

# **SONEUK NEWSLETTER**

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### Editorial Board

Dr Birendra Shrestha Dr Bidur Ghimire Sanyukta Shrestha Umesh Parajuli

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### TALK PROGRAM: ICE PROFESSIONAL DEVELOPMENT REVIEW



The Society of Nepalese Engineers in UK (SONEUK) successfully organised a valuable talk program at The Mall, Monty's Tandoori, Ealing Broadway on 24th November 2018. The program was conducted by SONEUK executive member and event coordinator Ms Pooja Bhagat. Started with a warm welcome speech of the Chairman of SONEUK, the program was mainly focussed at helping and supporting SONEUK members both early career and experienced engineers to get chartership through Institution of Engineers (ICE).

Membership Development Officer (MDO, Surrey) at ICE, Mrs Kate Harrison CEng MICE and One of the SONEUK members and Supervising Civil Engineer (SCE) at Highways England, Mr Laxman Ghimire CEng MICE, MCIHT interactively delivered the programme sharing detailed information on various routes that are pertinent to the professional development reviews to get the Chartership.

Mr Laxman Ghimire said he would be happy to mentor any SONEUK member for the chartership, at various stages of membership route; and similarly, Mrs Harrison advised SONEUK engineers who do not have SCE and mentor support within the company to contact Mr Laxman Ghimire or herself to find someone to help.

In the programme, various topics discussed amongst other were – development action plans, various attributes, CPD requirements, profession reviews, company training agreements, mentor-match programme etc. For detail information, it is advised to visit the membership section of the ICE at: https://www.ice.org.uk

An encouraging presence of 25 participants including former chairman, advisors and members of executive committees had made the event very lively and interactive. The event was split into two sessions with a classical Nepalese cuisine in the middle. The program was concluded with very positive feedbacks from participants as being very useful and inspiring in that being a chartered engineer (CEng) is every engineer's dream and the talk has exactly focussed on various ways of getting chartership that would suit the varied situations.

Mr Shailendra Kajee Shrestha, chairman of the SONEUK, also presented flowers and mementos to the speakers. He thanked both the speakers and all the participants for taking their time and effort to contribute and participate. Mr Shailendra also assured that similar events will be organised in the future as well so that its members would be benefitted.







### TRAINING: GEOGRAPHICAL INFORMATION SYSTEM (GIS)

London, 23rd February 2019

Society of Nepalese Engineers in UK (SONEUK) successfully organised a one-day training on Geographic Information System (GIS), which is a framework for gathering, storing, managing and analysing geographical information. SONEUK Executive Member Dr Bidur Ghimire trained 15 engineers from around London at the event held in Everest Inn, Blackheath. He delivered an in-dept presentation on the GIS theory and then conducted a hands-on practice on engineering application of GIS, later on the day. He also discussed the inter-relationship between various GIS software applications during the training programme.

SONEUK Advisor and former Chairperson Krishna Kishor Shrestha expressed that such events can prove very useful to the engineering community. The event was conducted by SONEUK Executive Member and Training Coordinator Mr Bed Bhattarai who informed that more such training on other relevant software applications like AutoCAD, Revit, Visual Basic, etc. will be organised in the future.

SONEUK Chairperson Shailendra Kaji Shrestha distributed certificates to the organisers and participants of the training and added that the society will be conducting more useful trainings in the future so as to benefit its members. Most of the participants expressed the training was successful in enhancing their knowledge of GIS and it also was very beneficial to fresh graduate engineers.







### MoU WITH INSTITUTE OF ENGINEERING

21st December 2018

Society of Nepalese Engineers UK (SONEUK) signed an MoU with Institute of Engineering, Pulchowk, Kathmandu, setting out for collaborative activities. The parties intend to promote co-operation in research and study by working together on activities and projects where there is alignemnt of strategy and objectives.

Based on the MoU, the Office of the Dean, IoE, has appointed research team under its Centre of Infrastructure Development Studies, IoE, Pulchowk.



### MoU WITH NEPAL ENGINEERING ASSOCIATION

8th February 2019

Nepal Engineers Association (NEA) signed an MoU with Society of Nepalese Engineers UK (SONEUK) to achieve their common goals and enhance the professional activities in Nepal.

Dr Tri Ratna Bajracharya (President , NEA), Shailendra Kaji Shrestha (Presiednt, SONEUK), Chhabi Raj Pokhrarel (General Secretary, NEA) and the members of NEA executive committee, Mahendra Dhital (Deputy Director, CIDS), IOE Dean, IOE Deputy Dean, Prof Dr Prem Nath Maskey, Prof Dr Indra Acharya, Anil Marsani, Shree Ram Dhakal were instrumental in this achievement with their continuous support to set up H&S study work in Nepal. The study will be undertaken by IOE and SONEUK.



### INTERNATIONAL CONFERENCE OF NEPALI ENGINEERS



### London, Saturday 27th April 2019

The Society of Nepalese Engineers UK (SONEUK) organised a fourth SONEUK Conference on Engineering for Sustainable Development of Nepal: Opportunities and Challenges on Saturday. The conference was inaugurated jointly by His Excellency the Ambassador of Nepal Dr. Durga Bahadur Subedi and Prof. Tri Ratna Bajracharya (Former Dean of Institute of Engineering and current Presidency Nepal Engineers' Association). The conference was attended by hundreds of Nepali engineers living in the UK and abroad (Nepal, Thailand and Norway).

The inaugural program was conducted by the General Secretary of SOEUK Mr. Umesh Parajuli. In the program, SONEUK's first technical publication was also unveiled. The publication contained 15 technical papers, themed at Nepalese context, were authored by SONEUK members. In his inaugural speech, His Excellency the Ambassador of Nepal expressed his belief that the conferences like this will play an effective role in the delivery of 'prosperous and happy Nepal' and committed to cooperate in such events at embassy level as well as personal level.

Similarly, Special Guest Prof. Tri Ratna, Bajracharya, who came from Nepal for the conference, delivered a keynote speech on the role of the Institute of Engineering (IoE) in the quality engineering education in Nepal. He highlighted that IoE is continuously reviewing its curriculum to deliver skilled manpower needed for the development of the country. In this context, he was interested to work together with SOEUK on the basis of newly signed Memorandum of Understandings (MoU).

In the program, Vice Chairman of SOEUK and Coordinator of the Conference Committee Dr Birendra Shrestha pointed out that this conference is a continuation of regular programs to promote professional development of SONEUK members by the exchange of ideas and interactions. He highlighted that the main aim of the conference was to discuss and share experiences of various engineering applications in the UK and other countries for the development of Nepal.

In his closing remarks of the inauguration session, the chairperson of the session and of SONEUK Shailendra Kajee Shrestha thanked all guests, SONEUK committee members and general members for making the conference successful. He presented the tasks successfully completed so far and subsequent plans in continuation of the signing of the MOUs with IoE, Nepal Engineers Association and Nepal Electricity Authority.

### PROCEEDINGS OF 3rd SONEUK CONFERENCE 2019

The first-ever publication was released on the occassion of 3rd SONEUK Conference as the proceedings of the conference. The following papers were included in the proceedings:

Society of Nepalese Engineers UK (SONEUK): A Brief History

Collaborative working: An experience from Crossrail project
- Rajesh Pathak

Tunnelling and the Underground Metro Rail in Kathmandu Soil – Dr Binod Amatya

Importance of a Robust Engineering Assurance Process and iELC for Railway Infrastructure Projects

- Narad Bhadari

Schematic Design of Dodhara Chandani Pedestrian Suspension Bridge

- Krishna Kishor Shrestha

Resolving through Structural Forms: Examples including Mayadevi Temple

- Kanhaiya Bhagat and Ghanashyam Paudyal

Innovative technologies and sustainable practices in the energy sector to overcome energy crisis of Nepal

- Ramhari Poudyal

Strategies for adoption of Building Information Modelling (BIM) in Nepal:

Lessons Learned from the UK and Other Countries

- Dr Ramesh Marasini

Bus Priority: A Tool to Improve Bus Services in Kathmandu

- Dr Birendra Shrestha

Sustainable Building Design and Construction Approach in Nepal

– Bidur Sharma Chapagain

Sustainable Drainage System (SuDS) for Surface water Management – Shailendra Kajee Shrestha

Safety improvement through the application of UK skid resistance policy in Nepalese Highways

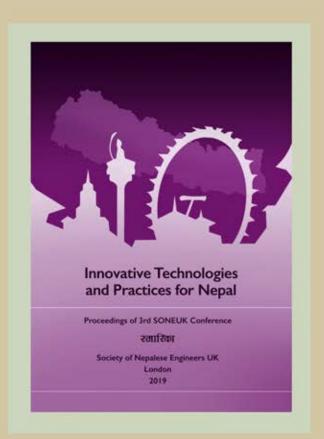
- Umesh Parajuli

Electricity Reliability: National Grid UK- an example to follow – Subhash Shrestha

Necessity of Quality Management System in Nepal's Construction Works

- Sudib KC

The scope and benefits of computer games in the context of Nepal – Sanyukta Shrestha



### INTERNATIONAL CONFERENCE OF NEPALI ENGINEERS

The inauguration session was followed by two technical sessions chaired respectively by Dr Birendra Shrestha (Principal Transport Modeller, TfL) and Dr Ramesh Marashini (Associate Professor Solent University).

Following papers were presented at these sessions.

Kathmandu Metro Rail Vision 2040: Dr. Binod L. Amatya, Consulting Civil Engineer, ARCADIS

Tunnel Boring Machine (TBM) - High Tech & Advanced Machine: Vijay Gurung, Senior Construction Manager/BYTP UK

The Development of Advanced Natural Fibre Reinforced Bio-composites: Sustainable Materials in an Asian Context: Prof Hom Dhakal, Portsmouth University

Geopolymer Sand as a Construction Material for Sustainable Development: Dr Indra Acharya, Assistant Professor, IOE

Energy Efficiency Measures in Nepalese Industries: Ramhari Poudyal, PhD Candidate, Swansea University

In addition, three guest speakers Madan Bandhu Regmi (United Nations Economic and Social Commission for Asia and the Pacific), Sudan Panthi (World Health Organization) presented the challenges and opportunities in Nepal in the area of transport and environment sectors respectively. Another guest speaker, Colin Shurrock presented a concept of engineering education opportunities to the poor and diligent students engineering through Rotary Club.

The conference was managed by SONEUK Executive members Rashmi Singh Rana, Dr Bidur Ghimire, Bed Bhattarai, Sanyukta Shrestha, Akshay Chapagain, Pawan Bajracharya and Sagyan Kharel.









## INTERACTION WITH INSTITUTION OF CIVIL ENGINEERS (ICE)

1st May 2019

Representatives from SONEUK executive Committee including Chairperson Shailendra Shrestha, Executive Member Bidur Ghimire and Advisor Binod Amatya, and President of Nepal Engineers Association (NEA) Professor Dr Tri Ratna Bajracharya and Assistant Prof Dr Indra Acharya had an important meeting with ICE International director and international membership manager. The interaction held in Institutions of Civil Engineer (ICE) in London concluded with a decision for SONEUK will liaise between NEA, IOE and ICE for professional development of Nepalese engineers.







### TALK PROGRAM

# Public Safety for All including For People with Disabilities and the Elderly, Earthquake Safety Engineering, Disaster Management, and Heritage Reconstruction

Er. Ananta Ram Baidya needs a very little introduction, specially among Nepalese community. He has been promoting "Public Safety for All including For People with Disabilities and the Elderly, Earthquake Safety Engineering, Disaster Management, and Heritage Reconstruction" in Nepal. He is a Fulbright Specialist sponsored by the Fulbright Foundation in the United States, Chairperson of Nepal Liaison Committee American Society of Nepalese Engineers and former Visiting Faculty KU.

On 14 April 2019, Mr. Baidya was returning home via London after completing 6 weeks of Training as a Fulbright Scholar from Nepal on "Public Safety For All, Earthquake Safety Engineering and Heritage Reconstruction". The training was hosted by Lalitpur Center for Culture Conservation, LCCC, Lalitpur. During his short transit visit, Mr. Baidya was kind enough to deliver a talk program to the Nepalese community of London, UK in the Hotel Holiday Inn, T4 Heathrow. In a very short notice, despite of their preplanned engagements, prominent Nepalese scholars from different walks of life took active part in the programme. Due to the festive day, many who wished but could not attend, sent apologies. Participants were from SONEUK, PPGUK, WNO UK.

Mr. Baidya in his outstanding presentation supported with power point slides explained various engineering positive and negative aspects of ongoing post-earthquake restoration, particularly on the safety of heritage infrastructure in Nepal. He covered positive aspects as well as the obvious lapses in decision making and implementation in engineering the rehabilitation works. The message from Mr. Baidya was very clear to appeal that the Nepalese expats should remain vigilant in the process and should do every best to prevent from incorrect engineering practice in the preservation of the heritage. As he emphasized "those are not only the Nepalese but are the World heritage" and Nepalese expats can contribute significantly in saving them. For this purpose, the expats can put their appropriate voices boldly in time, with all due respect, to the concerned executing and implementing authorities in Nepal and contributing countries, to prevent from the wrong practice.

Mr. Baidya presented various effective but low cost engineering practice he had proposed to implement in Patan and Kathmandu and to provide safe access to the heritage sites for the disabled and elderly population. Mr. Baidya answered to the questions raised by the participants. Upon the request of the participants, he also shared the slides he presented in the program.

Report prepared by Krishna Chakkhun, Advisor, SONEUK





### TALK PROGRAM:

# Protection and control system for high voltage (132-400kV) transmission lines and substations

On Friday 28th December 2018, SONEUK member Mr Subhash Shrestha had a wonderful interaction session with electrical engineers at NEA Engineering Company Ltd office, Thapathali. The session was focused on protection and control system for high voltage (132-400kV) transmission lines and substations. Mr Shrestha received very encouraging feedback from participanting engineers.

"This is the most relevant and to the point interaction program among the programs delivered by overseas nepalese experts" and "This kind of collaboration should get continuation further" were some common voices heard from the member of the audience.





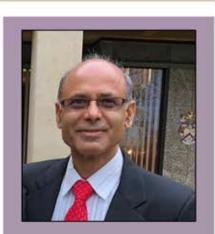
### TALK PROGRAM:

## Safety in design and Construction

SONEUK Advisor and member of constitutional amendment committee, Mr Debendra Dahal delivered a presentation titled "Safety in Design & Construction" in IoE, Pulchock campus on 23rd March 2019.

Associate Profesor Mr Indra Acharya, IoE, facilitated organise a lecture at Pulchwok Campus for Masters Level student. Mr Dahal briefed the students about the use of proper design guidelines and encorporated considering safety measures from the project design stage and reviewed those risks until project completion. The lecture provided a good overview enabling the attendees to understand and apply this knowledge to complete projects within proposed schedule and budget.

The student studying in final year of Master's Degree in Transport Engineering and other designated professors/lecturers including Mr Anil Marasani, Pradip Shrestha and others lecturers also attended the programme. This opportunity was used to strengthen the relation between two different organisation and transfer the knowledge between IOE and SONEUK.



### TALK PROGRAM: POST-EARTHQUAKE REVIVAL OF NEPAL

7 th June 2019

Prof. Rajesh Dhakal from University of Canterbury, New Zealand flew to London to present his findings on "Post-earth-quake revival of Nepal: What are the needs and how can we contribute". His presentation once again reminded those collapsed or damaged buildings, structures, heritage sites here and there from Kathmandu and outside Kathmandu.

His conclusion was that those damages were mainly due to lack of anti-seismic features in design and construction. Buildings with technical faults such as slender column, insufficient reinforcement, inadequate splicing/anchorage, inadequate confinement, poor detailing were mainly affected. His other findings were poor material quality, inadequate or inappropriate foundation for the soil type and amplification of ground shaking due to local geological features leading the damages. His observation was that in terms of earthquakes, Nepal was technically in a state of reasonable knowledge, limited preparedness and mixed practices.

Some of the challenges he found immediately after the earthquakes were misinterpretation of colour tags (green, yellow, red), crack-phobia among public, shortage of engineers with earthquake engineering expertise, professionals speaking outside the area of competence, scarcity of demolition skill and equipments, debris clearance and confused authorities and people.

Big earthquake causes unbearable pain but also provides a golden opportunity to develop a more resilient community that is better equipped to combat similar disasters in future. This applies to Nepal as well. He highlighted a need to develop/improve building codes, establish robust construction quality control mechanisms and develop comprehensive soil mapping and construction to suit the local soil conditions. He also pointed on a need of urban development strategy based on a sound land use planning and the state-of-the-art earthquake engineering education and training for capacity enhancement of Nepalese engineers.

Report prepared by Binod Lal Amatya, Advisor, SONEUK



### **TALK ON MAYA DEVI TEMPLE & TEKU DOVAN**

British Council Nepal has been engaging the site of Teku Dovan since early 2018 in order to develop a long-term project to support gradual rejuvenation of the site. British Council was motivated by the site's complex history and significance as well as prior engagement of the British Embassy (through the Teku-Thapathali Research Group) to push for this business development activity. As an offshore collaborator of the Teku Dovan project which can bring a much needed facelift in the local heritage of the region, SONEUK has formed a team of three,, as a representatives from SONEUK. The team comprises of Mr Ghanashyam Paudyal, Advisor, SONEUK as the Coordinator, and Mrs Rosha Marahatta, Member, SONEUK and Mr Sanyukta Shrestha, Secretary, SONEUK, as the team members.

Coordinator Mr Poudyal and team member Mr Shrestha delivered a talk at the Embassy of Nepal at an event marking the announcement of Visit Nepal Year 2020 on 19th January 2019. In the talk, Mr Poudyal briefed on his experience with the reconstruction of Maya Devi temple, whereas Mr Shrestha briefed on the Teku Dovan project, which were warmly received.





### TALK AT EX-QGE REUNION

Mr Sailendra Shrestha, Chariperson, SONEUK, delivered a talk at the Ex-QGE Clerk of Works & Military Plant Foreman Reunion on 29th June 2019 at Maidstone Nepalese Samaj Ghar. Mr Shrestha was complemented for adding value to the reunion and giving insight on SONEUK, whilst bridging the gap between SONEUK and Infra Eng (RE).





### **CALL FOR PAPERS**

# 5th SONEUK Conference on

### Promoting cultural change in engineering practices for the Development of Nepal: Learning from the UK

Following the success of the conference earlier this year, SONEUK is organising another conference on 'Development of Engineering Practices in Nepal: Promoting Cultural Change' to be held in London on Saturday 25th April 2020. The conference aims to include papers covering all novel engineering methods and applications that are aimed at capacity building and promoting culture change in the engineering practices for the development of Nepal.

SONEUK seminar and conference committee would like to invite members to submit a full paper for consideration to conference@soneuk.org by Saturday 30 th November 2019. All submitted papers going through a peer-review process will be published in the conference proceeding to be unveiled at the conference in April 2020. Only selected papers will be invited to present at the conference.

### **Important Dates**

Call for papers: Saturday 13 th July 2019

Submission of the full paper: Saturday 30 th November 2019
Conference: Saturday 25 th April 2020

If you would like to discuss any aspect of the conference, please contact a member of the seminar and conference committee:

Dr Birendra Shrestha, Transport for London, <b.p.shrestha@hotmail.com>

Dr Ramesh Marasini, Solent University, <marasinir@hotmail.com>

Mr Krishna Shrestha, lacobs, <kk shrestha@hotmail.com>

Prof Keshab Dahal, University of West of Scotland, <keshav.dahal@uws.ac.uk>

Mr Narad Bhandari, Network rail, <naradbh@yahoo.com>

Prof Hom Nath Dhakal, University of Portsmouth, <hom.dhakal@port.ac.uk>

Dr Bidur Ghimire, Wood Group, <ghimireb@hotmail.com>

### TALK PROGRAM WITH KULMANI ACHARYA

On 21st July 2019, SONEUK held a short meeting/talk preprogramme with Mr Kulmani Acharya, Chair- International Liaison Committee, ASNEngr at Everest Inn Restaurant, Blackheath, Southeast London.

SONEUK Chairperson, General Secretary, Executive Committee members and Advisors including Ex-Chairperson and Ex-General Secretary were among the attendees of the meeting.

The agenda for discussion was to familiarise both organisation and their activities, governance and structure, and also to identify way forward to work together for a common goal.

The outcomes of the meetings were as follows:

- I. To draft MoU and sign by Chairs of SONEUK and ASNEngr ASAP within few months for which SONEUK Chairperson (SK Shrestha) & Chair for International Liaison Committee, ASNEngr (Mr Kul Mani Acharya) to lead and work together for the task.
- 2. To form international communication hob which will be represented by coordinators from various internationally existed Nepalese professional organisations with common goal including Nepal Engineers' Association, Kathmandu.
- 3. To organise international conference at least every 2 years, for which NRNA platform may be used (but this need to be agreed first within organisation such as SONEUK, ASNEngr, etc)

Report prepared by Umesh Parajuli.

### UPCOMING EVENT

# SONEUK Family Gathering/ Social Networking and Annual General Meeting 2019

Venue:

Gurkha Kitchen, Nottingham,
131 Glaisdale Dr W,
Nottingham,
NG8 4GY

Date: Saturday, 03/08/2019 from 15:30 to midnight

Activities: Networking & Entertainment (music/dance) with Barbeque & Dinner & AGM

Price: £15 (> 12 years), £8 (5-11yrs). Kids below 5 yrs are free.

Further details contact:
Pawan Bajracharya- 07384234106
Tara Lamsal - 07809722425
Bed Bhattarai - 07446035332
Roshan Bhattarai - 07988756784

