

For Immediate Release: June 11, 2023

PRESS RELEASE

IIT (ISM) faculty members idea for developing advanced materials through recycle/reuse of scrap, selected among top 75 ideas of the Life Global Call for Ideas and Papers by NITI Aayog.

The idea of a three member team of faculty members, including two of IIT (ISM) Dhanbad for developing advanced materials through the recycling of scraps with the help of a mobile application has been selected in the top 75 ideas for the LiFE Global Call for Ideas and papers.

The team of three assistant professors including Dr Ajay Bhandari of Department of Mechanical Engineering and Dr Rahul MR of Fuel, Minerals and Metallurgical Engineering of IIT (ISM) besides Dr Ashok Kamraj of Department of Material Science and Metallurgical Engineering of IIT Hyderabad through their project aims to change the behaviour pattern of communities to dispose of reusable commodities at recycling centres.

Elaborating about selection of their idea among the 75 ideas, Dr Ajay Bhandari said, “NITI Aayog received 2538 idea proposals from 67 countries under this call” “Out of this the top 75 ideas were shortlisted in two phases and our idea is one of them” further said Dr Bhandari.

“We initially submitted the idea in November 2022 and the first phase of selection was conducted during the same month while the second phase of selection was completed in March 2023” detailed Bhandari.

Explaining some background he said “In the present scenario recycling of material is essential for the efficient energy utilization and reducing environmental degradation”

“There needs to be more awareness of recycling materials, vendor details, economic benefits and environmental impact among common people” elaborated Bhandari.

Moreover, there is also need to encourage small and medium scale industries to use scientifically proven recycling methods that are also profitable.

“The proposed mobile application will guide the community to connect with potential industries and vice versa as it will have consolidated details from various scientific studies related to materials recycling, data analysis, relevant recycling industries and many more” explained Bhandari and added that the application will serve as a data base to connecting the larger community with waste collection centres and recycling units.

In addition the application will be embedded with artificial intelligence to guide the individual to connect to relevant industries for better benefits.

“The application will have literature for effectively developing advanced materials from scraps by integrating experimental and computational tools, to help venture into the recycling domain” divulged Bhandari and added that this will serve as a scientific proof for value added material for communities.



भारतीयप्रौद्योगिकीसंस्थान (भारतीयखनिविद्यापीठ), धनबाद
Indian Institute of Technology (Indian School of Mines), Dhanbad

In the long term the application will bring behavioural changes in the community and establish a systematic and profitable model for recycling scrap.

Rajni Singh

Dean (Media & Branding)