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BUREAU OF INDIAN STANDARDS

MINUTES

Third Meeting of Panel (TXD 40/P01) under TXD 40 to discuss and deliberate on different types of carbon fibres

Date	Time	Venue
31 May 2024 (Friday)	1600 h	Through Video Conference

CONVENOR: Dr. Hemant Kumar Shukla, NAL, Bangalore

Member Secretary, TXD 40: Shri Swapnil, Scientist-B/Asst. Director, Textiles, BIS New Delhi

ATTENDEES:

- 1) Dr. Hemant Kumar Shukla, NAL, Bangalore (**Convenor**)
- 2) Mrs. Sheeja Sunil, NAL, Bangalore
- 3) Dr. Ravi Sriraman, Avient Corporation, Shirur
- 4) Dr. Milind Khandwe, Bhor Chemicals and Plastics Pvt Ltd, Mumbai
- 5) Shri Swapnil, Member Secretary, TXD 40

Item 0 WELCOME AND INTRODUCTORY REMARKS

Dr. Hemant Kumar Shukla, NAL, Bangalore (Convenor) extended a hearty welcome to the members of panel. Member secretary has also welcomed the Convenor and all other members.

Item 1 CONFIRMATION OF THE MINUTES OF THE PREVIOUS MEETING

The panel **CONFIRMED** the minutes of the 2nd meeting of the panel held on 23 June 2023 through VC which were circulated vide email dated 24 June 2023.

Item 2 COMPOSITION OF PANEL

The Panel **NOTED** the present composition of panel constituted under TXD 40 and **DECIDED** as follows:

- a) To co-opt of following organization in panel constituted under TXD 40 Sectional Committee:
 - i) Dr. Sreedhar, Vikram Sarabhai Space Centre, Kerala
 - ii) Dr. Ramesh Sundaram, NAL, Bangalore

- iii) Shri BVSR Murthi, ASL, Hyderabad
- iv) Dr. T V Sreekumar, BTRA, Mumbai

Item 3 NEW SUBJECTS

The panel scrutinized the working/preliminary draft on 'Textiles – Carbon Fibres – Specification' as given in **Annex 1** of agenda.

After detailed deliberations, the panel decided as follows:

- a) [*Page 3, Foreword, first para (fourth line)*] – Delete the term 'textile'.

[*Page 3, Foreword, second para (fourth line)*] – Add the term 'aerospace' and 'pressure vessel'.

[*Page 3, Clause 3*] – Include 'Pitch' under 'Terms and Definitions'.
- b) As per the decision of 2nd panel meeting, Dr. Dhaval Patel, Nikol Advance Materials Pvt Ltd, Ahmedabad shall provide the list of users of Carbon fibres within 7 days.
- c) The Panel **NOTED** that inputs regarding the definition of additional characteristics have been received. However, no inputs have been provided by Dr. Milind Khandwe of Bhor Chemicals and Plastics Pvt Ltd, Mumbai, concerning the values and test methods for these additional characteristics, including spool hardness, electrical conductivity, and functional groups on the fibre surface of carbon fibres.

Further, the panel requested the aforementioned member/organization to provide technical inputs/information within 7 days.
- d) Dr. Hemant Kumar Shukla, NAL, Bangalore and Dr. Milind Khandwe, Bhor Chemicals and Plastics Pvt Ltd, Mumbai shall provide inputs related to properties of carbon fibres as per the design perspective of carbon fibre composites.
- e) BIS shall share the revised working/preliminary draft on 'Textiles – Carbon fibres - Specification' as placed and discussed before the panel during the meeting for comments/ inputs/ suggestions from convenor and all other members within 7 days.

Item 4 ANY OTHER BUSINESS

4.1 Dr. Hemant Kumar Shukla recommended Member Secretary, TXD 40 to visit the Carbon fibres facility at NAL Bangalore for a better understanding of the manufacturing process, performance requirement and the other aspects of different types of Carbon fibres.

4.2 There being no other business, the meeting ended with a hearty vote of thanks to the Convenor.