

Dear Professionals and community members,

You are cordially invited to attend the talk program organized by The DC Chapter of American Society of Nepalese Engineers at 2:00 PM on 11th January 2014 in the following venue. The theme of the program is "Engineering and Technology for Future". The papers will be presented by renowned Nepali Professor Dr. Jagan Nath Shrestha, and young Nepali Scientist Dr. Lok Nath Lamsal on the contemporary issues.

Date: 2:00 PM on Saturday, 11 January 2014

Venue: Arlington Central Library

1015 North Quincy Street

Arlington, VA 22201

Prof. Dr. Jagan N Shrestha

Prof. Dr. J N Shrestha is the president of Nepal Solar Energy Society and Visiting Professor in Institute of Engineering, TU. He has more than 45 years of research and education experience in solar and renewable energy sector. He was former Director and Founder of Center for Energy Studies, and Assistant Dean at Institute of Engineering, TU. He also has worked as a consultant to JICA, ICIMOD, UNDP/GEF/SGP, UNDP/ILO, UNEP, NISSAN (Japan), UNIDO, etc. He has presented about 50 papers related to Renewable Energy, Telecommunications and Engineering Education.

Energy scenario and way forward to minimize load shedding in Nepal

The continuity of sustainable human development depends on the availability of sufficient, sustainable, reliable and affordable energy in various forms. The ever increasing energy crisis, due to various reasons, is deteriorating the quality of life of people in many developing countries including Nepal. Energy saving technology, drudgery saving technology and labor saving technology need to be considered as basic building blocks for environment protection, employment generation and health improvement so that sustainable development can take place supported by renewable energy sources with sufficiency in quality, quantity and continuity.

The presentation highlights present energy scenario of Nepal along with ways of reducing load shedding hours and also shows on how sustainable solar electricity based energy solutions must pass the test of broad criteria of availability, affordability and acceptability through decentralized energy generation policy, institutional and technical innovations to fit the specific needs of Nepalese people.

The presentation further highlights the performance of the best practiced solar energy based electrical devices tested for improving the quality of life of Nepalese people in different parts of Nepal. The presentation also focuses on how MLM (more from less for more) paradigm for accommodating inclusive growth with particular reference to solar electricity based devices.

Dr. Lok N. Lamsal

Dr. Lok N. Lamsal is a research scientist at NASA Goddard Space Flight Center, Greenbelt, Maryland. He received an M.Sc. degree in Physics from Tribhuvan University in 1998 and a Ph.D. degree in Atmospheric Science from the Institute of Remote Sensing, University of Bremen, Germany in 2006.

From 2006 to 2010, he worked as a postdoctoral fellow at Dalhousie University, Halifax, Canada. His research areas include development of scientific algorithm to derive atmospheric trace gases from satellite instruments, evaluation of satellite data, interpretation of satellite observations for various applications, and contribution to mission design for future satellite instruments.

Monitoring Air Pollution from Space

Human activities are altering atmospheric species that have tremendous impact on human health and climate. We exploit the measurements of radiances by space-based instruments to derive the abundance of atmospheric trace gases all over the world on a daily basis. Satellite instruments designed to measure air pollution from space observe EPA's criteria air pollutants, such as ozone, nitrogen dioxide, particulate matter, etc., that are deleterious to human health. In this talk, I will briefly discuss the methods, capabilities of satellite observations, and opportunities for us.