Nepal. The MOU highlights that collaboration and co-operation will promote more effective use of resources and provide enhanced opportunities.

acem and Fusemachines Nepal have decided to focus their efforts on cooperation within the area of skill development through internship, on-site training and placement type of activities.

Mr. Regmi appreciated the keen interest of Fusemachines Nepal to work closely with the academia of Nepal and support the skill development of students. Er. Lochan Lal Amatya, Principal, welcomed the Fusemachines Nepal team in the program.

Mr. Dileep Agrawal, Director of acem and World Link, congratulated both the institutions and opined, "I believe that students of acem will be benefited with the AI integrated curriculum of Fusemachines."

## acem Alumni Meet



acem organized an Alumni Meet on February 6, which gave former acem students to come together after years. The meet saw enthusiastic alumni members from all around the world like Australia, Canada, Germany, Thailand, and Nepal.

Er. Lochan Lal Amatya, Principal of acem welcomed the alumni members with a warm speech and expressed his delight in having former acem students on one platform again. He also introduced all the Board of Directors and the members of the Research and Innovation Unit.

A brief virtual presentation was given to update alumni members on the progress and upcoming projects of acem.

Mr. Ramesh Kumar Silwal, Chairman of acem highlighted how both acem and the former students could work together in different ways to benefit both parties. There was wonderful interaction among everyone present. Mr. Kapil Dev Regmi, Executive Director of acem said, "acem is adding different dimension and growing in leaps and bounds. I believe that alumni and acem can both benefit from this networking."

## HOLOCAUST REMEMBRANCE EVENT



Ramesh Kumar Silwal, Chairman, delivering speech on Holocaust Commemorating Day at UN Office on 27th January. The event was also graced by other speakers like Ms. Sara Beysolow Nyanti, UN Resident Coordinator, His Excellency Hanan Goder-Goldberger, Ambassador of the State of Israel to Nepal, Her Excellency Nona Deprez, Ambassador of The Delegation of the European Union to Nepal, His Excellency Roland Schäfer Ambassador of The Federal Republic of Germany to Nepal and other distinguished guests.

# PARANOIA

Shital Nyaupane  
BEX  
Batch-2074



The past few months have been catastrophic for him. Every day waking up early, waking up with a nightmare, waking up at 2 am, blabbing at night and the list goes on. Every single day he wakes up, the first thing that runs through his head is her name. He is 30 years old and broke, spent his last penny on a couple of cigarettes and some bottles of vodka.

The morning of November 22 was unusual. As usual, he woke up agitated. It was 3 in the morning. He drew his cigarettes from the nightstand and lit them. This time he had a different kind of dream, in fact, it was a partial nightmare. In his dream, he woke up near a river. All of sudden, he heard faint sobbing, curiously moving closer to the voice, he saw a silhouette of a woman. On moving closer, he saw her beautiful face. She looked like a temptress. He moved closer to kiss her. Being traumatized by the past, he couldn't feel the new paradise that he had created in his head. Suddenly it started to rain heavily with thunder. She disappeared in the rain..... Now, he is on a boat crossing the river, again she is there on the same boat. He remembered the boat, the same boat where he kissed her so tenderly under the full moon. He tried to move closer but something from behind grasped him strongly and whispered, "You killed me".

"Bummer!" he exclaimed with dismay. It's almost 6 am by now. He grabbed a piece of bread and rushed out of the door.

He smelled the morning air -sitting on the park bench. However, small a moment may seem; it always has an impact around us. That small event made him realize his existence in this universe, blowing wherever fate was driving him. His eyes were full of tears, he looked up to the sky and started yelling "damn you, damn you.....". On the way back home, he kicked a trash can and bumped against a pole. He arrived at his condo and opened a bottle of vodka.

When he woke up, he found himself lying on the corridor floor, butts of cigarettes scattered all over the floor. There was vomit all over at the end of the corridor. He then realized; he was holding her photo in his left hand. And now for the very first time, in a very long time, he tried to figure it out, he was responsible for her death. Maybe if he had accepted the way she was, accepted the baby he found playing in front of his porch, maybe.....

When something bad or mysterious is about to happen- you feel that in your bones. Like you can feel the fever coming when you swallow your food or drink water. Likewise, he felt the same heat- he was going to see his wife after six years. The last time he saw her face was at the station where she was blowing him a goodbye kiss. At first, he didn't want to accept what had happened while he was away fighting a war for his country. How could he accept a child who isn't his blood? It's impossible to be all sugar one day and spit venom the next day.

She never meant to have that child. But how could a woman live with the fact that she killed a child before it was born? So, she raised the child while her neighbors and her family hated her. The father of the child disappeared after a few meetings, she thought of killing herself but she lacked the courage to do the evil deed.

He wanted to say a lot, he wanted to hate her for what she did to him, and he wanted to hate the child so much that he dreamed of chopping his head off. Even the tenderness in her love couldn't stop him from getting drunk every night and arguing with her. One night as things escalated and went out of control, he hit her and the child. The next morning all he knew was that both of them were gone. Then, again guilt started taking control of him, part of him told him to search for her, accept the child, and raise the child as his own. As soon as he reached and was just about to take a sip, some officers in the blue dress came up to him and whispered into his ear. He felt the entire universe weighing on him. He lost all his senses. His wife and the child were found dead inside the car, near the pines. Her head was lying on the driving wheel but her body was never found. The child was not in the car so they assumed him dead.

Meeting her for the first time and marrying her was both the most unnerving and intriguing event he had experienced in all his years. The complexities of inner thoughts are more complex than they sound. He was not more virtuous than she; she, too, wanted to do what was right, why should he be chosen to live and she dies?

He got up slowly from the floor. His visions were still blurry. He went to the roof to get fresh air. Looking up to the starry sky, he said to himself "We all live in each other's paranoia".

## ROBOTICS IN NEPAL

Subin Kumar Shrestha  
BEX  
Batch-2074



The term "robot" was derived from the Slavic word "robota" which meant forced labor. Therefore, the word "robotics" then came further as a combination of the word robot and electronics.

In the 21st century, we have completely changed our way of living compared to the 20th century. Science and Technology have entirely revolutionized the world. In this great race of Technology and Advancement, Nepal is also one of the countries that don't want to stay back.

Nepal is a developing country. There are only a handful number of recognized works done in Nepal in the field of Robotics. This exposes the scope of the robotics of Nepal. Taking these into consideration, many robotic geeks and technical enthusiasts youths of the country are nowadays involved in the upliftment of Robotics in the nation.

The craze for robotics is slowly starting to build up among the Nepalese audience. The waiter robot was also a

major achievement. It hasn't been much time since the robot was built however the robot has managed to take a very good market here in Nepal.

Recently, a robot 'Qarisma' was built by several engineering students from Advanced Robotics Club under the supervision and guidance of the Advanced College of Engineering and Management. Qarisma is a robot that distributes a pamphlet. The primary purpose of this robot is to help in the implementation of robotics in marketing and publicity.

The robot uses image processing for face detection and a microcontroller for controlling all the functions of the robot. The upper torso of the robot is shaped into a human-like structure, giving it more of a humanoid look. The head consists of a pi camera that enables the robot to detect the face of any visitor nearby. Also, the head is provided with few LEDs that change its color time and again, making it look like the eyes of the robot. The chest region has an ultrasonic

sensor which in combination with face detection, pops out a pamphlet from the storage and drops it to the tray carried by the robot's hand. Then with the help of a paper sensor and limit switch, the robot draws its hand forward along with the tray containing the pamphlet. When any visitor takes the pamphlet from the tray, the robot pulls its hands back and then greets the visitor with a Thank You message. It also gives a pleasant gesture by moving its head in the end. It gives more of a humane behavior to the robot. Once fixed at any place, the robot works autonomously detecting any visitors and giving them the pamphlet with proper greetings and message.

In the present run, Nepal is slowly paving its way towards the field of Robotics. For the youths, it has been more of a passion rather than a hobby. A step like Qarisma and other innovative robots can indeed be a great inspiration for the youth to help uplift the status of robotics here in Nepal for a better tomorrow.

# MEDICAL AND SPECIAL SAFE WASTE MANAGEMENT IN NEPAL DURING COVID-19 RESPONSE



Er. Bikash B. Shrestha, PEng  
Associate Professor, Advisor and HoD  
Department of Electrical Engineering, ACEM

There are increased volumes of discarded materials from health protection activities, medical diagnosis, treatment, and scientific research. Safe and efficient disposal of this medical waste is a critical component of a comprehensive response effort.

The major concern is to share the current policies and national protocols on water, sanitation, and hygiene (WASH) and medical waste management in healthcare facilities as well as the safe use of incinerators and autoclaves in the context of COVID-19. WHO recommends the use of WASH FIT to assess WASH in healthcare facilities, make necessary improvements, and sustain quality WASH infrastructure services during this pandemic and the availability and use of waste treatment amenities in healthcare facilities.

While some hospitals have an incinerator to dispose of the medical waste generated, they do not have the necessary license to operate it. Hospitals that do not have their incinerators contact private healthcare waste management providers, 92% of which are located in landfill sites like Okharpauwa. The long-distance from the hospital to the final medical waste disposal site can increase the risk of illegal dumping, cross-contamination, and disease transmission due to a heightened chance of accidents or human errors during the extended transport time.

Management of Infectious Medical Waste in Hospitals, Medical Centers, and Emergency

## Medical Facilities:

### TRANSPORT

Additional vehicles should have a non-absorbent, sealed load area capable of being locked, disinfected, and separate from the driver's cabin. Their vehicle identification numbers (VIN) or chassis numbers should be recorded to allow future control.

### DISPOSAL

Infectious medical waste is typically segregated by hospital staff at the time of packing. The double bagged items are sprayed with 0.5% chlorine solution before onsite temporary storage. The method of disposal then varies between hospitals:

- Sterilization through steam (autoclave) or irradiation before disposal in a licensed landfill.
- Disposal through incineration on-site or at a remote specialist facility. If these resources begin to be overwhelmed, alternatives are available for temporary capacity increase.

- Mobile incineration or autoclave units may be used to support the existing infectious medical waste infrastructure.

- Secure facilities can be used as temporary storage in anticipation of additional emergency resources becoming available in the medium term.

## Household Infectious Medical Waste Management

- Households containing a person under investigation (PUI) or a person under monitoring (PUM) should be encouraged to segregate all medical waste (face masks, wipes, tissues).
- Where possible the monitoring agency responsible for PUI/PUM management should provide yellow medical bags and collection services for PUI/PUM related waste.
- All PUI/PUM related waste should be double-bagged, "swan neck" tied and the outside sprayed with a 0.5% chlorine disinfectant solution (1% household bleach solution).
- If dedicated medical waste collection is available, then the double-bagged waste should be disposed of immediately.
- If no dedicated medical waste collection is available, then the double-bagged waste should be stored for 72 hours before being disposed with the general household waste.

## Solution

To address the concern and further strengthen the national COVID-19 response, the Ministry of Health (MoH) released should allow hospitals to operate unlicensed incinerators during the finalization stage of the permit attainment process.

The MoH also should plan to construct a provincial-based healthcare waste management facility—placing incinerators in seven provincial headquarters. Safe transport requires vehicles that can be sterilized, trained drivers and waste collectors, dedicated routes, and vehicle and waste tracking systems. Training must be conducted for crews who will be exposed to household infectious medical waste.

Ensuring reliable and safe waste management is a must for all provinces to protect public health and contain the spread of the virus in Nepal.

## acem's new premises



"Starting from the new intake of 2077, acem is moving to its new location in Balkhu, adjacent to the Ring Road, where the students can reap the advantage of being in the centrally located area of the capital, while at the same time enjoying the serenity of a college known for its natural beauty and well-made infrastructure which has been developed with most modern equipment. We aim to make our students feel at home and comfortable in college premises."

Ramesh Kumar Silwal  
Chairman

# RESEARCH AND INNOVATION UNIT AT acem

acem has formed the Research and Innovation Unit. The Research and Innovation Unit plays a vital role in the further development of academic activities (including academic and research works) within the college, linking real-life activities in research. acem encourages students to cultivate an interest in research and make it a part of students' life, beginning from small scale research work to moderate level, and to bigger projects to be accomplished in the future. Here are the members of the Research and Innovation Unit:



Dr. Prina Bajracharya obtained her Professional Doctorate in Engineering (PDEng) in User System Interaction from Technical University Eindhoven (TU/e), Eindhoven, Netherlands, and is a Designer/IT Consultant at The World Bank, Nepal. She completed her Master Degree program in Engineering from Asian Institute of Technology (AIT), Bangkok. She is the faculty at Kathmandu University.



Dr. Prativa Pandey is the Founder/CEO of Catalyst Technology and Herveda Botanicals and is a researcher and a science entrepreneur. She completed her MS/Ph.D. in Chemistry from Northwestern University and Management Certificate from the Kellogg School of Management, USA. She received the prestigious UNESCO-OWSD Early Career Fellowship

2019 and NAST-NABIL Science and Technology Award 2019 in recognition of her leadership and excellence in STEM.



Dr. Baburam Niraula obtained his Ph.D. in economics from Yokahama National University in Japan. He is currently working as a consultant at the World Bank. His research interests lie in quantitative development economics and policy applications.



Bidur Raj Joshi is an entrepreneur and business analysis, director of Peace Nepal DOT Com Pvt. Ltd, Impetus Incorporation Pvt. Ltd & Fix IT Pvt. Ltd. He has been working as a visiting faculty at Kathmandu University (KU), Departments of Arts and Design, since 2009. He completed his Master of Business Administration (2011), Ace Institute of Management. He specializes in Interaction Design, Graphic Design, Product Development and innovation, and Business Analysis.



Sojan Prajapati completed his master's degree from the Technical University of Munich (TUM) and his bachelor's degree from Kathmandu University (KU). He previously worked at Boston Consulting Group (BCG) as an analyst.



ADVANCED COLLEGE  
OF ENGINEERING & MANAGEMENT  
Affiliated to Tribhuvan University (T.U.)

## Editorial Team :

**Faculty Advisor:** Er. Bikash B. Shrestha  
**Editor:** Ms. Shreemita Maharjan

## Student Team:

Sushmita Phuyal

Reetu Poudel

Sundar Neupane

Ankit Khanal

Rajeev Dahal

Published by Advanced College of  
Engineering and Management,

✉ 01-5522852, 5538281,

✉ info@acem.edu.np,

🌐 www.acem.edu.np

acem students, Esha Adhikari and Isha Adhikari, had an opportunity to perform in Noam Chomsky Global Connections Awards 2020

## JOB MELA AT acem

Advanced College of Engineering and Management has decided to organize a job mela in the last week of Baishakh 2078 in the new premises of the college at Balkhu, in partnership with merojob. There will be more than 20 industries participating. Mr. Shailendra Raj Giri, Managing Director of merojob informed that merojob will prepare students for job interview with few sessions on resume writing, group discussions, and mock interviews. This job mela will help prepare students to enter the job market.