28th Prof. Brahm Prakash Memorial Materials Event (BPMME 2020)

November 28, 2020 (Saturday)

Through Webex Platform* from IGCAR, Kalpakkam

Organized by

Indian Institute of Metals, Kalpakkam Chapter

Program Schedule

09:45 Hrs: Online joining of the participants

10:00 Hrs: Welcome

10:05 Hrs: Welcome address by Dr. Divakar, R. *Chairman, IIM Kalpakkam Chapter*

10:10 Hrs: Presidential address by Dr. Shaju K. Albert, *Outstanding Scientist & Director, Metallurgy and Materials Group & Materials Science Group, IGCAR; Chairman BPMME-2020*

10:20 Hrs: About BPMME 2020 by Dr. B. Anandkumar, *Convener BPMME-2020*

10:25 Hrs: Welcome and Introduction of BPMME 2020 Speaker by Dr. V. Karthik, *Secretary, IIM Kalpakkam Chapter*

10:30 Hrs. Prof. Brahm Prakash Memorial Materials Lecture on "Urban Mining of E-waste: Challenges and Technologies to Reduce, Reuse, and Recycle of Materials" by

Dr. U. Kamachi Mudali

Former Distinguished Scientist, DAE &
Chairman and Chief Executive, Heavy Water Board,
Dept. of Atomic Energy, Mumbai
Immediate Past President, Indian Institute of Metals

11:30 Hrs: About *Essay and* Elocution Contest: Jury—*Elocution Contest*

11:40 Hrs: Elocution Contest (Among 8 Short listed Candidates)

13:00 Hrs: Announcement of award winners and Prize distribution

13:10 Hrs: Vote of Thanks: Shri. P. Vasantharaja, *Co-Convener, BPMME-2020*

***Meeting Number: 1766485694 Password: zjPbTJFH394**

*https://iimkalpakkam.webex.com/iimkalpakkam/onstage/g.php?MTID=e05d80ae0e1db3bfd0bdd9ca80d897d5e

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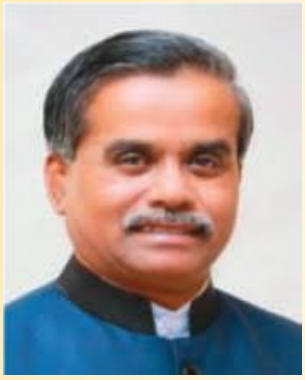
Prof. Brahm Prakash Memorial Materials Lecture 2020

Urban Mining of E-waste:

Challenges and Technologies to Reduce, Reuse, and Recycle of Materials



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Abstract

Waste from electrical and electronic equipment (WEEE) is a big global concern today as the accumulated quantities are keep increasing and they become a potential hazard in landfills. Reducing the waste quantity and reusing the materials recovered from them for applications again is a challenge and the whole world is working on this today. Newer technologies for efficient recovery of the materials employed in such WEEEs and reusing them in the metals industry is a primary concern for materials engineers. This is particularly important for critical materials including the primary metals like, Cu, Al, etc., REEs such as Y, Sm, Co etc., noble metals like Au, Pd, Ir etc., recovered from WEEEs such as computer devices, electrical utilities, magnet systems, batteries, lamps, etc.. The lecture provides an overview of WEEEs in global and Indian perspective, materials that can be recovered for reuse, technologies and challenges associated with such recycling, etc..