

ISO 9001: 2015

No. CFEES/HRG/V.TRG/CERTIFICATE/ 1555 रक्षा मंत्रालय, डीआरडीओ Min. of Defence, DRDO अग्नि, विस्फोटक एवं पर्यावरण सुरक्षा केंद्र Centre for Fire, Explosive & Environment Safety, (CFEES) ब्रि. एस. के. मजूमदार मार्ग, तिमारपुर, Brig. S. K. Mazumdar Marg, Timarpur दिल्ली - ११० ०५४ Delhi - 110054

Dated: 17/01/2022

CERTIFICATE

This is to certify that Mr. Deepanjan Maitra (BE. in Chemical Engineering, Batch 2018-22, Roll No. 101801001) of Thapar Institute of Engineering and Technology (Deemed to be University), Patiala, has undergone his 6 months training at Centre for Fire, Explosive and Environment Safety (CFEES), Defence Research & Development Organization (DRDO), Timarpur, New Delhi-110054 from the period 26/07/2021 to 31/12/2021. During this training, he worked on the topic "Modelling of Enclosure Fire using Two Zone Model and Large Eddy Simulation" under the guidance of Mr. Satya Prakash Dobhal, Scientist 'F'. He was found to be sincere and hardworking during the training. We wish him great and successful future.

Associate Director (ENSG) Associate Director (TCP&HR) CFEES DRDO

This is to certify that Ms. Navdha Kapoor has carried out the research work presented in this dissertation thesis entitled "CATALYTIC PROCESS FOR THE PRODUCTION OF AROMATICS FROM NAPHTHA" from Catalytic Reforming Area, Light Stock Processing Division, CSIR – Indian Institute of Petroleum, Dehradun under my supervision during the period of July 2021 to December 2021. This is also certified that the thesis represents her independent work and to the best of my knowledge, original investigation without any previously reported results, for the award of degree course. I wish for her success in future.

16/12/2021 Dr. ANUP PRAKASH TATHOD (Scientist) Catalytic Reforming Area Light Stock Processing Division CSIR-IIP, Dehradun

16/12/2021

DR. N. VISWANADHAM (Chief Scientist) Head of Department Light stock Processing Division CSIR-IIP, Dehradun Dr. Nagabhatla Vlawanadham Chief Scientist Professor, AcSIR

Head, Light Stock Proces and Division. CSIR-Indian Institute of Petrojeum

248005

2

चरम प्राक्षेपिकी अनुसंधान प्रयोगशाला, चंडींगढ़

TERMINAL BALLISTICS RESEARCH LABORATORY, CHANDIGARH

TBRL/HRD/STU/II/2021/Chemical/EXPG-04/019

TO WHOM SO IT MAY CONCERN

This is to certify that Utkarsh Sharma S/o Shri Shyam Lal Sharma student Thapar Institute of Engineering & Technology, Patiala has undergone Industrial Training from 02nd August 2021 to 29th December 2021 at TERMINAL BALLISTICS RESEARCH LABORATORY, CHANDIGARH. He has worked on the project "RTD Study of 10 Series CSTR".

Date - 29th December 2021

(Rajesh Kumari) GROUP DIRECTOR (HRD)

Ministry of





इंजीनियर्स इंडिया लिमिटेड, ईआईएल कार्यालय परिसर, सैक्टर-16, गुरुग्राम - 122 001 (हरियाणा) भारत Engineers India Limited, EIL Office Complex, Sector-16, Gurugram - 122 001 (Haryana) INDIA

TRG/VT/2021-22-44

31 December 2021

<u>प्रमाण- पत्र</u> TO WHOMSOEVER IT MAY CONCERN

यह प्रमाणित किया जाता है कि Mr. Anmol Ghai, जो कि Thapar Institute of Engineering and Technology में B.E in Chemical Engineering के छात्र है जिन्होनें 05 July 2021 से 31 December 2021 तक हमारे संगठन के Research and Development Department में अपना व्यावसायिक प्रशिक्षण पूरा कर लिया है। उन्होंने 'Development of kinetic model for conversion of Methanol to Dimethyl Ether'. विषय में अपना प्रशिक्षण पूरा किया है। प्रशिक्षण के दौरान, Mr. Ghai ने अपने कार्य में गहरी रुचि दिखाई है और मूल्याकंन करने पर उनका निष्पादन 'उत्कृष्ट' पाया गया है।

निष्पादन 'उत्कृष्ट' पाया गया हो

This is to certify that Mr. Anmol Ghai, a student of B.E in Chemical Engineering from Thapar Institute of Engineering and Technology has completed his Vocational Training in Research and Development Department of our organization from 05 July 2021 书 31 December 2021. He has undertaken his training assignment on 'Development of kinetic model for conversion of Methanol to Dimethyl Ether'. During the course of training, Mr. Ghai has shown keen interest in his assignment and his performance on evaluation has been found to be 'Excellent'.



3105 . 51/12/21

अनुभा टी. अग्रवाल/ Anubha T Agarwal प्रभारी-प्रशिक्षण/ In-Charge-Training महाप्रबंधक-मा.सं./ General Manager - HR







ISO 9001: 2015

No. CFEES/HRG/V.TRG/CERTIFICATE/ /556 रक्षा मंत्रालय, डीआरडीओ Min. of Defence, DRDO अग्नि, विस्फोटक एवं पर्यावरण सुरक्षा केंद्र Centre for Fire, Explosive & Environment Safety, (CFEES) ब्रि. एस. के. मजूमदार मार्ग, तिमारपुर, Brig. S. K. Mazumdar Marg, Timarpur दिल्ली - ११० ०५४ Delhi - 110054

Dated: 17/01/2022

CERTIFICATE

This is to certify that Ms. Mudita Tyagi (BE. in Chemical Engineering, Batch 2018-22, Roll No. 101801015) of Thapar Institute of Engineering and Technology (Deemed to be University), Patiala, has undergone her 6 months training at Centre for Fire, Explosive and Environment Safety (CFEES), Defence Research & Development Organization (DRDO). Timarpur, New Delhi-110054 from the period 26/07/2021 to 31/12/2021. During this training, she worked on the topic "Study of enclosure fire and development of an experimental plan" under the guidance of Mr. Satya Prakash Dobhal, Scientist 'F'. She was found to be sincere and hardworking during the training.

We wish her great and successful future.

Associate Director (ENSG)

Associate Director (TCP&HR) CFEES DRDO



← :

Dear Mr. Himanshu,

Please find email as your required for your college purpose. In view of Covid scenario training certificate will be shared with you later on.

यह प्रमाणित किया जाता है कि Mr. **Himanshu Kumar**, जो कि Thapar Institute of Engineering and Technology में B.E in Chemical Engineering के छात्र है जिन्होनें 05 July 2021 से 31 December 2021 तक हमारे संगठन के Process 2 Department में अपना व्यावसायिक प्रशिक्षण पूरा कर लिया है। उन्होंने 'Pressure drop calculation in single & two phase fluid flow'. विषय में अपना प्रशिक्षण पूरा किया है। प्रशिक्षण के दौरान, Mr. Kumar ने अपने कार्य में गहरी रुचि दिखाई है और मूल्याकंन करने पर उनका निष्पादन 'उत्कृष्ट' पाया गया है।

सादर (With Best Regards), शैलेंद्र राणा (Shailender Rana) प्रशिक्षण विभाग (Training Dept) ई आई एल – गुरुग्राम, (EIL Gurugram)





इंजीनियर्स इंडिया लिमिटेड, ईआईएल कार्यालय परिसर, सैक्टर-16, गुरुग्राम - 122 001 (हरियाणा) भारत Engineers India Limited, EIL Office Complex, Sector-16, Gurugram - 122 001 (Haryana) INDIA

TRG/VT/2021-22-46

29 December 2021

प्रमाण- पत्र TO WHOMSOEVER IT MAY CONCERN

यह प्रमाणित किया जाता है कि Mr. Brijesh Gupta, जो कि Thapar Institute of Engineering and Technology में B.E in Chemical Engineering के छात्र है जिन्होनें 05 July 2021 से 28 December 2021 तक हमारे संगठन के Process 2 Department में अपना व्यावसायिक प्रशिक्षण पूरा कर लिया है। उन्होंने 'Overview of MS-Block (NHT, ISOM and CCR) and Calculations of Associated Equipments'. विषय में अपना प्रशिक्षण पूरा किया है। प्रशिक्षण के दौरान, Mr. Gupta ने अपने कार्य में गहरी रुचि दिखाई है और मूल्याकंन करने पर

उनका निष्पादन 'उत्कृष्ट' पाया गया है।

This is to certify that Mr. Brijesh Gupta, a student of B.E in Chemical Engineering from Thapar Institute of Engineering and Technology has completed his Vocational Training in Process 2 Department of our organization from 05 July 2021 社 28 December 2021. He has undertaken his training assignment on 'Overview of MS-Block (NHT, ISOM and CCR) and Calculations of Associated Equipments'. During the course of training, Mr. Gupta has shown keen interest in his assignment and his performance on evaluation has been found to be 'Excellent'.



अनुभा टी. अग्रवाल/ Anubha T Agarwal प्रभारी-प्रशिक्षण/ In-Charge-Training महाप्रबंधक-मा.सं./ General Manager - HR





ii



Saurav Chemicals Limited

Works: Derabassi-Barwala Road, Village Bhagwanpura, Tehsil Derabassi, District Sahibzada Ajit Singh Nagar, Punjab, India -140507 Tel.: +91-1762-506091 & 522180 Website: www.sauravchemicals.com, CIN: U24112PB1993PLC014017

Ref: SCL/BHG/TRN/ 7215

Date: 17-Jan-22

TO WHOM IT MAY CONCERN

This is to certify that Mr. Mamnoon Azam student of B.E. (Chemical) Thapar Institute of Engineering, Patiala has undergone training in our organization in P.E. Department from 02-Aug-21 to 05-Jan-22. During the period of his training, he remained sincere and punctual.

We wish Mr. Mamnoon Azam all the best in his future endeavors.

For Saurav Chemicals Ltd.

Authorized Signatory

Regd. Office: Derabassi-Barwala Road, Village Saidpura, Tehsil Derabassi, District Sahibzada Ajit Singh Nagar, Punjab, India -140507, Tel.: +91-1762-522312 & 522211

Corp. Office: Plot No. 370, Industrial Area, Phase-II, Panchkula, Haryana, India-134109, Tel.: +91-172-5054817-18

L&T-CHIYODA LIMITED

L&T-Chiyoda Limited

19 July, 2021

Sth Floor, West Block 1, L&T Knowledge City Gate No. 1, Ajwa-Waghodia Crossing, N.H. # 8, Vadodara 390 019, Gujarat. INDIA Tel: +91 265 244 2000 www.Lntchiyoda.com

Ref: Onshore /2021/TRG/HR - 170

To, Dr. Avinash Chandra, Associate Professor, Thapar Institute of Engineering & Technology

Dear Sir/Madam,

With reference to your application for the training of **Mr. Abhishek Jain**, we are pleased to accommodate the student to undergo Online Internship Programme for Industrial Project Work in our organization on the following terms & conditions:

Department	:	Process Engineering
Reporting To	:	Ms. Darshana Chetwani
Duration	:	01 August 2021 to 31 December 2021

Kindly note any company related information that will be made available while doing the project should be treated as strictly confidential. This information should not be published or disclosed in any public forum without prior written permission. The student will be governed by the rules & regulations of the department assigned.

This internship is non-remuneration based and no terms of employment are applicable to the student.

Thanking You,

Yours Sincerely, For L&T Chiyoda Limited

Elizabeth Praveen Sr. DGM – Human Resources

Registered Office: L&T House, N. M. Marg, Ballard Estate, Mumbai - 400 001. INDIA CIN: U28920MH1994PLC083035



L&T-Chiyoda Limited is a Joint Venture of L&T Hydrocarbon Engineering Limited, India and Chiyoda Corporation, Japan.

31" December 2021 at TERMINAL BALLISTICS RESEARCH LABORATORY, CHANDIGARH. He Based Explosives (Theoretical)". has worked on the project "Study on Decomposition Products Formed After Detonation of C-H-N-O Engineering & Technology, Patiala has undergone Industrial Training from 02nd August 2021 to This is to certify that Aniruddh Skukla S/o Shri Mahesh Chandra Shukla student Thapar Institute of Date - 13th January 2022 TERMINAL BALLISTICS RESEARCH LABORATORY, CHANDIGARH चरम प्राक्षीपकी अनुसंधान प्रयोगराला, चंडीगढ़ TO WHOM SO IT MAY CONCERN TBRL/HRD/STU/II/2021/Chemical/EXPG-05/020 **GROUP DIRECTOR (HRD)** 31.4 (Rajesh Kumari) 191 Halles Ministry of Defence 40

Ð

DUA

CAME

Certificate

नेशनल फर्टिलाइजर्स लिमिटेड (आरत सरकार का उपक्रम) नंगल इकाई, नया नंगल -140126(पंजाब) NATIONAL FERTILIZERS LIMITED (A GOVERNMENT OF INDIA UNDERTAKING) NANGAL UNIT, NAYA NANGAL (PUNJAB) 140 126 (An ISO-9001:2008, ISO-14001:2004 & OHSAS-18001:2007 Unit)



Website : nationalfertilizers.com

nationalfertilizers.com (An ISO-9001 No. NFL/NGL/HRD/VT/2021

7-220541

एसटीडीकोडनं- 01887

वेबसाईट-

ईपीएबीएक्सनं. -220510

Dated: 31.12.2021

CERTIFICATE OF TRAINING

This is to certify that Ms. Shaheen Singh D/o Shri Kanwar Shah Dev Katoch student of B. Tech. (Chemical Engg.), Regn. No. 101801020 from Thapar University, Patiala, PB has undergone her Vocational training from 22.07.2021 to 31.12.2021 in Production Department at this organization.

She took keen interest in her training and her conduct and performance was found to be Excellent. We wish her all the best for her bright future.

01758

33 JANOITAN

सहायक प्रबंधक (समन्वय)

Swresh Chardena (Industry Mentor)

RECONSTRUCT 2011, 秋平王 24、前10日、 利品共産品中川で、 3ccRSR201日中201301 20120-2412294, 2412445です3092201 花08, 今年ま2412397
COMPORATE OFFICE A.11, SECTOR 24, NORDA, GALITAM BUDH NAGAR (UP) 201301 20120-2412294, 2412445 & 309221 to 08, FAX: 2412397
COMPORATE OFFICE: A.11, SECTOR 24, NORDA, GALITAM BUDH NAGAR (UP) 201301 20120-2412294, 2412445 & 309221 to 08, FAX: 2412397
COMPORATE OFFICE: A.11, SECTOR 24, NORDA, GALITAM BUDH NAGAR (UP) 201301 20120-2412294, 2412445 & 309221 to 08, FAX: 2412397
COMPORATE OFFICE: A.11, SECTOR 24, NORDA, GALITAM BUDH NAGAR (UP) 201301 20120-2412294, 2412445 & 309221 to 08, FAX: 2412397
COMPORATE OFFICE: A.11, SECTOR 24, NORDA, GALITAM BUDH NAGAR (UP) 201301 20120-2412294, 2412445 & 309221 to 08, FAX: 2412397
COMPORATE OFFICE: A.11, SECTOR 24, NORDA, GALITAM BUDH NAGAR (UP) 201301 201301 20120-2412294, 2412445 & 309221 to 08, FAX: 2412397
COMPORATE OFFICE: A.11, SECTOR 24, NORDA, GALITAM BUDH NAGAR (UP) 201301 201301 20120-2412294, 2412445 & 309221 to 08, FAX: 2412397
COMPORATE OFFICE: A.11, SECTOR 24, NORDA, GALITAM BUDH NAGAR (UP) 201301 201302 201302 2012445 & 309221 to 08, FAX: 2412397
COMPORATE OFFICE: COMPORATE OFFICE:



No. CFEES/HRG/V.TRG/CERTIFICATE/1553 रक्षा मंत्रालय, डीआरडीओ Min. of Defence, DRDO अग्नि, विस्फोटक एवं पर्यावरण सुरक्षा केंद्र Centre for Fire, Explosive & Environment Safety, (CFEES) ब्रि. एस. के. मजूमदार मार्ग, तिमारपुर, Brig. S. K. Mazumdar Marg, Timarpur दिल्ली - ११० ०४४ Delhi - 110054

ISO 9001: 2015

This is to certify that Ms. Riya Kansal, (B.E., Chemical Engineering, Roll number: 101801023) of Thapar Institute of Engineering & Technology, Patiala, 147004 has successfully completed her training at Centre for Fire, Explosive and Environment Safety (CFEES), Defence Research & Development Organization (DRDO), Timarpur, New Delhi-110054 from the period 26th July - 30th December, 2021. During this training, she worked on the project "CHEMICAL PROCESS DESIGN AND SCALE UP" under the guidance of Mr. Kumar Kaushik, Scientist 'E'.

She was found to be sincere and hardworking during the training. We wish her a great and successful future.

(Shri R K Tanwar) Scientist 'G' Associate Director (FC & HB) CFEES DRDO

121

(Dr. Meenakshi Gupta) Scientist 'G' Associate Director (TCP & HR) CFEES DRDO

Dated: 3/ (12/2021