

# 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



# "CSIR-Integrated Skill Initiative"

"CSIR-Integrated Skill Initiative" is a national program on skill development initiated by Council of Scientific and Industrial Research (CSIR) using the expertise and infrastructure of CSIR laboratories positioned across the country. CSIR-Central Salt and Marine Chemicals Research Institute (CSIR-CSMCRI), Bhavnagar is a leading constituent laboratory dedicated towards multidisciplinary R&D programs of both basic and applied sciences. Under skill India initiative CSIR-CSMCRI, the only R&D laboratory of CSIR in Gujarat, proposes to organize the following Training programs.

Applications are invited from the eligible candidates for the following training programs:

Sr.	Name of	Mode	Duration	Maximum	Qualification	Last date of application	Entrance
No	Training	of		No. of Intake	and Remarks		Test
	Program	training					
1.	Theory and	Virtual /	4 <sup>th</sup> Oct.,2021 to	50	12 <sup>th</sup> Science	24 <sup>th</sup> September 2021	28th
	practical aspects of	Online	5 <sup>th</sup> Oct,2021	(Selection of	pass / Diploma in	through e-mail only to	September 2021
	Household			candidates	engineering	through e-man only to	(11.00 AM)
	Solar Thermal			will be done	pass / ITI	jayminpatel@csmcri.org	(1110071111)
	Gadgets			based on	pass/	,,,,,	Online link
	_			Entrance	Engineering		will be
				<mark>Test</mark> )	students /		shared.
					Engineering		
		- (())	th a .		graduates	th a	
2	Solar Salt	Offline	4 <sup>th</sup> Oct.,2021 to	30	Secondary	29 <sup>th</sup> September 2021	No
	Production Process and		8 <sup>th</sup> Oct,2021	(There will be	Exam. (Passed out)	through e-mail only to	Entrance Test
	Quality			NO Entrance	and above	through e-man only to	Test
	Control			Test for this	aa a	paruls@csmcri.res.in	
	Aspects			training			
	-			program)			
3	Fermentation	Offline	22 <sup>nd</sup> October' 21	30	B.Sc. (Passed	30 <sup>th</sup> September' 2021	No
	Technology		to 25 <sup>th</sup> October'	(There will be	out) and		Entrance
			21	NO Entrance	above	through e-mail only to	Test
				Test for this		sourishb@csmcri.res.in	
				training		sourishb@csilichi.les.iii	
				program)			

#### Course Fee

For training program on "Theory and practical aspects of Household Solar Thermal Gadgets" : NIL

For training program on "Solar Salt Production Process and Quality Control Aspects" & "Fermentation Technology" :

Rs. 1000/- + Rs.180/- GST = Rs.1180/-	Category I: Self- sponsored     [Students, Individual (other than student) and Entrepreneur (as an individual)]
Rs. 5000/- + Rs.900/-GST = Rs.5900/-	Category II: Any sponsored candidate     (Government, Industry and sponsored by Entrepreneur)

- Fee is non-refundable. Only the selected candidates will be intimated regarding online fee payment (Bank details is attached).
- The Course fee has to be deposited through NEFT or RTGS only.
- Mode of communication would be either in हिन्दी & / or in English.
- Tea (two times) and Lunch will be provided during training program on "Solar Salt Production Process and Quality Control Aspects". Lodging & boarding arrangements of selected candidates will be done by their own.
- Certificates will be provided to the candidates who successfully complete the course.

## • Training venue

For training program on "Theory and practical aspects of Household Solar Thermal Gadgets":	Virtual Mode / Online
For training program on "Solar Salt Production Process and Quality Control Aspects"	Offline mode at CSIR-CSMCRI, Bhavnagar
For training program on "Fermentation Technology"	Offline mode at CSIR-CSMCRI, Bhavnagar

#### How to apply and Selection:

• Maximum numbers of intake are limited as mentioned above.

Selection will be made as under:

For training program on "Theory and practical aspects of Household Solar Thermal Gadgets": based on written test to be conducted online on 28<sup>th</sup> September 2021 (11.00 AM) for which link will be shared. For sending of applications and any query about the training program you can contact by email: jayminpatel@csmcri.org

For training program on "Solar Salt Production Process and Quality Control Aspects": on "first-cum-first-served basis with having fulfilment of qualification criteria, payment and other terms and conditions". For sending of applications, payment and any query about the training program you can contact by email: paruls@csmcri.res.in

For training program on "Fermentation Technology": on "first-cum-first-served basis with having fulfilment of qualification criteria, payment and other terms and conditions". For sending of applications, payment and any query about the training program you can contact by email: sourishb@csmcri.res.in

- One self-attested set of documents to be submitted along with application as attachment.
- The selected candidates will be intimated by email. The Course fee (applicable for training program on "Solar Salt Production Process and Quality Control Aspects") has to be deposited within 3 days of email from us about selection.
- Incomplete applications shall not be considered.
- These are training programs and it would, therefore, not confer any right/claim implicit or explicit for any candidates for claiming extension or absorption in CSIR CSMCRI / CSIR.
- No traveling or any other allowances will be paid to candidate for training program.



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# Application Form (आवेदन पत्र)

1.	Name of the Candidate उम्मीदवार का नाम	:		
2.	Father's / Guardian's Name पिता/ पति का नाम			Photo
3.	, Date of Birth जन्म तिथि		_	
4.	Category वर्ग	:	General / OBC / SC / ST	
5.	Address (Permanent) पता (स्थायी)	:		
6.	Address (Communication) पता (पत्र व्यवहार)	:		
7.	Educational Qualifications शैक्षणिक योग्यता	:		
8.	Phone No. फोन/ मोबाइल नंबर	:		
9.	E mail ईमेल	:		
10.	AADHAAR Card Number आधार कार्ड नंबर	:		
11.	Training opted for: (put tick mark / write) प्रशिक्षण के लिए (टिक मार्क लगाएं / लिखे)		Theory and practical aspects of Household Sola Solar Salt Production Process and Quality Cont Fermentation Technology	
Candidate's Signature उम्मीदवार के हस्ताक्षर				
Details	of enclosures			

# केन्द्रीय नमक व समुद्री रसायन अनुसंधान संस्थान

गिजुभाई बधेका मार्ग, भावनगर- ३६४ ००२

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.

वित्त एवं लेखा अध्याति। 2 Signature of the account holder कें.न.स.र.अ.स., भावनगर

Bank Certificate

C.S.M.C.R.I., BHAVNAGAP

It is certified that M/S CSMCRI has an Account No 302673101772 with our Bank and it is confirmed that the details given above are correct as per our record

Date: Place: Signature of the Authorized Official of Bank with seal



# केन्द्रीय नमक व समुद्री रसायन अनुसंधान संस्थान (वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद, भारत)

गिजूभाई बधेका मार्ग ,भावनगर 364002 (गुजरात)

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# **Registration form**

# (Payment only through RTGS/ NEFT)

(Applicable for training program on "Solar Salt Production Process and Quality Control Aspects" &

	"Fermentation Technology")
Amount (INR)	<b>:</b>
Bank Name	÷
Branch Name	:
Account No.	:
Transaction ID and Date	:
	Signature of Depositor/ Candidate
	Name:
Fee structure (non-refundable):	
For training program on "Theory and p	oractical aspects of Household Solar Thermal Gadgets": NIL
For training program on "Solar Salt I Technology" :	Production Process and Quality Control Aspects" & "Fermentation
Rs. 1000/- + Rs.180/- GST = Rs.1180/-	Category I: Self- sponsored [Students, Individual (other than student) and Entrepreneur (as an individual)]
Rs. 5000/- + Rs.900/-GST = Rs.5900/-	Category II : Any sponsored candidate (Government, Industry and sponsored by Entrepreneur)

## SALIENT FEATURES OF THE TRAINING PROGRAM ON "FERMENTATION TECHNOLOGY":

- ❖ 30% Theory and 70% practical sessions as per the course curriculum
- Tutorials based on specific needs of the candidates.
- Interactive sessions.
- ❖ Focus on current needs of fermentation industry.

Following topics will be covered in the training program.

# **Basic learning modules**

- Training on fermentation principles.
- Bioreactor design.
- Growing microorganisms in fermenter.
- Hands on pilot scale fermentation experiences.
- Critical control parameters.

## Topics to be discussed

- Critical components of an industrial bioreactor.
- Importance of mixing and aeration: Mass Transfer.
- Scale up of fermentation process.
- Downstream (purification) process and product formulation.
- Material and Energy Balance Computations.
- Process Economics.

#### **Practical modules**

- Detailed understanding of the principles of Fermenter design, microbial fermentation process and production economics.
- Apply biological and engineering principles in cultivating microrganisms in fermenters.
- ❖ Assess parameters critical for fermentation such as aeration, agitation ad K<sub>L</sub>a estimation.
- Attain practical skills on fermenter sampling, product yield and microbial growth estimation, harvesting of culture and cleaning of fermenter.
- ❖ Analyze problems encountered during fermentation process.