

i-PSG MS Teams Meeting: Presentation list**(Date: October 26-27, 2021; Time: 2 PM onwards)****[A] Thematic Research Project: Completed, On-going and New Proposals (10 min presentation followed by 5 min discussion)**

Sl. No.	Project No.	Status	Title of the project	Start date	End date	PL	Date of presentation
1.	OLP-0382	Completed	Effect of deformation induced martensite and dislocations density on the hydrogen permeation and hydrogen embrittlement of austenitic steels	16-10-20	15-10-21	G. Sudhakar Rao	27.10.2021
2.	OLP-0383	Completed	Discerning the individual and synergistic effect of carbide inhibitors on austenite retention and stability in medium manganese advanced high strength steels	16-10-20	15-10-21	Avanish K. Chandan	27.10.2021
3.	OLP-0384	Completed	Neural network-based sensitivity analysis and performance optimization of carbon recovery from Blastfurnace and Corex plant sludge of JSW Steel plant using froth flotation - A step towards Waste-to-Wealth management	16-10-20	15-10-21	Ajita Kumari	27.10.2021
4.	OLP-0385	Completed	Understanding the phenomenon and enhancement of anti-icing properties of HVOF deposited coating	16-10-20	15-10-21	Paritosh Dubey	27.10.2021
5.	OLP-0374	Completed	Characterization of microbubbles and its subsequent application in fine particle separation	01-06-20	30-09-21	Kumari Ruby	27.10.2021
6.	OLP-0388	On-going	Study of Amorphous magnetic alloy flakes for Microwave Absorbing Materials (2-18 GHz): Tuning magnetic permeability through flake microstructure and Morphology	01-06-21	30-11-21	M. Premkumar	27.10.2021
7.	OLP-0389	On-going	Numerical modelling of heat transfer and fluid flow in Selective Laser Melting (SLM) of SS316L	01-06-21	31-03-22	Y. Usha	27.10.2021
8.	OLP-0392	On-going	Multi physics and heat treatment simulation of additive manufacturing process for property prediction of SS316L	01-06-21	31-03-22	M. Madan	27.10.2021
9.	---	New Proposal	Decarburization of high carbon ferroalloys by CO ₂ treatment	---	---	A. Ammasi	26.10.2021
10.	---	New Proposal	Production of iron powder/iron nugget from industrial waste by the process of segregation roasting	---	---	M. Bhattacharya	26.10.2021
11.	---	New Proposal	Feasibility study on producing DRI from lumps/pellets by using hydrogen	---	---	M. Madan	26.10.2021
12.	---	New Proposal	Processing of glassy metal powders through gas atomization for additive manufacturing and coating applications	---	---	Rajat Roy	26.10.2021
13.	---	New Proposal	Extraction and separation of rare earth elements through porous silica-grafted ligands	---	---	Rajen Kundu	26.10.2021

14.	---	New Proposal	Enhancement of molten salt corrosion resistance of thermal energy storage materials in concentrated solar power plant through doping inhibitors	---	---	S. K. Pradhan	26.10.2021
15.	---	New Proposal	Oxidation and hot corrosion behaviour studies of AMed Inconel 625 & Inconel 718 alloys	---	---	S. Paswan	26.10.2021
16.	---	New Proposal	Development of a hybrid centrifugal separator for application in mineral processing	---	---	Sunati Mohanty	26.10.2021

[B] Technology Development Project: Completed, On-going and New Proposals (10 min presentation followed by 5 min discussion)

Sl, No	Project No.	Status	Title of the project	Start date	End date	PL	Date of presentation
17.	OLP-0369	On hold	Scaling up of the process for production of iron powder from waste iron oxide fines / slimes using hydrogen gas /natural gas	16-10-19	15-07-21	D. C. Sau	27.10.2021
18.	OLP-0372	On-going	Development of melting-casting facilities and optimization of melting and casting parameters for 3 rd generation Al-Li alloys	01-12-19	31-03-22	A. P. Murugesan	27.10.2021
19.	OLP-0393	On-going	Investigations on the NML'S retort technology for magnesium metal production	01-06-21	31-03-22	Krishna Kumar	27.10.2021
20.	---	New Proposal	Investigate NML developed furnace compatibility with IIP bio-pellets	---	---	R. B. Meshram	26.10.2021
21.	---	New Proposal	Upscaling of an energy efficient process for the recovery of metal values from spent NdFeB magnets	---	---	S. K. Sahu	26.10.2021

[C] Scholastic Project: Completed, On-going and New Proposals (10 min presentation followed by 5 min discussion)

Sl. No.	Project No.	Status	Title of the project	Start date	End date	Project Leader	Date of presentation
22.	OLP-0352	Completed	High Temperature Crack Growth of Cr-Mo Steels (Module-III)	16-10-20	15-10-21	C. V. Singh	27.10.2021
23.	OLP-0353	Completed	Development of Functionalized MOF and its composites for the adsorption of light rare earths from effluent/dilute leach solution: Dynamic filtration studies with mass transfer modelling (Module-III)	16-10-20	15-10-21	Shivendra Sinha	27.10.2021
24.	OLP-0354	Completed	Study of structure-property correlations of inorganic - organic hybrid geopolymers (Module-III)	16-10-20	15-10-21	Rashmi Singla	27.10.2021
25.	OLP-0355	Completed	Studies on the physico-chemical behavior of mixture of amine (pri, sec, ter and quart amines) and organophosphoric compounds	16-10-20	15-10-21	Swati Pramanik	27.10.2021

			(Phosphoric,phosphonic and phosphinic acids) for the solvent extraction and separation of Li, Co, Ni and Mn (Module-III)				
26.	OLP-0345	Completed	Development of Low Carbon Bainitic Steels (Module-III)	01-06-20	30-05-21	Gaurav Kr. Bansal	27.10.2021
27.	OLP-0387	Completed	Extraction and recovery of copper from lean grade chalcopyrite	16-10-20	15-10-21	Rajanikant Choudhari	27.10.2021
28.	OLP-0386	Completed Module-I and New proposal	Behaviour of mold flux for high Al steels during continuous casting process (Module I: Completed) [<i>New proposal for Module-II</i>]	16-10-20	15-10-21	Bhupendra Kumhare	26.10.2021
29.	---	New Proposal	Development of electromagnetic sensor for real time health monitoring of structural components exposed to high-temperature (above 600°C) (Module-I)	---	---	Chandan Datta	26.10.2021
30.	---	New Proposal	A study on hydrodynamics characteristics in separation of minerals in a monolithic flotation column (Module-I)	---	---	K. Hembrom	26.10.2021
31.	---	New Proposal	Flow Accelerated Pipeline Corrosion: Probing the FAC mechanisms of API 5L grade steels through gravimetric and different electrochemical techniques (Module-I)	---	---	L. K. Meena	26.10.2021
32.	---	New Proposal	Evaluation of mechanical properties across fusion boundaries of dissimilar metal welds materials using ball indentation technique and co-relate with microstructural characteristic (Module-I)	---	---	Mousumi Das	26.10.2021