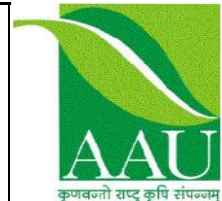




**One Day Visit Organized by**  
**Industry Institute Interaction Cell -IIC**  
**CAET, AAU, Godhra**



**Event Organized**

The 18th Heads of State and Government Summit of the Group of 20 (G20), under the Indian Presidency, is scheduled to take place in New Delhi, India, during September 2023. The summit will revolve around the theme of 'One Earth, One Family, One Future'. As part of the G20 proceedings, the National Innovation Foundation (NIF), India, and the Indian National Science Academy (INSA), in association with the Science 20 (S20) engagement group, have arranged a series of expert talks and round the table discussion with students from various institutes. The expert talk and discussion with Dr. Subeer S. Majumdar be held at the Ahmedabad Management Association (AMA) located on Dr. Vikram Sarabhai Marg, University Area, Ahmedabad, on the 26th of June 2023, from 2:00 pm to 02:30 pm. To enrich the event as the audience, students from CAET, AAU, Godhra, have been invited to participate. Under the guidance of Er. Chirag Jadav, Chairman of the Industry Institute Interaction Cell and Assistant Professor in Mechanical Engineering in the Basic Engineering & Applied Sciences Department, a visit has been organized for the students on the 26th of June 2023.

**About Event**

That sounds like a wonderful and engaging expert talk by Dr. Subeer S. Majumdar on the theme of "Disruptive Science for Innovative and Sustainable Development," with a specific focus on the sub-theme of Science for Society, Culture & Heritage. It's great to hear that Dr. Subeer actively encouraged student participation and created a platform for knowledge exchange among the students.

During the lecture, Dr. Subeer emphasized the importance of gene and protein engineering, genomics, functional genomics, and transgenic animals in advancing scientific research and development. These fields have significant implications for various areas, including biotechnology, agriculture, medicine, and conservation. By actively involving the students and encouraging them to share their doubts, queries, and questions, Dr. Subeer fostered an interactive learning environment that likely enhanced the students' understanding and sparked insightful discussions.

Such interactive sessions provide an excellent opportunity for students to deepen their understanding of complex scientific concepts, clarify any doubts they may have, and explore

potential research opportunities. Additionally, they allow students to learn from their peers and broaden their perspectives through knowledge sharing.

Dr. Subeer's lecture on "Disruptive Science for Innovative and Sustainable Development" with a focus on Science for Society, Culture & Heritage seems to have been a valuable and thought-provoking experience for the students in attendance. By encouraging active participation and knowledge exchange, he likely inspired the students to pursue further research and contribute to the advancement of science and its applications in society.

Dr. Subeer S. Majumdar has made significant contributions to the fields of animal biotechnology, genomics, and animal reproduction. His research focus primarily revolves around several key areas:

1. Production of therapeutic proteins: Dr. Majumdar has explored the production of therapeutic proteins for both animals and humans by utilizing farmed animals, particularly through the milk of these animals. This approach offers a potential avenue for large-scale production of important proteins for medical applications.
2. Sex-selection in cattle: Dr. Majumdar has worked on attempts to generate bulls that produce only X chromosome-bearing sperm, aiming to increase the production of female offspring (cows). This approach could be beneficial in optimizing breeding strategies and improving the overall quality of the cattle herd.
3. Methods of transgenesis: Dr. Majumdar has contributed to the development of new methods for transgenesis, particularly in cattle, goats, and buffalo. Transgenesis involves introducing specific genes into an organism to confer desired traits or enhance research capabilities. By improving transgenesis techniques, Dr. Majumdar aims to facilitate advancements in biomedical research and the production of transgenic animals with desirable characteristics, such as disease resistance and increased milk yield.
4. Livestock genomics: Dr. Majumdar has also focused on the field of livestock genomics, which involves studying the genetic makeup and variations within different livestock species. This research helps in understanding the genetic basis of various traits in animals and enables the development of breeding strategies for improving livestock quality, productivity, and disease resistance.
5. Alternative gene-editing technologies: Alongside traditional gene knockout technologies, Dr. Majumdar has explored alternative methods such as utilizing short hairpin RNA (shRNA) to generate transgenic animals. shRNA technology allows for targeted gene silencing and manipulation, offering potential alternatives or complementary approaches to conventional gene editing techniques.

Overall, Dr. Majumdar's research and contributions in animal biotechnology, genomics, and animal reproduction have significant implications for the fields of medicine, agriculture, and livestock management. His work explores innovative approaches to enhance production, improve animal health, and contribute to the sustainable development of these industries.

### **Key Role of Officer, Faculty and Staff**

The visit was impeccably organized and flawlessly executed by Er. Chirag Jadav, Chairman of the Industry Institute Interaction Cell, and Assistant Professor. Dr. Mukesh Tiwari, Head of the Soil and Water Conservation Department, and Er. Suryaprakash Suryavansi, SRA of the IDE Department, also contributed their unwavering commitment to ensuring the smooth functioning of all activities throughout the day. A special mention goes to Er. Kapil Mandloi, Head of the BEAS Department, whose steadfast support was invaluable. The success and productivity of the event were further enhanced by Dr. R. Subbaiah, the Principal and Dean of CAET, AAU, Godhra.



