



Shri. Narendra Modi
Honorable Prime Minister of India &
President CSIR India



FOSTERING A STRONG ATMANIRBHAR BHARAT

10 Research Themes
75 i-Connect Events

INDUSTRY MEET-2022 Civil Infrastructure and Engineering



5, 7, 11, 14 & 15 July 2022



Dr. Jitendra Singh
Honorable Minister for MoST, ES & Vice President CSIR



Dr. V K Saraswat
Members, NTI Aayog, GSI



Prof. Ajay Kumar Sood
Principal Scientific Advisor (PSA), GSI



Dr. Rajesh S Gokhale
Secretary DSIR, DG CSIR & Secretary DST



Dr. S. Chandrasekhar
Secretary DST



Dr. M. Ravichandran
Secretary MoS

Opportunities for Entrepreneurship

Organised by CSIR- AMPRI Bhopal



सीएसआईआर- एम्प्री
CSIR-AMPRI

Participating Organisations



Theme Nodal : CIE



Dr. N. Anandavalli
Director
CSIR-SERC, Chennai



Dr. Vibha Malhotra
Sawhney, Scientist H,
Head TMD and IPU
CSIR, New Delhi



Mr. Devendra Singh
Principal Scientist, TMD
CSIR, Ministry of Science
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BACKGROUND

Growing industrialization and population leads to generation of huge quantity of solid wastes. About one billion tons of solid wastes have been generated in India from industrial, agricultural, municipal and other sources. Already accumulated wastes and their increasing annual production are the major source of pollution and became a challenge due to its heterogeneous characteristics and complexity in recycling. To save energy, create employment, enhance the economy and safeguard our environment, efficient recycling of all these Wastes into Wealth (WW) is essential. This industry meet aims to address on wastes recycling technologies in Civil Infrastructural and Engineering (CIE).

OPPORTUNITIES

Scientific innovations on solid waste management has resulted in introducing ceramic, cement, and concrete matrix composites; polymer matrix composites and metal matrix composites as an alternative materials for civil infrastructure and engineering. Many labs and pilot scale processes and technologies have been developed by CSIR institutes for recycling different wastes materials. Environment friendly, energy-efficient and cost-effective alternative materials developed from solid wastes by CSIR Labs and other institutes have great scope to cater to people's needs. Still, non availability of waste based products in mass scale and lack of commercialisation to be contended with for optimum benefits. There is a immediate need for R&D transformation with industry connect and public private partnership for effective commercialization and address the Indian Industry challenges through implementing Indian technologies in a sustainable approach.

Recycling waste materials will lead to sustaining the greater use of country's resources with a sustainable solution to Government of India mission program on Clean and Make in India. Also, realisation of all such technologies would leads to reduce emission of carbon dioxide and the impact of global warming and climate changes challenges. A technology compendium have been prepared on the CIE-WW theme of CSIR Institutes on marketable technologies. This would be shared for cross sector & pan industry waste exchange and entrepreneurship development on Waste to Wealth (WW). This industry connect aim to provide a common platform to industries, entrepreneurs, start-ups and stakeholders to maximise the benefits of solid waste recycling technologies in civil infrastructure and engineering in achieving Atmanirbhar Bharat.

PROGRAM : CIE-WW Theme: I-CEN 40: DAY 1: 5 July 2022, 1400 - 1600 hrs

1400-1405	Welcome Address and Introduction - Dr. Asokan Pappu, Chief Scientist, CSIR-AMPRI, Bhopal & Coordinator CIE-WW Moderator: Dr. Ashok Kumar, Outstanding Scientist / Scientist H, CSIR-CBRI, Roorkee
1405-1410	Opening Remark :Dr. N. Anandavalli, Director-CSIR-SERC, Chennai
1410-1420	Innagural Address - Dr. Avanish Kumar Srivastava, Director-CSIR-AMPRI, Bhopal
1420-1435	Plenary Talk : Civil infrastructure materials from Waste Materials & Challenges Dr. Mukesh Kumar, Director Steel Research and Technology Mission, Govt. of India, Former Chief, R&D Vedanta Ltd.
1435-1450	Keynote Address: Resource Efficiency from TPS Wastes -Mr. Sanjeev K. Saxena, GM, NTPC Vindhyachal

Technical Session : High-performance civil infrastructure materials and structures from industrial inorganic wastes

Time	Technology / Know how Presentation	TRL
1450-1455	Address by session Chair: Prof. Suddhasatwa Basu, Director CSIR-IMMT, Bhubaneswar	
1455-1510	Disaster resistant lightweight prefabricated building systems-Dr.J.Prabhakar, Chief Scientist, SERC, Chennai	8
1510-1525	Manufacturing high performance & hybrid composite wood using inorganic wastes- Dr. Asokan Pappu, Chief Scientist, CSIR-AMPRI, Bhopal	7
1525-1540	Advanced fly ash based geopolymers concrete for infrastructural applications- Dr. Manish Mudgal, Sr. Principal Scientist, CSIR-AMPRI, Bhopal	6
1540-1555	Utilization of Jarofix for road embankment construction - Dr A.K. Sinha, Sr.Principal Scientist, CRRI, New Delhi	8
1555-1600	Closing & Vote of thanks- Dr. Rajneesh K Gupta, CSIR New Delhi	

Industry Meet - 2022

CIE- Waste to Wealth: Azadi ka Amrit Mahotsav and 80 years of CSIR

CIE- Waste to Wealth- DAY 2: 7 July 2022, 1400 - 1610 hrs

PROGRAM SCHEDULE : CIE-WW Theme: I-CEN 42

1400-1405	Welcome Address - Dr. Asokan Pappu, Chief Scientist, CSIR-AMPRI, Bhopal
	Moderator - Dr. Manish Mudgal, Sr. Principal Scientist, CSIR-AMPRI, Bhopal
1405-1410	Introductory Address - Dr. Avanish Kumar Srivastava, Director-CSIR-AMPRI, Bhopal
1410-1415	Opening Remark :Dr. N. Anandavalli, Director-CSIR-SERC, Chennai
1415-1430	Plenary Talk — Opportunity for construction industry for usage of C&D and other inorganic wastes Shri Suresh C Tripathi, Sr. Consultant, NovoCrete and Former Sr. GM, Aditya Birla Group
1430-1445	Keynote Address: Ship recycling waste — opportunities: Dr. Anand Hiremath, Head R&D, GMS, Lead coordinator Ship recycling, Bhavnagar, Gujarat

Technical Session: Alternative building materials and structures using silica rich wastes

Time	Technology / Know how Presentation	TRL
1445-1450	Address by Session Chair: Dr. Indranil Chatteraj, Director CSIR-NML Jamshedpur	
1450-1505	Manufacture of cold setting fly ash building brick- Dr. S.M. Mustakim, Sr. Tech Officer, IMMT, BBSSR	9
1505-1520	Utilization of phosphogypsum for road construction- Dr A.K. Sinha, Sr.Principal Scientist, CRRI, Delhi	7
1520-1535	Quick repairing material by geopolymerisation- Mr Rohit B Meshram, Sr. Scientist, NML Jamshedpur	8
1535-1550	Toilet unit using thin precast concrete segmental panels -Dr. K.N. Laksmikandhan, Sr. Scientist, SERC Chennai	8
1550-1605	Eco-friendly geopolymer concrete blocks - Dr. P.S. Ambily, Principal Scientist, SERC Chennai	7
1605-1610	Closing & Vote of Thanks- Dr. Deepti Mishra, Sr. Principal Scientist, CSIR-AMPRI, Bhopal	

CIE- Waste to Wealth- DAY 3: 11 July 2022, 1000 – 1210 hrs

PROGRAM SCHEDULE : CIE-WW Theme: I-CEN 44

1000-1005	Welcome Address - Dr. Asokan Pappu, Chief Scientist, CSIR-AMPRI, Bhopal
	Moderator - Dr. Sarika Verma, Principal Scientist, CSIR-AMPRI, Bhopal
1005-1010	Introductory Address - Dr. Avanish Kumar Srivastava, Director-CSIR-AMPRI, Bhopal
1010-1015	Opening Remark :Dr. N. Anandavalli, Director-CSIR-SERC, Chennai
1015-1030	Plenary Talk : Construction & demolition waste as a replacement for natural aggregates Shri Mohan Ramanathan, Managing Director, Advanced Construction Technologies (P) Ltd., Chennai
1030-1045	Keynote Address: Cross sector waste recycling in civil infrastructure- Mr. Deepak Bansal, Jt. General Manager (Proj.), HUDCO, New Delhi

Technical Session: High volume use of industrial inorganic wastes for civil infrastructure

Time	Technology / Know how Presentation	TRL
1045-1050	Address by Session Chair: Dr. Anjan Ray, Director CSIR-CBRI, Roorkee	
1050-1105	Utilization of copper slag for road construction- Dr A.K. Sinha, Sr.Principal Scientist, CRRI, New Delhi	7
1105-1120	Eco- friendly X-ray radiation shielding leadfree redmud door&panels- Dr. MK.Gupta, Scientist, CSIR-AMPRI	6
1120-1135	Cost effective durable water tanks using flowable cement mortar- Dr. J. Prabhakar, Chief Scientist, SERC	7
1135-1150	Know how for making building components from construction & demolition wastes, Dr G. Santhakumar, CBRI	7
1150-1205	CSIR-AMPRI's marketable technologies — Dr. Kirti Soni, Principal Scientist, PPD, CSIR-AMPRI Bhopal	6-9
1205-1210	Closing & Vote of Thanks- Mr. Devendra Singh, Principal Scientist, TMD, CSIR New Delhi	



एक कदम स्वच्छता की ओर

**SWACHH
BHARAT
ABHIYAN**



**AatmaNirbhar
Bharat Abhiyan**

(आत्मनिर्भर भारत)



ASH TO CASH

Organizer:



Dr. Avanish K. Srivastava
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Registration:
Industries, Stakeholders
Entrepreneurs & Startups
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<https://www.iconnect75.com>



Organizers:

CSIR-Advanced Materials and Processes Research Institute (AMPRI)
Habibganj Naka, Bhopal, MP- 462026

Industry Meet - 2022

CIE- Waste to Wealth :Azadi ka Amrit Mahotsav and 80 years of CSIR

DAY 4 : 14 July 2022 , 1400 hrs – 1600 hrs

PROGRAM SCHEDULE : CIE-WW Theme: I-CEN 46

1400-1405	Welcome address - Dr. Asokan Pappu, Chief Scientist, CSIR-AMPRI Bhopal
	Moderator - Dr. J.P Shukla, Sr. Principal Scientist, CSIR-AMPRI, Bhopal
1405-1415	Introductory Address - Dr. Avanish Kumar Srivastava, Director-CSIR-AMPRI, Bhopal
1415-1420	Opening Remark :Dr. N. Anandavalli, Director-CSIR-SERC, Chennai
1420-1435	Plenary Talk — Agro waste management & challenges - Shri Ashwani K. Gupta, Addl. Director Industries, Haryana
1435-1450	Keynote Address: Organic and inorganic waste management & opportunities- Dr. K K. Goyal, MSME, New Delhi

Technical Session: Industrial & agro wastes recycling technologies in green building materials

Time	Technology / Know how Presentation	TRL
1450-1455	Address by Session Chair: Dr Ranjana Aggarwal, Director, CSIR-NIScPR & CSIR-CRRI (Addl. Charge), New Delhi	
1455-1510	High volume use of Parali- paddy stubble (Agrowaste)- a raw materials for manufacturing hybrid particle boards- Dr. Asokan Pappu, Chief Scientist, CSIR-AMPRI Bhopal	7
1510-1525	Advance paver blocks from copper tailings - Dr. Akram Khan, Sr. Principal Scientist, CSIR-AMPRI Bhopal	6
1525-1540	Textile reinforced concrete prototyping technology - Dr. Smitha Gopinath, Principal Scientist, SERC	7
1540-1555	Enhanced utilization of blast furnace slag (granulated) and fly ash in blended cement- Ms Rashmi Singla, Principal Scientist, NML, Jamshedpur	7
1555-1600	Closing & Vote of Thanks- Dr. Manoj K. Gupta, Scientist, CSIR-AMPRI, Bhopal	

DAY 5 : 15 July 2022 , 1400 – 1630 hrs

PROGRAM SCHEDULE: CIE-WW Theme: I-CEN 47 Panel Discussions and Concluding Session on CIE-WW

1400-1405	Welcome address (Moderator) : Dr. Akram Khan, Sr. Principal Scientist, CSIR-AMPRI, Bhopal
1405-1415	Summary presentation of CIE-WW theme on 19 technologies - Dr. Asokan Pappu, Chief Scientist, CSIR-AMPRI
1415-1420	Address by Dr. Avanish Kumar Srivastava, Director-CSIR-AMPRI, Bhopal
1420-1425	Remark by Dr. N. Anandavalli, Director-CSIR-SERC, Chennai & Chairperson CIE Cluster
1425-1440	Planery Talk : Resource Efficiency & Circular Economy on Waste to Wealth Smt. Amneet P. Kumar, IAS, Director General MSME, Haryana
1440-1455	Keynote Address: Cross sector waste recycling- Shri Mukesh Gulati, ED, Foundation for MSME Cluster, New Delhi
1455-1505	Panel Discussions : Address on Waste to Wealth
1505-1605	Address by Panelists & Discussions : Dr. Amit Chatterjee, Director R&D Vedanta Ltd.; Shri CP. Agrawal, Director, Jindal Adv. Materials, Gurugram; Dr. Uttam Pawaskar, Head Civil, Tata Power, Mumbai; Shri RK. Solanki, GM, DB Power, CG.; with Adani, Birla, NTPC, NALCO... Shri J R. Meena, Chief Engineer, CPWD, Bhopal; Dr. Deepak Bansal, Jt. GM, HUDCO, Delhi; Dr. P. Jagan, Regional Director, CPCP Bhopal; Dr. Ruhi Haque, SDO Forest Dept. Raisen, M.P. Dr. Amit Rai, Vice President, Buss. Dev., JB Power, Gurugram; Dr. Anand Hiremath, Head R&D GMS, Bhavnagar Shri Sanjay Sharma, GM Tech., Abellon, Gujarat; Shri Baburao Kadam, GM, Devkai Foods Industry, Hingoli, MH. Shri Amit Goyal, Director, GMG Plywoods Pvt Ltd. & Crosta Panels, Haryana
	Topics of Discussions with Technologists: CIE-WW Industrial inorganic wastes (Redmud, fly ash, marble, stone and granite wastes, copper tailing, FGD Gypsum waste), Agro wastes & Municipal waste, FRP wastes, Ship breaking wastes and Plastic wastes
1605-1615	Concluding Session : Address by Shri V.P. Sing Walia, Joint Director, Dist MSME Centre, Yamuna Nagar, Haryana
1615-1625	Concluding Remark by Dr. Anjan Ray, Director CSIR-IIP Dehradun & Director CSIR- CBRI Roorkee
1625-1630	Closing & Vote of Thanks- Dr. Ashok Kumar, Outstanding Scientist / Scientist H, CSIR-CBRI Roorkee

Register to join (Free) @:
<https://www.iconnect75.com>

Participating Organisations:

CSIR-TMD, AMPRI,
CBRI, CRRI,
IMMT, NML, SERC
Stakeholders & Industries
Entrepreneurs & Startups