BUREAU OF INDIAN STANDARDS

AGENDA

MEETING	NO. OF MEETING	DAY &DATE	TIME	VENUE
Secondary Cells and Batteries Sectional Committee, ETD 11	**31th**	**Thursday 10th October 2024**	**1430 Hrs**	**Hybrid (Copper Room, Manak Bhawan, New Delhi) https://bismanak.webex.com/bismanak/j.php?MTID=me0e014b41ab743a2696ccef2f9efa1be**

CHAIRMAN: Shri Pankaj Batra **MEMBER SECRETARY**: Shri Neeraj Kushwaha

Item 0 WELCOME ADDRESS BY THE CHAIRMAN

Item 1 CONFIRMATION OF THE MINUTES OF LAST MEETING

1.1 The minutes of the 30th meeting of Secondary Cells and Batteries Sectional Committee, ETD 11 held on 24th July 2024 were circulated vide letter dated 20th August 2024.

The committee may formally confirm the minutes of the last meeting.

Item 2 REVIEW OF COMPOSITION OF SECTIONAL COMMITTEE, ETD 11

2.1 a) Identification and involvement of talent available in the country related to the subject dealt by the committee and methodology to involve them in the proceedings of the Committee

The committee members are requested to identify experts/talent that is active in the area of Transformers who may be co-opted in ETD 11.

b) Co-option requests

i) **Apple India Pvt. Ltd.**

ii) **Godi Energy -** Godi India Pvt Ltd is the largest private R&D house in India for advanced energy storage systems and we are working on advanced Li-ion & Na-ion cells, Supercapacitors & Hybrid Capacitors, Novel materials and futuristic & proprietary cell manufacturing processes. We are a DSIR recognized organization for in-house R&D. We are also a public-private-partnership member with CSIR through Central Electrochemical Research Institute. Godi is the first company in India to have BIS certification for its in-house & indigenous NMC & LFP based Li-ion cells. Godi is the only company in India to have large-Farad EDLC Supercapacitors. Godi is currently planning for large scale manufacturing of Li-ion Cells and Supercapacitors. Godi has also developed next-generation Na-ion cells and Hybrid Supercapacitors.

iii) IIT Roorkee

Item 3 APPROVAL OF DOCUMENTS/AMENDMENTS FOR FINALIZATION/PRINTING

Sl No.	Draft Indian Standard	Circulated vide BISDG letter No. & date	Remarks
1.	Amendment no. 1 to IS 1652:2013, Stationary cells and batteries, lead - Acid type with plante positive plates - Specification (Fourth Revision)	Dated 27th June 2024	As per the discussions in ETD11/WG02, Editorial comments incorporated in the draft and being sent with agenda.

Item 4 APPROVAL OF DOCUMENTS/AMENDMENTS FOR WIDE CIRCULATION

Sl No.	Draft Indian Standard	Circulated vide BISDG letter No. & date	Remarks
a)	Draft revision of IS 17882 Methods of test for measurement of Energy density and Cycle life of Advanced Chemistry Cells ACCs (First revision)	Nil	Provided by ETD 11/WG03. Draft document is being sent with the agenda.

Item 5 COMMENTS/QUERIES ON INDIAN STANDARDS

5.1 Comments:

S No.	Indian Standard	Commentator	Comments
a)	IS 16046 (Part 2):2018, Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes - Safety Requirements for Portable Sealed Secondary Cells and for Batteries Made from Them for Use in Portable Applications Part 2 Lithium Systems (Second Revision) IS 16047(Part 3):2018, Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes - Secondary Lithium Cells and Batteries for Portable Applications Part 3 Prismatic and	MEITY	IS 16047: Part 3 mentions - "Only cell or battery samples which are less than two months (60 days) old, from the date of manufacture, shall be used for the tests specified...". However, cells/ batteries imported into India might have already elapsed the 60 days' time period and hence the testing of these may not be performed because of the aforesaid clause. A similar clause is stated in IS 16046 (Safety standards) as well. BIS to relook into these clauses and take up

	Cylindrical Lithium Secondary Cells, and Batteries Made From Them (First Revision)		suitable action to address the matter.

5.2 Queries:

S No.	Indian Standard	Clarification sough from	Query
a)	IS 16270:2024	Registration Department, BIS	Registration Department is in receipt an application for Secondary Battery for Solar PV application as per IS 16270:2014. In this regard, a query was raised to the applicant for sulphation test (Cl 8.5.2 of IS 16270:2014) as lab had carried out discharge at C_{120} rate to an end voltage of 1.9 V/cell instead of C_{10} rate as mentioned in Cl 8.5.2 (d) . In reply, lab has stated that "*C_{120} should have been mentioned in the standard instead of C_{10} . C_{10} is a typo error in IS 16270:2014 and hence in the test report we have mentioned as C_{120} instead of C_{10} .Mentioning discharge at C_{10} would give a totally wrong meaning/perspective to the test performed. The same has been corrected in the revised edition of the same standard IS 16270: 2023*"

Item 6 PRESENT POSITION OF WORK

6.1 Present status of work as identified during previous meetings of ETD 11 are given below:

SI. No.	IS No.	Decision	Remarks
1.	Progress of work of 'Draft for batteries for drone application	The working group(ETD11/WG01) updated the committee that a meeting has been conducted and it was decided to involve QCI and UL India in the working group. The committee requested the working group to provide the draft within 2 months.	ETD11/WG01 may update the committee.
2.	Adoption of IEC 63193: 2020 'Lead-acid batteries for propulsion power of lightweight vehicles - General	The committee requested Dr. Mayavan to review the IEC Standard and to provide working draft within 01 month considering the Indian ambient conditions.	Dr. Mayavan may update the committee.

SI. No.	IS No.	Decision	Remarks
	requirements and methods of test'	The committee requested Dr. Mayavan to provide the draft document within 01 month.	

Item 7 REVIEW/REAFFIRMATION OF PUBLISHED INDIAN STANDARDS

7.1 As per BIS procedure, Indian Standards are to be reviewed which are 5 years old and are to be reaffirmed.

The committee requested Shri Lalit from Bharat Test House to review the documents mentioned in the agenda and provide a report in the next committee meeting. Based on the report, the standards mentioned in **Annex A** have been reaffirmed after the approval of the chairperson of ETD 11 Sectional committee.

The Committee may note.

Item 8 NEW SUBJECTS AND FUTURE PROGRAMME OF WORK

8.1 Following New work item received for consideration of the committee:

i) Battery Regenerator – **Annex B**
ii) Lithium Hexafluorophosphate - **Annex C**

The committee may consider.

Item 9 INTERNATIONAL ACTIVITIES

9.1 India is a 'P' member in IEC TC 21 and IEC SC 21A

It may be noted that P-Members (Participating members) have the obligation to vote at all stages and to participate and contribute in the TC meetings.

Next meeting of TC 21 and SC 21A, and their working groups, to be held in Saint-Denis, France from 2024-11-19 to 2024-11-22.

The agenda of the meeting is at **ANNEX-D.**
The committee may note

9.2 Designated experts in specific sectors

For commenting and voting of each document in IEC TC 21 and SC 21A, a provision of designated experts is being introduced in the committee. Members are requested to nominate themselves for the relevant sectors.

S. No	Sector	Sub Sector	Designated experts
1	Lead acid and other aqueous electrolyte based		
2	Li-ion, Ni-cd and other Advanced chemistry based	i) Li-ion system ii) Ni Metal Hydride system iii) Ni cadmium system iv) Other	
3	Application specific		
4	General standards and Fuel cells		
5	Second life of batteries		

9.3 Reports of Working groups

The experts nominated in Working groups are requested via mail to give report to the committee regarding the work being done in the working groups of IEC.

Following experts are requested to give a brief of the work going on in IEC TC 21 and SC 21A to the committee.

Structure of TC 21

WG/ JWG/ MT/ CAG	Title	Indian Representative
SC 21A	Secondary cells and batteries containing alkaline or other non-acid electrolytes	No
WG 2	Starter and Auxiliary batteries	Mr Sundar Mayavan
WG 3	Traction and stationary batteries	Mr Sundar Mayavan
WG 8	Safe operation of batteries	No
WG 11	Secondary high temperature cells and batteries	Ms Rashi Naresh Gupta
PT 63330	Requirements for reuse of secondary batteries	Ms Rashi Naresh Gupta
MT 6	Maintenance of IEC 61056 series "General purpose batteries"	No
MT 62902	Maintenance of IEC 62902 "Secondary cells and batteries - Marking symbols for identification of their chemistry"	No
JWG 7	Flow Battery Systems for Stationary applications linked to TC 105	Ms Rashi Naresh Gupta

JWG 12	Harmonization of terms and definitions for secondary batteries and their applications linked to TC 35, ISO/TC22/SC37	No
JWG 82	TC21/TC82 - Secondary cells and batteries for Renewable Energy Storage linked to TC 82	No
JWG 69 Li	TC21/SC21A/TC69 - Lithium for automobile/automotive applications linked to TC 69	Ms Rashi Naresh Gupta
JWG 69 Pb-Ni	TC 21/SC 21A/TC 69 - Lead Acid and Nickel based systems for automobile/automotive applications linked to TC 69	No

Structure of SC 21A

WG/ JWG/ MT/ CAG	Title	Indian Representative
WG 1	Secondary alkaline cells and batteries for industrial applications	No
WG 2	Secondary alkaline cells and batteries for portable applications	No
WG 3	Secondary lithium cells and batteries for portable applications	Ms Rashi Naresh Gupta
WG 4	Safety of secondary cells and batteries for portable applications	Mr Neeraj Kushwaha
WG 5	Secondary lithium cells and batteries for industrial applications	Mr Viswa Teja
WG 6	Environmental issues related to Secondary cells and batteries containing alkaline or other non-acid electrolytes	No
WG 7	Aircraft Batteries	No
PT 63338	General guidance for reuse of secondary cells and batteries	No
MT 8	Guide to designation of current in alkaline secondary cell and battery standards	No
JMT 18	(TC 35/SC 21A) - Safety of primary and secondary lithium batteries during transport Managed by TC 35	No

Item 9 ANY OTHER BUSINESS