

i-PSG MS Teams Meeting: Presentation list**(Date: April 7-8, 2022; Time: 2 PM onwards)****[A] Thematic Research Project: Completed, On-going and New Proposals**

Sl. No.	Project No.	Title of the project	Start date	End date	PL	Status	Presentation date
1.	OLP-0382	Effect of deformation induced martensite and dislocations density on the hydrogen permeation and hydrogen embrittlement of austenitic steels	16-10-20	15-03-22	G. Sudhakar Rao	Completed	08.04.2022
2.	OLP-0385	Understanding the phenomenon and enhancement of anti-icing properties of HVOF deposited coating	16-10-20	15-01-22	Paritosh Dubey	Completed	08.04.2022
3.	OLP-0374	Characterization of microbubbles and its subsequent application in fine particle separation	01-06-20	31-03-22	Kumari Ruby	Completed	08.04.2022
4.	OLP-0388	Study of Amorphous magnetic alloy flakes for Microwave Absorbing Materials (2-18 GHz): Tuning magnetic permeability through flake microstructure and Morphology	01-06-21	31-03-22	M. Premkumar	Completed	08.04.2022
5.	OLP-0389	Numerical modelling of heat transfer and fluid flow in Selective Laser Melting (SLM) of SS316L	01-06-21	31-03-22	Y. Usha	Completed	08.04.2022
6.	OLP-0392	Multi physics and heat treatment simulation of additive manufacturing process for property prediction of SS316L	01-06-21	31-03-22	M. Madan	Completed	08.04.2022
7.	OLP-0396	Production of iron powder/iron nugget from industrial waste by the process of segregation roasting	01-11-21	30-04-22	M. Bhattacharya	Completed	08.04.2022
8.	OLP-0395	Decarburization of high carbon ferroalloys by CO ₂ treatment	01-11-21	30-09-22	A. Ammasi	On-going	08.04.2022
9.	OLP-0398	Processing of glassy metal powders through gas atomization for additive manufacturing and coating applications	01-11-21	30-09-22	Rajat Roy	On-going	08.04.2022
10.	OLP-0406	Extraction and separation of rare earth elements through porous silica-grafted ligands	01-11-21	30-09-22	Rajen Kundu	On-going	08.04.2022
11.	OLP-0399	Enhancement of molten salt corrosion resistance of thermal energy storage materials in concentrated solar power plant through doping inhibitors	01-11-21	30-09-22	S. K. Pradhan	On-going	08.04.2022
12.	OLP-0407	Oxidation and hot corrosion behaviour studies of AMed Inconel 625 & Inconel 718 alloys	01-11-21	30-09-22	S. Paswan	On-going	08.04.2022
13.	---	Design and development of an in-house barrel electroplating system for coating Mg-based biodegradable implants	---	---	Roshan Kumar	New Proposal	07.04.2022
14.	---	Low-Temperature (<100 °C) Glow Discharge Plasma Nitriding of Aluminum/Aluminum Alloys	---	---	Paritosh Dubey	New Proposal	07.04.2022
15.	---	Low cycle fatigue behaviour of an additively manufactured Ni-base superalloy IN-625	---	---	C V Singh	New Proposal	07.04.2022

16.	---	Influence of precipitation on the threshold intensity factor for environmental assisted cracking of AA 5083-H111	---	---	G. Sudhakar Rao	New Proposal	07.04.2022
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[B]Technology Development Project: Completed, On-going and New Proposals

Sl. No	Project No.	Title of the project	Start date	End date	PL	Status	Presentation date
17.	OLP-0369	Scaling up of the process for production of iron powder from waste iron oxide fines / slimes using hydrogen gas /natural gas	16-10-19	31-03-22	D. C. Sau	Completed	08.04.2022
18.	OLP-0372	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	Completed	08.04.2022
19.	OLP-0393	Investigations on the NML'S retort technology for magnesium metal production	01-06-21	31-03-22	Krishna Kumar	Completed	08.04.2022
20.	OLP-0401	Investigate NML developed furnace compatibility with IIP bio-pellets	01-11-21	30-04-22	R. B. Meshram	Completed	08.04.2022
21.	OLP-0408	Upscaling of an energy efficient process for the recovery of metal values from spent NdFeB magnets	01-11-21	30-09-22	N. S. Randhawa	On-going	08.04.2022
22.	OLP-0397	Feasibility study on producing DRI from lumps by using hydrogen	01-11-21	30-09-22	M. Madan	On-going	08.04.2022
23.	OLP-0400	Development of a hybrid centrifugal separator for application in mineral processing	01-11-21	30-09-22	Sunati Mohanty	On-going	08.04.2022

[C] Scholastic Project: Completed, On-going and New Proposals

Sl. No.	Project No.	Title of the project	Start date	End date	Project Leader	Status	Presentation date
24.	OLP-0352	High Temperature Crack Growth of Cr-Mo Steels (Module-III)	16-10-20	15-10-21	C. V. Singh	Completed	08.04.2022
25.	OLP-0353	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	31-03-22	Shivendra Sinha	Completed	08.04.2022
26.	OLP-0361	Development of high efficiency Tin Selenide based Thermoelectric and optically tunable coatings for alternative energy harvesting from different industrial applications (Module-III)	01-06-21	31-03-22	Komal Singh	Completed	08.04.2022
27.	OLP-0390	Mitigation of galvanizability of steel surface through adoption of sol-gel pre-coating and improvement in corrosion resistance of galvanizing coating through post intercalated ion conversion method (Module I)	01-06-21	31-03-22	M. Walunj	Completed	08.04.2022
28.	OLP-0378	Characterization, beneficiation and coke formation studies on low volatile coking coal for metallurgical utility (Module-II completed and New Proposal for Module-III)	01-06-21	31-03-22	Mohan Rao Andavarapu	Completed and new proposal for Module-III	07.04.2022
29.	OLP-0379	Determining the process route parameters of the formation of stable Face Centred Cubic Titanium (Module-II completed and New Proposal for Module-III)	01-06-21	31-03-22	Vaibhav Gaur	Completed and new proposal for Module-III	07.04.2022

30.	OLP-0380	Precipitation hardened compositionally complex Ni-based alloys aided with HDI strengthening (Module-II completed and New Proposal for Module-III)	01-06-21	31-03-22	Shubhada Kar	Completed and new proposal for Module-III	07.04.2022
31.	OLP-0391	Designing of a magneto-plasmonic grapheme material and its multimodal application in catalysis (Module-I completed and New Proposal for Module-II)	01-06-21	31-03-22	Sudeshana Das Chakravarty	Completed and new proposal for Module-II	07.04.2022
32.	---	Beneficiation of lepidolite bearing pegmatite/aplite for lithium minerals concentrate	---	---	S K Sahoo	New Proposal	07.04.2022
33.	---	Near net shape 3D manufacturing of Inconel 718 by optimizing controlled parameters of wire arc additive manufacturing with Cold metal transfer process	---	---	Nimai Haldar	New Proposal	07.04.2022
34.	---	In-depth study of interfacial conditions during early stages of pearlitic transformation in multicomponent highcarbon steels	---	---	Vikas Kumar Sahu	New Proposal	07.04.2022
35.	---	Ratcheting fatigue behavior of welded Inconel 740H nickel-based superalloy under asymmetric cyclic loading	---	---	Rupendra Singh Rajput	New Proposal	07.04.2022
36.	---	Investigation of hydrodynamics of gas solid fluidized bed in terms of angle of fluidization and separation chamber aspect ratio	---	---	Abhishek Kumar	New Proposal	07.04.2022
37.	---	Development of Fe-rich cost effective High-Entropy Alloys for high temperature applications	---	---	Vikas Shivam	New Proposal	07.04.2022
38.	---	Microstructural evolution of Superalloy Inconel 740H during Thermomechanical Processing	---	---	PVS Chaitanya	New Proposal	07.04.2022
39.	---	Preparation of a geopolymer-type binder from briquette ashes of Ulaanbaatar, Mongolia	---	---	Zolzaya Tsoodol	New Proposal	07.04.2022

[D] Infrastructure Development Project: Completed, On-going and New Proposals

Sl. No.	Project No.	Title of the project	Start date	End date	Project Leader	Status	Presentation date
40.	---	Development of a MoU management System	---	---	Beena Kumari	New Proposal	07.04.2022
41.	---	Revamping In-house Project Management System (CSIR-NML-IPSG) Phase III	---	---	Beena Kumari	New Proposal	07.04.2022

Presentation time:

- (1) Completed projects: 10 minutes each
- (2) On-going projects : 5 minutes each
- (3) New Proposals: 8 minutes each

PRESENTATION TIMING IS TO BE STRICTLY FOLLOWED