HINDUSTHAN EDUCATIONAL AND CHARITABLE TRUST
HICET

HINDUSTHAN
COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF CHEMICAL ENGINEERING
AMALGAM OF ENGINEERING
HICET

OFFICIAL NEWSLETTER OF
DEPARTMENT OF CHEMICAL ENGINEERING

CHEMERSATZ

DECEMBER 2021 - AUGUST 2022

NEWSLETTER – 04

STUDENT ASSOCIATION OF CHEMICAL ENGINEERING

Student Editors

Mr Surendhar T (III Year)

Ms Alka Dinesh (III Year)

Editor

Ms Dineshkumar M, AP

Convener

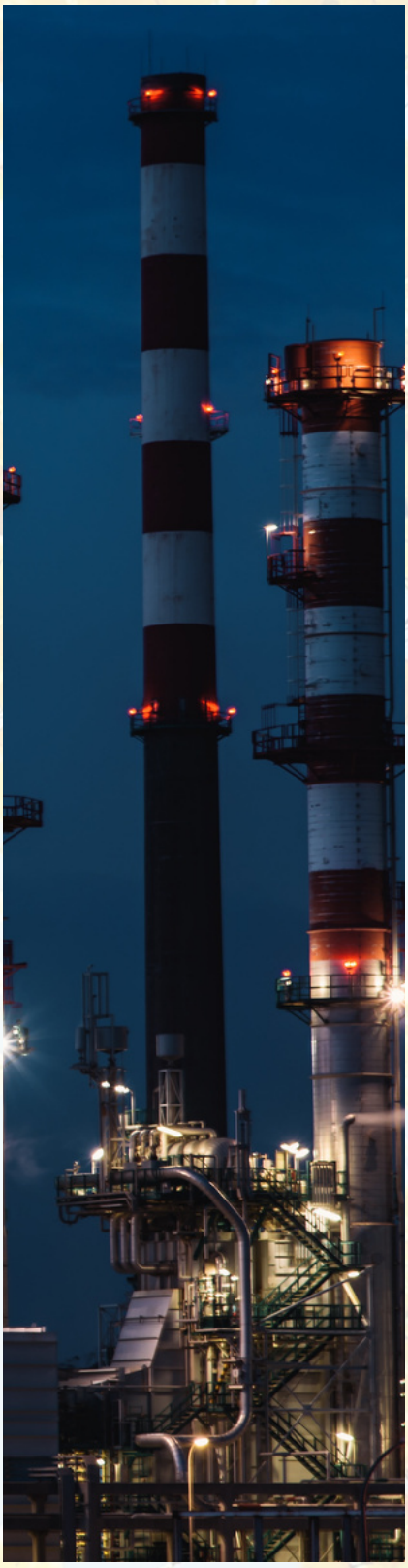
Dr Seenuvasan M, HoD

Great things are not done by impulse, but by a series of small things brought together.

George Eliot

WHAT CHEMICAL ENGINEERS DO?

PRESERVE ENVIRONMENT | ENERGY GENERATION | MATERIAL ADVANCEMENT | BIOMEDICINE ENHANCEMENT | ELECTRONICS IMPROVEMENT | ENHANCE FOOD PRODUCTION



Vision of the Department

To produce dynamic Engineers with excellence in process operations and problem-solving skills to meet the challenges and drive for the growth of the nation.

Mission of the Department

- To foster engineers with quality engineering education to meet the challenging and developing technology in the chemical sectors.
- To prepare students for leadership in diverse careers, create knowledge and provide multidisciplinary solutions to broad societal problems.
- To emphasize on the practical aspects of research, innovation and ensuring the realities of sustainable development.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

Graduates of Chemical Engineering will be able to:

- Participate as leaders in their fields of expertise and in activities that support service and economic development nationally and throughout the world.
- Pursue continued life-long learning through professional practice, research and training programs in the field of chemical engineering and science.
- Solve real-life problems in a broad perspective to fulfill ethical, economic, environmental and social responsibilities.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

Graduates of Chemical Engineering will be able to:

- Apply the knowledge of unit processes and operations for the design of Chemical plant.
- Acquire working knowledge of process safety and environment issues in Chemical Processes.
- Innovate and integrate the new ideas of Chemical Engineering processes as a team for the complex problems and development of chemical industries.

CHEMERSATZ

TABLE OF CONTENTS

MoU with Rubber, Chemical & Petrochemical Skill Development Council (Under the aegis of Ministry of Skill Development and Entrepreneurship, Under the Govt of India)

RCPSDC

Skill India

HICET

HINDUSTHAN
College of Engineering and Technology

(An Autonomous Institution Affiliated to Anna University
Approved by AICTE, New Delhi, Accredited with A Grade by NAAC)

Department of Chemical Engineering

Signing

Memorandum of Understanding

with

Rubber, Chemical & Petrochemical Skill Developement Council

(Under the aegis of, Ministry of Skill Development and Entrepreneurship (MSDE), Govt. of India)

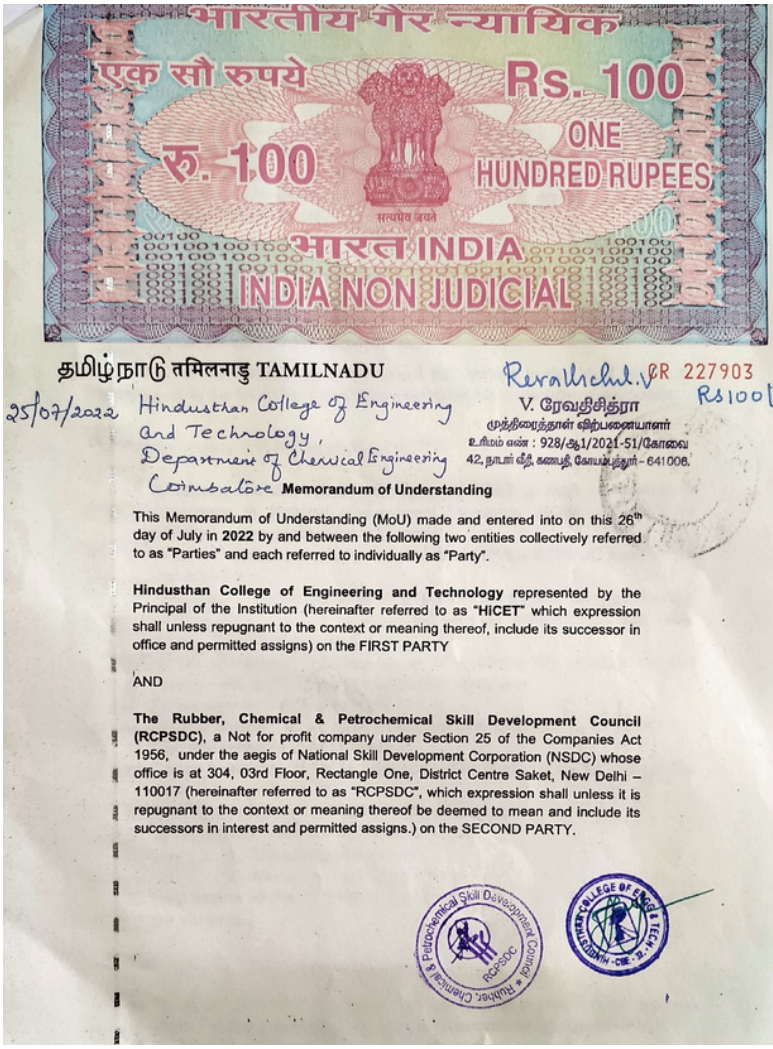
On Behalf of HiCET

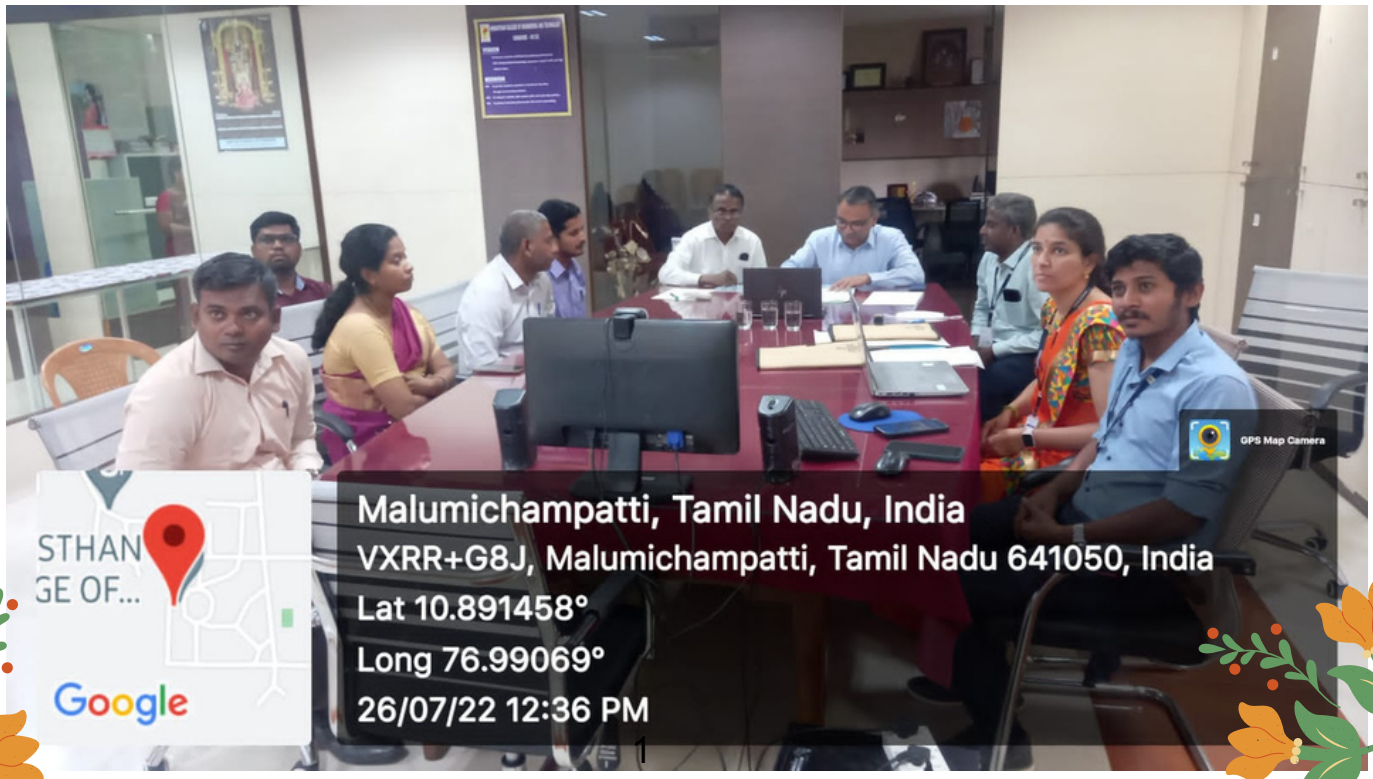
Dr Karunakaran K	Dr Jaya J	Dr Seenuvasan M
(CEO)	(Principal)	(HOD)

On Behalf of RCPSDC

Mr Vinod Patkotwar	Dr Ashrita Tripathi	Ms Shilpa Adlakha
Chairman	Head QA & Training	Sr Manager Higher Education

July 26, 2022 @ 11.00 am
Venue: Board Room - HiCET | Mode: Online





International Virtual Conference

Department of Chemical Engineering
HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

Department of Biotechnology and Microbiology
HINDUSTHAN COLLEGE OF ARTS & SCIENCE

Coimbatore, Tamilnadu, India

Organizes

International Virtual Conference on Advances in Chemical, Biochemical and Microbial Technology for Sustainable Development - 2022

ACBMT'2022

6 MAY, 2022

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Professor & Head, Dept. of Chemical Engg, HiCET

Dr. G Rajalakshmi
Professor & Head, Dept. of Biotechnology, HiCAS

Dr. Lali Growther
Professor & Head, Dept. of Microbiology, HiCAS

Co-ordinators

Er. M Dineshkumar, Asst. Prof
Er. A Rajkumar, Asst. Prof
Dept. of Chemical Engg, HiCET
9597351722, 9486407006

Dr. P Senthilkumar, Assoc. Prof
Dr. S G Antony Godson, Asst. Prof
Dept. of Biotechnology, HiCAS
9003917440, 94884 06931

Dr. N Hemashenpagam, Professor
Dr. R Manju, Assoc. Prof
Dept. of Microbiology, HiCAS
9944691201, 8825490672

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Principal, HiCAS

Convener

Dr. M Seenuvasan
Professor & Head, Department of Chemical Engineering, HiCET

Dr. G Rajalakshmi
Professor& Head, Dept. of Biotechnology, HiCAS

Dr. Lali Growther
Professor & Head, Dept. of Microbiology, HiCAS

Co-Ordinators

Er. M Dineshkumar
Assistant Professor, Department of Chemical Engineering, HiCET.

Er. A Rajkumar
Assistant Professor, Department of Chemical Engineering, HiCET.

Dr. N Hemashenpagam
Professor, Department of Microbiology, HiCAS.

Dr. R Manju
Associate Professor, Department of Microbiology, HiCAS.

Dr. P Senthilkumar
Associate Professor, Department of Biotechnology, HiCAS.

Dr. S G Antony Godson
Assistant Professor, Department of Biotechnology, HiCAS.

ACBMT'2022

Tentative Speakers

Dr. Selvaraju Narayanasamy
Associate Professor, Department of Biosciences & Bioengineering,
IIT Guwahati, India

Dr. Divya Thiagarajan
Scientist, Pixelgen Technologies,
Sweden

Dr. Anil Kumar Madhava
Senior Scientist, Analytical and Environmental Science Division & Centralized Instrument Facility,
CSIR, CMCRI, Bhavnagar, India

Dr. Baskar Gurunathan
St.Joseph's College of Engineering, Chennai, India
Ranked top 2% Scientist in the World 2020
Issued by Standford University and
Elsevier BV-Oct 2021

Dr. Mohammad Feroze Fazaludeen
University of Eastern Finland | UEF · A.I. Virtanen Institute for Molecular Sciences,
Early Stage Researcher, Finland

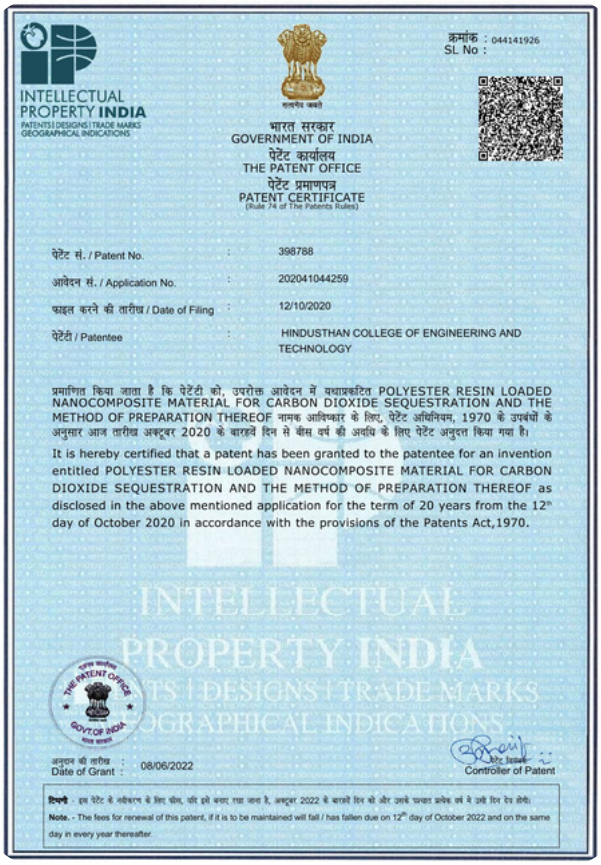
Organized by
Department of Chemical Engineering, HiCET
Department of Biotechnology and Microbiology, HiCAS
Coimbatore, Tamilnadu, India.

PATENT PUBLISHED & GRANTED

Name	Title	Patent No
Dr Seenuvasan M, Dr. Jeevarathinam G, Dr. Sridar N	Polyester resin loaded nanocomposite material for carbon dioxide sequestration and the method of preparation thereof	Granted - 398788
Dr M Seenuvasan Dr Magudeswaran N Dr Jaya J Mr Dineshkumar M Mr Rajkumar A Ms Induja P Dr Nithyanandam C Dr SenthilMurugan V Mr Sriharish K	Magentite Embedded Biochar as Nano-Sorbent for Effective Adsorption of Textile Dye and the Method Thereof	202241028399
Nabeel Ahmed Kamal Alaskar Chandrakumar Dixit Sushma Jaiswal Dr Seenuvasan M Manish Ranjan Pandey Aravind Kumar Shukla Rajdeep Singh, Ravichandran Sivaramakrishnan M Arpan Kumar Tripathi	Medication Dose Preparation And Transfer System Using Artificial Intelligence Mechanism Scope Of	20 2022 100 927.9
Dr Jeevarathinam G Ms Neethu C S Ms Nivetha T Dr Seenuvasan M Farhana Rasheed Keerthana J M	Production of Biochemcial Solution for Ginger Peel Removal by Citric acid blend From food waste and thereof	202241030415
Mr S Sathish Dr S Sahaya Arokia Selva Dr S Geetha Dr S Vijayalakshmi Dr D Maarimuthu Mr S Prem Dr R Maguteeswaran Mrs P Mathumitha Mrs A Thamarai Muthumari Dr M Rajeshwaran	A New Technique for Solid Removal Dust Removal Using Two Inlet Cyclone Separator	202241045257 A

PATENT PUBLISHED & GRANTED

	Granted	Publishe
Dr Seenuvasan M	02	02
Mr Dineshkumar M	0	01
Mr Rajkumar A	0	01
Ms Induja P	0	01
Mr Sathish J	0	01



INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

भारत सरकार
GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE
पेटेंट प्रमाणपत्र
PATENT CERTIFICATE
(Rule 74 of The Patents Rules)

क्रमांक : 044141926
Sl. No :

पेटेंट सं. / Patent No. : 398788
आवेदन सं. / Application No. : 202041044259
फाइल करने की तारीख / Date of Filing : 12/10/2020
पेटेंटी / Patentee : HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित POLYESTER RESIN LOADED NANOCOMPOSITE MATERIAL FOR CARBON DIOXIDE SEQUESTRATION AND THE METHOD OF PREPARATION THEREOF नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख अक्टूबर 2020 के बारहवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled POLYESTER RESIN LOADED NANOCOMPOSITE MATERIAL FOR CARBON DIOXIDE SEQUESTRATION AND THE METHOD OF PREPARATION THEREOF as disclosed in the above mentioned application for the term of 20 years from the 12th day of October 2020 in accordance with the provisions of the Patents Act,1970.

अनुदान की तारीख / Date of Grant : 08/06/2022

Controller of Patent

टिप्पणी : इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, अक्टूबर 2022 के बारहवें दिन को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देय होगी।
Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 12th day of October 2022 and on the same day in every year thereafter.

Bundesrepublik Deutschland

Urkunde

über die Eintragung des
Gebrauchsmusters Nr. 20 2022 100 927

Bezeichnung:
System zur Vorbereitung und Übertragung von Medikamentendosen mit künstlicher Intelligenz

IPC:
G16H 20/10

Inhaber/Inhaberin:
Ahmad, Nabeel, Kanpur, UP, IN
Alaskar, Kamal, Kolhapur, Maharashtra, IN
Dixit, Chandra Kumar, Lucknow, UP, IN
Jaiswal, Sushma, Indore, Madhya Pradesh, IN
Muthulingam, Seenuvasan, Coimbatore, Tamil Nadu, IN
Pandey, Manish Ranjan, Moradabad, UP, IN
Shukla, Arvind Kumar, Sultanpur, U.P, IN
Singh, Rajdeep, Moradabad, UP, IN
Sivaramakrishnan, Ravichandran, Chennai, Tamil Nadu, IN
Tripathi, Arpan Kumar, Durg, Chhattisgarh, IN

Tag der Anmeldung:
18.02.2022

Tag der Eintragung:
02.06.2022

Die Präsidentin des Deutschen Patent- und Markenamts

Cornelia Rudloff-Schäffer

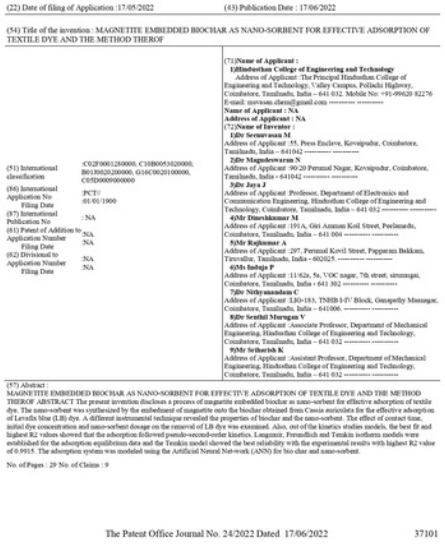
München, 02.06.2022

Die Voraussetzungen der Schutzfähigkeit werden bei der Eintragung eines Gebrauchsmusters nicht geprüft.
Den aktuellen Rechtsstand und Schutzumfang entnehmen Sie bitte dem DPMAregister unter www.dpma.de.

(12) PATENT APPLICATION PUBLICATION (21) Application No.202241045857 A
(19) INDIA
(22) Date of filing of Application :11/08/2022 (43) Publication Date : 19/08/2022

(54) Title of the invention : A NEW TECHNIQUE FOR SOLID DUST REMOVAL USING TWO INLET CYCLONE SEPARATOR

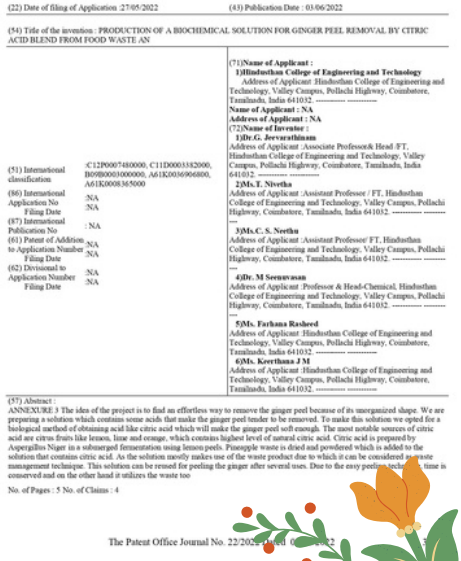
The Patent Office Journal No. 33/2022 Dated 19/08/2022 52043



(12) PATENT APPLICATION PUBLICATION (21) Application No.202241028399 A
(19) INDIA
(22) Date of filing of Application :17/05/2022 (43) Publication Date : 17/06/2022

(54) Title of the invention : MAGNETITE EMBEDDED BIOCHAR AS NANO-SORBENT FOR EFFECTIVE ADSORPTION OF TEXTILE DYE AND THE METHOD THEROF

The Patent Office Journal No. 24/2022 Dated 17/06/2022 37101



(12) PATENT APPLICATION PUBLICATION (21) Application No.202241030415 A
(19) INDIA
(22) Date of filing of Application :27/05/2022 (43) Publication Date : 03/06/2022

(54) Title of the invention : PRODUCTION OF A BIOCHEMICAL SOLUTION FOR GINGER PEEL REMOVAL BY CITRIC ACID BLEND FROM FOOD WASTE AN

The Patent Office Journal No. 22/2022 Dated 03/06/2022

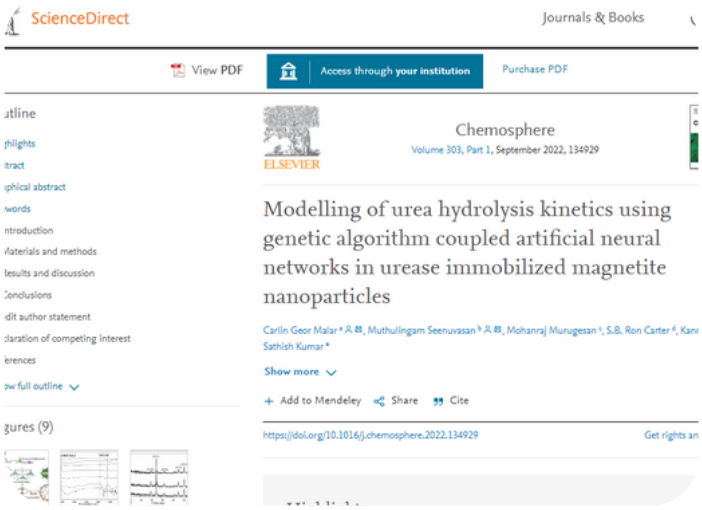
RESEARCH PUBLICATIONS

S.No	Name of the Faculty (with designation)	Name of the Journal	Title of the Paper	Volume/Issue/PP/Year	DOI	Index	h index
1.	Dr M Seenuvasan (Professor & HoD)	Chemosphere	Kinetics, equilibrium and thermodynamic investigations of methylene blue dye removal using Casuarina equisetifolia pines"	285/ - / 131480 / 2021	https://doi.org/10.1016/j.chemosphere.2021.131480	Scopus &Web of Science	8.9
4.	Dr M Seenuvasan (Professor & HoD)	Chemosphere	Modelling of urea hydrolysis kinetics using genetic algorithm coupled artificial neural networks in urease immobilized magnetite nanoparticles	303 / - / 134929 / 2022	https://doi.org/10.1016/j.chemosphere.2022.134929	Scopus &Web of Science	8.9

BOOK CHAPTER PUBLICATIONS

S.No	Name of the Faculty (with designation)	Name of the Journal	Title of the Paper	Volume/Issue/PP/Year	Publisher	DOI
1.	Dr M Seenuvasan (Professor & HoD)	Sustainable Bioprocessing for a Clean and Green Environment	Phycoremediation of Heavy Metals in Wastewater: Strategy and Developments	1/ - / 163-175 / 2021	Taylor and Francis	https://www.taylorfrancis.com/chapters/edit/10.1201/9781003035398-9/phycoremediation-heavy-metals-wastewater-velusamy-priya-sivakumar-vivek-carlin-geor-malar
2.	Dr M Seenuvasan (Professor & HoD)	Sustainable Bioprocessing for a Clean and Green Environment	Bio-based Coagulants for the Remediation of Environmental Pollutants	1/ - / 103-112 / 2021	Taylor and Francis	http://dx.doi.org/10.1201/9781003035398-6

RESEARCH & BOOK CHAPTER PUBLICATIONS



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Chemosphere
Volume 303, Part 1, September 2022, 134929

Modelling of urea hydrolysis kinetics using genetic algorithm coupled artificial neural networks in urease immobilized magnetite nanoparticles

Carlin Geor Malar, Muthulingam Seenuvasan, Mohanraj Murugesan, S.B. Ron Carter, Kani Sathish Kumar

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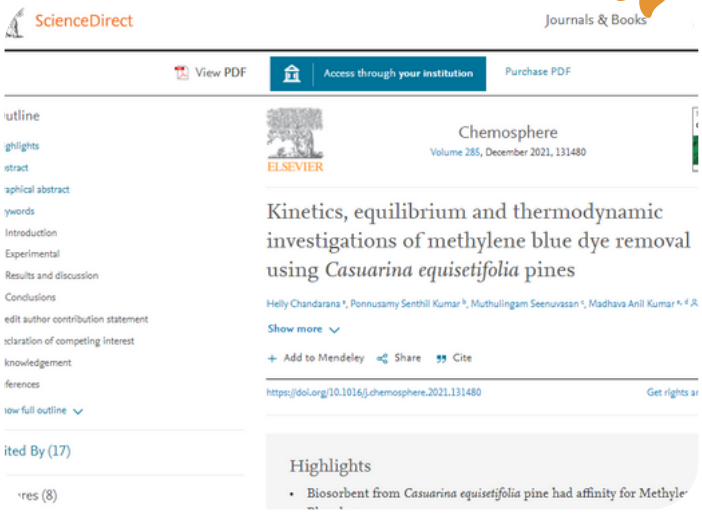
https://doi.org/10.1016/j.chemosphere.2022.134929



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Chemosphere
Volume 285, December 2021, 131480

Kinetics, equilibrium and thermodynamic investigations of methylene blue dye removal using *Casuarina equisetifolia* pines

Helly Chandarana, Ponnusamy Senthil Kumar, Muthulingam Seenuvasan, Madhava Anil Kumar

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https://doi.org/10.1016/j.chemosphere.2021.131480

Highlights

- Biosorbent from *Casuarina equisetifolia* pine had affinity for Methyle

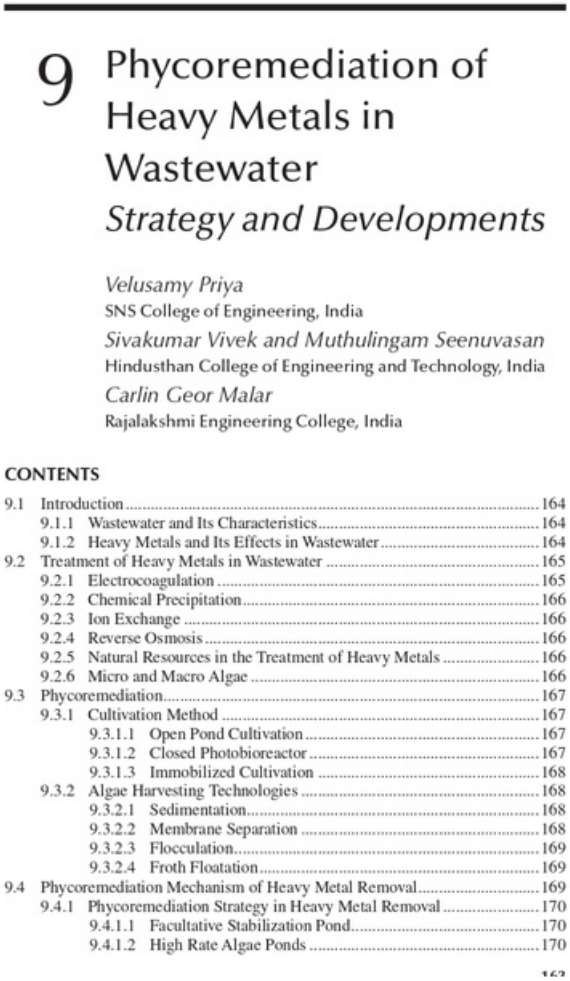
6 Bio-based Coagulants for the Remediation of Environmental Pollutants

Mansi Kikani and Chanchpara Amit
CSIR-Central Salt & Marine Chemicals Research Institute, India
Doddabhimappa Ramappa Gangapur and Madhava Anil Kumar
CSIR-Central Salt & Marine Chemicals Research Institute, India; Academy of Scientific and Innovative Research, India
Muthulingam Seenuvasan
Hindusthan College of Engineering and Technology, India

CONTENTS

6.1 INTRODUCTION

Water quality, its goodness, and deterioration are governed by several factors such as natural conditions and anthropogenic effects. Water finds its use in domestic and industrial supplies, irrigation, nurturing, breeding and preservation of aquatic life, power generation, transport, and recreational activities. Everyday activities and their associated processes generate pollution at all spheres: atmosphere, lithosphere, biosphere, hydrosphere, and sphere of the environment. Regulatory agencies are concerned with protecting the environment into two categories: (a) point and (b) non-point sources.



9 Phycoremediation of Heavy Metals in Wastewater
Strategy and Developments

Velusamy Priya
SNS College of Engineering, India
Sivakumar Vivek and Muthulingam Seenuvasan
Hindusthan College of Engineering and Technology, India
Carlin Geor Malar
Rajalakshmi Engineering College, India

CONTENTS

82 Students have succesfully registered and become a member of Indian Institute of Chemical Engineers (IIChE)

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

DR SEENUVASAN M (PROFESSOR & HEAD)

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/STTP/ Training program	Name of Organizing Institute	Place
Workshops					
1.	Dr Seenuvasan M	13.12.2021 to 17.12.2021	Technologies for Increasing the Shelf-Life of Perishable Foods	NIT	Rourkela
2.	Dr Seenuvasan M	25.01.2022	National Intellectual Property Awareness Mission	Intellectual property of India	New Delhi
FDPs/STTPs					
1.	Dr Seenuvasan M (Professor)	07.02.2022 to 11.02.2022	Carbon Balance and Environmental Sustainability	BMS College of Engineering, Bengaluru	Karnataka
2.	Dr Seenuvasan M (Professor)	07.03.2022 to 11.03.2022	Recent Trends in Upstream Petroleum Technology	Dibrugarh University	Assam
3.	Dr Seenuvasan M (Professor)	07.02.2022 to 11.02.2022	Online Orientaion Training Programme for Mentors	NITTTR – AICTE, Chennai	Tamilnadu
4.	Dr Seenuvasan M (Professor)	1.03.2022-5.03.2022	Domains of Academis: Research and Teaching -Learngin	Department of Chemical Engineeringm, Marwadi University, Gujarat	Gujarat
5.	Dr Seenuvasan M (Professor)	04.10.2021 to 09.10.2021	Optimization, modelling and simulation for Process Industries	Department of Chemical Engineering, Annamalai University.	Tamilnadu
6.	Dr Seenuvasan M (Professor)	28.06.2021 to 02.07.2021	International Entrepreneurship Development Programme	Dr. S. Gopalaraju Govt First Grade College, Karnataka.	Karnataka
7.	Dr Seenuvasan M (Professor)	27.09.2021 to 02.10.2021	Recent advances in soft computing Techniques for Optimizing Industrial Process	Department of Chemical Engineering, Annamalai University.	Tamilnadu

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

DR SEENUVASAN M (PROFESSOR & HEAD)

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy
Certificate
This is certified that Seenuvasan M, Professor of Hindusthan College of Engineering and Technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Carbon Balance and Environmental Sustainability" from 07/02/2022 to 11/02/2022 at BMS College of Engineering, Bengaluru.
Advisor-I, ATAL Academy
Mamta Rani Agarwal
Coordinator

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy
Certificate
This is certified that Seenuvasan M, Professor of Hindusthan College of Engineering and Technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Recent Trends in Upstream Petroleum Technology" from 07/03/2022 to 11/03/2022 at Dibrugarh University.
Advisor-I, ATAL Academy
Mamta Rani Agarwal
Coordinator

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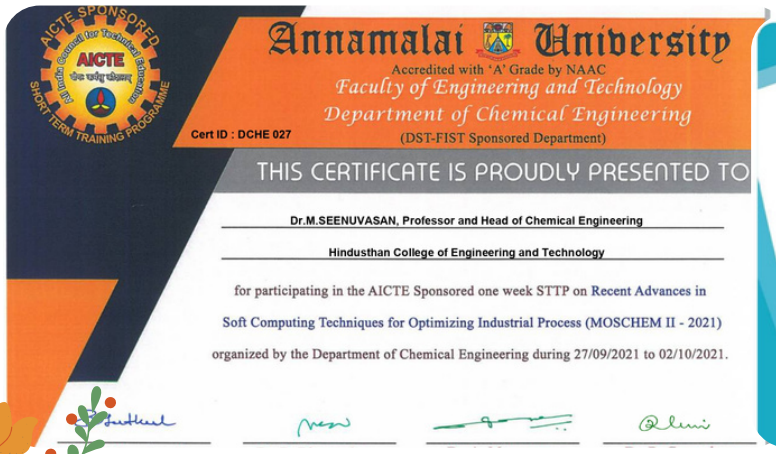
NIPAM
NATIONAL IP AWARENESS MISSION
Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks
CERTIFICATE
This is to certify that, DR. DR SEENUVASAN M , FACULTY of HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY has successfully participated in IP Awareness/Training program under
NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION
on January 25,2022
Organized by
Intellectual Property Office, India
Date:February 18,2022
(RAJENDRA RATNOO, IAS)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

National Institute of Technology
Department of Food Process Engineering
Rourkela - 769008, Odisha, India
SERB
Karyashala
Certificate of Participation
This certificate is awarded to appreciate
Dr Seenuvasan M
for successfully participating in five days DST-SERB sponsored Karyashala, High-End International Workshop on "Technologies for Increasing the Shelf-Life of Perishable Foods"(Online Mode) organized by the Department of Food Process Engineering, National Institute of Technology, Rourkela, Odisha, from 13th to 17th December, 2021.



AICTE SPONSORED
Annamalai University
Accredited with 'A' Grade by NAAC
Faculty of Engineering and Technology
Department of Chemical Engineering
(DST-FIST Sponsored Department)
Cert ID : DCHE 027
THIS CERTIFICATE IS PROUDLY PRESENTED TO
Dr.M.SEENUVASAN, Professor and Head of Chemical Engineering
Hindusthan College of Engineering and Technology
for participating in the AICTE Sponsored one week STTP on Recent Advances in Soft Computing Techniques for Optimizing Industrial Process (MOSCHEM II - 2021)
organized by the Department of Chemical Engineering during 27/09/2021 to 02/10/2021.

DST
Marwadi University
CERTIFICATE OF PARTICIPATION
This certificate is presented to Mr/Ms
DR SEENUVASAN M
for Participating in One Week Online STTP on
'Domains of Academia: Research and Teaching-Learning'
Organized by
Department of Chemical Engineering, Faculty of Technology,
and Department of Learning & Development
Marwadi University, Rajkot, Gujarat, India.
Sponsored by
Gujarat Council on Science & Technology,
Department of Science & Technology, Govt. of Gujarat on
March 01 to 05, 2022

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP)

DR SEENUVASAN M (PROFESSOR & HEAD)

Redspectra Instruments Pvt Ltd

02-Aug-2021
Chennai

Dear Dr Seenuvasan M,

Based on your expertise and experience in the Chemical and allied technology, you have been appointed as member of our technical advisory team.

Expecting your valuable suggestions and comments towards our growth.

Thank you for taking part in our collaborative activity

For Redspectra Instruments Pvt Ltd
Director

795, Trunk Road, Poonamalle, Chennai - 600 056, India.
CIN : U36999TN2019PTC129385 Phone : +91 9600486691 info@redspectra.com www.redspectra.com

अखिल भारतीय तकनीकी शिक्षा परिषद्, नई दिल्ली

प्रमाणपत्र

यह प्रमाणित किया जाता है कि

सीनुवासन एम
पंजीयन क्र.: 1-7353285301
ने
राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण पहल के अंतर्गत
दिनांक 7 फरवरी से 11 फरवरी 2022 तक आयोजित
मेंटर उन्मुखीकरण ऑनलाईन प्रशिक्षण कार्यक्रम
सफलतापूर्वक पूर्ण किया।

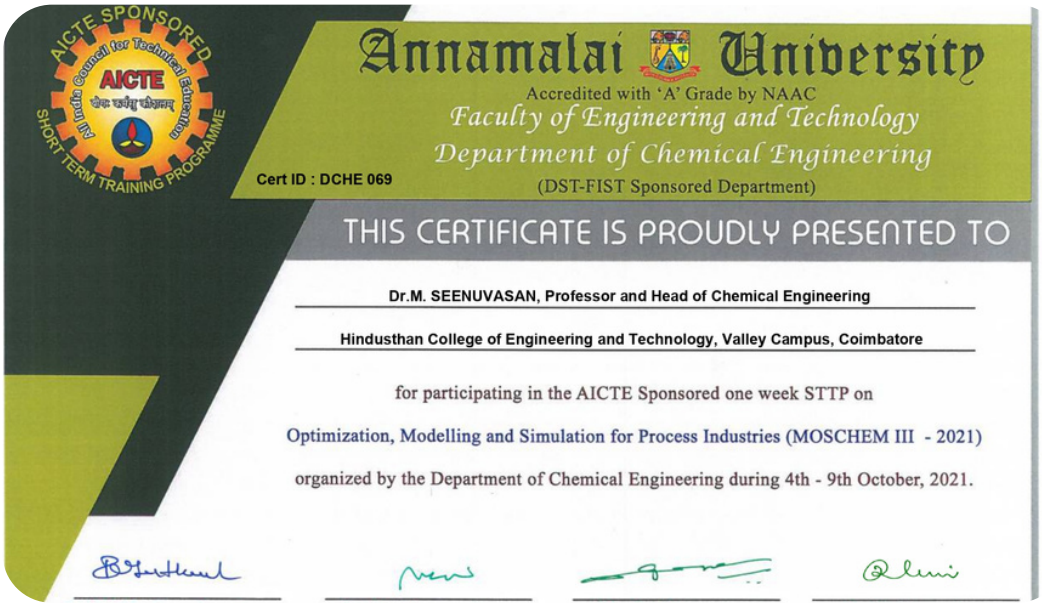
All India Council for Technical Education, New Delhi

Certificate

This is to certify that
SEENUVASAN M
Registration No. 1-7353285301
has successfully completed the
Online Orientation Training Programme for Mentors
organized from 7th February to 11th February 2022
under
National Initiative for Technical Teachers Training.

DIRECTOR NITTTR, Bhopal | DIRECTOR NITTTR, Chandigarh | DIRECTOR NITTTR, Chennai | DIRECTOR NITTTR, Kolkata

MEMBER SECRETARY



AICTE SPONSORED
All India Council for Technical Education
SHORT TERM TRAINING PROGRAMME

Annamalai University
Accredited with 'A' Grade by NAAC
Faculty of Engineering and Technology
Department of Chemical Engineering
(DST-FIST Sponsored Department)

Cert ID : DCHE 069

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Dr.M. SEENUVASAN, Professor and Head of Chemical Engineering

Hindusthan College of Engineering and Technology, Valley Campus, Coimbatore

for participating in the AICTE Sponsored one week STTP on

Optimization, Modelling and Simulation for Process Industries (MOSCHEM III - 2021)

organized by the Department of Chemical Engineering during 4th - 9th October, 2021.

Alison

Certificate

This is to certify that

Dr SEENUVASAN M

Successfully obtained certificate in

Introduction to E-Learning Theory and Practice

Maeve Richardson
Director of Certification

17th June 2022
Date of Award

SkillUP
by Simplilearn

/Productivity Guy

Declaration of Completion

Dr. SEENUVASAN M

has successfully completed the online course:

Introduction to Productivity Framework Course

This professional has demonstrated initiative and a commitment to deepening their skills and advancing their career. Well done!

18th Jun 2022
Certificate code : 3539444

Krishna Kumar

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

MS DRISYA G CHANDRAN (ASSISTANT PROFESSOR)
MS FETCIA JACKULIN (ASSISTANT PROFESSOR)

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/STTP/ Training program	Name of Organizing Institute	Place
FDPs/STTPs					
1.	Drisya G Chandran (Assistant Professor)	23.02.2022 to 25.02.2022	Effective Pedogogies in Teaching and Learning	Dhaanish Ahmed College of Engineering	Tamilnadu
2.	Drisya G Chandran (Assistant Professor)	28.02.2022 to 04.03.2022	Control System and Sensor Technology	National Institute of Technical Teachers' Training and Research, Kolkata.	West Bengal
3.	Drisya G Chandran (Assistant Professor)	07.3.2022 to 11.03.2022	Recent Trends in Upstream Petroleum Technology	Dibrugarh University	Assam
4.	Drisya G Chandran (Assistant Professor)	24.01.2022 to 31.01.2022	Unit Operations in Agricultural Processing	SNS College of Technology, Coimbatore	Tamilnadu
5.	Ms Fetcia Jackulin (Assistant Professor)	27.09.2021 to 02.10.2021	Undergone STTP on Recent Advances in Soft Computing Techniques for Optimizing Industrial Process (MOSCHEM- II 2021).	Annamalai University	Tamilnadu

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

MS DRISYA G CHANDRAN (ASSISTANT PROFESSOR)
MS FETCIA JACKULIN (ASSISTANT PROFESSOR)

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Dineshkumar, Assistant Professor of Hindustan College of Engineering participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "Intellectual Property Rights in Academia: Creation, Protection, and Commercialization" from 07/02/2022 to 11/02/2022 at Andhra University.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

No: ATAL/2022/1643470820

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Seenuvasan M, Professor of Hindusthan College of Engineering and Technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Recent Trends in Upstream Petroleum Technology" from 07/03/2022 to 11/03/2022 at Dibrugarh University.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

DACE Cultivating Technology
DHAANISH AHMED COLLEGE OF ENGINEERING
TAMBARAM, CHENNAI 601301

Approved by AICTE, New Delhi and affiliated to Anna University, Chennai,
NAAC Accredited with B++, (Recongnised under section 2(F) & 12(B) of UGC Act, 1956) Approved to admit NRI / Foreign Nationals

Certificate
OF PARTICIPATION

FACULTY DEVELOPMENT PROGRAM

This is to certify that

DRISYA G CHANDRAN

of HINDUSTHAN COLLEGE OF ENGINEERING& TECHNOLOGY

has attended Online Faculty Development Program "EFFECTIVE PEDOGOGIES IN TEACHING AND LEARNING" organized by Internal Quality Assurance Cell, **Dhaanish Ahmed College of Engineering**, Chennai from 23 February 2022 to 25 February 2022

SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
www.sathyabama.ac.in

Azadi Ka Amrit Mahotsav

Certificate of Participation

This is to certify that
DINESHKUMAR M
from
Hindusthan College of Engineering and Technology
has participated in NAAC Sponsored Two Day National Level Online Workshop on
Quality Assessments and Accreditation in HEIs
on 27.6.2022 and 28.06.2022 organized by Sathyabama Institute of Science and Technology, Chennai.

– IQAC

Vice Chancellor

CERTIFICATE

CENTRE FOR FACULTY DEVELOPMENT
ANNA UNIVERSITY :: CHENNAI - 600 025

Ms. P. Indija, Assistant Professor
Hindusthan college of Engineering & Technology, Coimbatore
took part in the six-day Faculty Development Training Programme on
AI 8401 - Unit Operations in Agricultural Processing conducted in
ONLINE MODE by the Department of Agriculture Engineering
at SNS college of Technology, Coimbatore
from 24.01.2022 to 31.01.2022

COORDINATOR(S)
DIRECTOR

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

MR DINESHKUMAR M (ASSISTANT PROFESSOR)

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/STTP/ Training program	Name of Organizing Institute	Place
Workshops					
1.	Mr Dineshkumar M	27.06.2022 – 28.06.2022	Quality Assessments and Accreditation in HEIs	Sathyabama Institute of Science and Technology	Chennai
FDPs/STTPs					
1.	Mr Dineshkumar M (Assistant Professor)	07.02.2022 to 11.02.2022	Intellectual Property Rights in Academia: Creation, Protection, and Commercialization	Andhra University	Andhra Pradesh
2.	Mr Dineshkumar M (Assistant Professor)	20.12.2021 to 24.12.2021	Waste Technology	Government Engineering College, Bharuch	Gujarat
3.	Mr Dineshkumar M (Assistant Professor)	21.02.2022 to 25.02.2022	Emerging Trends in Green Energy Technologies	Government Polytechnic Gondia	Maharashtra
4.	Mr Dineshkumar M (Assistant Professor)	24.01.2022 to 31.01.2022	Unit Operations in Agricultural Processing	SNS College of Technology, Coimbatore	Tamilnadu
7.	Mr Dineshkumar M (Assistant Professor)	08.08.2022 to 14.08.2022	Emerging Trends in Food Processing	Department of Food Technology, HiCET	Tamilnadu

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

MR DINESHKUMAR M (ASSISTANT PROFESSOR)

No: ATAL/2022/1642569617

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Dineshkumar, Assistant Professor of Hindustan College of Engineering participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "Intellectual Property Rights in Academia: Creation, Protection, and Commercialization" from 07/02/2022 to 11/02/2022 at Andhra University.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

No: ATAL/2022/1643688604

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Dineshkumar, Assistant Professor of Hindustan College of Engineering participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Emerging Trends in Green Energy Technologies" from 21/02/2022 to 25/02/2022 at Government Polytechnic Gondia.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

No: ATAL/2021/1637050512

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Dineshkumar, Assistant Professor of Hindustan College of Engineering participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Waste Technology" from 20/12/2021 to 24/12/2021 at Government Engineering College, Bharuch.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

HINDUSTHAN EDUCATIONAL AND CHARITABLE TRUST
HECT

HINDUSTHAN EDUCATIONAL INSTITUTIONS, COIMBATORE

An Autonomous College-affiliated to Bharathiar University
Approved by AICTE and Govt. of Tamilnadu
Accredited by NAAC-An ISO Certified Institution

DEPARTMENT OF FOOD PROCESSING TECHNOLOGY AND MANAGEMENT
&
DEPARTMENT OF FOOD TECHNOLOGY

Certificate of Appreciation

This is to certify that Mr DINESHKUMAR MYILSAMY
Hindusthan College of Engineering and Technology, Coimbatore
has participated in the seven days *International Faculty Development Program* titled
Emerging Trends in Food Processing
organised by Department of Food Processing Technology and Management
& Department of Food Technology
from August 08, 2022 to August 14, 2022.

FDP

Dr.N.Murugalatha
Professor & Head
Department of FPTM
HICAS

Dr. G. Jeevarathinam
Associate Professor & Head
Department of FT
HICET

Dr. A.Ponnusamy
Principal
HICAS

Dr. J.Jaya
Principal
HICET

Dr. K. Karunakaran
CEO

Made for free with Certify'em

SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
www.sathyabama.ac.in

Azadi Ka Amrit Mahotsav

Certificate of Participation

This is to certify that

DINESHKUMAR M

from

Hindusthan College of Engineering and Technology

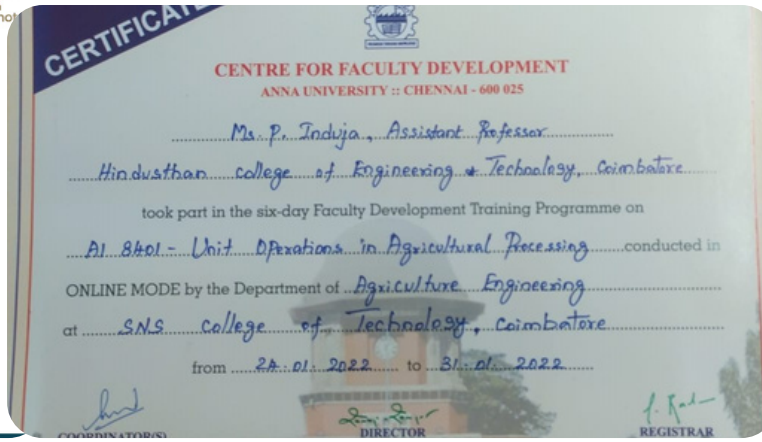
has participated in NAAC Sponsored Two Day National Level Online Workshop on

Quality Assessments and Accreditation in HEIs

on 27.6.2022 and 28.06.2022 organized by Sathyabama Institute of Science and Technology, Chennai.

Dean - IQAC

Vice Chancellor



CERTIFICATE

CENTRE FOR FACULTY DEVELOPMENT
ANNA UNIVERSITY :: CHENNAI - 600 025

Ms. P. Indija, Assistant Professor
Hindusthan college of Engineering & Technology, Coimbatore
took part in the six-day Faculty Development Training Programme on
AI &Rol - Unit Operations in Agricultural Processing conducted in
ONLINE MODE by the Department of Agriculture Engineering
at SNS College of Technology, Coimbatore
from 24.01.2022 to 31.01.2022

DIRECTOR

REGISTRAR

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

MR DINESHKUMAR M (ASSISTANT PROFESSOR)

Great Learning

CERTIFICATE OF COMPLETION

Presented to

Dinesh Kumar

For successfully completing a free online course

Marketing: Strategic Framework

Provided by

Great Learning Academy

(On July 2022)

Great Learning

CERTIFICATE OF COMPLETION

Presented to

Dinesh Kumar

For successfully completing a free online course

Business Finance Foundations

Provided by

Great Learning Academy

(On July 2022)

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

MR RAJKUMAR A (ASSISTANT PROFESSOR)

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/STTP/ Training program	Name of Organizing Institute	Place
Workshops					
1.	Mr Rajkumar A	01.07.2021	Bloom's Taxonomy – An Insight	Internal Quality Assurance Cell & Curriculum Development Cell, HiCET	Coimbatore
2.	Mr Rajkumar A	17.07.2021 & 18.07.2021	Emerging Trends in Agricultural Science and Technology	Kalasalingam Academy of Research and Education, Krishnankovil	Krishnankovil
FDPs/STTPs					
1.	Mr. Rajkumar A (Assistant Professor)	07/02/2022 to 11/02/2022	Avenues for Energy Conservation in Thermal Power Plants	Anna University	Tamilnadu
2.	Mr. Rajkumar A (Assistant Professor)	21/02/2022 to 25/02/2022	Green Technology and Sustainability	National Institute of Technology, Durgapur	West Bengal
3.	Mr. Rajkumar A (Assistant Professor)	24.01.2022 to 31.01.2022	Unit Operations in Agricultural Processing	SNS College of Technology, Coimbatore	Tamilnadu

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

MR RAJKUMAR A (ASSISTANT PROFESSOR)


No: ATAL/2022/1643021693

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Rajkumar A, Assistant Professor of Hindusthan College of Engineering and Technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Avenues for Energy Conservation in Thermal Power Plants" from 07/02/2022 to 11/02/2022 at Anna University.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator


No: ATAL/2022/1643021850

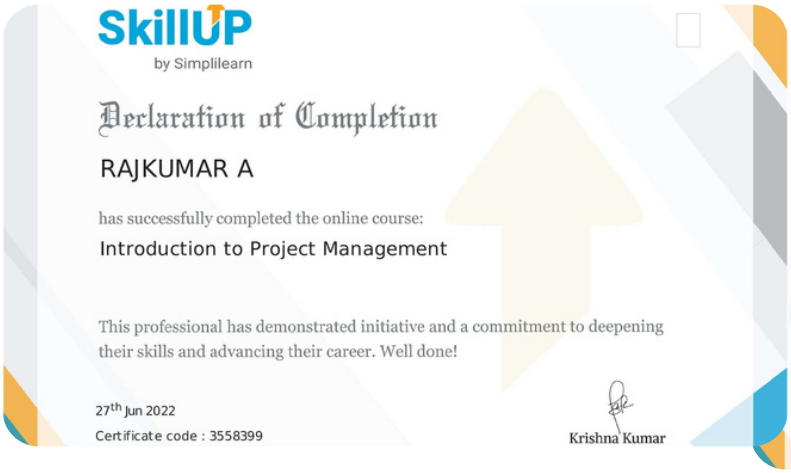
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Rajkumar A, Assistant Professor of Hindusthan College of Engineering and Technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Green Technology and Sustainability" from 21/02/2022 to 25/02/2022 at National Institute of Technology, Durgapur.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator


SkillUP
by Simplilearn

Declaration of Completion

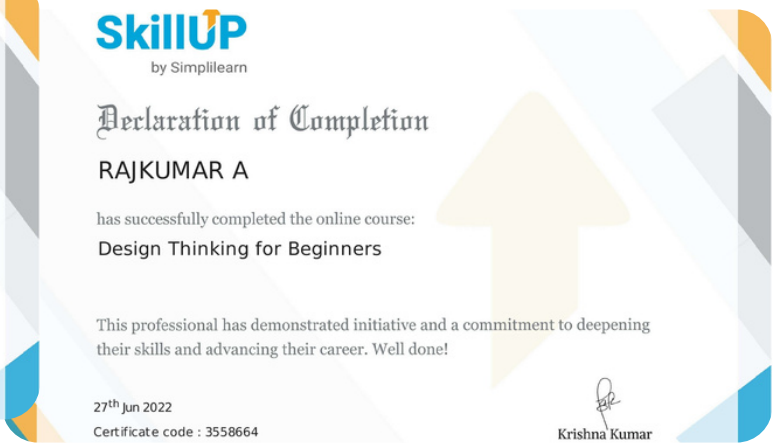
RAJKUMAR A

has successfully completed the online course:
Introduction to Project Management

This professional has demonstrated initiative and a commitment to deepening their skills and advancing their career. Well done!

27th Jun 2022
Certificate code : 3558399

Krishna Kumar


SkillUP
by Simplilearn

Declaration of Completion

RAJKUMAR A

has successfully completed the online course:
Design Thinking for Beginners

This professional has demonstrated initiative and a commitment to deepening their skills and advancing their career. Well done!

27th Jun 2022
Certificate code : 3558664

Krishna Kumar


HINDUSTHAN
COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous Institution, Affiliated to anna university accreditaed by NBA and Accrediated with "A" Grade by NAAC)
VALLEY CAMPUS, POLLACHI HIGHWAY, COIMBATORE-641032

DEPARTMENT OF MECHANICAL ENGINEERING

Certificate

This is to certify that

RAJKUMAR A,Assistant Professor

has participated in the Two Days Workshop on "INTELLECTUAL PROPERTY RIGHTS (IPR) EMPHASIS ON PATENTS TRADEMARK FILLING" from 10/ 12/ 2020 to 11/12/2020 organized by Department of Mechanical Engineering

Dr.C.NITHYANANDAM
COORDINATOR

Dr.Y.RAS MATHEW
COORDINATOR

Dr.K.SIVA
IPR PRESIDENT& HOD/MECH

INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

Made for free with Certify'em

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP

MR INDUJA P (ASSISTANT PROFESSOR)

Title	Level	Mode	Venue	Sponsored Agency	Date
Green Technology & Sustainability Engineering	National	Online	Bharati Vidyapeeth College of Engineering, Navi Mumbai	AICTE Training And Learning (ATAL) Academy	23.08.2021 to 27.08.2021
Energy Engineering	National	Online	Defence Institute Of Advanced Technology (Du)		21.02.2022 to 25.02.2022
Carbon Balance and Environmental Sustainability	National	Online	B.M.S. College of Engineering		07.02.2022 to 11.02.2022
A research Oriented Academic Body	National	Online	Dr S Gopalaraju Govt. First Grade College, Karnataka		22.06.2021 to 26.06.2021
International Entrepreneurship Development Programme	National	Online	Dr. S. Gopalaraju Govt First Grade College, Karnataka.	Dr. S. Gopalaraju Govt First Grade College, Karnataka.	28.06.2021 to 02.07.2021
Recent Trends in Upstream Petroleum Technology	National	Online	Dibrugarh University	AICTE Training And Learning (ATAL) Academy	07.03.2022 to 11.03.2022
Unit Operations in Agricultural Processing	National	Online	SNS College of Technology, Coimbatore	Anna University	24.01.2022 to 31.01.2022

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP)

MR INDUJA P (ASSISTANT PROFESSOR)

No: ATAL/2022/1644559038

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Induja, Assistant Professor of Hindusthan college of engineering and technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Recent Trends in Upstream Petroleum Technology" from 07/03/2022 to 11/03/2022 at Dibrugarh University.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

No: ATAL/2022/1643622125

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Induja, Assistant Professor of Hindusthan college of engineering and technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Carbon Balance and Environmental Sustainability" from 07/02/2022 to 11/02/2022 at BMS College of Engineering, Bengaluru.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

CERTIFICATE

CENTRE FOR FACULTY DEVELOPMENT
ANNA UNIVERSITY :: CHENNAI - 600 025

Ms. P. Induja, Assistant Professor
Hindusthan college of Engineering & Technology, Coimbatore
took part in the six-day Faculty Development Training Programme on
AI 8401 - Unit Operations in Agricultural Processing conducted in
ONLINE MODE by the Department of Agriculture Engineering
at SNS college of Technology, Coimbatore
from 24.01.2022 to 31.01.2022

COORDINATOR(S) DIRECTOR REGISTRAR

No: ATAL/2022/1643627010

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Induja, Assistant Professor of Hindusthan college of engineering and technology participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Energy Engineering" from 21/02/2022 to 25/02/2022 at DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY (DU).

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

GOVERNMENT OF KARNATAKA
DEPARTMENT OF COLLEGIATE EDUCATION

DR. S. GOPALARAJU GOVERNMENT FIRST GRADE COLLEGE, ANEKAL

Affiliated to Bangalore University, Re-Accredited by NAAC with 'B' Grade & RUSA Funded

CERTIFICATE OF PARTICIPATION

This certificate is awarded to

Dr/Prof/Mr/Mrs. P. Induja

for participating in FIVE DAYS INTERNATIONAL ENTREPRENEURSHIP DEVELOPMENT PROGRAMME organized by Dr. S. Gopalaraju Govt. First Grade College, Anekal, Entrepreneurship Development Cell, Internal Quality Assurance Cell in association with Club Inspiring Millions, held from 28th June to 2nd July, 2021.

We appreciate your participation.

Mr. ANANDRAJ. D, Founder, CIM
Dr. KALAIVANI K.N, Organising Secretary
Dr. SALMA BANO, Coordinator, IQAC
Dr. RAMAKRISHNA, PRINCIPAL

GOPALARAJU GOVT. FIRST GRADE COLLEGE, ANE

Affiliated to Bangalore University, Re-Accredited by NAAC with 'B' Grade and RUSA Funded

Five days online faculty development program

"CONVERGENCE OF TECHNOLOGY, BUSINESS EDUCATION AND ENTREPRENEURSHIP FOR SUSTAINABLE DEVELOPMENT"

Certificate of Participation

This is to certify that Dr./Prof./Mr./Mrs. Ms. P. Induja of Hindusthan College of Engineering and Technology has successfully participated in the Five Days National Level Online FDP organised bythe Department of Commerce and Management and IQAC in association with Academic Research Group (A Research Oriented Academic Body) "Srinivasaa", NGOs Layout, Harohalli Main Road, Kolar from 22.6.2021 to 26.6.2021.

FACULTY PARTICIPATION – FDP/SEMINAR/WORKSHOPS/STTP)

MR INDUJA P (ASSISTANT PROFESSOR)


SkillUP
by Simplilearn

Declaration of Completion

INDUJA P

has successfully completed the online course:

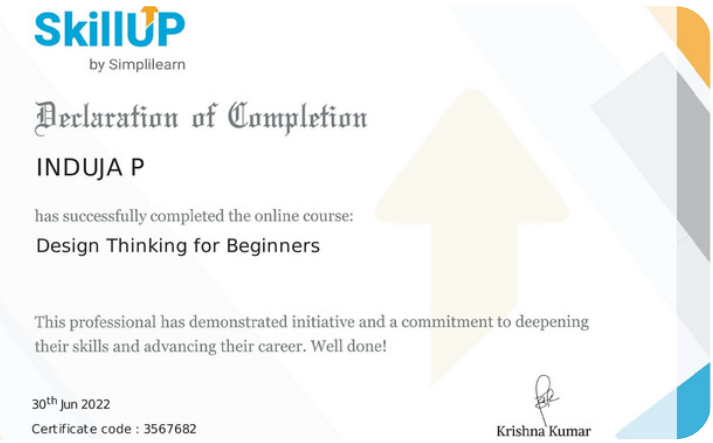
Introduction to Project Management

This professional has demonstrated initiative and a commitment to deepening their skills and advancing their career. Well done!

29th Jun 2022

Certificate code : 3565662

Krishna Kumar


SkillUP
by Simplilearn

Declaration of Completion

INDUJA P

has successfully completed the online course:

Design Thinking for Beginners

This professional has demonstrated initiative and a commitment to deepening their skills and advancing their career. Well done!

30th Jun 2022

Certificate code : 3567682

Krishna Kumar

Events Organized

S.No	Name of the event	National / International	Date	No. of Students Benefited	No. of Faculty Benefited	External Resource Person	
						Academic	Industry
1.	Education Equality Empowerment	Regional	23.12.2021	45	5	1	
2.	IPR Basics and Indian Patenting System	Regional	28.01.2022		5		1
3.	Effective Separation of Emerging Contaminants from water environment using hydrothermally derived activated carbon spheres	Regional	22.12.2021	133	5	1	
4.	Personality Perfection Programme	Regional	5.03.2022	107	5		1
5.	Role of Engineers in Water Conservation	Regional	22.03.2022	96	5	1	
6.	Innovation in Paint Manufacturing Technology	Regional	02.06.2022	57	5	1	

EVENT ORGANIZED – 1

EVENT ORGANIZED – 2

HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF CHEMICAL ENGINEERING

In Association with

Makeover Paints

IIC Self Driven Activity

Organizes One Day Workshop

on

INNOVATIONS IN PAINT MANUFACTURING TECHNOLOGY

2 JUNE - 2022 @ 10.00 AM

KEY PERSON
Dr. S Subhagar
Associate Professor
Department of Chemical Engineering
Annamalai University

KEY PERSON
Ms. P Induja
Assistant Professor
Department of Chemical Engineering
HiCET

Patrons

Dr. K Karunakaran
CEO
Hindusthan Educational Institutions

Dr. J Jaya
Principal
HiCET

Conveners
Dr. M Seenuvasan
Professor & Head
Dept. of Chemical Engg
HiCET

Co-ordinators
Er. P Induja, Asst. Prof
Er. C Fetcia Jackulin, Asst. Prof
Dept. of Chemical Engg
HiCET

EVENT ORGANIZED - 3

HINDUSTHAN
COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous Institution)
Valley Campus, Pollachi Highway, Coimbatore – 641032.

INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

Department of Chemical Engineering & Food Technology

Cordially invite you all for

IIC Self Driven Activity

Webinar on

"IPR Basics and Indian Patenting System"

Mrs.Divya Sridharan
Independent Patent Agent
Former Visiting Faculty
(IPR Valuation and Management)
UPES, Dehradun

Date: 28.01.2022 | 3.00pm

Dr. J.Jaya
Principal

Dr. K. Karunakaran
CEO

Convenor
Dr.M. Seenuvasan
HoD/Chemical

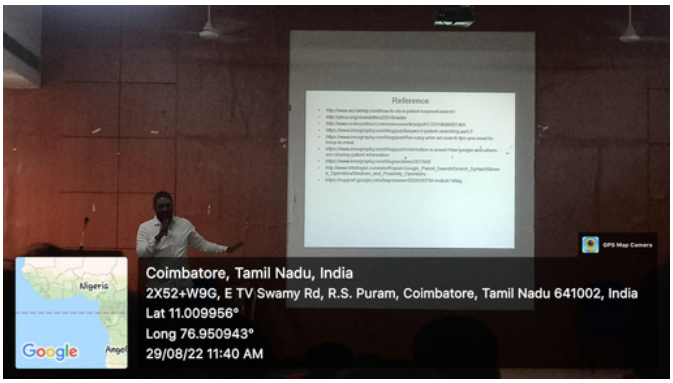
Coordinators
Ms.P.Induja, AP/Chemical
Mr.M.Dineshkumar AP/Chemical
Mrs.C.S.Neethu , AP/FT

Join us live on Google Meet
https://meet.google.com/uyu-zszn-hon

EVENT ORGANIZED – 4

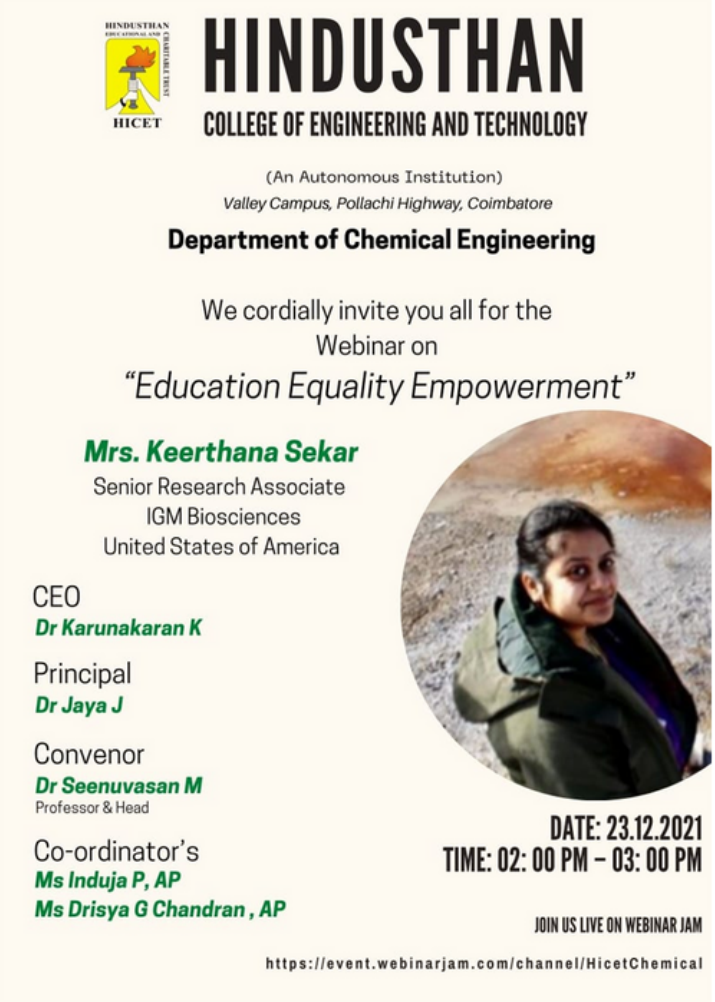
On 22nd December 2021,
Dr P Senthilkumar
Head, Centre of Excellence in Water Research (CEWAR), Professor, SSN College of Engineering, Chennai had Provided a Lecture **Effective Separation of Emerging Contaminants from water environment using hydrothermally** had organized by **Ms Fectia Jackulin** Department of Chemical Engineering, **HICET**

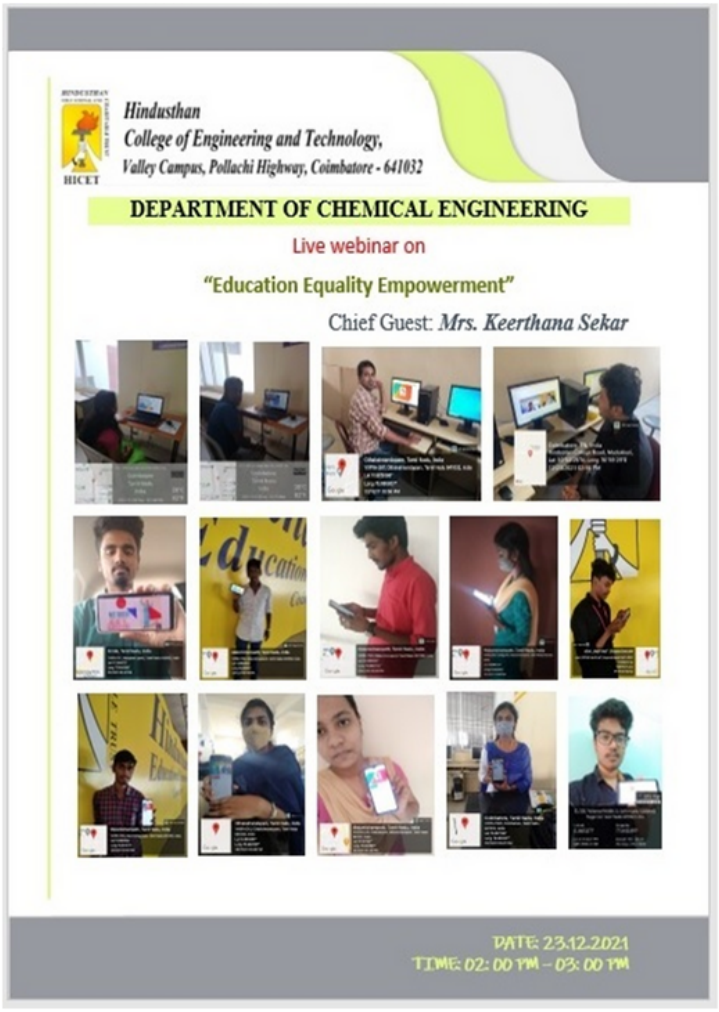
EVENT ORGANIZED - 5

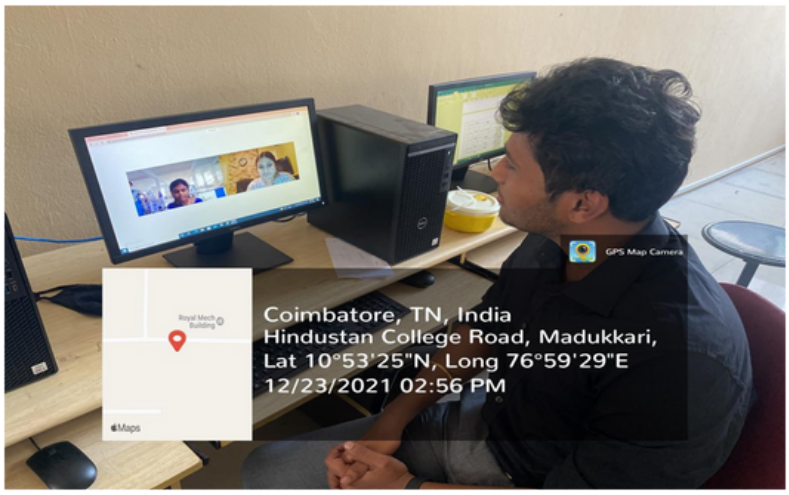


EVENT ORGANIZED – 6

EVENT ORGANIZED - 7







EVENT ORGANIZED – 8

HINDUSTHAN EDUCATIONAL AND CHARITABLE TRUST
HICET

HINDUSTHAN
COLLEGE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University| Approved by AICTE, New Delhi, Accredited with 'A' Grade by NAAC)

Department of Chemical Engineering

Inviting you all for the

Webinar on

"Importance of Under Graduate Research in Innovation"

IIC self-driven activity

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

Dr ARUN J

Research Scientist 'C'
Centre for Waste Management
'International Research Centre'
Sathyabama Institute of Science and Technology

AUGUST 24, 2022
@11.30 AM

https://meet.google.com/fnp-sfsv-vrp

Patrons

Dr Jaya J
Principal

Dr Karunakaran K
CEO

Convener

Dr Seenuvasan M
HoD/Chem Engg

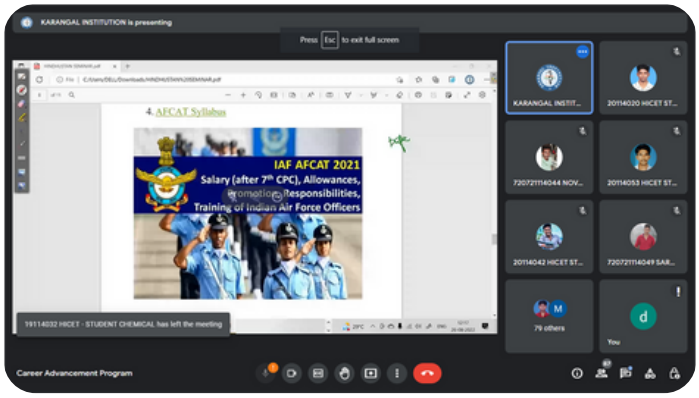
Co-ordinators

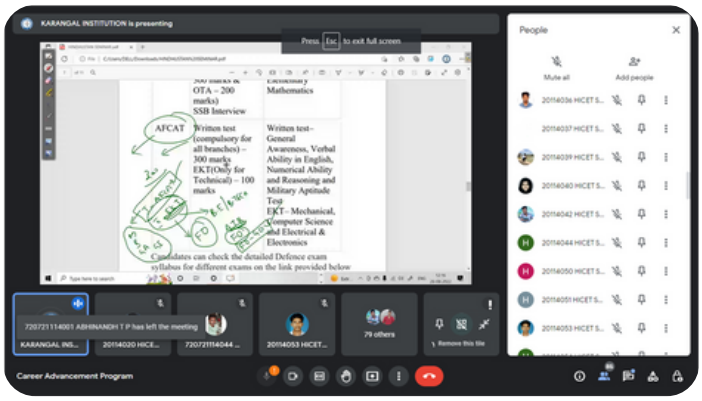
Er Sathish J
AP/Chem Engg

Dr Vivek M S
ASP/Chem Engg

Event organized - 9

On 26.08.2022 - Department of Chemical Engineering organized Opportunities in Service Commissions & Public Sector Units. The main purpose of the Programme was to create awareness among the students about the scope in the defense sectors and exams related to it.





The main purpose of the Programme was to create awareness among the students about the scope in the defense sectors and exams related to it.

97 of our students had attended and cleared their doubts with the expert.

Hindusthan College of Engineering and Technology

An Autonomous Institution Affiliated to Anna University

Approved by AICTE, New Delhi Accredited with 'A' Grade by NAAC | Accredited by NBA (ECE, MECH, EEE, IT & CSE)

Valley Campus, Pollachi Highway, Coimbatore 641 032.

Department of Chemical Engineering

Organizes Seminar on

Understanding Diversity & Inclusion in 21st Century Context : Demystifying Gender

Rohan Jeyakumar

Strategic Planning | System Reform | Governance | Social Entrepreneurship | Educator Capacity Building | Organisation Development

Consultant, Quest Alliance, Bengaluru, Karnataka, India

Patrons

Dr K Karunakaran, CEO
Hindusthan Educational Institutions.

Dr J Jaya, Principal

Convener

Dr Seenuvasan M, Head

Co-ordinators

Ms Induja P, Assistant Professor

Mr Rajkumar A, Assistant Professor

30.08.2022 | 2:30 PM

Webinar

SCAN ME

Cordially Invites you all

Outreach And Extension Activity-1

On June 6, 2022
Lion Pasumai Desam
Er S Rajendhar ,Founder of PasumaiDesamArakattalai , had provided an awareness about **WORLD ENVIRONMENT DAY-2022.** Our students 30 members had participated in this event.Around 50 and 30 tree saplings were planted inside and outside the campus respectively.

Set of 10 students on 2 batches conducted a road rocco on environmental pollution in the industrial corridor in the Vellalumachampatti, Coimbatore.

Outreach And Extension Activity – 2

On 10.08.2022 - Department of chemical Engineering organized Cleanliness Drive under Swachh Bharat Abhiyaan Programme

The main purpose of the Programme was to create Awareness among the Students, Shopkeepers and Devotees in Perur Temple regarding cleanliness and its benefits. Our Students members had participated in this programme.

Outreach And Extension Activity - 3

On 11.08.2022 - Department of chemical Engineering organized Cleanliness Drive under Swachh Bharat Abhiyaan Programme

The main purpose of the Programme was to create awareness among the Students in Regional Science Centre and Museum – Coimbatore regarding cleanliness and its benefits.

Our Students 57 members had participated in this programme.

Outreach And Extension Activity – 4

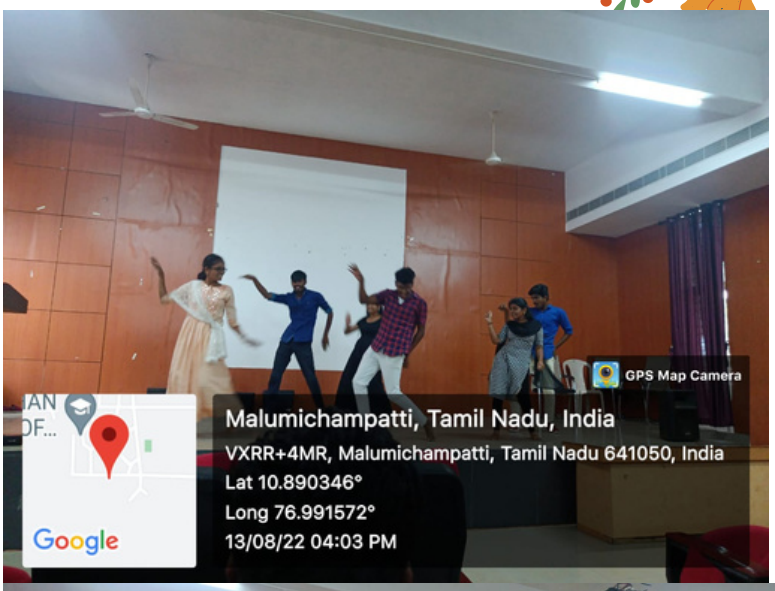
On 11.08.2022 - Department of chemical Engineering organized Cleanliness Drive under Swachh Bharat Abhiyaan Programme

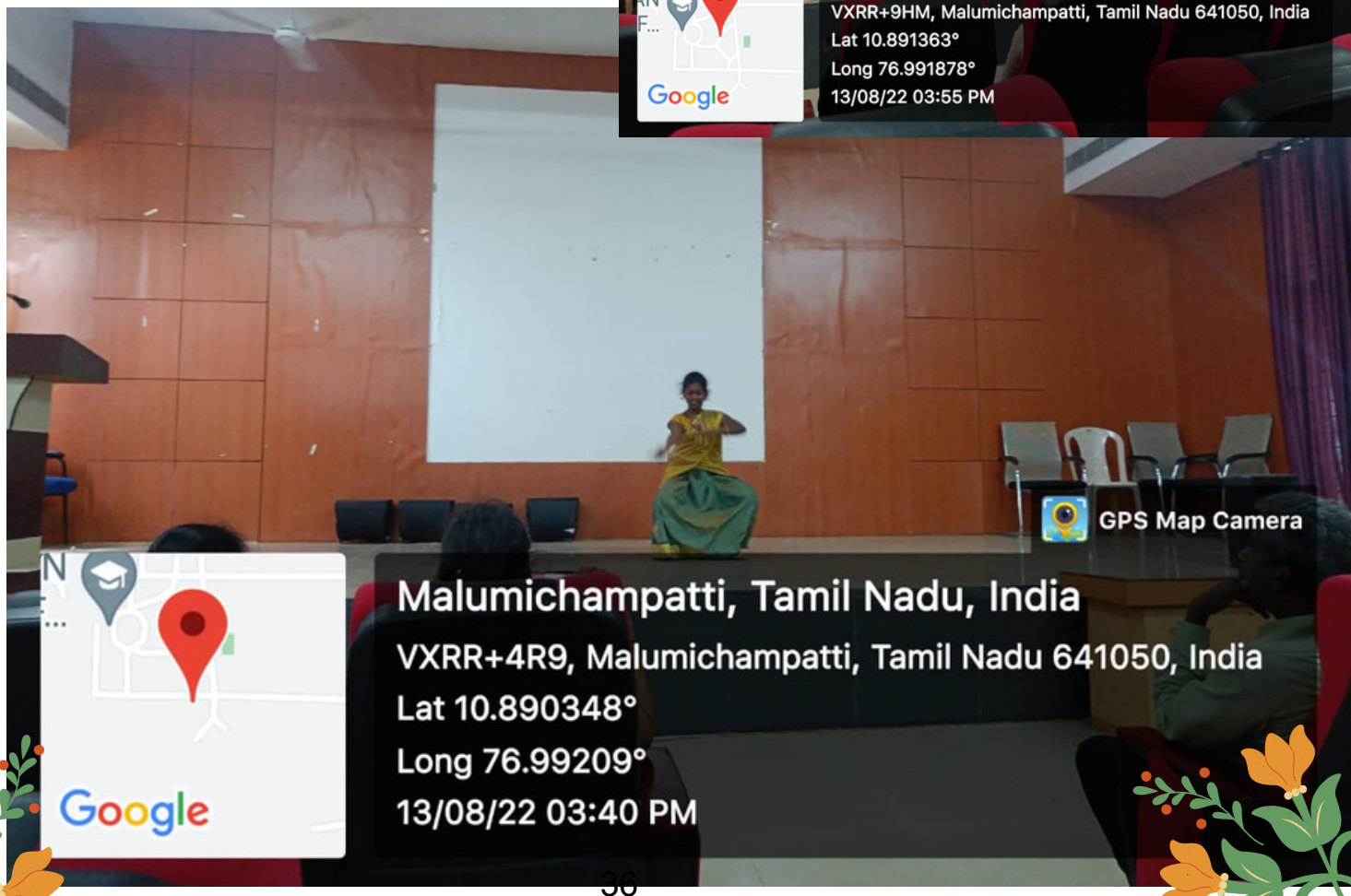
The main purpose of the Programme was to create awareness among the Students in Regional Science Centre and Museum – Coimbatore regarding cleanliness and its benefits.

Our Students 57 members had participated in this programme.

Department Cultural Activities - Chess

Department Cultural Activities – Dance





AS PROGRESS CONTINUES TO FALTER, HOW DO THE SUSTAINBLE DEVELOPMENT GOALS GET BACK ON TRACK?

The UN's Sustainable Development Report - updated annually and now in its 7th iteration - details the progress made against the UN's Sustainable Development Goals which aim to achieve decent lives for all on a healthy planet by the year 2030. Digital & Communications Manager, Ben Stallworthy, takes a look at some of the key takeaways from this year's report. The UN's Sustainable Development Report assesses progress in meeting the 17 Sustainable Development Goals (SDGs) that aim to achieve peace and prosperity for people and the planet. First outlined in 2015 and adopted by 193 countries, they are integrated areas of focus ranging from education and health to climate action and biodiversity. Within each of the 17 Goals are a set of specific targets which governments commit to achieving.

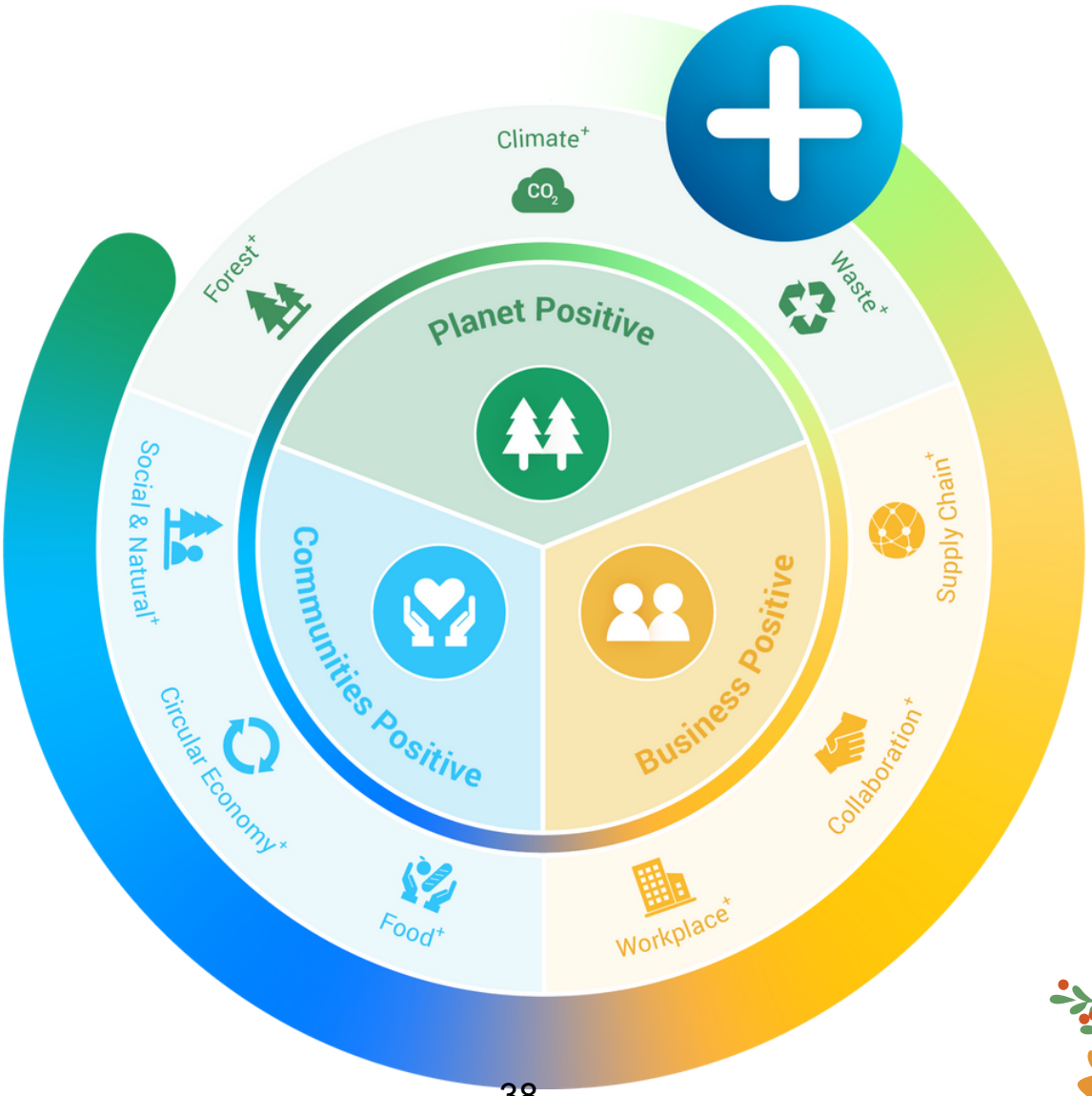
There is one key oversight in the setting of these goals, in that they don't explicitly recognise the relevance of population growth, which can be clearly related to each of the 17. The relationship between the SDGs and population is examined in-depth in our Sustainable Development Goals campaign

WHAT'S NEW IN 2022?

The headlines this year are not good. For the second consecutive year, progress has slipped back further, as "multiple and overlapping health and security crises have led to a reversal in SDG progress". While progress was slow pre-pandemic - too slow to reach the desired goals by 2030 - it was at least moving forward. The ongoing health situation and military conflicts have all exacerbated poverty, food shortages and access to affordable energy.

"On family planning specifically, the evidence shows that it is growth in levels of consumption driven by unsustainable development that influences carbon emissions and increases climate change, rather than population growth itself. Family planning is therefore not a climate mitigation strategy."

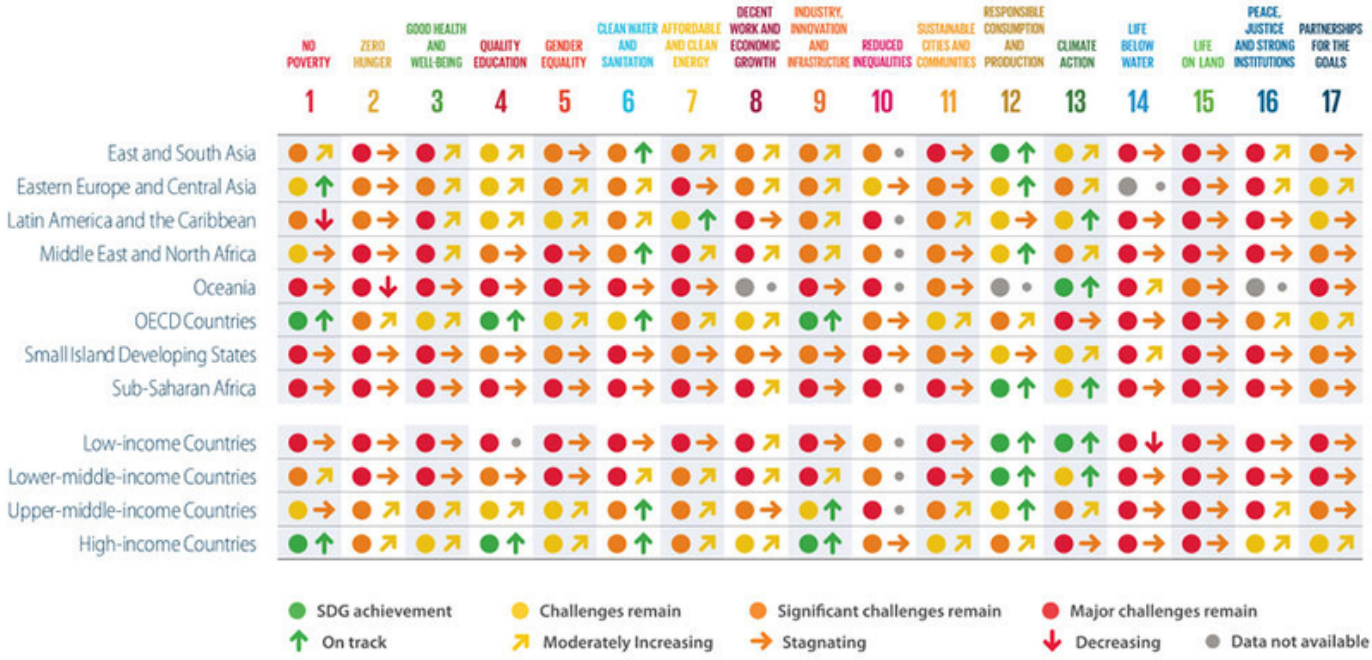
Despite these rocky times, the clear statement is that adherence and buy-in to the SDGs are of paramount importance as they "remain the roadmap for achieving sustainable development by 2030 and beyond."



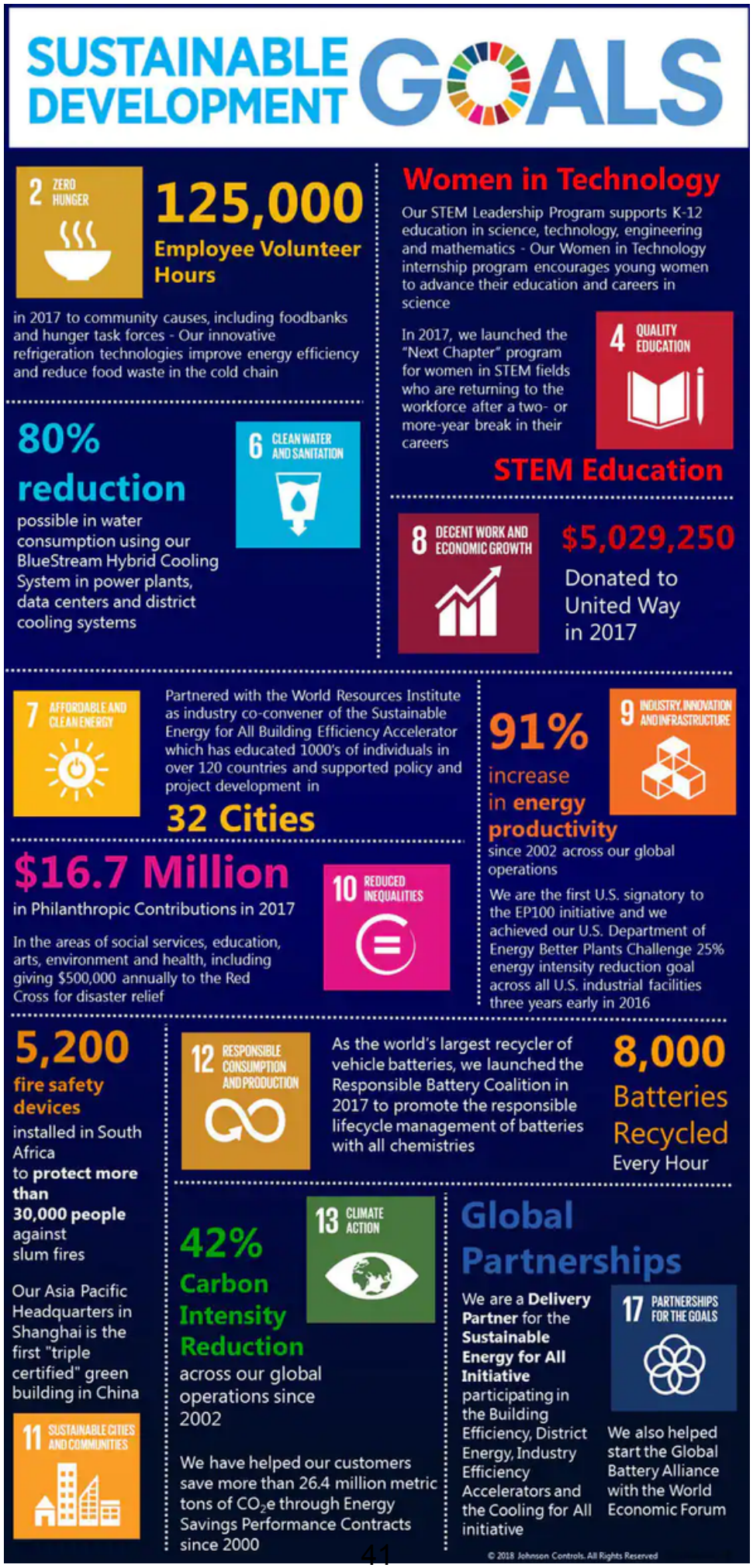
A DEEPER DIVE

In High-income Countries (HIC), progress has stagnated and “major challenges” remain to reach the SDG achievement when it comes to climate and biodiversity (Goals 13-15), although the outlook is more positive in relation to poverty (Goal 1), education (Goal 4) and industry (Goal 9). “These countries perform better on goals related to socio-economic outcomes and basic access to infrastructure and services”, but “historically these countries are also responsible for the bulk of greenhouse gas emissions and climate change”. Not only is this the case, but richer countries also have an adverse impact on the ability of others to reach their SDGs due to what the report calls international “spillover”.

International spillovers, both positive and negative, occur when “one country's actions generate benefits or impose costs on another country that are not reflected in market prices and therefore are not 'internalized' by the actions of consumers and producers”. Spillover contributes toward the overall SDG index score, but the negative effects tend to come from richer countries, which serves to undermine the efforts of others to achieve success against the 17 goals.



"Approximately 40 percent of the European Union's carbon footprint relating to its consumption of good and services takes place in other countries." Significant challenges" also remain on responsible consumption and production in HICs (Goal 12), a key area driving spillover, and indicative of a lack of commitment to significant change where it needs to be shown. It also appears any temporary environmental gains made during restrictions imposed due to the pandemic were quickly reversed once those restrictions were lifted. If we drill down a little further, Finland comes out on top of the SDG index, meaning it is making the most progress, closely followed by three other Nordic countries - Denmark, Sweden and Norway. Perhaps unsurprisingly, Nordic countries are also said to be the happiest countries in the world, according to the latest World Happiness Report. Overall, HICs are closer to achieving their targets, but it's clear that no country is close to meeting all 17 goals.


SUSTAINABLE DEVELOPMENT GOALS
2 ZERO HUNGER
125,000
Employee Volunteer Hours
in 2017 to community causes, including foodbanks and hunger task forces - Our innovative refrigeration technologies improve energy efficiency and reduce food waste in the cold chain
80% reduction
possible in water consumption using our BlueStream Hybrid Cooling System in power plants, data centers and district cooling systems
6 CLEAN WATER AND SANITATION
Women in Technology
Our STEM Leadership Program supports K-12 education in science, technology, engineering and mathematics - Our Women in Technology internship program encourages young women to advance their education and careers in science
In 2017, we launched the "Next Chapter" program for women in STEM fields who are returning to the workforce after a two- or more-year break in their careers
4 QUALITY EDUCATION
STEM Education
8 DECENT WORK AND ECONOMIC GROWTH
$5,029,250
Donated to United Way in 2017
7 AFFORDABLE AND CLEAN ENERGY
Partnered with the World Resources Institute as industry co-convener of the Sustainable Energy for All Building Efficiency Accelerator which has educated 1000's of individuals in over 120 countries and supported policy and project development in
32 Cities
91%
increase in energy productivity
since 2002 across our global operations
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
We are the first U.S. signatory to the EP100 initiative and we achieved our U.S. Department of Energy Better Plants Challenge 25% energy intensity reduction goal across all U.S. industrial facilities three years early in 2016
$16.7 Million
in Philanthropic Contributions in 2017
In the areas of social services, education, arts, environment and health, including giving $500,000 annually to the Red Cross for disaster relief
10 REDUCED INEQUALITIES
5,200
fire safety devices
installed in South Africa to protect more than 30,000 people against slum fires
Our Asia Pacific Headquarters in Shanghai is the first "triple certified" green building in China
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
As the world's largest recycler of vehicle batteries, we launched the Responsible Battery Coalition in 2017 to promote the responsible lifecycle management of batteries with all chemistries
8,000
Batteries Recycled
Every Hour
42%
Carbon Intensity Reduction
across our global operations since 2002
13 CLIMATE ACTION
We have helped our customers save more than 26.4 million metric tons of CO_2e through Energy Savings Performance Contracts since 2000
Global Partnerships
We are a Delivery Partner for the Sustainable Energy for All Initiative participating in the Building Efficiency, District Energy, Industry Efficiency Accelerators and the Cooling for All initiative
17 PARTNERSHIPS FOR THE GOALS
We also helped start the Global Battery Alliance with the World Economic Forum
© 2018 Johnson Controls. All Rights Reserved

SHOW ME THE MONEY

The report also points to a need for a global plan to finance the SDGs if they are to be successful. The six areas they suggest focusing spending on are education, health systems, zero-carbon energy, sustainable food, sustainable infrastructure and universal digital services.It is also suggested that while governments have been happy to pay lip service to the SDGs, few have actually committed sufficiently from a policy and budgetary perspective. Only a third of the 61 surveyed governments mention the SGDs in their latest official budget document and only half of those included them in a dedicated section or budget line. Policy buy-in has varied, but among the G20 member states, the United States, Brazil, and the Russian Federation are showing the least support for the SDGs. Conversely, the Nordic countries, Argentina, Germany, Japan and Mexico are all showing high levels of support. Heads of state will convene in New York in September 2023 to discuss the SGDs as we arrive at the halfway point between their 2015 creation and the stated 2030 goal. It's a meeting that only takes place every 4 years, and in advance of that meeting the report highlights the importance of:

"restoring and accelerating SDG progress in all countries, including the poorest and most vulnerable, should be a major priority of recovery plans and reforms to the international development finance system."

STUDENTS CORNER

CURRICULAR ACTIVITES

- Topper Details
- NPTEL Certificates
- Internship Certificates
- Seminars/ Webinars Attended Certificates
- Innovation Manufacturing Practices
- International Conferences Attended

EXTRA CURRICULAR ACTIVITIES

- NCC Certificates
- Outreach Activities
- Department Cultural Activities

TOPPER DETAILS

Ms Nivetha V
(72071114043)
CGPA - 9.05
(upto I Semester)

Mr Harishkumar M
(20114023)
CGPA - 9.77
(upto III Semester)

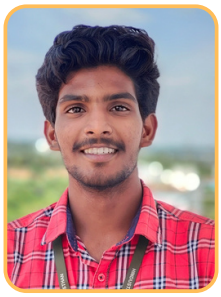
Mr Pragadeshwar Babu M V
(19114040)
CGPA - 9.59
(upto V Semester)

Mr Bhuvaneswaran B
(72071114014)
CGPA - 8.90
(upto I Semester)

Ms Kanagalakshmi R
(20114027)
CGPA - 9.65
(upto III Semester)

MR Gokul Jothi R
(19114011)
CGPA - 9.53
(upto V Semester)

Mr Ragulsangeerthian S
(72071114046)
CGPA - 8.90
(upto I Semester)



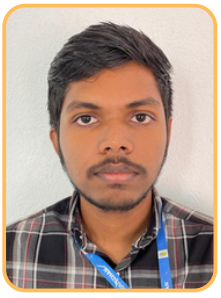
Mr Venkatesh T
(20114053)
CGPA - 9.58
(upto III Semester)

Ms Sugashini K
(19114051)
CGPA - 9.41
(upto V Semester)

Mr Ihlas Ahamed M J
(72071114025)
CGPA - 8.80
(upto I Semester)

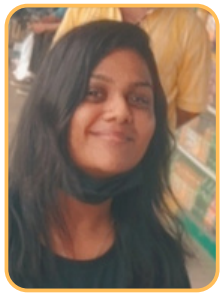
Mr Muhammad Roshan A K
(20114031)
CGPA - 9.53
(upto III Semester)

Mr Karthick L
(19114021)
CGPA - 9.33
(upto V Semester)



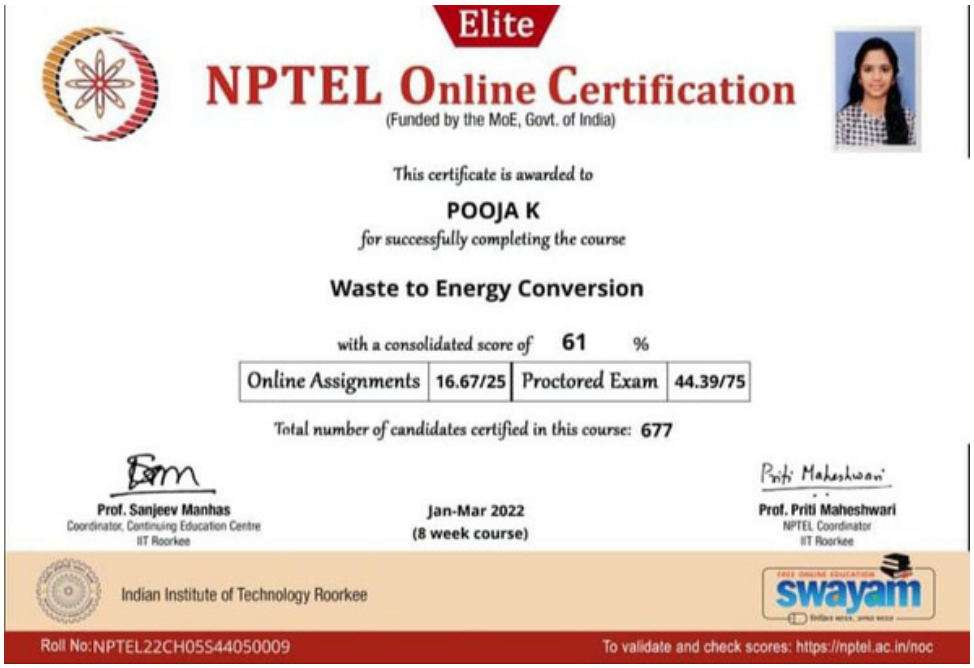
Mr Adwaith B R
(72071114003)
CGPA - 8.65
(upto I Semester)

Ms Abisha J
(20114005)
CGPA - 9.51
(upto III Semester)



Ms Kirubashini E
(19114023)
CGPA - 9.28
(upto V Semester)

Students Corner
Continuous Learning


Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

POOJA K

for successfully completing the course

Waste to Energy Conversion

with a consolidated score of 61 %

Online Assignments	16.67/25	Proctored Exam	44.39/75

Total number of candidates certified in this course: 677

Prof. Sanjeev Manhas
Coordinator, Continuing Education Centre
IIT Roorkee

Jan-Mar 2022
(8 week course)

Prof. Priti Maheshwari
NPTEL Coordinator
IIT Roorkee

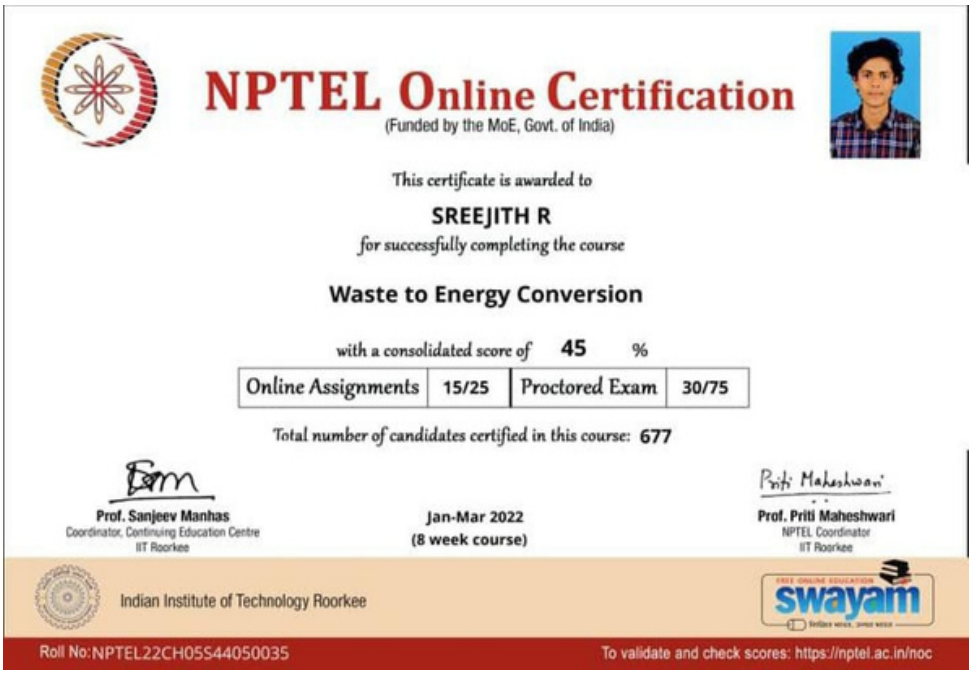
Indian Institute of Technology Roorkee

swayam

Roll No:NPTEL22CH05S44050009

To validate and check scores: https://nptel.ac.in/noc

Ms POOJA K of II year Chemical Engineering obtained a Elite certificate in NPTEL Online Course by completing **Waste to Energy Conversion with 61% Marks**


NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SREEJITH R

for successfully completing the course

Waste to Energy Conversion

with a consolidated score of 45 %

Online Assignments	15/25	Proctored Exam	30/75

Total number of candidates certified in this course: 677

Prof. Sanjeev Manhas
Coordinator, Continuing Education Centre
IIT Roorkee

Jan-Mar 2022
(8 week course)

Prof. Priti Maheshwari
NPTEL Coordinator
IIT Roorkee

Indian Institute of Technology Roorkee

swayam

Roll No:NPTEL22CH05S44050035

To validate and check scores: https://nptel.ac.in/noc

Mr SREEJITH R of II year Chemical Engineering obtained a Elite certificate in NPTEL Online Course by completing **Waste to Energy conversion with 45% Marks**

IICHE MEMBERSHIP - STUDENTS

INDIAN INSTITUTE OF CHEMICAL ENGINEERS
Dr H. L. Roy Building
Raja SubodhMullick Road
KOLKATA - 700 032
Phone: (033)-2414 6670, 2412 9314
Email: iichehq@gmail.com,Website: www.iiche.org.in

APPLICATION FORM FOR STUDENT MEMBERSHIP
(Only Undergraduate Chemical Engineering Students of Institutions recognised by IIChE/AICTE and candidates enrolled for Associate Membership Examination conducted by IIChE/AICTE are eligible)

1. NAME:	MR SRI RITHIK A
2. UNDERGRADUATE CLASS:	2ND YEAR
3. ADDRESS: (a) Institution: Hindusthan College of Engineering and Technology, Chemical Engineering, , Othakkalmandapam, Malumichampatti, Chettipalayam, Coimbatore, Tamil Nadu, Pin Code- 641032	(b)(Permanent) Residential: 11/A, Gandhiji Road, Kannappa Nagar, Sanganoor, Rathinapuri, Coimbatore, Sanganoor(P.O), Thudiyalur, Coimbatore, Tamil Nadu, Pin Code- 641027
Landline Office: 0422-4242424	Mobile: Residence: 9952544014
Email: Office	Email: Personal: rithikices@gmail.com
4. Address for Communication:(Tick) Residence:	Institution: ✓
5. Date of Birth: 16-02-2002 / 6.Gender: Male / 7. Nationality: India	
8.Month and Year of Admission to the bachelor degree programme in Chemical Engineering: Month: Aug Year: 2020	
9. Expected completion date of the UG programme: Month: May Year: 2024	
10. Area of Interest: Petroleum Refinery Engineering & Petrochemicals	
11. Student Chapter/Regional Center: CIT-SC, Coimbatore / Coimbatore	
12. PAYMENT DETAILS: Compounding Fees: Rs. 590/- (Including GST of 18%). Payment is to be made in favour of "INDIAN INSTITUTE OF CHEMICAL ENGINEERS" payable at Kolkata Transaction ID:- 216614283835 Payment Date:- 2022-06-15	
DECLARATION BY THE APPLICANT: I, the undersigned, attest that the particulars given above by me are true. If elected to Student Membership, I agree to abide by the Constitutions and the Bye-laws of the Indian Institute of Chemical Engineers. I also agree to inform IICHE the date of completion of Chemical Engineering Bachelor Degree programme.	
Date: Signature of the Applicant:	

INDIAN INSTITUTE OF CHEMICAL ENGINEERS
Dr H. L. Roy Building
Raja SubodhMullick Road
KOLKATA - 700 032
Phone: (033)-2414 6670, 2412 9314
Email: iichehq@gmail.com,Website: www.iiche.org.in

APPLICATION FORM FOR STUDENT MEMBERSHIP
(Only Undergraduate Chemical Engineering Students of Institutions recognised by IIChE/AICTE and candidates enrolled for Associate Membership Examination conducted by IIChE/AICTE are eligible)

1. NAME:	MRS SAFNA KA
2. UNDERGRADUATE CLASS:	2ND YEAR
3. ADDRESS: (a) Institution: Hindusthan College of Engineering and Technology, Chemical Engineering, , Othakkalmandapam, Malumichampatti, Chettipalayam, Coimbatore, Tamil Nadu, Pin Code- 641032	(b)(Permanent) Residential: Pattikadu Street, Vaniampara, Vaniampara(P.O), Peechi Police Station, Thrissur, Kerala, Pin Code- 680652
Landline Office: 0422-4242424	Mobile: Residence: 8304826691
Email: Office	Email: Personal: safnasamad2001@gmail.com
4. Address for Communication:(Tick) Residence:	Institution: ✓
5. Date of Birth: 08-11-2001 / 6.Gender: Female / 7. Nationality: India	
8.Month and Year of Admission to the bachelor degree programme in Chemical Engineering: Month: Sept Year: 2020	
9. Expected completion date of the UG programme: Month: May Year: 2024	
10. Area of Interest: Petroleum Refinery Engineering & Petrochemicals	
11. Student Chapter/Regional Center: CIT-SC, Coimbatore / Coimbatore	
12. PAYMENT DETAILS: Compounding Fees: Rs. 590/- (Including GST of 18%). Payment is to be made in favour of "INDIAN INSTITUTE OF CHEMICAL ENGINEERS" payable at Kolkata Transaction ID:- 214612865006 Payment Date:- 2022-05-26	
DECLARATION BY THE APPLICANT: I, the undersigned, attest that the particulars given above by me are true. If elected to Student Membership, I agree to abide by the Constitutions and the Bye-laws of the Indian Institute of Chemical Engineers. I also agree to inform IICHE the date of completion of Chemical Engineering Bachelor Degree programme.	
Date: Signature of the Applicant:	

INDIAN INSTITUTE OF CHEMICAL ENGINEERS
Dr H. L. Roy Building
Raja SubodhMullick Road
KOLKATA - 700 032
Phone: (033)-2414 6670, 2412 9314
Email: iichehq@gmail.com,Website: www.iiche.org.in

APPLICATION FORM FOR STUDENT MEMBERSHIP
(Only Undergraduate Chemical Engineering Students of Institutions recognised by IIChE/AICTE and candidates enrolled for Associate Membership Examination conducted by IIChE/AICTE are eligible)

1. NAME:	MR SRIDHAR J K
2. UNDERGRADUATE CLASS:	2ND YEAR
3. ADDRESS: (a) Institution: Hindusthan College of Engineering and Technology, Chemical Engineering, , Othakkalmandapam, Malumichampatti, Chettipalayam, Coimbatore, Tamil Nadu, Pin Code- 641032	(b)(Permanent) Residential: 1/32, AD Street, Thumbalam, Thumbalam (P.O), Musiri, Trichy, Tamil Nadu, Pin Code- 621211
Landline Office: 0422-4242424	Mobile: Residence: 6369453796
Email: Office	Email: Personal: sridharjayabalan0507@gmail.com
4. Address for Communication:(Tick) Residence:	Institution: ✓
5. Date of Birth: 07-11-2003 / 6.Gender: Male / 7. Nationality: India	
8.Month and Year of Admission to the bachelor degree programme in Chemical Engineering: Month: Oct Year: 2020	
9. Expected completion date of the UG programme: Month: May Year: 2024	
10. Area of Interest: Petroleum Refinery Engineering & Petrochemicals	
11. Student Chapter/Regional Center: CIT-SC, Coimbatore / Coimbatore	
12. PAYMENT DETAILS: Compounding Fees: Rs. 590/- (Including GST of 18%). Payment is to be made in favour of "INDIAN INSTITUTE OF CHEMICAL ENGINEERS" payable at Kolkata Transaction ID:- 214571582633 Payment Date:- 2022-05-25	
DECLARATION BY THE APPLICANT: I, the undersigned, attest that the particulars given above by me are true. If elected to Student Membership, I agree to abide by the Constitutions and the Bye-laws of the Indian Institute of Chemical Engineers. I also agree to inform IICHE the date of completion of Chemical Engineering Bachelor Degree programme.	
Date: Signature of the Applicant:	

INDIAN INSTITUTE OF CHEMICAL ENGINEERS
Dr H. L. Roy Building
Raja SubodhMullick Road
KOLKATA - 700 032
Phone: (033)-2414 6670, 2412 9314
Email: iichehq@gmail.com,Website: www.iiche.org.in

APPLICATION FORM FOR STUDENT MEMBERSHIP
(Only Undergraduate Chemical Engineering Students of Institutions recognised by IIChE/AICTE and candidates enrolled for Associate Membership Examination conducted by IIChE/AICTE are eligible)

1. NAME:	MR ANJANA DAS
2. UNDERGRADUATE CLASS:	2ND YEAR
3. ADDRESS: (a) Institution: Hindusthan institute of engineering and technology , Chemical , Malumichappatti , Othakalmandabam, Coimbatore , Chettipalayam, Coimbatore , Tamil Nadu, Pin Code- 641020	(b)(Permanent) Residential: Cheloor, Irijalakuda, Irijalakuda , Thrissur , Kerala, Pin Code- 680121
Landline Office: -	Mobile: Residence: 6003794729
Email: Office	Email: Personal: anjanadas014@gmail.com
4. Address for Communication:(Tick) Residence: ✓	Institution:
5. Date of Birth: 05-08-2001 / 6.Gender: Female / 7. Nationality: India	
8.Month and Year of Admission to the bachelor degree programme in Chemical Engineering: Month: Nov Year: 2020	
9. Expected completion date of the UG programme: Month: Oct Year: 2024	
10. Area of Interest: Chemistry,Chemical Process principles	
11. Student Chapter/Regional Center: Coimbatore / Coimbatore	
12. PAYMENT DETAILS: Compounding Fees: Rs. 590/- (Including GST of 18%). Payment is to be made in favour of "INDIAN INSTITUTE OF CHEMICAL ENGINEERS" payable at Kolkata Transaction ID:- 217567432102 Payment Date:- 2022-06-24	
DECLARATION BY THE APPLICANT: I, the undersigned, attest that the particulars given above by me are true. If elected to Student Membership, I agree to abide by the Constitutions and the Bye-laws of the Indian Institute of Chemical Engineers. I also agree to inform IICHE the date of completion of Chemical Engineering Bachelor Degree programme.	
Date: Signature of the Applicant:	

82 Students have succesfully registered and become a member of Indian Institute of Chemical Engineers (IIChE)

IICHE MEMBERSHIP – STUDENTS

PROCEEDINGS -
SRISHTI 2022

SAINTGITS COLLEGE OF ENGINEERING
(AUTONOMOUS)
KOTTAYAM, KERALA | www.saintgits.org

Proceedings – SRISHTI 2022 EEE-515

Obstacle Sensor for the Disabled

S.Ragulasangeerthian, M.J.Ihlas Ahamed, B. Mahalakshmi
Hindusthan College of Engineering and Technology, Othakaalmandapam, Coimbatore.
kogilavani.eng@hicet.ac.in

Abstract: The obstacle sensor caters its major contribution towards helping the disabled under every circumstance. The obstacle sensor is situated in neck (as a Neck band – completely sealed and insulated) which proves to be an advantage for the handicapped people (specifically – blind people) to acknowledge their surroundings with the help of the sensor. The obstacle sensor is highly beneficial and reliable to the disabled who travel alone in night, as the indication from the sensor alerts the user about the surroundings. Hence the dependence of the handicapped over other people is substantially reduced.

Introduction

In this modern era, handicapped people (disabled) face several issues in the society. They are many practical difficulties in their day to day life, as they are not independent and always depend on someone for their survival. This project mainly focuses on people with Visual impairment and it highly benefits them.

Challenges faced by the disabled:
- Lack of independence in their day to activities
- Unable to sense their surroundings
- Safety threats
- They are more prone to accidents because of their inability to perceive their circumstances

Obstacle sensor (Neck band):
An obstacle sensor is a device which is used in detection of objects (obstacles) and alerts the person with a buzzer sound. Once the buzzer sound is heard, the contact of person with the obstacle is avoided.
It simply works by sending an ultrasonic pulse out at 40 kHz which travels through the air and if there is an obstacle or object, it will bounce back to the sensor. By calculating the travel time and the speed of sound, the distance can be calculated. Ultrasonic sensors are the best solution for the detection of clear objects, for presence detection, ultrasonic sensors detect objects regardless of the color, surface, or material.

Components and their working:
Arduino board: This micro controller provides necessary commands for the working of individual components in the circuit.
Ultrasonic sensor: It is connected to the arduino board and when it senses an obstacle it emits UV rays that hit the obstacle and returns back to the sensor and due to which Buzzer emits sound of audible frequency.
Buzzer: This component plays a major role in supporting the individual by alerting him/her with the buzzer

82 Students have succesfully registered and become a member of Indian Institute of Chemical Engineers (IIChE)


HINDUSTHAN
INSTITUTE OF TECHNOLOGY
COIMBATORE-641 032
An Autonomous Institution
(Approved by AICTE,New Delhi,Accredited by NBA and with 'A' Grade by NAAC,Affiliated to Anna University,Chennai.)
Department of
ELECTRONICS AND COMMUNICATION ENGINEERING
Certificate of Participation
This is to certify that Dr/Mr/Ms. SENTHIL VEL. V. P
from HINDUSTHAN COLLEGE OF ENGINEERING & TECHNOLOGY
has participated in ICSSR Sponsored Two Day National Level Seminar on
" Azadi Ka Amrit Mahotsav : Self-Reliant India For The Success Of Independence 2.0 " on 15th & 16th March 2022.
Co-ordinator
Convenor
Principal

On 15 to 16 March 2022
Mr.Senthil Vel. V P
has participated in **ICSSR** Sponsored seminar on **AzadiKa Amrit Mahotsav:Self-Reliant India For The Success Of Independence 2.0** organized by Departmentof Electronics And Communication Engineering

On 15 to 16 March 2022
Mr.Gowtham.B
has participated in **ICSSR** Sponsored seminar on **AzadiKa Amrit Mahotsav:Self-Reliant India For The Success Of Independence 2.0**
Department of Electronics And Communication Engineering


HINDUSTHAN
INSTITUTE OF TECHNOLOGY
COIMBATORE-641 032
An Autonomous Institution
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Department of
ELECTRONICS AND COMMUNICATION ENGINEERING
Certificate of Participation
This is to certify that Dr/Mr/Ms. GOWTHAM.B
from HINDUSTHAN COLLEGE OF ENGINEERING & TECHNOLOGY
has participated in ICSSR Sponsored Two Day National Level Seminar on
" Azadi Ka Amrit Mahotsav : Self-Reliant India For The Success Of Independence 2.0 " on 15th & 16th March 2022.
Co-ordinator
Convenor
Principal

Internship Certificates

https://drive.google.com/folderview?id=1-PSWDVP4YTXzkN-jjNLVhd5gONImR7mn

सिपेट : पेट्रोकेमिकल्स तकनीकी संस्थान (आईपीटी)
रसायन एवं पेट्रोरसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
गिंडी, चेन्नै - 600 032.
फ़ोन : 91-44-2225 4701 (6 लाइन)
फ़ैक्स : 91-44-22254707
ई-मेल : chennai@cipet.gov.in
वेबसाइट : www.cipet.gov.in

CIPET : INSTITUTE OF PETROCHEMICALS TECHNOLOGY (IPT)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Guindy, Chennai - 600 032.
Phone : 91-44-2225 4701 (6 Lines)
Fax : 91 - 44 - 22254707
E-mail : chennai@cipet.gov.in
Website : www.cipet.gov.in

CIPET/CHN/VTC/INTERNSHIP TRG/2022-23/400 04.08.2022

INTERNSHIP CERTIFICATE

This is to certify that **Mr. MOHAMED ASIF M.,** S/o. Mr. Mohammed Sulthan A., student of B.Tech (Chemical Engineering) from Hindusthan College of Engineering & Technology, Coimbatore has completed the two day **"INTERNSHIP"** from 03.08.2022 to 04.08.2022 at Central Institute of Petrochemicals Engineering & Technology, Guindy, Chennai 600 032.

During the Internship training period, the performance of the trainee was found good.

VELLADURAI A.
Head of the Department
CAD/CAM/CAE Centre

RAVICHANDRAN. A
Head of the Department
Vocational Training Centre

मुख्यालय : सिपेट, गिंडी, चेन्नै - 600 032. **Head Office :** CIPET, Guindy, Chennai - 600 032.
केंद्र : अहमदाबाद, अमृतसर, औरंगाबाद, अगरतला, बद्दी, बालासोर, बेंगलुरु, भोपाल, भुवनेश्वर, चन्दपुर, चेन्नई, देहरादून, गुरुग्राम, गुवाहाटी, ग्वालियर, हैदराबाद, हाजीपुर, हल्दिया, इम्फाल, जयपुर, कोच्चि, कोरबा, लखनऊ, मदुरै, मुम्बाल, मैसूरु, रायपुर, रांची, वलसाड, वाराणसी एवं विजयवाडा
Centres : Ahmedabad, Amritsar, Aurangabad, Agartala, Baddi, Balasore, Bengaluru, Bhopal, Bhubaneswar, Chandrapur, Chennai, Dehradun, Gurugram, Guwahati, Gwalior, Hyderabad, Hajipur, Haldia, Imphal, Jaipur, Kochi, Korbi, Lucknow, Madurai, Murthal, Mysuru, Raipur, Ranchi, Valsad, Varanasi & Vijayawada

FACT
प्रगति के पथप्रदर्शक
PIONEERS IN PROGRESS

दि फर्टिलाइज़र्स एण्ड केमिकल्स ट्रावनकोर लिमिटेड
THE FERTILISERS AND CHEMICALS TRAVANCORE LIMITED
(भारत सरकार का उद्यम)/ (A Government of India Enterprise)

फेक्ट प्रशिक्षण और विकास केंद्र
FACT TRAINING & DEVELOPMENT CENTRE
मुख्यालय / Head Office
उद्योगमंडल / Udyogamandal - 683 501

दूरभाष / Phone : 0484 - 2567544, 2567467, 2567583, 2567423, 2567380, 2567424
ई-मेल/ Email : sdc@factltd.com , mdc@factltd.com mtrg@factltd.com , am1-ftdc@factltd.com

ER-FTDC-CERT-IP/277/2022 09.08.2022

CERTIFICATE

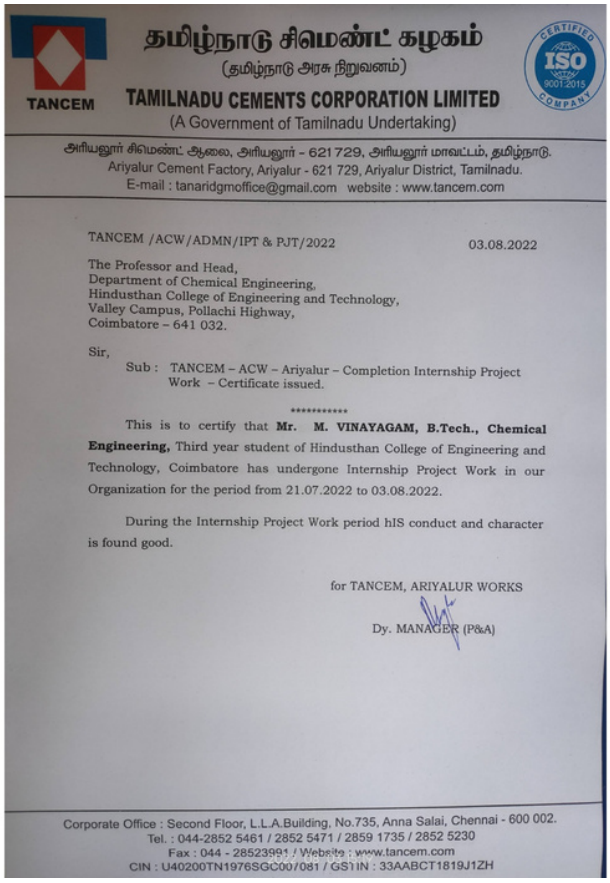
Certified that **Mr. AGNAL JOHN**, student of B.Tech Chemical, Hindusthan College of Engineering & Tech, Coimbatore has successfully completed his **Internship** in FACT, Udyogamandal during the period from 27.07.2022 to 09.08.2022

We wish the student all the best in his future endeavors.

Abraham P Varghese
Internship Co-ordinator.

Antony K D
Engineer (Trg&Dev),
FTDC, Udyogamandal

Scanned by TapScanner



TANCEM
தமிழ்நாடு சிமெண்ட் கழகம்
(தமிழ்நாடு அரசு நிறுவனம்)
TAMILNADU CEMENTS CORPORATION LIMITED
(A Government of Tamilnadu Undertaking)

அரியலூர் சிமெண்ட் ஆலை, அரியலூர் - 621 729, அரியலூர் மாவட்டம், தமிழ்நாடு.
Ariyalur Cement Factory, Ariyalur - 621 729, Ariyalur District, Tamilnadu.
E-mail : tanaridgmoffice@gmail.com website : www.tancem.com

TANCEM /ACW/ADMN/IPT & PJT/2022 03.08.2022

The Professor and Head,
Department of Chemical Engineering,
Hindusthan College of Engineering and Technology,
Valley Campus, Pollachi Highway,
Coimbatore – 641 032.

Sir,

Sub : TANCEM – ACW – Ariyalur – Completion Internship Project Work – Certificate issued.

****

This is to certify that **Mr. M. VINAYAGAM, B.Tech., Chemical Engineering,** Third year student of Hindusthan College of Engineering and Technology, Coimbatore has undergone Internship Project Work in our Organization for the period from 21.07.2022 to 03.08.2022.

During the Internship Project Work period hIS conduct and character is found good.

for TANCEM, ARIYALUR WORKS

Dy. MANAGER (P&A)

Corporate Office : Second Floor, L.L.A.Building, No.735, Anna Salai, Chennai - 600 002.
Tel. : 044-2852 5461 / 2852 5471 / 2859 1735 / 2852 5230
Fax : 044 - 28523991 / Website : www.tancem.com
CIN : U40200TN1976SGC007081 / GSTIN : 33AABCT1819J1ZH

हिन्दुस्तान ऑर्गेनिक केमिकल्स लिमिटेड
HINDUSTAN ORGANIC CHEMICALS LIMITED
(भारत सरकार का उद्यम A Govt. of India Enterprise)
आम्बलमुगल-682 302, एरणाकुलम जिला, केरल, भारत
AMBALAMUGAL - 682 302, ERNAKULAM DIST., KERALA, INDIA
दूरभाष Phone : 0484-2720911-13, 2720844
फैक्स Fax : (0484) 2720893, वेब Web. www.hoclindia.com
ई-मेल e-mail : kochi@hoclindia.com
CIN No. L 99999MH1960GOI011895

आई एस ओ 9001, 14001 & 45001 यूनिट
An ISO 9001, 14001 & 45001 Unit

कार्मिक एवं प्रशासन/प्रशिक्षण/प्रमाणपत्र/परियोजना/2022/52
P&A/TRG/CERT-PROJ/2022/52 दिनांक DATE: 05.08.2022

प्रमाणपत्र CERTIFICATE

प्रमाणित किया जाता है कि **श्री ई पी शालूब अहम्मेद**, बी टेक (केमिकल इंजीनियरिंग) छात्र, हिंदुस्तान कॉलेज ऑफ इंजीन्यरिंग एंड टेक्नॉलजी, कोयपत्तूर **21.07.2022** से **05.08.2022** तक की अवधि के दौरान हमारे **उत्पादन विभाग** में **इंटर्नशिप प्रशिक्षण** किया है।

Certified that **Mr. E.P SHALOOB AHAMMED, B.Tech (Chemical Engineering)** student of ***Hindusthan College of Engineering and Technology, Coimbatore*** has done his **Internship Training** in our **Production Department** during the period from **21.07.2022 to 05.08.2022.**

(एन वी रविदेव N.V RAVIDEV)
महा प्रबन्धक (कार्मिक एवं प्रशासन)
GENERAL MANAGER (P&A)

निगमित कार्यालय : 4 वाँ तल, वी टाइम्स स्क्वायर , सेक्टर 15 , सीवीडी बेलापूर, नवी मुंबई -400614
Corporate Office : 4th Floor, V Times Square, Sector 15, CBD Belapur, Navi Mumbai - 400 614
Facebook : fb.me/hoclindia; twitter: twitter.com/organic_ltd

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EXTRACURRICULAR ACTIVITIES – STUDENTS

L/CPL Devanand S (20114020) / TN21SDA845804

Combined Annual Training Camp Cum Republic Day Camp Selection at Hindusthan College of Engineering and Technology, Coimbatore from 26.07.2022 to 04.08.2022.

Combined Annual Training Camp Cum Republic Day Camp Selection - I at RVS Technical Campus, Coimbatore from 13.08.2022 to 20.08.2022.

Combined Annual Training Camp Cum Republic Day Camp Selection - I at Sri Narayana Guru College, Coimbatore from 11.07.2022 to 20.07.2022.


CATC CUM RDC TRAINING CAMP - I

6 (TN) MED COY NCC, COIMBATORE

CERTIFICATE

This is to certify that Regt No. TN21SDA845805 Rank LCPL

Name : DEVANAND.S of HINDUSTHAN COLLEGE OF ENGG AND TECH, CBE had attended CATC CUM RDC TRAINING CAMP - I held at RVS TECHINICAL CAMPUS, Coimbatore from 13 AUG 2022 to 20 AUG 2022.

Place Coimbatore
Date 20 AUG 2022

(Ashok Kumar P)
Major
Camp Commandant


ANNUAL TRAINING CAMP

2 TAMILNADU ARTY BATTERY NCC, COIMBATORE

CERTIFICATE

This is to certify that Regt No. TN21SDA845805 Rank LCPL

Name DEVANAND.S Fathers Name SUBRAMANIAN

School / College : HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY

has attended Annual Training Camp held at Sree Narayana Guru College, Coimbatore from 11 Jul 2022 to 20 Jul 2022

Special Achievements

Place Coimbatore
Date 20 Jul 2022

(C CHANDRASEKHAR)
COL
CAMP COMMANDANT


NATIONAL CADET CORPS

2 (TN) COMPOSITE TECHNICAL COMPANY

CERTIFICATE

This is certify that No. TN21SDA845805 Rank LCPL

Name : DEVANAND S D/o. S/o. Sh. / Smt. SUBRAMANIAN M

of HINDUSTHAN COLLEGE OF ENGG & TECH has attended the COMBINED ANNUAL TRAINING CAMP CUM RDC SELECTION CAMP AT HINDUSTHAN COLLEGE OF ENGG & TECH, COIMBATORE W.e.f. 26.07.2022 to 04.08.2022

He / She has participated in and stood

Place : Coimbatore
Date : 04 Aug 2022

(Manish Sharma)
Lt Col
Camp Commandant

EXTRACURRICULAR ACTIVITIES – STUDENTS

SGT Deepak S (20114019) / TN20SDA845803

KOVAI

PRANA YOGA CENTER

Gandhipuram www.kovaipranayoga.com Saravanampatti

PARTICIPATION CERTIFICATE

This is to certify that

SGT. DEEPAK.S

has successfully participated in PYC Skill Development Programme

Conducted at SREE NARAYANA GURU COLLEGE,

8(TN) ARTY BTY NCC *on* 14/07/22

Educator Founder

ANNUAL TRAINING CAMP

2 TAMILNADU ARTY BATTERY NCC, COIMBATORE

CERTIFICATE

This is to certify that Regt No. TN20SDA845803 *Rank* SGT

Name DEEPAK.S *Fathers Name* SENTHIL KUMAR.A

School / College : HINDUSTAN COLLEGE OF ENGINEERING AND TECHNOLOGY

has attended Annual Training Camp held at Sree Narayana Guru College, Coimbatore from 11 Jul 2022 to 20 Jul 2022

Special Achievements .....

Place Coimbatore
Date 20 Jul 2022

(C CHANDRASEKHAR)
COL
CAMP COMMANDANT

NATIONAL CADET CORPS

2 (TN) COMPOSITE TECHNICAL COMPANY

CERTIFICATE

This is certify that No. TN20SDA845805 Rank CDT

Name DEEPAK.S D/o. S/o. Sh. / Smt. SENTHIL KUMAR.A

of HINDUSTHAN COLLAGE OF ENGG & TECH has attended the ANNUAL TRAINING CAMP / CATC / AT HINDUSTHAN COLLEGE OF ENGG & TECH, COIMBATORE

W.e.f. 06 Feb 2022 to 10 Feb 2022

He / She has participated in ..... and stood .....

Place : Coimbatore
Date : 10 Feb 2022

(Manish Sharma)
Lt Col
Camp Commandant

---

121 / 2022

NATIONAL CADET CORPS

(TAMIL NADU, PUDUCHERRY & ANDAMAN NICOBAR DIRECTORATE)

COMBINED ANNUAL TRAINING CAMP CUM THAL SAINIK CAMP

Certificate

No TN20SDA845808 Rank CPL Name Palanimuthu A

of Hindusthan College of Engg. & Technology, Coimbatore (Institution)

of 2 (TN) BTY NCC, Coimbatore has Attended Combined Annual Training Camp Cum TSC Selection Camp for SD/SW/JD/JW BOYS & GIRLS held at Sri Seshaas International Public School, Salem from 04 May 2022 to 13 May 2022, under the aegis 12 (TN) BN NCC, Salem.

Place : Salem
Date : 13 May 2022

(Rakesh Mishra)
Col
Camp Commandant

NATIONAL CADET CORPS

(TAMIL NADU, PUDUCHERRY & ANDAMAN NICOBAR DIRECTORATE)

COMBINED ANNUAL TRAINING CAMP CUM THAL SAINIK CAMP

Certificate

No TN20SDA845808 Rank CPL Name PALANIMUTHU.A

of HINDUSTHAN COLLEGE OF ENGG & TECHNOLOGY, CBE (Institution)

of 2(TN) BTY NCC, COIMBATORE has attended Combined Annual Training Camp Cum TSC Selection Camp for SD/SW/JD/JW BOYS & GIRLS held at K.S.R. College of Engineering, Tiruchengode from 21 May 2022 to 30 May 2022, under the aegis 11 (TN) SIG COY NCC, Salem.

Place : Tiruchengode
Date : 30 May 2022

(M P Singh)
Col
Camp Commandant

EXTRACURRICULAR ACTIVITIES - STUDENTS

Innovations in Manufacturing Practices (IMP) 2022 - Final Round

Jadavpur University, Kolkata & Indian National Academy of Engineering

Mr Harishkumar M (20114023)
Mr Sakthi Surya (20114041)
Mr Senthilvel V P (20114042)

Out of 1000+ ideas **"A PLace to Safeguard Luggage"** selected in the top10 to present their idea in the final round.

JADAVPUR UNIVERSITY

Indian National Academy of Engineering

Innovations in Manufacturing Practices (IMP) 2022

Certificate of Participation

This is to certify that

Senthil Vel V. P.

Harish Kumar M.

Sakthi Surya K.

of

Luggages Garages

participated in the final round of IMP 2022 on 20th June, 2022 at Jadavpur University, Kolkata with the innovation

A Place to Safeguard Your Luggage.

Sivaji Chakravorti
Vice-President, INAE

Swarnendu Sen
Coordinator, IMP 2022

Humanity Consumes 1.75 Times More Natural Resources than Earth Can Regenerate

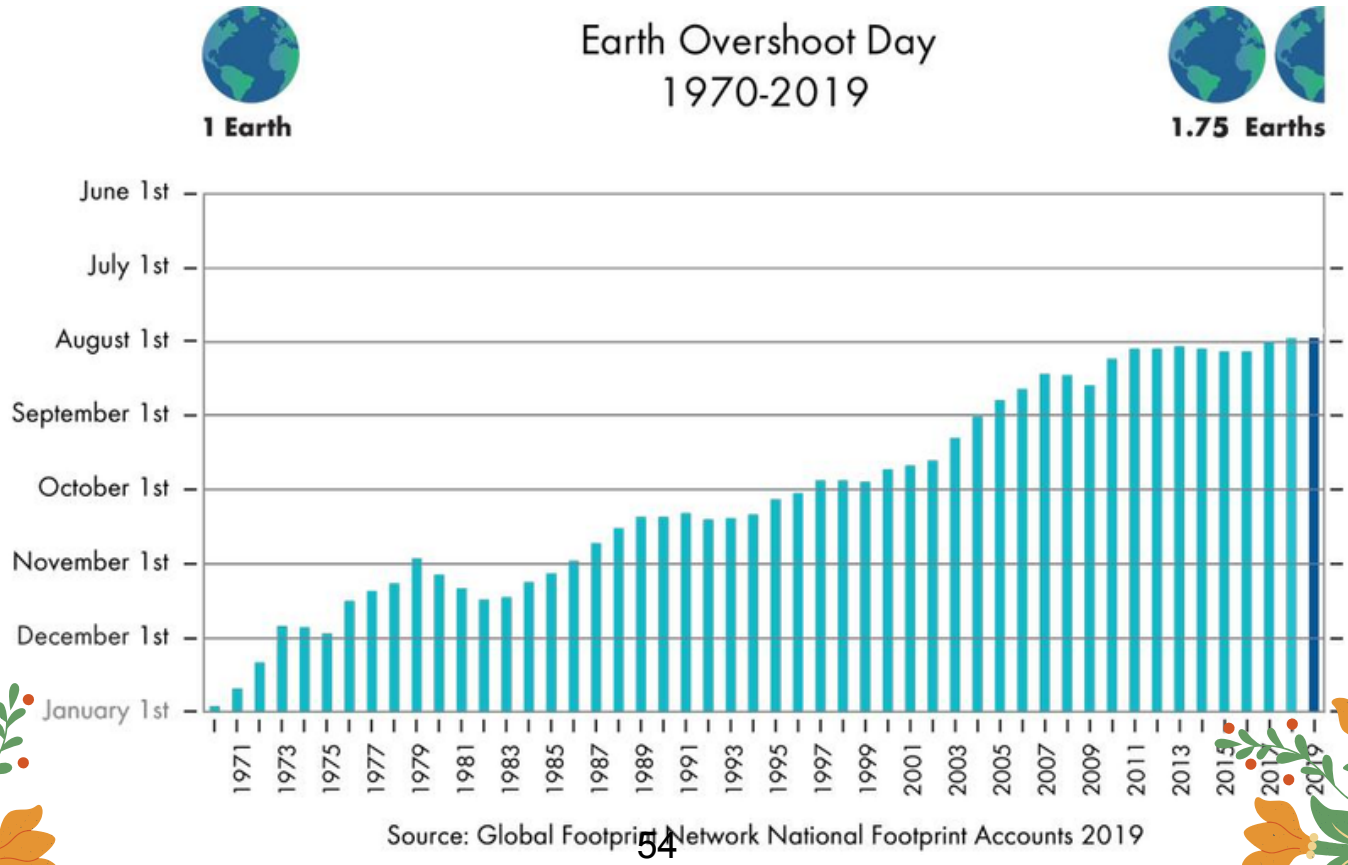
Rabat - A study carried out by the Global Footprint Network shows that humanity has depleted, in just 7 months, all of its share of natural resources such as water, soil, and clean air for the year. This means that the earth's population is currently consuming the resources of future generations. The Earth Overshoot Day fell this year on July 29, which is the earliest date ever, according to a report from the Global Footprint Network. The Overshoot Day marks the date when humanity's level of consumption exceeds the amount of natural resources the earth can regenerate.

The environmental group stated that humans have consumed 1.75 more natural resources in 2019 than the earth can regenerate. "Earth Overshoot Day falling on July 29 means that humanity is currently using nature 1.75 times faster than our planet's ecosystems can regenerate. This is akin to using 1.75 Earths," said Global Footprint Network in a statement. The group's calculations take into account the amount of water, land, fish, and forests we use as well as how much CO2 we're pumping into the atmosphere.

The NGO added that this over consumption of natural resources will lead to climate change which could cause extreme weather events such as the heatwave Europe is currently experiencing. "The costs of this global ecological overspending are becoming increasingly evident in the form of deforestation, soil erosion, biodiversity loss, or the buildup of carbon dioxide in the atmosphere. The latter leads to climate change and more frequent extreme weather events," the report added.

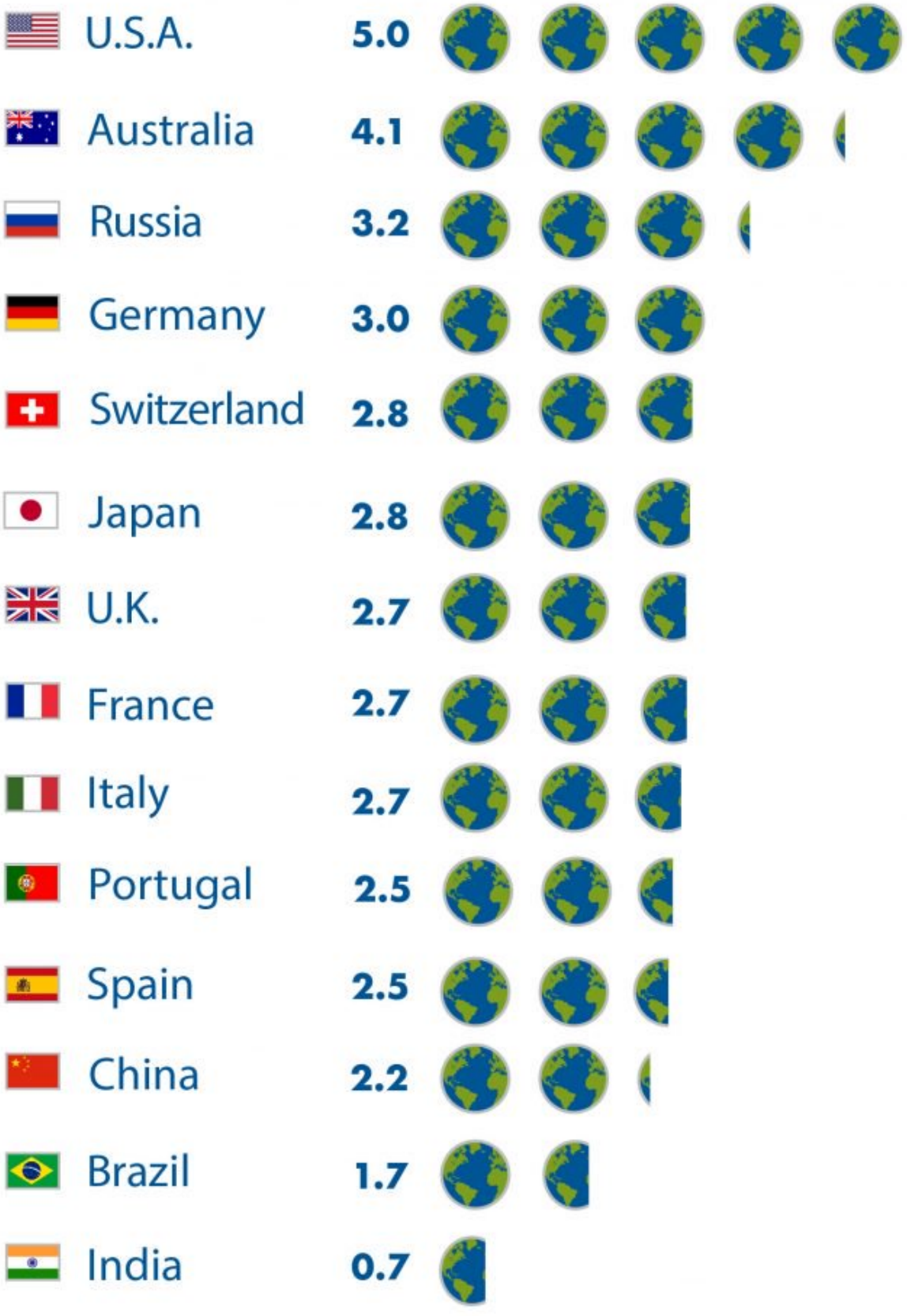
Earth Overshoot Day

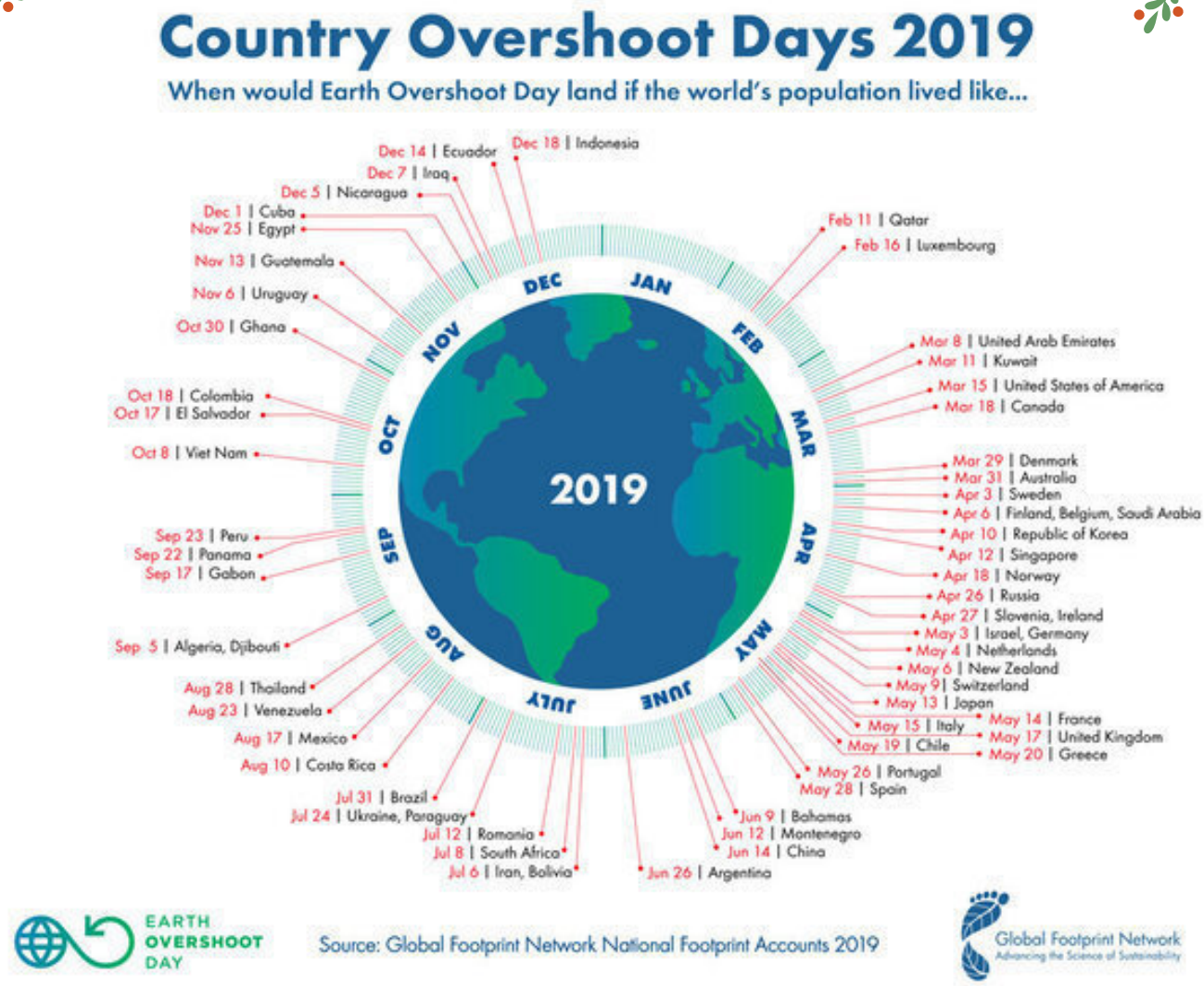
The first calculated Earth Overshoot Day was in 1986. The date has been falling earlier each year. In 1993, Earth Overshoot Day fell on October 21, in 2003 on September 22, and in 2017 on August 2. “We have only got one Earth this is the ultimately defining context for human existence. We can’t use 1.75 (earths) without destructive consequences,” said Mathis Wackernagel, founder of Global Footprint Network. The Global Footprint Network also analyses the amount of resources each country is individually using. Morocco impressively almost makes it to the end of the year before having its own overshoot day, estimated to be on December 16. Qatar, in comparison, burns through the replenishable resources for the year by February 11.



How many Earths do we need

if the world's population lived like…





The environmental group has launched a campaign, '#MoveTheDate', proposing solutions aimed at moving back the date to limit consumption to one-year of natural resources annually. Among the solutions, cutting CO2 emissions from burning fossil fuels by 50% would help to move back the date by 93 days. Emissions from burning fossil fuels contribute significantly to global warming. "The past does not necessarily determine our future. Our current choices do. Through wise, forward-looking decisions, we can turn around natural resource consumption trends while improving the quality of life for all people," says the group.

"While our planet is finite, human possibilities are not. The transformation to a sustainable, carbon-neutral world will succeed if we apply humanity's greatest strengths: foresight, innovation, and care for each other."

"The good news is that this transformation is not only technologically possible, it is also economically beneficial and our best chance for a prosperous future."

The group recommends changes in 5 areas: "cities, energy, food, planet, and population."

Cities must be built to be more compact rather than sprawling, there must be a move towards renewable energy, and awareness must be spread over how we produce, distribute and consume food, says the group.

Finally, efforts must be put into conservation, reforestation, regenerative farming for the sake of the planet, and the population growth must be reduced through the empowerment of women and through family planning.

The NGO has also launched the #MoveTheDate Solutions Map where people are invited to share their solutions for a better sustainable future. Users can propose their solutions in the form of a comment and start a conversation with other conservationists.

SLV-3

ight : 22.7m
t-off weight : 17 t
opulsion : All Solid
yload mass : 40 kg
bit : Low Earth Orbit

ASLV

Height : 23.5m
Lift-off weight : 39 t
Propulsion : All Solid
Payload mass : 150 kg
Orbit : Low Earth Orbit

PSLV-XL

Height : 44m
Lift-off weight : 320 t
Propulsion : Solid & Liquid
Payload mass : 1860 kg
Orbit : 475 km Sun Synchronous Polar Orbit (1300 kg in Geosynchronous Transfer Orbit)

GSLV Mk II

Height : 49m
Lift-off weight : 414 t
Propulsion : Solid, Liquid & Cryogenic
Payload mass : 2200 kg
Orbit : Geosynchronous Transfer Orbit

GSLV Mk III

Height : 43.43 m
Lift-off weight : 640 t
Propulsion : Solid, Liquid & Cryo
Payload mass : 4000 kg
Orbit : Geosynchronous Transfer Orbit

Sonam Wangchuk created the first prototype of 6 metres (20 ft) Ice Stupa by freezing 150,000 l (40,000 US gal) in Leh without any shade from the sun. Water was piped from upstream using gravity. Ladakh region experiences water shortage for the needs of agriculture during spring season which restricts cultivating period further in a subarctic climate area.

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