

## AGENDA of i-PSG Meeting

**Venue:** Lecture Hall; **Date:** October 08 & 09, 2018; **Time:** 10:30 am onwards

- Opening remarks by Chairman, i-PSG
- Presentation of New, On-going and Completed projects  
(Please upload your presentations by 10:00 AM)
- Feedback and discussion
- Concluding remarks by Chairman, i-PSG
- Close door meeting

### **i-PSG Presentation Schedule**

<b>Technology Development and Thematic Research Presentation on October 08, 2018</b>									
Sl. No	Project No	Project Category	Title of the project	PL	Project Duration		Presentation Schedule		Remarks
					Start	Completion	Date	Time	
1.	OLP-0337	Technology Development	Development of indigenous air stratifier for dry beneficiation	G. Chalavadi	16-04-18	15-10-18	08-10-18	10:30	Presentation (Completed project)
2.	OLP-0318	Thematic Research	Modelling and Simulation of non- conventional superimposed multi-force mineral separator	G. Chalavadi	01-06-17	28-02-19	08-10-18	10:45	Presentation (On-going project)
3.	OLP-0343	Thematic Research	Design and optimization study of flotation process using modelling and simulation analysis	K. Hembrom	16-04-18	15-04-19	08-10-18	11:00	Presentation (On-going project)
4.	OLP-0342	Thematic Research	A process development for production of glass-ceramics products from metallurgical slags	Ammasi A.	16-04-18	15-04-19	08-10-18	11:15	Presentation (On-going project)
5.	OLP-0344	Thematic Research	Synthesis of dry geopolymer cement using industrial by-products and waste	S. K. Nath	16-04-18	15-04-19	08-10-18	11:30	Presentation (On-going project)
6.	OLP-0321	Thematic Research	Development of Expertise in Life Cycle Analysis (LCA) at CSIR-NML	R.B. Meshram	01-06-17	30-09-18	08-10-18	11:45	Presentation (Completed project)
7.	OLP-0332	Technology Development	Development of a process for the production of synthetic rutile from low grade ilmenite ore	S. Prasad	16-04-18	15-07-18	08-10-18	12:00	Presentation (Completed project)
8.	OLP-0340	Technology Development	Production of iron powder from iron oxide fines at low temperature using hydrogen and methane/	D.C. Sau	16-04-18	15-07-18	08-10-18	12:15	Presentation (Completed project)

			natural gas (NG)						
9	OLP-0338	Technology Development	Development of process for extraction and separation of REEs from FCC catalysts	Abhilash	16-04-18	15-10-18	08-10-18	12:30	Presentation (Completed project)
10.	OLP-0336	Technology Development	Production of Fe-Ni/Co-Mo metallic alloy and alumina rich slag from Ni-Mo/Co-Mo spent catalysts in electric arc furnace	S. Agarwal	16-04-18	15-10-18	08-10-18	12:45	Presentation (Completed project)
11.	OLP-0331	Technology Development	Energy efficient Coke based brass melting furnace for the artisans of West Bengal and Odisha	N. Haldar	01-10-17	30-09-18	08-10-18	13:00	Presentation (Completed project)
12.	OLP-0333	Technology Development	Modeling and optimization of water cooled copper drum channel of melt spinning technique for the production of amorphous alloys	Y. Usha	16-04-18	15-10-18	08-10-18	13:15	Presentation (Completed project)
<b>Lunch break</b>									
13.	OLP-0334	Technology Development	Graphene supercapacitor with energy density close to Li-ion battery	R.K. Sahu	16-04-18	15-10-18	08-10-18	14:15	Presentation (Completed project)
14.	OLP-0335	Technology Development	Development of a mobile based app to know the corrosion rate of structural metals/alloy in India	S. Kundu	16-04-18	15-10-18	08-10-18	14:30	Presentation (Completed project)
15.	OLP-0339	Technology Development	IoT for high temperature processes in a hazardous environment in steel making	S. Sagar	16-04-18	15-10-18	08-10-18	14:45	Presentation (Completed project)
16.	OLP-0317	Thematic Research	A crystal plasticity based computational materials engineering approach to design novel microstructure suitable for development of 3rd generation AHSS	K Mukherjee	01-06-18	30-09-18	08-10-18	15:00	Presentation (Completed project)
17.	OLP-0319	Thematic Research	Simulation of thin strip casting	G.K. Mandal	01-06-17	30-09-18	08-10-18	15:15	Presentation (Completed project)
18.	OLP-0320	Thematic Research	Large-scale massively parallel molecular dynamics simulation of metal-matrix nano-composite: novel design and characterization	Sunil Kumar	01-06-17	30-09-18	08-10-18	15:30	Presentation (Completed project)
19.	OLP-0341	Thematic Research	Effect of build direction on properties of metallic components produced by direct digital manufacturing (3D metal printing) technique	K. Gopala Krishna	16-04-18	15-04-19	08-10-18	15:45	Presentation (On-going project)
20.	New proposal	Thematic Research	Studies on carbon dioxide(CO <sub>2</sub> ) sequestration using steel plant slags	D.C.Sau	01-10-18	30-09-19	08-10-18	16:00	Presentation (New proposal)
21.	New proposal	Thematic Research	Graphene based high strength steel: Can graphene effectively block the dislocation movement ?	J. Chakraborty	01-10-18	30-09-19	08-10-18	16:15	Presentation (New proposal)
22.	New proposal	Thematic Research	Ab initio Modelling of deformation anisotropy in BCC ferrite using Density Functional Theory	K. Mukherjee	01-10-18	30-09-19	08-10-18	16:30	Presentation (New proposal)

			(DFT)						
23.	New proposal	Thematic Research	Estimation of various micro-structures and crystal dislocations during thermal and mechanical processing of steel: a molecular dynamics simulation investigation.	Sunil Kumar	01-10-18	30-09-19	08-10-18	16:45	Presentation (New proposal)
24.	New proposal	Thematic Research	Phase field modelling of microstructure evolution of steel during deformation processing	Sheuli Hore	01-10-18	30-09-19	08-10-18	17:00	Presentation (New proposal)
<b>Scholastic Research Presentation on October 09, 2018</b>									
Sl No	Project No.	Category	Title of the project	PL	Project Duration		Presentation Schedule		Remarks
					Start	Completion	Date	Time	
25.	OLP-297	Scholastic Research	Development of High Induction amorphous based soft magnetic alloys	Premkumar M.	01-10-17	30-09-18	09-10-18	10:30	Combined presentation (completed module-II & new module-III)
26.	OLP-303	Scholastic Research	Study of wear and RCF mechanism in high carbon nanopearlitic rail steel	S. Tripathy	01-10-17	30-09-18	09-10-18	10:45	Combined presentation (completed module-II & new module-III)
27.	OLP-304	Scholastic Research	Development of Medium Mn, high Al low density high strength steel	Biraj Kumar Sahoo	01-10-17	30-09-18	09-10-18	11:00	Combined presentation (completed module-II & new module-III)
28.	OLP-305	Scholastic Research	Study on Evolution of low temperature nanobainitic steel	Minal Shah	01-10-17	30-09-18	09-10-18	11:15	Combined presentation (completed module-II & new module-III)
29.	New Proposal	Scholastic Research	High Temperature Crack Growth of Cr-Mo Steels (Module-I)	C V Singh	01-10-18	30-09-19	09-10-18	11:30	Presentation (New proposal)
30.	New Proposal	Scholastic Research	Development of carbon based filler immobilized mixed matrix membrane for separation of Heavy Toxic Metals (Focus on Nuclear metals) from dilute effluent/leach solution-MODULE-1	Shivendra Sinha	01-10-18	30-09-19	09-10-18	11:40	Presentation (New proposal)
31.	New Proposal	Scholastic Research	Development of inorganic-organic hybrid geopolymers (Module-I)	Rashmi Singla	01-10-18	30-09-19	09-10-18	11:50	Presentation (New proposal)
32.	New Proposal	Scholastic Research	Rational Design of Solvent System: A Novel Approach for Recycling Metals from leach solution of Cathode Materials of Lithium-ion Batteries by solvent extraction.	Swati Pramanik	01-10-18	30-09-19	09-10-18	12:00	Presentation (New proposal)

33.	OLP-251	Scholastic Research	Studies on corrosion behavior of electrodeposited Ni using ionic liquid on AZ91 and AZ31 Mg alloys.	Charu Singh	01-04-17	30-09-18	09-10-18	12:10	Presentation (Completed project)
34.	OLP-0288	Scholastic Research	Studies for the recovery of lanthanide group metals from primary and secondary resources	Archana Kumari	01-04-18	30-09-18	09-10-18	12:20	Presentation (Completed project)
35.	OLP-0323	Scholastic Research	Machinability and Optimisation of Process Parameter of Titanium Alloy (Ti-6Al-4V) by Die-Sinking EDM Process Using Copper Tool	Manoj Kumar	01-10-17	30-09-18	09-10-18	12:30	Presentation (Completed project)
36.	OLP-0324	Scholastic Research	Friction stir welding of dissimilar material Cu-Al using cryo-treated tool	Nimai Halder	01-10-17	30-09-18	09-10-18	12:40	Presentation (Completed project)
37.	OLP-0325	Scholastic Research	Development of Hard and Optically Transparent Nanocomposite Coatings for Wear and Optoelectronic Applications. (Module I): Effect of Deposition Conditions on Mechanical and Optical Behaviour of Al-S-N Thin Films	Soni	01-10-17	30-09-18	09-10-18	12:50	Presentation (Completed project)
38.	OLP-0326	Scholastic Research	Studies on magnetocaloric behaviour of NiMnGa based crystalline and Fe/Co Glassy Systems (Module 1: Preparation of NiMnGa-X(X=Cu) alloy by melting casting /melt spinning and characterization)	Sushmita Dey	01-10-17	30-09-18	09-10-18	13:00	Presentation (Completed project)
39.	OLP-0327	Scholastic Research	Correlation of microstructure and mechanical properties of steel by Electromagnetic characterization (Module 1) : Studies on recovery and recrystallization behaviour of 80% cold rolled low carbon steel by Magnetic Non-destructive Evaluation	Siuli Dutta	01-10-17	30-09-18	09-10-18	13:10	Presentation (Completed project)
40.	OLP-0328	Scholastic Research	Study of Structure-Property Correlation to Comprehend Cementite Dissolution During Wire Drawing Process	Sabita Ghosh	01-10-17	30-09-18	09-10-18	13:20	Presentation (Completed project)
41.	OLP-0329	Scholastic Research	Evaluation of residual stress and mechanical properties of in-service components using ball indentation technique with finite element modelling	Mousumi Das	01-10-17	30-09-18	09-10-18	13:30	Presentation (Completed project)
<b>Only progress report submission (submit a one page report by October 05. 2018)</b>									
42.	OLP-0255	Scholastic Research	Thermo-mechanical processing parameters on microstructures and hot deformation behaviour of molybdenum added low carbon micro alloyed	A.P. Murugesan	16-04-18	15-04-19	NA		No presentation; Progress report submission only.

			steel (Module-IV)					
43.	OLP-0256	Scholastic Research	Control & Analysis of Inclusions in Electrical Steel (Module-IV)	Ashok K.	16-04-18	15-04-19	NA	No presentation; Progress report submission only.
44.	OLP-0285	Scholastic Research	Scientific Investigation on Hydro and Electro-chemical dissolution of scrap magnets of wind turbines for the recovery of rare earth metals and other valuable products; (Module-III)	Aarti Kumari	16-04-18	15-04-19	NA	No presentation Progress report submission only.
45.	OLP-0287	Scholastic Research	Effect of oxygen partial pressure on induration behaviors of carbon added iron oxide pellets and burning behaviour of carbon (different origin) in pellets (Module-III)	Ammasi A.	16-04-18	15-04-19	NA	No presentation; Progress report submission only.
46.	OLP-0311	Scholastic Research	Study of Particulate Flow in Centrifugal Force Field with Continuous Fluid Current (Module-II)	Ranjit Singh	16-04-18	15-04-19	NA	No presentation; Progress report submission only.
47.	OLP-0312	Scholastic Research	Heat transfer modelling of condensation behavior of metal (Mg) vapours during distillation for quantitative analysis of condenser design (Module-II)	Krishna Kumar	16-04-18	15-04-19	NA	No presentation; Progress report submission only.
48.	OLP-0345	Scholastic Research	Development of Low Carbon Bainitic Steels (Module-I)	Gaurav Kr. Bansal	16-04-18	15-04-19	NA	No presentation; Progress report submission only.
49.	OLP-0346	Scholastic Research	Microstructural evolution and deformation behavior of high entropy alloys at ambient and sub-ambient and sub-ambient temperatures (Module-I)	Avanish Kr. Chandan	16-04-18	15-04-19	NA	No presentation Progress report submission only.
50.	OLP-0347	Scholastic Research	Study of dewatering behaviour of fine particles in hydrocyclone (Module-I)	Sunati Mohanty	16-04-18	15-04-19	NA	No presentation Progress report submission only.
51.	OLP-0348	Scholastic Research	Textural, mineralogical and geochemical constraints of the low grade iron ore and fines of Odisha-Jharkhand sector around Barbil: Scientific interest and industrial concern	Paromita Biswas	16-04-18	15-04-19	NA	No presentation Progress report submission only.
52.	OLP-0349	Scholastic Research	Hydrogen assisted degradation and fracture in pipeline steel	Swapna Dey	16-04-18	15-04-19	NA	No presentation Progress report submission only.