

“सीएसआईआर एकीकृत कौशल पहल”
“CSIR-Integrated Skill Initiative”

Training Program on “Seaweed Cultivation and Processing Technology”

Phase- I, Date: 18th – 20th June, 2025

Phase- II, Date: 24th – 26th June, 2025



Venue

**CSIR – CSMCRI - Marine Algal Research Station,
Mandapam Camp - 623 519,
Ramanathapuram District, Tamil Nadu.**



केन्द्रीय नमक व समुद्री रसायन अनुसंधान संस्थान
(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद, भारत)
गिजूभाई बधेका मार्ग, भावनगर 364002, गुजरात
CSIR- Central Salt & Marine Chemicals Research Institute
(Council of Scientific & Industrial Research)
Gijubhai Badheka Marg, Bhavnagar – 364 002 (Gujarat)
www.csmcri.res.in



Introduction

Seaweeds have rapidly evolved into a thriving global industry, with cultivation efforts expanding across Europe, the Americas, Canada, and Asia. Traditionally collected from natural habitats, seaweeds are increasingly farmed to address the growing demand for sustainable raw materials. Among producing nations, China stands as the largest contributor, followed by the Republic of Korea and Japan. The scope of seaweed cultivation now extends to regions such as Norway, the United States, Canada, Portugal, France, Australia, and numerous Asian countries.

The demand for seaweed has extended well beyond its traditional role in Asian cuisines, reaching markets in North and South America as well as Europe. Its diverse applications include soil enrichment, animal and aqua feed, biofuel production, aquaculture, and wastewater treatment. Recent estimates by the Food and Agriculture Organization (FAO) highlight the industry's remarkable scale, with an annual production of 31.2 million tons valued at over US\$ 11.7 billion. While India currently plays a modest role globally, advancements in seaweed farming technologies have positioned it as a potential growth hub.

In India, the cultivation of *Kappaphycus alvarezii* has introduced a steady source of income for coastal communities. The CSIR-Central Salt and Marine Chemicals Research Institute (CSIR-CSMCRI) has been instrumental in capacity building, particularly by training fishermen and empowering women in seaweed farming. With an extensive coastline offering ideal conditions for large-scale cultivation, India recognizes seaweed farming as a key area of development. A specialized training program aims to leverage this opportunity, fostering a supportive ecosystem for industry growth.

The Skill India Mission, initiated in 2015 by the honourable prime minister, is a nationwide scheme designed to empower 40 crore Indian citizens with industry-relevant skills. Focusing on unemployed and underprivileged youth, the initiative enhances employability and productivity, aligning with market demands. Implemented through the National Skill Development Corporation (NSDC) under the Ministry of Skill Development and Entrepreneurship, the scheme has integrated innovative programs to build workforce readiness.

CSIR-CSMCRI, headquartered in Bhavnagar, Gujarat, is a premier research institution specializing in seaweed-based activities. Its extension unit, the Marine Algal Research Station (MARS) in Mandapam, Tamil Nadu, has pioneered seaweed cultivation technologies for commercially valuable species. Seaweeds, categorized into green, red, and brown types, are vital sources of *phyocolloids*—unique compounds with multifaceted industrial applications. The growing global demand for *phyocolloids* underscores the significance of large-scale seaweed cultivation, particularly in countries like India with extensive coastal regions.

Beyond meeting industrial demand, seaweed cultivation has emerged as a sustainable livelihood opportunity, fostering economic stability and entrepreneurial growth among coastal communities. To further this mission, CSIR-CSMCRI has registered with NSDC to offer specialized training in its areas of expertise, including seaweed farming. The Marine Algal Research Station (MARS) in Mandapam has successfully developed diverse cultivation techniques, demonstrating its commitment to advancing the sector.

The training program aims to raise awareness of the significance of seaweeds while exploring their applications and global and national relevance through concise theoretical sessions. A distinctive feature of the program includes hands-on field training, equipping participants with practical knowledge of cultivation techniques for various commercially significant seaweed species. Additionally, it facilitates interactions with experienced seaweed farmers, providing insights into the livelihoods sustained by this practice. Participants are also introduced to industry applications, offering a comprehensive understanding of the value chain from cultivation to industrial utilization.

Designed for university researchers, post-graduate students, and aspiring entrepreneurs, the program presents a unique opportunity to explore the immense potential of seaweed farming. Eligible candidates are invited to participate on the designated date to gain knowledge and contribute to the growth of this promising industry.



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Faculties



Dr. V. Veeragurunathan
M. Sc., Ph. D.
Principal Scientist & In charge
Marine Algal Research Station (MARS),
CSIR-CSMCRI, Mandapam, Tamil Nadu

Specialization : Red algae cultivation & Processing
Publications : Journals - 44 ; Book chapter – 08



Dr. Dinesh Kumar R.
M. Tech., Ph. D.
Principal Scientist
Marine Algal Research Station (MARS),
CSIR-CSMCRI, Mandapam, Tamil Nadu

Specialization: Biochemical Engineering
Publications : Journals-40
Book Chapters- 10



Dr. S. Dinesh Kumar
M. Sc., M. Phil., Ph. D.
Scientist
Marine Algal Research Station (MARS),
CSIR-CSMCRI, Mandapam, Tamil Nadu

Specialization: Tank-based Seaweed Cultivation
Publications: Journals-99
Book Chapters- 44



Dr. Satish Lakkakula
M. Sc., Ph. D., M.B.A
Scientist
Marine Algal Research Station (MARS),
CSIR-CSMCRI, Mandapam, Tamil Nadu

Specialization : Seaweed Tissue Culture
Publications : Journal -61
Book chapter-20



Mr. S. Thirupathi
M.Sc.
Sr. Technical Officer
Marine Algal Research Station (MARS),
CSIR-CSMCRI, Mandapam, Tamil Nadu

Specialization: Seaweed Farming
Publications: Journals-10
Book Chapters- 01



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TRAINEE ENROLLMENT FORM

TITLE OF SKILL DEVELOPMENT PROGRAM	:	CSIR Integrated Skill Initiative			
DATE(S), TIME AND VENUE	:	<input type="checkbox"/>	Phase- I, Date: 18th – 20th June, 2025		
		<input type="checkbox"/>	Phase- II, Date: 24th – 26th June, 2025		
	:	The applicant may choose the phase, subject to change based on availability. Venue : CSIR – CSMCRI - Marine Algal Research Station, Mandapam Camp - 623 519, Ramanathapuram District, Tamil Nadu			
FULL NAME OF TRAINEE	:				
FATHER'S / HUSBAND'S NAME	:				
DATE OF BIRTH (DD/MM/YYYY)	:				
GENDER (MALE / FEMALE / OTHERS)	:				
CATEGORY (SC / ST / OBC / EWS / GENERAL)	:				
PHYSICALLY DISABLED (YES / NO)	:				
CURRENT STATUS (Please ✓)	:	Working	Entrepreneur	Student	Unemployed
QUALIFICATIONS	:				
PHOTO ID NUMBER (Aadhaar/ PAN/ Voter ID/ Passport)	:				
MOBILE NUMBER	:				
ALTERNATE MOBILE NUMBER	:				
EMAIL ADDRESS	:				
TRAINEE'S DOMICILE (RURAL / URBAN)	:				
ADDRESS	:				
FEE PAYMENT DETAILS	:				
DATE:	:				
		SIGNATURE OF APPLICANT			

- **Kindly submit completed form on or before June 13, 2025 (3 PM) for Phase-I & Phase-II to marsmandapam@gmail.com**
- **For any query please contact Dr. S. Dinesh Kumar (9443069049).**

Bank details of CSIR-CSMCRI for Trainee Program Fee



केन्द्रीय नमक व समुद्री रसायन अनुसंधान संस्थान

गिजुभाई बधेका मार्ग, भावनगर- ३६४ ००२

CSIR-CSMCRI CSIR-CENTRAL SALT & MARINE CHEMICALS RESEARCH INSTITUTE

Gijubhai Badheka Marg, Bhavnagar 364 002, Gujarat, India

Phone No. (O) 0278, 2471792 E-mail: fao@csmcri.org

Electronic Fund Transfer Account Details

1	Name of account holder	DIRECTOR, C.S.M.C.R.I.
2	Address	GIJUBHAI BADHEKA MARG, BHAVNAGAR 364002
3	e-mail address	fao@csmcri.org
4	Phone No./Mobile No.	0278-2471792
5	Fax No.	0278-2567562
6	Permanent Account Number (PAN)	AACCC1313P
7	Particulars of Bank Account	
	A. Name of the Bank	STATE BANK OF INDIA
	B. Name of the Branch	WAGHAWADI ROAD BRANCH
	C. Branch Code	10863
	D. Address	Shubham Shop No.G2/3, Plot No.2569 E1/2, Waghawadi Road Opp. Gulista Ground, Bhavnagar-364002 e-mail: sbi.10863@sbi.co.in
	E. Telephone No	0278- 2569884
	F. Account No.	30267310153
	G. Type of Account	SAVINGS BANK ACCOUNT
	H. IFSC Code (RTGS/NEFT)	SBIN0010863
	I. MICR code	364002023

We/ I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or lost because of incomplete or incorrect information, I/ we would not hold CSMCRI responsible.

Signature of the account holder

वित्त एवं लेखा अधिकारी
कें.न.स.र.अ.स., भावनगर

FINANCE & ACCOUNTS OFFICER
C.S.M.C.R.I., BHAVNAGAR

Bank Certificate



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Fee Payment Details

- Payment must be made only through digital modes such as RTGS, NEFT, IMPS, Google Pay, or PhonePe.
- Cash transactions will not be accepted.

Amount (INR)	:	
Bank Name	:	
Branch Name	:	
Account No.	:	
Transaction ID and Date	:	

Signature of Depositor/ Candidate
Name: _____

Fee Structure (Non-Refundable):

- **Category I: Self-Sponsored Candidates**
(Students, Individuals other than students, and Entrepreneurs applying independently)
Rs. 1,000/- + Rs. 180/- (GST) = Rs. 1,180/-
- **Category II: Sponsored Candidates**
(Candidates sponsored by Government organizations, Industries, or Entrepreneurs)
Rs. 5,000/- + Rs. 900/- (GST) = Rs. 5,900/-

Important Notes:

- The training program fee is **non-refundable** and must be paid **only through NEFT or RTGS**.
- The medium of instruction will be in **Hindi / Tamil / English**.
- **Participants are responsible for arranging their own lodging and boarding.**
- **Certificates** will be awarded to participants upon **successful completion** of the training program.

Application Submission – Phase I & II Training Programs

Candidates are requested to submit the **completed application form** along with **proof of payment** via email to **marsmandapam@gmail.com** on or before **June 13, 2025 (upto 3 PM)**.

For any queries, please contact **Dr. S. Dinesh Kumar** at **9443069049**.

Important Guidelines:

- Only applications with complete information and payment made through **digital mode** will be considered.
- Selection will be based on the evaluation of the candidate's **Curriculum Vitae (CV)**.
- Selected candidates must bring a **printed copy of the payment receipt** and a **photocopy of their AADHAR card** at the time of joining the training program.
- **Selection results** will be communicated via **email on June 13, 2025**.