



CSIR-NML NEWSLETTER AUGUST- 2021

SEPTEMBER , 2021

CSIR-NML, JAMSHEDPUR
RESEARCH PLANNING & BUSINESS
DEVELOPMENT DIVISION

SUMMARY OF SIGNIFICANT ACTIVITIES

For the period August,2021, CSIR-National Metallurgical Laboratory

1. Technology Development (New Product/Process Technologies)

Nil

2. Agreement(s) Signed

S.No.	Title	Client/Sponsor
1.	Information Non-Disclosure Agreement	Trishulavel Eshan Pvt. Ltd.

3. Patent(s)/Copyright(s) Filed

Nil

4. S&T services that have created a national/visible impact

- CERAMIC COATING FOR ANTICORROSION AND HIGH TEMPERATURE OXIDATION RESISTANCE OF MILD STEEL

A process for the production of corrosion resistant TMT rebar was developed through treatment of the hot rebar with an aqueous solution of magnesium dihydrogen phosphate. The process is suitable for integration to the rebar production line. Another epoxy-ceramic hybrid anticorrosion coating based on Iron Magnesium phosphate was developed to prevent corrosion of mild steel in extreme corrosive environments (like acid fumes in pickling plants). Similarly, magnesium chromate based high temperature resistant ceramic coating was developed to prevent oxidation of mild steel at high temperature (400-600 OC). The corrosion resistance performance of the developed coatings in acid fume environment and high temperature environment was evaluated.

5. Details of important Workshop(s)/Symposia(s)/Conference(s)/Training Course(s)/ Meeting(s) Organized

- Webinar on IP STRATEGY FOR BRAND BUILDING (31st August 2021)

CSIR-National Metallurgical Laboratory- Intellectual Property Facilitation Center in association with MSME-Development Institute, Ranchi organized this webinar for the benefits of Entrepreneurs, MSME's, Startups & Others.

**WEBINAR ON
IP STRATEGY FOR BRAND BUILDING**

DATE: 31ST, AUGUST -2021
TIME: 11.00 A.M- 1.00 P.M
 JOINTLY ORGANIZED BY:
NML-IPFC, JAMSHEDPUR
 &
MSME-DI, RANCHI

SESSIONS

11.00 – 11.45 AM: Role of Trade Mark for the brand development of MSME's by: Dr. S.K. Pat, Head, NML-IPFC.

11.45 – 12.00 PM: About NML-IPFC & IP Activities for the development of MSME's by: Mr. Sudhakar Rao K, NML-IPFC.

12.00 – 12.30 PM: Trade Mark Filing Procedure in India by: Mr. Sunil Kumar Bishoi, Trade Mark Agent, NML-IPFC.

12.30 – 1.00 PM: Ujuzin Registrations & MSME Schemes by: Mr. Sudip Paul, Asst. Director, MSME-DI, Ranchi.

Scope & objectives:

The objectives of the webinar is to develop an awareness about Intellectual Property and their role in brand development and promotional activities. The program will be useful for Entrepreneur, MSME's, Startup's for brand development as well as in developing their IP Portfolio.

The take away from the webinar are as follows:

- Understanding the role of IPK's in business.
- How to secure your IP assets.
- Role of Trade Mark in product development.
- Role of Trade Mark in Export marketing.

Beneficiaries:
 Entrepreneurs, MSME's, Startup's & Others

Webinar Link:
 Click here for MS TEAM Link: <https://bit.ly/3uq2081>

For details, please contact:

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 CSIR-National Metallurgical Laboratory
 Jamshedpur-831007
 Tel: 0657-2345211
 Email: skp@nmlindia.org

Director I/c
 MSME-Development Institute,
 Ministry of MSME, Ranchi
 Tel: 0631-2546266
 Email: dcid-ranchi@dicmsme.gov.in

- Webinar on Jagrukta Abhiyan for COVID-19 Appropriate Behaviour (26th August, 2021)
 The webinar was jointly organized by NASI, Jharkhand Chapter of NASI and CSIR-NML.

The National Academy of Sciences India (NASI)

**Jagrukta Abhiyan
 for
 Covid-19 Pandemic/
 Azadi ka Amrut Mahotsav**

**Jointly organized by
 NASI HQs
 Jharkhand Chapter
 & CSIR-NML
 August 26, 2021
 11:00 am-2:00 pm**

Meeting Link: <https://nasi.webex.com/nasi/j.php?MTID=me2c3db2a4fb3b9f70aea75b2fdc1167>

JAGRUKTA ABHIYAN FOR COVID-19 PANDEMIC/AMRUT MAHOTSAV
 Jointly organized by NASI HQs, Jharkhand Chapter & CSIR-NML under NASI New Initiatives
 Date: Aug 26, 2021 Time: 11:00 am-2:00 pm

Tentative Programme
 11:00-11:10 am Welcome Address Dr. I. Chatterjee

- Training on Multidisciplinary Materials Technology
 The training was organized by CSIR-National Metallurgical Laboratory, Jamshedpur to promote multidisciplinary R&D activities like software, sensors, tools, devices, IOT,

Machine Learning, AR & VR and other system development. This is the one-to-one project based training programme. Students/Graduates aspiring for jobs from any background, preferably engineering and science, were eligible to apply under this Societal Training Programme (STP). This was a R&D based training.

SOCIETAL TRAINING PROGRAMME SCHEDULE FY 2021-22

CSIR INTEGRATED SKILL INITIATIVE

SOCIETAL TRAINING PROGRAMME (STP)

ORGANISED BY
CSIR-National Metallurgical Laboratory Jamshedpur

TRAINING COORDINATOR
Dr. Mita Tarafdar
Chief Scientist, CSIR-NML

Contact
Dr. Sangeeta Mishra, CSIR-NML
SR, 406241-0448
Email: sangeeta.mishra@gmail.com

CSIR FOR SOCIO-ECONOMIC TRANSFORMATION THROUGH SKILL & ENTREPRENEURSHIP DEVELOPMENT

About CSIR Integrated Skill Initiatives

- To utilize CSIR knowledgebase and infrastructure for contributing to national skill mission.
- To implement special up-skilling/training programs for industrial and societal benefits.
- To promote entrepreneurship/techno-entrepreneurship in CSIR through skilling, Training of Trainers and Incubation facilities.

About CSIR-NML

- CSIR-NML is a premier Indian research organization dedicated to various facets of Minerals, Metals, and Materials - science, technology, industrial services, and human resource development.
- The Laboratory has made notable contributions in the areas of mineral beneficiation and agglomeration, process and continuous metallurgy, alloy development and processing, materials science & engineering and, resource conservation & environment.

Website: www.nmlindia.org

- PTP Metallurgy For Engineers (M4E) (24-27th August 2021)
- CSIR-NML organized the online Professional Training Programme (PTP).

PROFESSIONAL TRAINING PROGRAMME
DURATION: 3 TO 4 DAYS
ENTRY QUALIFICATIONS: BSC/MSC/B.E./B.TECH/DIPLOMA

CSIR INTEGRATED SKILL INITIATIVE 2021-22

PROFESSIONAL TRAINING PROGRAMME (PTP)
EXCLUSIVELY FOR INDUSTRY & MSME

ORGANISED BY
CSIR-National Metallurgical Laboratory Jamshedpur

TRAINING COORDINATOR
Dr. Mita Tarafdar
Chief Scientist, CSIR-NML

Contact
Dr. Sangeeta Mishra, CSIR-NML
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CSIR-NATIONAL METALLURGICAL LABORATORY

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6. Details of any New Facilitie(s)

- Mini Flow Slurry Pump Units (2)

Gaustec Miniflow slurry pump is a specifically designed unit of wet high intensity magnetic separator (WHIMS). It is used for pumping of the feed and discharge slurry material to WHIMS. Miniflow pump is a accessory spare unit of WHIMS. Our existing slurry pumps (Gaustec make) were damaged and not working properly and also WHIMS cannot be operated without these pumps There is no alternative to this pump which is solemnly manufactured by M/s. Gaustec LTDa, Brasil, with respect to design and compatibility of the Miniflow slurry pump to Minimag WHIMS.



- Self Supporting High Temperature Axial Extensometer
- Microwave Digestion Table Top System

7. Details of any outstanding Honor(s)/Award(s) received by the staff

- Dr. Shobhana Dey received MEAI 2020, NMDC Award for the year 2020. The Award Presentation Ceremony was held on 20th August 2021 at Hospet, Karnataka.





- Dr. GVS Murthy, Sr. Principal Scientist received CV Raman Prize 2021 from the Institute of Researchers, in recognition of his outstanding professional & research achievements in the area of materials science and technology.



8. Any other items considered to be significant

- Dr. Rupendra Singh Rajpurohit, Nehru-PDF was deputed to Indira Gandhi Centre for

Atomic Research Kalpakkam, India to participate in the International Conference on "CREEP, FATIGUE AND CREEP-FATIGUE INTERACTION" during 24th -27th August 2021.

- Capt. Rajesh Lal, Sr. Security Officer superannuated from CSIR-NML on 31st August 2021.



- Dr. Jayanto Konar, Sr. Technical Officer superannuated from CSIR-NML on 31st August 2021.



- Mr. Anil Kumar Sharma, Sr. Administrative Assistant superannuated from CSIR-NML on 31st August 2021.



Staff Transferred to CSIR-NML:

- Mr. Ratnakar Behera, COFA joined CSIR-NML on 08-04-2021. Transferred from CSIR-CMERI



- Dr. Ranjan Kundu, Scientist joined CSIR-NML on 31-05-2021. Transferred from CSIR-CMERI



- **Mr. Pankaj Kumar, F&AO joined CSIR-NML on 10-08-2021. Transferred from CSIR-CMERI**



- **Mr. Subhajit Banerjee, AO joined CSIR-NML on 16-08-2021. Transferred from CSIR-CMERI**



- **Mr. Mahesh Babu, SO(F&FA) joined CSIR-NML on 23-08-2021. Transferred from CSIR-CDRI**



- **Invited Talk Delivered by Staff**

Dr. GVS Murthy, Sr. Principal Scientist delivered a talk on “Importance of non-destructive testing in Archaeometallurgy” on 09th August 2021 at National Research Laboratory for Conservation of Cultural Property, Lucknow.



National Research Laboratory for Conservation
of Cultural Property, Lucknow



Certificate of Appreciation

This certificate is presented to

Dr. G. V. S. Murthy

for sharing valuable knowledge and experience as a speaker in the topic on “*Import Non-Destructive Testing in Archaeometallurgy*” during the online short-term course “*Archaeometallurgy and Scientific Analysis of Ancient Metal Objects*” on 09.08.2021.

Dr. Manager Singh
Director General

Dr. Preeti Verma
Scientist-B

- **Independence Day Celebration**

The occasion was celebrated in all campuses of CSIR-NML . Staff-children participated in events like Sit & Draw and Poetry Recitation Competition.





• *Staff Transferred from CSIR-NML to other CSIR-Labs.:*

- **Mr. Amrendra Kumar, Section Officer (G)- Transferred to CSIR-IICB, Kolkata (16-08-2021) Mr. Oj Kandulna, Section Officer (G)- Transferred to CSIR-IMMT, Bhubaneswar (16-08-2021)**
- **Mr. Lakshmi Narayan Singh, Section Officer (S&P)- Transferred to CSIR-CIMFR, Dhanbad (18-08-2021)**
- **Dr. (Mrs.) Ranu Verma, Section Officer (G)- Transferred to CSIR-CGCRI, Kolkata (18-08-2021)**
- **Mr. P D Lakra, Section Officer (G)- Transferred to CSIR-CIMFR, Dhanbad (18-08-2021)**
- **Mr. Anuja Mohan Pradhan, F&AO- Transferred to CSIR-CMERI, Durgapur (17-08-2021)**
- **Mr. Naveen Kr. Sharma, S&PO- Transferred to CSIR-IICB, Kolkata (16-08-2021)**
- **Mr. Anand Bharti, Store & Purchase Officer- Transferred to CSIR-CIMFR, Dhanbad (18-08-2021)**
- **Mr. Robert Barla, F&AO- Transferred to CSIR-IIMT Bhubneswar (16-08-2021)**
- **Mr. Kumar Rahul, AO- Transferred to CSIR-CIMFR, Dhanbad (18-08-2021)**
- **Mr. Uttam Kumar Jha, AO- Transferred to CSIR-IITR, Lucknow (17-08-2021)**
- **Mr. Nalin Kumar Singh, Controller of Store & Purchase- Transferred to CSIR-CIMFR, Dhanbad (18-08-2021)**





9. Scientific & Technical Services rendered

During this period the following industrial houses viz. Central Mine Planning & Design Ltd., Asansol , Hindalco Industries Limited, Chhattisgarh , IGCAR, Kalpakkam , LAXCON STEELS LTD. Ahmedabad , M/s. Geo-Chem Laboratories Pvt. Ltd.,Odisha , M/s. Krishnaping Minerals Pvt. Ltd., AP , M/s. Tata Steel Limited, Jamshedpur , M/s. Twenty Twenty Agency , M/s.Adhunik Power and Natural Res Ltd.Kandra , M/s.Arcvac Forgecast Pvt. Ltd., West Bengal , M/s.Bharat Coking coal Limited, Dhanbad , M/s.Bharat Cooking Coal Limited, Jharkhand , M/s.BIOMES, Bhubaneswar , M/s.Calderya India Refractory Ltd. Nagar , M/s.CCIC India Pvt. Ltd., Mumbai , M/s.Commissonerate of customs,Bhubaneswar , M/s.Envomin Consultant Pvt. Ltd.,Bhubaneswar , M/s.Excel Surveyors Pvt. Ltd.,Kolkata , M/s.Ganesh Consultancy & Analytical Services , M/s.Hampi Chemicals, Ballari , M/s.Hindustan Silicate Mfg. Co., Jamshedpur , M/s.Hindustan Traders, Odisha , M/s.Hitech Scientific Corporation, Jaipur , M/s.ILC Iron & Steel Pvt. LTD., Hospet , M/s.Indian Air Force, Vadodara , M/s.Innovative Foundry Solutions, Ahmedabad , M/s.Inspectorate Griffith India Pvt. Ltd. , M/s.IRC Industrial Research & Consultancy , M/s.Kancara resources Pvt. ltd., Jamshedpur , M/s.Kishore International, New Delhi , M/s.KSK Mahanadi Power Company Ltd.,Hydera , M/s.Lanco Anpara power Limited, UP , M/s.Material Testing Laboratory, New Delhi , M/s.MICRO Products, Haryana , M/s.Minerals Labs services Pvt. Ltd., , M/s.Minmat Ferro Alloy Pvt. Ltd., Kolkata , M/s.Mounika Traders, Bellary , M/s.NTPC Limited, Madhya Pradesh , M/s.NU Vista Limited, Chhatisgarh , M/s.Om Tek Analytical Solution, Giridih , M/s.Organic Chemical Industries, Kolkata , M/s.PENGG USHA MARTIN WIRES PVT. LTD. , M/s.Prayagraj power Generation Comp Ltd. UP , **received technical and scientific support from NML in the area of chemical analysis and physical test of their raw materials and finished products.**

10. ECF Details

External Cash Flow (ECF) Status During: 2021-8-1 TO 2021-8-31

Category	TOTAL (Figures in Rs. Lakh)
Sponsored R&D	225.15949
Grant-in-Aid R&D	4.09288
R&D Consultancy	0
Technical Services	104.52302
Collaborative/ Cooperative R&D	5.7132

Premia/Royalty	0
TOTAL	339.48859



END OF NEWSLETTER

