4<sup>TH</sup>GOLDEN JUBILEE LECTURE OF DEPARTMENT OF APPLIED GEOLOGY, DIBRUGARH UNIVERSITY ON 'REVISITING COAL SCIENCE AND TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT' by Dr. BINOY KUMAR SAIKIA of CSIR-NEIST, JORHAT, ASSAM and RECEIPIENT OF THE PRETIGIOUS SHANTI SWARUP BHATNAGAR AWARD 2021 IN THE EARTH, ATMOSPHERE, OCEAN AND PLANETARY SCIENCE CATEGORY.

To celebrate the glorious 50 years of the establishment of the Department of Applied Geology, Dibrugarh University, the department has been organizing a series of lectures. The 4<sup>th</sup> Golden Jubilee Lecture sponsored by the Dibrugarh University held on 11<sup>th</sup> April, 2022 at Rangghar



Auditorium of the University organized in association with the Dibrugarh University Research



Scholars' Association. Event started with the University Anthem sung by the students of the Department of Applied Geology. Prof. L.K. Nath, Honourable Vice Chancellor of Dibrugarh University and Chief Guest of the event welcomed the Special Chief Guest Dr. Rajkumar Ranjan Singh, Honourable Minister of State for External Affairs and Education; Guest of Honour Prof. Jiten Hazarika, Registrar, Dibrugarh University,

Dr. Manoj Phukan, Principal Scientist, Geosciences & Technology Division, NEIST, Jorhat and Dr.

Diganta Bhuyan, HoD, Department of Applied Geology. Prof. Nath extended warm greetings and heartiest congratulations to the Guest Speaker Dr. Binoy Kumar Saikia, FIC. Senior Scientist and Assistant Professor (AcSIR), Head of the Department Coal And Energy Division, CSIR-NEIST, Jorhat, Assam and receipient of the Pretigious Shanti Swarup Bhatnagar Award 2021 presented by CSIR, Government of India in the Earth, Atmosphere, Ocean and Planetary Science category



below the age of 45. He sincerely wishes that the expertise and experience of Dr. Saikia in the field



of coal chemistry and his lecture will surely benefit the teachers and research scholars present. Prof. Nath specially felt grateful of Mr. Rajkumar Ranjan Singh for gracing the event. He inaguarated the 4<sup>th</sup> Golden Jubilee Lecture. Dr. Rajkumar Ranjan Singh, Special Chief Guest of the event expressed his happiness for becoming the part of this 4<sup>th</sup> Golden Jubilee lecture of Department of Applied geology and informed the gatherings about his shift from academics to politics. Mr. Singh made special mention about the Atmanirbhar Bharat scheme and many other

schemes initiated by the Government of India for the development of our country. He praised NEIST for their relentless efforts to serve the society during COVID 19 pandemic period

. Prof. Kalpana Deka kalita of the Department of Applied Geology introduced Guest Speaker Dr. Binoy Kumar Saikia to the faculties, research scoloras, students and guest about his life, research

and achievements in details with a ppt. Dr. Saikia was born to Mr. Birendra Nath Saikia and Mrs. Bokuli Saikia at Sarupathar village of the Golaghat district. He received hid Ph. D from Dibrugarh University in the year 2008. Dr Saikia's contributions were primarily on alternative utilisation of Indian Coal and its value addition products from abundant low-grade coals. His works also include contribution on air quality evaluation, aerosol chemistry and its mitigation approach. He developed a technology



for the production of blue-florescent carbon quantum dots from Indian coal which is patented both in



India and US. "Dr. Saikia has made outstanding contributions on the formation of fluorescent carbon quantum dots (CQDs) from Indian coal. His indigenous patented CQD technology for diverse applications falls under 'Atmanirbhar Bharat' (self-reliant India programme), leading to import substitution," the CSIR citation for Dr. Saikia read. Discovered accidentally in 2004, CQDs are small carbon nano-particles with size less than 10 nm (nano metre). Numbers of studies have been done worldwide in using fluorescent properties of CQDs, which have high stability, good conductivity, low

toxicity and are environmentally friendly, for various applications including medicine and

environmental science. His pioneering development of fluorescent CQDs of Indian coal is much cheaper than imported ones and it will help reduce dependency on other countries thus bringing down the import of CQDs.

Dr.Saikia is recipient of Young Award Scientist by International Union of Crystallography in 2009, Rajiv Gandhi Excellence Award-2012 from the Union Minister of Coal. Govt. of India, Er A. C. Datta Mineral Engineering Science Association of India Award-2014 By Mineral Engineering Science Association of India, IIME Coal Beneficiation Award (Academic/Industry) 2015, in



MESA (Mineral Engineering Science Association of India) Award -2014 and Dr R.P Bhatnagar Award (2015-16), Prof. (Dr.) MP Singh memorial coal science award-2019 and the prestigious Shanti Swarup Bhatnagar Prize for Science and Technology, one of the highest Indian science awards, in 2021. He has 5 patents (2 US and 3-Indian) and at present has been handling multiple R&D projects and currently holds four ongoing R&D projects with external R&D funding obtained up to 10.50 crore.

Dr. Saikia spoke on 'Revisiting Coal Science and Technology for Sustainable Development'. At the very beginning he mentioned about the struggle he faced initially in his journey towards achievements. Mentioning various aspects of coal depositsheelaboratedon his work on the promotion of affordable and clean energy, specially with regard to coal which affirms the aims under SDG-7. Dr.Saikia expressed his thanks and gratitude to the Department of Applied Geology and Dibrugarh University for the opportunity that he could reliver the lecture.

The Deans of faculties, teachers, research scholars, officers, students, and staffs of the Dibrugarh University attended the event with great enthusiasms to honour the great son of the soil



and also the alumina of this university Dr. Binoy Kumar Saikia.



On behalf of the members of the Department of Applied Geology, Dibrugarh University Research Scholars'

Association and the entire Dibrugarh University Prof. fraternity Kalpana Deka Kalita presented the citation and Dr. Diganta presented Bhuyan, memento to Dr. Saikia for making his homeland proud by being the recipient of the Shanti Swarup Bhatnagar Award 2021. Ms. Pallabi Borkakoty and Ms. Malobika Bora Assistant



Professors of the department read the citation and the memento.

Mr. Bidyutjyoti Dutta, president of the DURSA conducted an interactive session with Dr.



Saikia. Faculties, reseach students scholars and paticipated in the discussion to know thoroughly about his research. Mr. Gaurisankar Gogoi and Mr.



entertained the audience with a spell bound instrumental orchestra with flute and guiter. Dr. Diganta Bhuyan, HoD proposed the vote of thanks. Dr. Ratamali Machahari hosted the event.