

Vertace Consultants #8, Radhakrishnan Street Shankaran Avenue, Velachery, Chennai-600 042 www.vertace.com +91-44-4551-3535 |info@vertace.com

Date: 22/03/2019

To Whomsoever It May Concern

This letter is to certify that Ms. **NIVEDHA M** has successfully completed her internship program of Three months with **VERTACE CONSULTANTS**, **CHENNAI**. Her internship tenure was from (19th December 2018 to 22nd March 2019. She was working with Software Development Department and was actively & diligently involved in the projects and tasks assigned to her.

Thank you

RNM

Narendran P Vice President – Engineering.





(Causte Sente and EVC Divisions)

CIN L24110GJ1939PLC000748

Fax 04639 - 280611 Phone 04639 - 280231



Web www.dcwltd.com E-Mail lax@shpm.dcwitd.com

Lamilnadu PIN 628 229

DCW/HRD

19.06.2018

CERTIFICATE

This is to certify that Ms. S. Anto Herin Aarni, II year MHRM student of St. Mary's College, Thoothukudi has undergone Internship Training in our Works at Sahupuram from 19th May 2018 to 19th June 2018.

During the above said period she took enough initiative in learning on various activities exposed to her and was very much keen on making her training successful. Her character and conduct during the period was good.

We wish her all success.

G. Vijay Dy. Manager (Training)

office : 358 (Old No.645), Third Floor, MALAI, THOUSAND LIGHTS, CHENNAI - 600 000 Registered Office : DHRANGADHRA - 363 315 GUJARAT D: 02754 - 283244, 283381 Eax No 02754-283245



TUTICORIN MULTIPUROSE SOCIAL SERVICE SOCIETY

(REGISTERED UNDER BOCIETIES REGISTRATION ACT XXI AS 6.No. 25 OF 1972) Bishop's House, Post Box No : 122, Tuticorin - 628 001. Tamilnadu, India. Ph.: 0461 - 2326876 Email : tmsss1972@gmail.com; Websits : www.thoothula.dimsssociety.org

22.10.2018.

CERTIFICATE

This is to certify that Ms.G. Crossline Babiyana (17UPHR03) Il year MHRM student from St.Mary's College(Autonomous), Tuticorin, has been placed in our TMSSS, Tuticorin for her internship training on the topic Women Empowerment through Self Help Groups in TMSSS from 14.05.2018 to 13.06.2018. She has shown much interest and she has very well done her internship training in our organization. We wish her a bright future.

With prayers and love,

(FR. BENJAMIN DE SOUZA) SECRETARY/DIRECTOR

Madura Coats Private Limited

ar.

 Giobal Thread Supply India

 83 & 88, Beach Road, Tuticorin - 628 001, South India

 Tel : 0461-6633900

 Fax : 0461-2323300

CIN : UI8102KA1974PTC047421

Date : 22-10-2018

TO WHOMSOVER IT MAY CONCERN

This is to certify that Ms. M.Diana (Reg No: 17UPHR04) MHRM student of ST.MARY'S COLLEGE (AUTONOMOUS), Thoothukudi, underwent Internship Training in our organisation for a period of 30 days.

WE WISH ALL SUCCESS IN HER FUTURE ENDEAVOURS

for Madura Coats Private Limited

R.ETHIRAJ) ndustrial Relations Manager

> Global Thread Supply India is a division of Madura Coats Private Limited Registered office : 144, M.G. Road, Bangalore - 560 001. India.



DCW LIMITED

(Caustic Soda and PVC Divisions) CIN : L24110GJ1939PLC000748

> Fax : 04639 - 280611 Phone : 04639 - 280231



Sahupuram P.O. Thoothukudi Dist. Tamilnadu PIN : 628 229

DCW/HRD

Web www.dcwitd.com E-Mail : fax@shpm.dcwitd.com

19.06.2018

CERTIFICATE

This is to certify that Ms. A. Divina Mary, II year MHRM student of St. Mary's College, Thoothukudi has undergone Internship Training in our Works at Sahupuram from 19th May 2018 to 19th June 2018.

During the above said period she took enough initiative in learning on various activities exposed to her and was very much keen on making her training successful. Her character and conduct during the period was good.

We wish her all success.

G. Vijay Dy. Manager (Training)

Chennal Office : 358 (Old No.845), Third Floor, ANNA SALAI, THOUSAND LIGHTS, CHENNAI - 600 006 © : 044 - 28292752, 28292082 Fax No. 044-28295766 E-Mail : chennaloffice@chn.dcwltd.com





INFAC/HRD/2018

12th Jun, 2018

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. R.ISHWARIYA, Master of Human Resource Management (MHRM), who is a Bonafide student of St.Mary's College (Autonomous), Thoothukudi. Did the "Internship Training" in our company from the period 12.05.2018 to 12.06.2018. During the Training period the performance of the student was found to be good and she was totally involved and taken good initiative in the Internship training which she was involved.

We wish her all success for bright endeavor.

For INFAC INDIA PVT. LTD.,

N.BARANITHARAN MANAGER - HR

DIAMOND SEAFOOD EXPORTS

H

Exporters of : "KANNI" / "SUN" Brand Frozen Shrimps & Fish Products 3/52, Krishnarajapuram, Tulicorin - 628 002, TAMIL NADU, SOUTH INDIA.

GSTTIN 33AABFD0519L1ZS PAN AABFD0519L IEC No 0488019885 Bankers STATE BANK OF INDIA

Ref :

Phone : 2360346, 2360117, 2360952, 2360967 Fax : 0461 - 2362693, 2361109 E-mail : dsfkfflab@gmail.com Website : www.kanni.in

Date : 22.10.2018

TO WHOM SO EVER IT MAY CONCERN

This is certify that, Miss.S.Janani Priya (Roll No.17UPHR07)

Student of St.Marys College (Autonomous) Tuticorin has Conducted Summer Intership project for 30 days in our company. Her performance was quite satisfactory. We wish her all the best in her Future Endeavours.

FOR DIAMOND SEAFOOD EXPORTS

E. JEHAN PRODUCTION MANAGER

V.A.S.P. SALT REFINERIES

Manufacturers of Refined & Free Flow Iodised Sall

109 / 5K / 11, Ettayapuram Road, Polepettai, Tuticorin - 628 002. Tamilnadu, India Ph : +91-461-2321287 Fax : +01-461-2329495 E-mail : vasprefineries@gmail.com



TIN No. : 33165842028 CST No. : 477400 Dt. 26.02.2007 IEC No. : 3506005234

Date: 12-10-2018.

To Whomsoever it May concern

This is to certify that Miss. R. KAVITHA studying 2^{HD} year MHRM at St Mary's College Tuticorin underwent Internship Training programme in our company from May 2018 to June 2018 for a period of 30 days. The topic was "OCCUPATIONAL HEALTH AND SAFETY PRACTICES FOLLOWED AT V.A.S.P. SALT REFINERIES.

For V.A.S.P. SALT REFINERIES

Odyhu

PARTNER





INFAC/HRD/2018

12th Jun, 2018

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. S.MARIYA MESSIAH SHERIN, Master of Human Resource Management (MHRM), who is a Bonafide student of St.Mary's College (Autonomous) Thoothukudi. Did the "Internship Training" in our company from the period 12.05.2018 to 12.06.2018. During the Training period the performance of the student was found to be good and she was totally involved and taken good initiative in the Internship training which she was involved.

We wish her all success for bright endeavor.

For INFAC, INDIA PVT. LTD.,

N.BARANITHARAN MANAGER - HR

> No.113, Ellaiamman Koil Street, Padappai, Sriperumbudur Taluk, Kanchipuram Dist. - 601 301. INDIA Phone : 044 - 2717 4725 Web : www.infac.co.kr CIN : U31300TN1998PTC040933

Versus Home Appliances (P) Ltd. 554.4, Santidurganna, Tationa - 428103 Tesicaris Dat, Tamitude, inda Ph. +91-6461-2271891 / 1271894, Fax +91-6461-2271890 E-stall for ho@versubcomepplace.m.com



Date: 13.06.2018

To Whom So Ever It May Concern

This is to certify that Miss.R.MARIAMMAL I year MHRM Student of the ST.MARY'S COLLEGE has undergone Internship training in our company from 14th May 2018 to 13th June 2018. She has taken good involvement in learning all work in department and shown keen interest during this period. She was very punctual in attendance and good in interaction with employees. We wish her success in all endeavors.

For Venus Home Appliances (P) Ltd.,

K. Que

K.V.Damodaran HR MANAGER





TUTICORIN MULTIPUROSE SOCIAL SERVICE SOCIETY

(REGISTERED UNDER SOCIETIES REGISTRATION ACT XXI AS 5.No. 26 OF 1972) Bishop's House, Post Box No : 122, Tuticorin - 628 801. Tamilnadu, India. Ph.: 0451-2326878 Email: thoses1972@gmail.com; Website: www.hootbukudmassociety.org

22.10.2018.

CERTIFICATE

This is to certify that Ms.R. Mary Sahaya Vathani (17UPHR12)

Il year MHRM student from St.Mary's College(Autonomous), Tuticorin, has been placed in our TMSSS, Tuticorin for her internship training on the topic Rehabilitation of Child Labour in TMSSS from 14.05.2018 to 13.06.2018. She has shown much interest and she has very well done her internship training in our organization. We wish her a bright future.

With prayers and love,

(FR. BENJAMIN DE SOUZA) SECRETARY/DIRECTOR

CIN No. CINALI INTERNET COLUMNS No. NORTHIN MPETER, Report COLUMN AND ALL IN PAR

EDHAYAM FROZEN FOODS PVT. LTD.

Exporters of KANNI" & "SUN" Brand Marine Products Regd Office 3/52 B Krishnarajapuram Tuticorin 628002 laminadu South india Factory 4/91,A&B Maravanmadam Village,Pudukottai Tuticorin 628103 Taménadu

PAN IEC No	33AAACE4015A1ZM AAACE4015A 3595001401 CANARA BANK www.kanni.com	Phone 2360346 117/952 967 Fax 0461 2362693 2361109 E-mail tin kanni@yanoo.com theva arokia@yahoo.co.in kanni941@gmail.com
Ando 2116	AA60 2116 AAAAA PERTUNCOLU	

Ref

Date 17-10-2018

CERTIFICATE

This is to certify that *R.S.MONISHA* a final year student of Department of Management Studies, St. Mary's College, Thoothukudi, had undergone internship in our company - "Human Resource Information System" as part of her curriculum from 16-05-2018 to 15-06-2018 during the working hours of our organisation. During her training tenure her conduct was good. We wish her success in her future career.

For EDHAYAM FROZEN FOODS PVT. LTD

GENERAL MANAGER

Madura Coats Private Limited

Global Thread Supply India

83 & 88, Beach Road, Tuticorin - 628 001, South India Tel : 0461-6633900 Fax : 0461-2323300

CIN : UI8102KA1974PTC047421

Date : 22-10-2018

TO WHOMSOVER IT MAY CONCERN

This is to certify that Ms. C.Murugeshwari (Reg No: 17UPHR15) MHRM student of ST.MARY'S COLLEGE (AUTONOMOUS), Thoothukudi , underwent Internship Training in our organisation for a period of 30 days.

WE WISH ALL SUCCESS IN HER FUTURE ENDEAVOURS

For Madura Coats Private Limited

(R.ETHIRAJ) Industrial Relations Manager

> Global Thread Supply India is a division of Madura Coats Private Limited Registered office 144, M.G. Road, Bangalore - 560 001. India.

Encotes Evergy (India) Pvt. Ltd., C-85, Sector-63, Noida-201 301, UP, India



29th Jun 2018 Friday

TO WHOMEVER IT MAY CONCERN

This is to certify that Ms. A Muthulakshmi D/o Annamalai has successfully completed 30 days Internship training program on "Employee State Insurance" in our concern from 16.05.2018 to 14.06.2018

Her attitude and performance is satisfied during the training period.

Yours Faithfully

Encotec Energy India Pvt.Ltd

Sr.Executive - HR & Admin

www.encolecenergy.com

ENCOTEC ENERGY (INDIA) PVT. LTO. CORPORATE OFFICE C-85, Boctor-03, Noida-201 301 (IP India PHONE +B1 120 4153 812 / 4154 613 FAX +91 120 4348611 REGISTERED OFFICE 95 A/1, Mayur Vinar Phase-1, Dolbi, 110091 India E-NAIL <u>untoincerer regiment con</u> <u>taits@escalatornitay com</u> CIN U4636600,2009PTC187817 MANAGEMENT BOARD Arun Kumar Baroa (Managing Director), Rajeev Abuja (Director) Dr. Ralf Gilgen (Director), Claus Mollar (Director)

Madura Coats Private Limited

Global Thread Supply India

83 & 88, Beach Road, Tuticorin - 628 001, South India Tel : 0461-6633900 Fax : 0461-2323300

CIN : UI8102KA1974PTC047421

Date : 22-10-2018

TO WHOMSOVER IT MAY CONCERN

This is to certify that Ms. T.Muthumari (Reg No: 17UPHR17) MHRM student of ST.MARY'S COLLEGE (AUTONOMOUS), Thoothukudi, underwent Internship Training in our organisation for a period of 30 days.

WE WISH ALL SUCCESS IN HER FUTURE ENDEAVOURS

For Madura Coats Private Limited

(R.ETHIŘAJ) Industrial Relations Manager

Global Thread Supply India is a division of Madura Coats Private Limited Registered office 144, M.G. Road, Bangalore - 560 001. India

CIN Nu. U15431TN1995PTC029921 No. 3063/TIN/MPEDA/Regn/E/TTN/E-6/96 dt. 21.11.1996

EDHAYAM FROZEN FOODS PVT. LTD.

Exporters of "KANNI" & "SUN" Brand Marine Products Regd. Office : 3/52-B Krishnarajapuram, Tuticorin - 628002, Tamilnadu, South India. Factory : 4/91,A&B Maravanmadam Village,Pudukottai, Tuticorin - 628103,Tamilnadu.

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PAN AAACE4015A12M	Phone : 2360346 /117 /952 /967
IEC No : 3595001401	Fax : 0461 -2362693 / 2361109
Bankers : CANARA BANK	E-mail : ttn_kanni@yahoo.com
Web site : www.kanni.com	theva_arokia@yahoo.co.in kanni941@gmail.com

Ref :

GSTTIN

Date :

17-10-2018

CERTIFICATE

This is to certify that R.NANTHINI a final year student of Department of Management Studies, St. Mary's College, Thoothukudi, had undergone internship in our company - "Employee effectiveness at workplace" as part of her curriculum from 16-05-2018 to 15-06-2018 during the working hours of our organisation. During her training tenure her conduct was good. We wish her success in her future career.

For EDHAYAM FROZEN FOODS PVT. TAMAKHISSHNAN GENERAL MANAGER



Encotec Energy (India) Pvt. Ltd., C-85, Sector-63, Noida-201 301, UP, India

29th Jun 2018 Friday

TO WHOMEVER IT MAY CONCERN

This is to certify that Ms. A Nicholas Vergin D/o Anthoni Francis has successfully completed 30 days Internship training program on "Payroll Management" in our concern from 16.05.2018 to 14.06.2018

Her attitude and performance is satisfied during the training period.

Yours Faithfully

Encotec Energy India Pvt.Ltd

Seyed Faisal Sr.Executive – HR & Admin



www.encotecenergy.com

ENCOTEC ENERGY (INDIA) PVT. LTD. CORPORATE DFFICE C-85, Soctor-83, Noida-201 301, UP, India PMONE +81 120 4153 612 / 4154 613 FAX +81 120 4540R11 "REGISTERED OFFICE 50-A/1, Mayur Vihar, Phase-I, Deihi, 110501 India E-MAIL <u>encatecentros d'umail com</u> Miss<u>Remonectentros com</u> CEN Deasourg.2000PTC12P012 MANAGEMENT BOARD Arun Kumar Barna (Managing Director), Rajeev Ahuja (Director) Dr. Ratt Gilgen (Director) Claux Múller (Director)

Madura Coats Private Limited

Global Thread Supply India

83 & 88, Beach Road, Tuticorin - 628 001, South India Tel : 0461-6633900 Fax : 0461-2323300

CIN : UI8102KA1974PTC047421

Date: 22-10-2018

TO WHOMSOVER IT MAY CONCERN

This is to certify that Ms.V.Pavithra (Reg No: 17UPHR20) MHRM student of ST.MARY'S COLLEGE (AUTONOMOUS), Thoothukudi, underwent Internship Training in our organisation for a period of 30 days.

WE WISH ALL SUCCESS IN HER FUTURE ENDEAVOURS

For Madura Coats Private Limited

JA.

I

(R.ETHIRAJ) Industrial Relations Manager



(Caustic Soda and PVC Divisions)

CIN : L24110GJ1839PLC000748

Fax: 04639 - 280611 Phone : 04639 - 280231



Neb : www.dcwlid.com E-Mai lax@shpm.dcwlid.com

amilnadu PIN : 628 229

DCW/HRD

19.06.2018

CERTIFICATE

This is to certify that Ms. P. Preethi, II year MHRM student of St. Mary's College, Thoothukudi has undergone Internship Training in our Works at Sahupuram from 19th May 2018 to 19th June 2018.

During the above said period she took enough initiative in learning on various activities exposed to her and was very much keen on making her training successful. Her character and conduct during the period was good.

We wish her all success.

G. Vijay Dy. Manager (Training)

Chennal Office : 358 (Old No.645), Third Floor, ANNA SALAI, THOUSAND LIGHTS, CHENNAI - 600 006 (): 044 - 28292752, 28292082 Fax No. 044-28295766 E-Mail : chennaloffice@chn.dcwlld.com

Registered Office : DHRANGAD RA - 363 315 GULARAT D: 02754 - 283244, 283381 Fax No.02754-283245 E-mail : dcwltd@wilnetonline.nu



Date : 15.10.2018

CERTIFICATE

This is to certify that Ms. U. Rajalakshmi, II year MHRM student of St. Mary's college, Thoothukudi, has undergone internship training for 30 days.

During the above said period she took initiative in learning on various activities exposed to her and was very much keen on making her training student. Her character and conduct during the period was good.

We wish her all success.

For Sibaflor Natural Decorations Pvt. Ltd,

M. RAMESH MANAGER – HR & SEC



2/101- 2/108, Ettayapuram Road, Melamaruthur, Kurukkusalai (Post), Tuticorin - 628 722. India.

Phone : +91 461 2373346 / 47 / 48 / 49 Fax : +91 461 2373345 E-mail : info@sibaflor.co.in / Web : www.sibaflor.com GSTIN : 33AAACW1048D1ZV

CIN No. U15431TN1995PTC029921 No. 3063/TTN/MPEDA/Regn/E/TTN/R-6/96 dt. 21.11.1996

EDHAYAM FROZEN FOODS PVT. LTD.

Exporters of "KANNI" & "SUN" Brand Marine Products Regd. Office: 3/52-B Krishnarajapuram, Tuticorin - 628002, Tamilnadu, South India. Factory: 4/91, A&B Maravanmadam Village, Pudukottai, Tuticorin - 628103, Tamilnadu.

GSTTIN 33AAACE4015A1ZM	Phone: 2360346 /117 /952 /967
PAN AAACE4015A	Fax: 0461 -2362693 / 2361109
IEC No 3595001401	E-mail: ttn_kanni@yahoo.com
Bankers CANARA BANK	theva_arokia@yahoo.co.in
Web site www.kanni.com	kanni941@gmail.com

Ref :

Date :

17-10-2018

CERTIFICATE

This is to certify that N.SATHIYA BAMA a final year student of Department of Management Studies, St. Mary's College, Thoothukudi, had undergone internship in our company - "Interpersonal Skill at Workplace" as part of her curriculum from 16-05-2018 to 15-06-2018 during the working hours of our organisation. During her training tenure her conduct was good. We wish her success in her future career.

For EDHAYAM FROZEN FOODS PVT.

V. RAMAKRISSHNAN GENERAL MANAGER

Sibir

natural decorations pvt. Itd

Date : 15.10.2018

CERTIFICATE

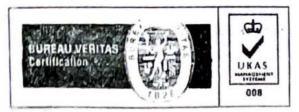
This is to certify that Ms. R. Srija, II year MHRM student of St. Mary's college, Thoothukudi, has undergone internship training for 30 days.

During the above said period she took initiative in learning on various activities exposed to her and was very much keen on making her training student. Her character and conduct during the period was good.

We wish her all success.

For Sibaflor Natural Decorations Pvt. Ltd,

M. RAMESH MANAGER – HR & SEC



2/101- 2/108, Ettayapuram Road, Melamaruthur, Kurukkusalai (Post), Tuticorin - 628 722, India. Phone : +91 461 2373346 / 47 / 48 / 49 Fax : +91 461 2373345 E-mail : info@sibaflor.co.in / Web : www.sibaflor.com GSTIN : 33AAACW1048D1ZV



Shalom Garments Pvt. Ltd., Presidum Garment Menufacturers & Experiers

TO WHOMOVER IT MAY CONCERN

This is to certify that Ms. Subashini .A, (Reg No - 17UPHR28) MHRM student of "ST.Mary's College(Autonomous), Thoothukudi- 628 001" has completed "A Study on Contract Labour Act In SHALOM GARMENTS PVT.LTD., VALLIOOR" from 12.05.2018 to 12.06.2018. During the project period it has been observed that the candidate has shown interest in the subject and put extra efforts to learn the various aspects pertaining to the Study.

During her study period her character and conduct have been good.

For Shalom Garments Pvt. Ltd.

Vallioor,

25.06.2018

Authorized Signatory



216/A, Main Road, Vallioor, Tirunelveli District, Tamilnadu, India. Ph.No:04637 222153, Fax 04637 222152 ,Email:admin@shelton.co.in

Madura Coats Private Limited

 Global Thread Supply India

 83 & 88, Beach Road, Tuticorin - 628 001, South India

 Tel : 0461-6633900

 Fax : 0461-2323300

CIN : UI8102KA1974PTC047421

Date: 22-10-2018

TO WHOMSOVER IT MAY CONCERN

This is to certify that Ms.K.Surthi (Reg No: 17UPHR30) MHRM student of ST.MARY'S COLLEGE (AUTONOMOUS), Thoothukudi, underwent Internship Training in our organisation for a period of 30 days.

WE WISH ALL SUCCESS IN HER FUTURE ENDEAVOURS

For Madura Coats Private Limited

(R.ETHIRAJ) Industrial Relations Manager

Global Thread Supply India is a division of Madura Coats Private Limited Registered office : 144, M.G. Road, Bangalore - 560 001 India. Venus Home Appliances (P) Ltd. 1.54-A, Serrhammenna: Energies - 528103 Innovan Der Tamensda, milis Ph. +91-046 (2271894) - 2271894, fax. +91-0461-2271890 Ermail. hr., hoff@venunfesmesappliancas.com



Date : 13.06.2018

To Whom So Ever It May Concern

This is to certify that Miss.K.VINOTHINI AGNET I year MHRM Student of the ST.MARY'S COLLEGE has undergone Internship training in our company from 14th May 2018 to 13th June 2018. She has taken good involvement in learning all work in department and shown keen interest during this period. She was very punctual in attendance and good in interaction with employees.

We wish her success in all endeavors.

For Venus Home Appliances (P) Ltd.,

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K.V.Damodaran HR MANAGER

Regid Office & Factory 3/34 A. Senthlamparia, Territoria, 129 - 3, iteratedo mola - Phan91.4517/27 EPH. Fac. 491.46172/190-Vints, energy emolitanemplanement - CPV-1, 10007711190077_205612 Branchus, Bergs crucil nanoppet Cherral Combarter France - Phylophic - Company - C. K. Anne Judice Marine Com Prad-

INTERNSHIP REPORT

Submitted by Anto Maria Jesili. R 18SPCH01

Certificate

सीएसआईआर-केंद्रीय विद्युतरसायन अनुसंघान संख्यान SIR-Central Electrochemical Research Institute कारेकुडी - 63003, तमिल नातु Karaikudi - 630 003, Tamil Nadu कौशल विकास प्रशिक्षण कार्यकम **Skill Development Training Programme** (सीएसजाईवार एकीकृत कीकल पहल के शहर)) (Under CSIR Integrated Skill Initiative) CERTIFICATA Ws. Anto Maria Jesili This is to certify that 803200986393 D/o. Raja Selvam. G. Aadhaar No. successfully completed the skill development training programme on Operation and Maintenance of Analytical Instruments consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi-630 003 31 May 2019 20 May 2019 from to Pongoli Nation समन्वयक - तकनीकी - नोडल देशक Coordinator Director Coordinator CSIR-CECRI Nodal Technical

CECRI was established in 1948 and had its origins in the nationalistic passion of Dr. Shanthi Swarup Bhatnagar, Pandit Jawaharlal Nehru, and Dr. R. M. Alagappa Chettiar. Dr. S. Radhakrishnan dedicated CECRI, the twelfth national laboratory under CSIR, to the country on January 14, 1953, making it a concrete reality.



The goal of CECRI's work is to produce novel advancements in electrochemical science and technology as well as new and improved products and processes. CECRI collaborates with laboratories both inside and outside of India to run a number of projects. We went to a few places where CECRI has had a big impact and took a glance at various instruments available at CECRI.

Electric vehicle

We came to known about high energy nickel-metal hybrid batteries for electric vehicles. Lead-acid batteries which are lightweight, inexpensive, and have a high specific energy and new battery that provides the same energy will weigh only 12 kg, compared to the current employed lead acid automobile batteries, which normally weigh roughly 20 kg was explained to us.



XRD

Powder X-ray diffraction (PXRD) measures the diffraction pattern of crystalline material. It is a rapid technique that can be used for phase identification and purity analysis of bulk crystalline materials. Combined with elemental analysis, pXRD methods can be used for the identification of unknown samples and/or impurities. Additionally, when single crystal growth is challenging, powder diffraction methods can be utilized for indexing to solving the structure from diffraction data collected on powders.



TEM

Transition Electron Microscopy (TEM) is a technique of imaging the internal structure of solids using a beam of high-energy electrons transmitted through the solid. This arrangement can be compared to the basic optical microscope with transmission illumination.



UV Spectroscopy

Ultraviolet-visible (UV-Vis) spectroscopy is a widely used technique in many areas of science ranging from bacterial culturing, drug identification and nucleic acid purity checks and quantitation, to quality control in the beverage industry and chemical research. UV-Vis spectroscopy is an analytical technique that measures the amount of discrete wavelengths of UV or visible light that are absorbed by or transmitted through a sample in comparison to a reference or blank sample. This property is influenced by the sample composition, potentially providing information on what is in the sample and at what concentration.



NMR

Nuclear Magnetic Resonance (NMR) spectroscopy is an analytical chemistry technique used in quality control and research for determining the content and purity of a sample as well as its molecular structure. For example, NMR can quantitatively analyze mixtures containing known compounds. For unknown compounds, NMR can either be used to match against spectral libraries or to infer the basic structure directly. Once the basic structure is known, NMR can be used to determine molecular conformation in solution as well as studying physical properties at the molecular level such as conformational exchange, phase changes, solubility, and diffusion.



SEM

A scanning electron microscope (SEM) is a type of electron microscope that produces images of a sample by scanning the surface with a focused beam of electrons. The electrons interact with atoms in the sample, producing various signals that contain information about the surface topography and composition of the sample. The electron beam is scanned in a raster scan pattern, and the position of the beam is combined with the intensity of the detected signal to produce an image. In the most common SEM mode, secondary electrons emitted by atoms excited by the electron beam are detected using a secondary electron detector (Everhart–Thornley detector). The number of secondary electrons that can be detected, and thus the signal intensity, depends, among other things, on specimen topography. Some SEMs can achieve resolutions better than 1 nanometer.



INTERNSHIP REPORT

Submitted by Antony Chella Nisha. C 18SPCH02

Certificate

सीएसआईआर-केंद्रीय विद्युतरसायन अनुसंधान संस्थान CSIR-Central Electrochemical Research Institute बारेकुरी - 63003, चनिल चापु Karalkodi - 638 003, Tamil Nada कौशल विकास प्रक्रिशण कार्यक्रम Skill Development Training Programme (सीएराजाईआर एकीकृत कोत्राल पहल के तहत) (Under CSIR Integrated Skill Initiative) CERTIFICAT Ms. C. Antony Chella Nisha This is to certify that Aadhaar No. 265556749121 D/o. S. Chelladurai successfully completed the skill development training programme on **Operation and Maintenance of Analytical Instruments** consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi-630 003 from 20 May 2019 to 31 May 2019 Rompali Adalios निदेशायः বঁত্ৰ - নাঁৱল समन्तव्यक - तकनीवी Director Coordinator CSIR-CECRI Coordinator Nodal Technical

CECRI was established in 1948 and had its origins in the nationalistic passion of Dr. Shanthi Swarup Bhatnagar, Pandit Jawaharlal Nehru, and Dr. R. M. Alagappa Chettiar. Dr. S. Radhakrishnan dedicated CECRI, the twelfth national laboratory under CSIR, to the country on January 14, 1953, making it a concrete reality.



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Electric vehicle

We came to known about high energy nickel-metal hybrid batteries for electric vehicles. Lead-acid batteries which are lightweight, inexpensive, and have a high specific energy and new battery that provides the same energy will weigh only 12 kg, compared to the current employed lead acid automobile batteries, which normally weigh roughly 20 kg was explained to us.



XRD

Powder X-ray diffraction (PXRD) measures the diffraction pattern of crystalline material. It is a rapid technique that can be used for phase identification and purity analysis of bulk crystalline materials. Combined with elemental analysis, pXRD methods can be used for the identification of unknown samples and/or impurities. Additionally, when single crystal growth is challenging, powder diffraction methods can be utilized for indexing to solving the structure from diffraction data collected on powders.



TEM

Transition Electron Microscopy (TEM) is a technique of imaging the internal structure of solids using a beam of high-energy electrons transmitted through the solid. This arrangement can be compared to the basic optical microscope with transmission illumination.



UV Spectroscopy

Ultraviolet-visible (UV-Vis) spectroscopy is a widely used technique in many areas of science ranging from bacterial culturing, drug identification and nucleic acid purity checks and quantitation, to quality control in the beverage industry and chemical research. UV-Vis spectroscopy is an analytical technique that measures the amount of discrete wavelengths of UV or visible light that are absorbed by or transmitted through a sample in comparison to a reference or blank sample. This property is influenced by the sample composition, potentially providing information on what is in the sample and at what concentration.



NMR

Nuclear Magnetic Resonance (NMR) spectroscopy is an analytical chemistry technique used in quality control and research for determining the content and purity of a sample as well as its molecular structure. For example, NMR can quantitatively analyze mixtures containing known compounds. For unknown compounds, NMR can either be used to match against spectral libraries or to infer the basic structure directly. Once the basic structure is known, NMR can be used to determine molecular conformation in solution as well as studying physical properties at the molecular level such as conformational exchange, phase changes, solubility, and diffusion.



SEM

A scanning electron microscope (SEM) is a type of electron microscope that produces images of a sample by scanning the surface with a focused beam of electrons. The electrons interact with atoms in the sample, producing various signals that contain information about the surface topography and composition of the sample. The electron beam is scanned in a raster scan pattern, and the position of the beam is combined with the intensity of the detected signal to produce an image. In the most common SEM mode, secondary electrons emitted by atoms excited by the electron beam are detected using a secondary electron detector (Everhart–Thornley detector). The number of secondary electrons that can be detected, and thus the signal intensity, depends, among other things, on specimen topography. Some SEMs can achieve resolutions better than 1 nanometer.



INTERNSHIP REPORT

Submitted by C. Gayathri 18SPCH05

तीएरुजाईजार-केंद्रीय विद्युतरसायन वनुसंघान संस्थान IR-Central Electrochemical Research Institute arरेकती - esods, तमिल माह, Karañudi +630 003, Tamil Nado काँश्वल विकास प्रशिक्षण कार्यक्रम Skill Development Training Programme (ellipsianifarie एकीकृत कीशल पहल के तहत) (Under CSIR Integrated Skill Initiative) CERTIFICATE Ms. Gayathri. C This is to certify that Aadhaar No 593713944169 D/o. Chelladurai. R successfully completed the skill development training programme on **Operation and Maintenance of Analytical Instruments** consisting of theory and hands-on training, conducted by CSIR=CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi-630 003 from 20 May 2019 31 May 2019 yali Nat समनवयक - तकनीकी माजन निदेशक Director Coordinator Coordinator CSIR-CECRI Nodal Technical. CONTROL CONTROL nveear



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XRD



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UV Spectroscopy



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SEM



INTERNSHIP REPORT

Submitted by Kowsalya. T 18SPCH06

सीएसआईआर-केंद्रीय विद्युतरसायन अनुसंघान संस्थान SIR-Central Electrochemical Research Institute जनिक्त्री - 63003, तमिल मार्च Karakudi - 630 003, Tamil Nedu कौशल विकास प्रशिक्षण कार्यक्रम Skill Development Training Programme (सीएसआईसाम एकीकृत जीवाल पहल के तहत) (Under CSIR Integrated Skill Initiative) RTIFICA C.037 Ms. Kowsalya. 7 This is to certify that のためのためのためのためのための Aadhaar No. 711072532403 D/o. S. Thanga Pandi successfully completed the skill development training programme on **Operation and Maintenance of Analytical Instruments** consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karalkudi-630 003 from 20 May 2019 31 May 2019 Pringali Nokos समनवयक - तकनीकी नोडल Coordinator. Coordinator Director CSIR-CECRI Technical. Nodal



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XRD



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UV Spectroscopy



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SEM



INTERNSHIP REPORT

Submitted by Maria Antony Vasanthi. A 18SPCH07

सीएलआईआर-केंद्रीय वियुत्तरसंयन कनुसंधान संस्थान CSIR-Central Electrochemical Research Institute गारीगुझी - 63003, गरिना भाषु Karakuti - 630 003, Tamii Nada कौराल विकास प्रशिक्षण कार्यक्रम Skill Development Training Programme (मीएसआईआर एसीएस जीवाज पहल के तहत) (Under CSIR Integrated Skill Initiative) ERTIFICAT This is to certify that Ms. Maria Antony Vasanthi. A D/o. T. Arul Prakasam Aadhaar No 979955542921 successfully completed the skill development training programme on **Operation and Waintenance of Analytical Instruments** consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute. Karaikudi-630 003 from 20 May 2019 to \$1 May 2019 Ponjali Nakas समन्वयक - तकनीकौ নারন Coordinator Coordinator Oirector. Technical. Nodal CSRR-CECRI



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XRD



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UV Spectroscopy



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SEM



INTERNSHIP REPORT

Submitted by P. Rayani Nivethitha 18SPCH10

सीएसजाईजार-केंद्रीय विद्युतरसायन अनुसंधान संस्थान SIR-Central Electrochemical Research Institute भारितारी - 63003. तनित भावु Karakudi - 630 063. Tamil Nadu कौशल विकास प्रशिक्षण कार्यक्रम Skill Development Training Programme (सीएसआईआर एकीइन कौशल पहल के तहन) (Under CSIR Integrated Skill Initiative) CERTIFICATE This is to certify that Ms. Rayani Nivethitha. 2 D/o. Prince Kumar. N Aadhaar No 308708669299 successfully completed the skill development training programme on Operation and Maintenance of Analytical Instruments consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi-630 003 to \$1 May 2019 from 20 May 2019 Rungali Nakan समनदयक - तकनीकी वयक - नोडल नेदेशक Coordinator Director Coordinator Technical CSIR-CECRI Nodal



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XRD



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UV Spectroscopy



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SEM



INTERNSHIP REPORT

Submitted by Renisha. R 18SPCH11

मीएसवाईवार-केंद्रीय विद्युतरसायन अनुसंधान संस्थान SIR-Central Electrochemical Research Institute करिकुमी - 63003, तमिल मानु Karakudi - 630 003, Tamil Nadu कौशल विकास प्रशिक्षण कार्यक्रम Skill Development Training Programme (सीएनसमाईअप्त एकीकृत करेशन प्राप्त में तहत) (Under CSIR Integrated Skill Initiative) ERTIFICATE Ws. Renisha. R This is to certify that D/o. Reno. S Aadhaar No 580716284729 successfully completed the skill development training programme on **Operation and Waintenance of Analytical Instruments** consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi-630 003 from 20 May 2019 to \$1 May 2019 Rugali Nakas समन्वपक - तकनीकी - नोडल नेटेकक Coordinator Coordinator Director Technical Nodal CSIR-CECRI



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XRD



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UV Spectroscopy



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SEM



INTERNSHIP REPORT

Submitted by S. Shelciya 18SPCH12

सीएसआईआर-केंद्रीय विद्युतरसायन अनुसंधान संस्थान CSIR-Central Electrochemical Research Institute बारीकुकी - 63003, लगिला भागु Karalkudi - 630 003, Tamit Nadu कौशल विकास प्रशिक्षण कार्यक्रम Skill Development Training Programme (सीएसआईकार एकीवृन्त कोशल पहल में तहत) (Under CSIR Integrated Skill Initiative) ERTIFICA Ms. S. Sheleiya This is to certify that D/o. A. Shelton 660572251537 Aadhaar No successfully completed the skill development training programme on **Operation and Waintenance of Analytical Instruments** consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi-630 003 from 20 May 2019 to \$1 May 2019 Rempet Nation समन्वयक - तकनीकी क - मोडल Coordinator Coordinator Director Technical Nodal. CSR-CECRI



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XRD



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UV Spectroscopy



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SEM



INTERNSHIP REPORT

Submitted by J. Sherly 18SPCH14

सीएसआईआर-केंद्रीय विद्युतरसायन अनुसंधान संरथान SIR-Central Electrochemical Research Institute सारे रहती - 63003, तमिल मासू Karalkudi - 630 003, Tamil Nadu कौशल विकास प्रशिक्षण कार्यक्रम Skill Development Training Programme (सीएसआईआर एवीकृत जीवाल पहल के तहत) (Under CSIR Integrated Skill Initiative) ERTIFICA This is to certify that Ms. Sherly. J D/o. Joseph Leenas. M Aadhaar No 666768696196 successfully completed the skilt development training programme on **Operation and Maintenance of Analytical Instruments** consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi-630 003 from 20 May 2019 to \$1 May 2019 ali Nata समन्वयक - तकनीकी नवयक - नोडल Sim Coordinator Coordinator Director CSIR-CECRI Technical Nedal



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SEM



INTERNSHIP REPORT

Submitted by Subha. K 18SPCH15

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SEM



INTERNSHIP REPORT

Submitted by J. Vaishnavi 18SPCH16

सीएनआईजार-केंद्रीय विद्युतरसायन अनुसंधान चरवान SIR-Central Electrochemical Research Institute 10/78:51 - 63003, 10/18: 1055 Karakudi - 630 503, Tamit Nadu . कौशल विकास प्रशिवण कार्यक्रम Skill Development Training Programme (तीएगआईबरर एकीकृत जोशान पहल के ताला) (Under CSIR Integrated Shift Initiative) This is to certify that Ms. Vaishnavi. J Aadhaar No 201858809721 D/o. 2. Jeyaraman successfully completed the skill development training programme on Operation and Maintenance of Analytical Instruments consisting of theory and hands-on training, conducted by CSIR-CECRI at CSIR-Central Electrochemical Research Institute, Karaikudi-630 003 from 20 May 2019 to \$1 May 2019 vali Nal मोठत निदेशक समन्त्रच्यकः तकनीवने Director Coordinator Coordinator CSIR-CECRI Nadal Technical



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SEM

