

The logo for 'Conference Report' features the word 'Conference Report' in a bold, black, sans-serif font. The text is partially enclosed by a series of overlapping, light gray rectangular frames that create a layered, architectural effect around the letters.

WELD 2021: Welding Technology–The Way Forward in the Next Normal

Kolkata Branch of The Indian Institute of Welding organized its Annual Branch Seminar, WELD 2021 online on March 6-7 2021 with the theme, “Welding Technology– The Way Forward in the Next Normal”. The seminar consisted of Invited Technical Papers from eminent scientists and scholars from Industry and academia, a Panel Discussion on “Welding Technology– Setting the Directions for Next Normal”, a Technical Session for Paper presentation from Research Scholars/ Members of the Students’ Chapter and Engineer Soumitra Kumar De Memorial Lecture. Sessions on presentation by corporate sponsors on the latest technology and innovations in the field of welding and joining were also arranged. Presentations were made by TATA Steel, BSRM-Bangladesh, EBIIW- CA, USA, ESAB India, Fronius- India and CLOOS- India.

The inaugural function started at 2:30pm with the National Anthem. Thereafter, 2 minutes silence was observed in the memory of Late Shri Bimal Kumar Das. Prof. Santanu Das, Vice President of Kolkata Branch of The Indian Institute of Welding conducted the Inauguration Session. Prof. Dr. G.L. Datta, Chairman of Kolkata Branch of The Indian Institute of Welding, delivered the Welcome Address. Shri Parimal Biswas, President, The Indian Institute of Welding, addressed the august gathering. Prof. Saikat Maitra, the Hon’ble Vice Chancellor, Maulana Abul Kalam Azad University of Technology, West Bengal was the Chief Guest of the event and delivered his speech. Prof. Maitra appreciated the organizers for the selection of such a theme of this seminar. He reviewed some useful discoveries in welding and highlighted some advances in welding including automated

or robotic welding that is being used in industries widely nowadays. He further stated about IT-enabled welding systems that are being the focus of implementation at present. He predicted high rate of automated welding systems being used in large to small size industries in coming 5 to 10 years. Probabilities of AI implementation in welding would also be immense. At the same time, welders with intense training are also much needed in different areas, and hence, he believed there would not be any loss of job of welders. Mr. Rituraj Bose, Hony. Secy General, IIW-India and Vice President of Kolkata Branch spoke about IIW-India and activities of Kolkata Branch.

Then, the President, IIW-India and the Chairman, Kolkata Branch distributed the awards to the recipients of the Paper Presentation Competition arranged by the Branch in person at IIW-India House. The judges of the event, namely Mr. P. K. Das, Past President, IIW-India, Mr. S. Chaudhuri, Director ANB, IIW-India and Mr. S. Ghosh, Sr. Manager of Shipbuilding Shop, GRSE Ltd. were honoured with a memento to each. The inaugural function ended with a Vote of Thanks by Shri Devasis Paul, Hony. Secy., Kolkata Branch.

The next session started with the presentations by the sponsors. Mr. Amlan Saha, of Fronius India delivered his presentation on ‘High Performance Welding– A Way Forward to Productivity & Profitability.’ Mr. Sudip Mazumder of EBIIW, USA made a presentation on ‘IoT Solutions for Smart Industrial Welding’, while Mr. Sandeep Kanjilal of ESAB India made a presentation on ‘Cut Cloud – Cloud based Cutting Solutions’.

At the end, Mr. Suman Mitra of CLOOS India made a presentation on 'Innovative Robotic Welding Technology, 1919-2020 and beyond'. All the presentations focused on the latest welding technology in compliance to WELD 4.0 and were highly appreciated by the audience present from different parts of country and abroad.

The last session of Day-1 started with the Panel Discussion. Prof. G. L. Datta, Former Chancellor, K. L. University and Chairman Kolkata Branch coordinated the panel discussion. The speakers took part in the panel discussion on 'Welding Technology– Setting the Directions for the Next Normal' are Mr. Sudipto Sarkar, Chief, Product Application of TATA Steel, India, Mr. Abby Joseph, Managing Director, voestalpine Bohler, India, Mr. V. V. Kamath, Managing Director, Fronius India, Mr. Gautam Bandopadhyay, COO, BSRM Steels, Bangladesh, Mr. Rashmi Ranjan Mohapatra, President-Engineering, Titanium Equipment & Anode Manufacturing, India and Mr. Sanjib Kumar Rout, President, C. V. Raman Global University, India.

All the speakers expressed their respective views on the manufacturing industry from the context of Industry Segment, location they envisage in the 'Next Normal'. With a Question Answer Session conducted, Prof. Datta summed up the panel discussion and ended the programme for the day.

The 2nd Day of WELD 2021 started with Prof. Santanu Das, Convenor of the event, briefing all the presenters with the objective of the seminar and guidelines. Thereafter, Prof. Amitava De of IIT Bombay delivered the Key Note address on "Recent Advances and Future Challenges in Welding and Joining Technology". After the key note address, Technical Session– 1 started with Dr. Sushovan Basak of C. V. Raman Global University presenting his paper on "Automotive Coated Sheet Joining using MIG Brazing". Mr.

Rahul Sengupta, CEO of RADIX presented his paper on "Opportunity & Challenges for the SMAW Consumable Manufacturer". Mr. Dipanjan De of IIT Kharagpur presented the research paper on "Study of Laser Welding of Hastelloy C-276 Sheets" also co-authored by Mr. Kalinga Simant Bal and Prof. Asimava Roychowdhury, as Engineer Bimal Kumar Das Memorial Award Lecture.

Technical Session–2 was for the presentations by the members of the Students' Chapter of Kolkata Branch. First, Mr. Ashraf Khan, a 3rd Year Student of the Department of Mechanical Engineering, Institute of Engineering and Management, Kolkata presented his paper. Co-authors of this paper were Mr. Himanshu Mishra and Mr. Priya Sahani with the paper title, "Remote Inspection of Welding Using Artificial Intelligence". Mr. Tamojit Datta, Mr. Sayak Deshmukh, Mr. Debayan Das and Mr. Soumyajit Ghosh, M.E. Department, Techno Main Salt Lake presented their paper on "The Application of Electrol Beam Welding for Joining of Dissimilar Metals". Ms. Aapti Vyas and Ms. Vandana Shikha Singh of C.V. Raman University presented their paper on "Joining of Aluminium to Steel by MIG Arc Brazing". Mr. Saswata Koley, a Student of Engineering Institute for Junior Executives, Dalalpukur, Howrah presented his paper on "Magnetic Pulse Welding: An Efficient & Alternative Solution for Less Thickness Pipe Joining" at the end of this session. The paper was co-authored by Mr. Raktim Roy and Mr. Rakesh Halder.

After the end of technical sessions, Prof. Santanu Das chaired the valedictory session. The programme ended with a Vote of Thanks by Mr. Devasis Paul, the Hony. Secretary of Kolkata Branch.

Santanu Das
Secretary, ISEC