

# Technical Program ICASMC 2024

DAY 1	<b>22<sup>nd</sup> February 2024</b> <b>Venue: CSIR-CSMCRI, Bhavnagar, Gujarat</b>	
08:30 a.m. – 10:00 a.m.	Registration (Delegate kit/payment receipt collection by participants)	
<b>INAUGURAL CEREMONY</b> <b>(10:00 a.m. to 11:00 a.m.)</b>		
10:00 a.m. – 10:08 a.m.	<ul style="list-style-type: none"> <li>• Introductory remarks by Dr. Parul Sahu &amp;</li> <li>• Lamp lighting by delegates</li> </ul>	
10:08 a.m. – 10:14 a.m.	Welcome address by Convener: Dr. Arvind Kumar	
10:14 a.m. – 10:22 a.m.	Address by Guest of Honour: Sheik Abdulaziz Al Qahtani	
10:22 a.m. – 10:30 a.m.	Address by Special Guest: Dr. Franz Goetzfried	
10:30 a.m. – 10:40 a.m.	Presidential address by Director CSIR-CSMCRI and Patron: Dr. Kannan Srinivasan	
10:40 a.m. – 10:55 a.m.	Address by Chief Guest: Mr. Ravi S. Jalan	
10:55 a.m. – 11:00 a.m.	Release of conference proceedings & vote of thanks by Co-convener: Dr. S C Upadhyay	
TEA/COFFEE BREAK (11:00 a.m. – 11:30 a.m.)		
<b>SESSION-1</b> <b><u>Global Salt Scenario, Salt Production Technologies &amp; Transport Logistics</u></b> <b>(11:30 a.m. to 01:10 p.m.)</b> Session chair: <u>Dr. Daniel McCorley</u> Co-chair: <u>Mr. Balasubramanian R</u>		
11:30 a.m. – 11:50 a.m.	Global supply and demand of pharmaceutical sodium chloride	Dr. Franz Goetzfried
11:50 a.m. – 12:10 p.m.	Issues and prospects of Indian salt industry	Mr. Bharat C. Raval
12:10 p.m.– 12:30 p.m.	Transport and logistics for salt industry	Mr. Chetan S. Kamdar
12:30 p.m. – 12:50 p.m.	The global salt market and the impact of new salt sources from brine mining and brine recovery - (Virtual)	Dr. Stefan Schlag Leon Beraud
12:50 p.m. – 01:10 p.m.	Solar salt and marine chemicals technologies @ CSIR-CSMCRI	Dr. Arvind Kumar
LUNCH BREAK (01:10 p.m. – 02:30 p.m.)		
<b>SESSION-2</b> <b><u>Scientific Design, Mechanization/Automation &amp; Environmental Impacts of Solar Salt Works</u></b> <b>(02:30 p.m. to 04:00 p.m.)</b> Session Chair: <u>Dr. Hiren Raval</u>		
02:30 p.m. – 02:45 p.m.	Mechanization and salt quality improvement in Indian solar salt works	Mr. Ajit Kumar Kotecha
02:45 p.m. – 03:00 p.m.	Scientific design, modernization and advanced construction of solar salt works for producing increased yield of quality salt	Dr. Bhoomi R. Andharia
03:00 p.m. – 03:15 p.m.	Advancements in solar salt industry: A comprehensive exploration of automation for enhanced efficiency and sustainability	Mr. Param H. Dave
03:15 p.m. – 03:30 p.m.	Salt refinery	Mr. Ganesh Iyer
03:30 p.m. – 03:45 p.m.	Salt Secrets - Biology of solar salt works- (Virtual)	Mr. Vladimir M Sedivy
03:45 p.m. – 04:00 p.m.	Designing of a salt works "Environment-friendly"	Mr. Dilipsinh Jadeja
TEA/COFFEE BREAK (04:00 p.m. – 04:30 p.m.)		
<b>SESSION-3</b> <b><u>Quality Control &amp; Brine Purification for Chlor-alkali/allied Industry and Trace Metals Recovery from Saline Systems</u></b> <b>(04:30 p.m. to 06:15 p.m.)</b> Session Chair: <u>Dr. Vaibhav Kulshreshtha</u>		
04:30 p.m. – 04:45 p.m.	Global scenario of growth of alkali industry	Mr. P. N. Rao
04:45 p.m. – 05:00 p.m.	Salt quality control and brine purification for Chlor-alkali industry	Mr. Najmul Khan

05:00 p.m. – 05:15 p.m.	Chlor-alkali industries expectation on salt quality for using high performance membranes in electrolyzer	Dr. Randheer Yadav
05:15 p.m. – 05:30 p.m.	Advancements in sulphate removal and concentration membrane system (SRCS) for brine purification, sustainable chemistry and waste reduction	Mr. Nithin Jose
05:30 p.m. – 05:45 p.m.	Opportunities and challenges in recovering crucial trace elements from seawater	Dr. Alok R. Paital
05:45 p.m. – 06:00 p.m.	Lithium ions extraction from seawater bittern using room temperature ionic liquid	Mr. Abdolreza Hormati
06:00 p.m. – 06:15 p.m.	Uranium extraction from seawater	Dr. Shilpi Kushwaha
07:00 p.m. – 09:00 p.m.	Cultural program	
09:00 p.m. onwards	Gala dinner	

DAY 2		23 <sup>rd</sup> February 2024	
<b>SESSION-1</b> <b>Bittern Management and Marine Chemicals</b> <b>(10:00 am to 11:00 am)</b> Session Chair: Dr. A. M. Bhatt			
10:00 a.m. – 10:15 a.m.	Strategic advancements in industrial brine preparation: A holistic approach to marine salt and bromine recovery @ CSIR-CSMCRI	Dr. S. C. Upadhyay & Mr. Sumit Heda	
10:15 a.m. – 10:30 p.m.	Magnesia based ceramics for high temperature applications: Activities at CSIR-CGCRI	Dr. H. S. Tripathi	
10:30 a.m. – 10:45 a.m.	Magnesium production through molten salt electrolysis -	Dr. Naveen Kumar Chandrasekaran	
10:45 a.m. – 11:00 a.m.	Recovery of potash and magnesium salts from kainite type mixed salt	Dr. Pratap Shashikant Bapat	
TEA/COFFEE BREAK FOLLOWED BY CSMCRI VISIT (11:00 a.m. – 11:45 a.m.)			
<b>PARALLEL SESSION-2A</b> <b>Salt and Health (Standards, Specialty Salts, Salt Fortification, Microplastics)</b> <b>(11:45 am to 01:30 pm)</b> Session Chair: Dr. C S Pandav <b>Venue: Rang Manch Dome, CSIR-CSMCRI</b>		<b>PARALLEL SESSION-2B</b> <b>Invited Talk &amp; Oral Presentation</b> <b>(11:45 am to 01:30 pm)</b> Session Chair: Dr. Tejwant Singh Kang Co-chair: Dr. Asish Kumar Parida <b>Venue: Auditorium, CSIR-CSMCRI</b>	
11:45 a.m. – 12:00 noon	Salt and health	Commodore Kamlesh Kumar (Retd.)	11:45 a.m. – 12:05 p.m. Rapid Screening of Crystallization Kinetics for Inorganic Salts (Dr. Gerard Capellades) <b>Virtual</b>  Oral Paper Presentation 12:05 pm – 01:30 p.m. (10 min each) 1. Ms. Nishu Chaudhary 2. Ms. Vartika Sharma 3. Mr. Jitendra Panchiwala 4. Mr. Kuldeep Singh 5. Mr. Ranjeet K Bhore 6. Mr. Shubham Mishra 7. Ms. Jasbir Kaur Mahey
12:00 noon – 12:15 p.m.	Beneficial aspects of various salts used in Food fortification - (Virtual)	Dr. Sirimavo Nair	
12:15 p.m. – 12:30 p.m.	Technology for double fortified salt (DFS) composition containing iron and iodine to control both deficiencies	Dr. J R Chunawala	
12:30 p.m. – 12:45 p.m.	GMP/CCP in manufacturing of IS 7224:2006 free flow iodized salt and manufacturing of IS 16232:2014, double fortified salt	Mr. Ketan Trivedi	
12:45 p.m. – 01:00 p.m.	Microplastic contamination in common salt: Global insights, health implications, and mitigation strategies	Dr. Sumit B. Kamble	
01:00 p.m. – 01:15 p.m.	Small scale salt industry – strategy to capacitate and consolidate them to produce iodized salt	Mr Arulraj Soloman	
01:15 p.m. – 01:30 p.m.	Climate change and salt industry	Mr Ranjan Jha	
LUNCH BREAK (01:30 p.m. – 02:15 p.m.)			

<b>PARALLEL SESSION-3A</b> <b>Salt Industry: India &amp; Africa</b> <b>(02:15 pm to 03:00 pm)</b> Session Chair: Dr. P. K. Agarwal <b>Venue: Rang Manch Dome, CSIR-CSMCRI</b>			<b>PARALLEL SESSION-3B</b> <b>Invited Talk &amp; Oral Presentation</b> <b>(02:30 pm to 04:00 pm)</b> Session chair: Dr. Naveen Kumar Chandrasekaran Co-chair: Dr. Arun Das <b>Venue: Auditorium, CSIR-CSMCRI</b>		
02:15 p.m. – 02:30 p.m.	Salt production in Rajasthan: Challenges and future prospects	Mr. Piyush Purohit	02:00 p.m. – 02:20 p.m. The Rise of Artisanal and Gourmet Sea Salt: Marketing Strategies and Consumer Insights (Mr. George Iacovou) <b><i>Virtual</i></b>  Oral Paper Presentation 02:20 pm – 04:30 p.m. (10 min each) 1. Dr. Kirti M Yenkie (Virtual) 2. Ms. Yesha Shah 3. Dr. Riddhi T. Bosamia 4. Mr. Prashant Upadhyay 5. Mr. Manas Ranjan Puhan 6. Mr. Govind Amaliar 7. Ms. Hemali R Masani 8. Mr. H. N. Patel		
02:30 p.m. – 02:45 p.m.	Creating jobs and wealth through industrialization of salt in Ghana	Mr. Kwame A Apeaning			
02:45 p.m. – 03:00 p.m.	The quest for survival and growth: Tanzania's 500+ small solar sea salt producers	Mr. Tamim Amijee			

**PANEL DISCUSSION**  
**Past, Present & Future of Salt Industry**  
**(03:00 p.m. – 04:00 p.m.)**  
 Coordinated by: Mr. Chetan S. Kamdar

TEA/COFFEE BREAK (04:00 p.m. – 04:30 p.m.)

**VALEDICTORY SESSION**  
**(04:30 pm to 05:30 pm)**  
**Venue: Rang Manch Dome, CSIR-CSMCRI**

04:30 p.m. – 04:35 a.m.	Introductory remarks by Dr. Parul Sahu
04:35 p.m. – 04:50 p.m.	Felicitation of guests and salt associations & Feedback from participants
04:50 p.m. – 04:55 p.m.	Address by ISMA President: Mr. Bharat C Raval
04:55 p.m. – 05:05 p.m.	Address by Guest of Honour: Dr. Daniel McKorley
05:05 p.m. – 05:10 p.m.	Address by Director: Dr. Kannan Srinivasan
05:10 p.m. – 05:20 p.m.	Address by Chief Guest: HH Maharaja Raol Shri Vijayrajsinhji Virbhadrasinghji Gohil
05:20 p.m. – 05:25 p.m.	Concluding Remarks by Convener: Dr. Arvind Kumar
05:25 p.m. – 05:30 p.m.	Vote of thanks by Controller of Administration: Mr. Subhash C. Antil

DAY 3	24 <sup>th</sup> February 2024
<b>INDUSTRY VISIT*</b> <b>Nirma Ltd, Bhavnagar</b> <b>(09:30 am to 01:00 pm)</b>  <b>*For interested participants only</b>	
LUNCH at NIRMA LTD. (01:00 p.m. onwards)	

### List of Speakers and Session Chairs

Dr. Parul Sahu	Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Dr. Arvind Kumar	Chief Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Sheik Abdulaziz Al-Qahtani	Chairman, Al Qahtani Holding, Saudi Arabia
Dr. Franz Goetzfried	Owner, Salt Research + Consulting, Germany
Dr. Kannan Srinivasan	Director, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr. Ravi S. Jalan	Managing Director, GHCL Limited, India
Dr. S. C. Upadhyay	Sr. Principal Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Dr. Daniel McKorley	Founder, Chairman, and Chief Executive Officer of the McDan Group of Companies, Ghana
Mr. Balasubramanian R.	Managing Director, Shriram Engineering, India
Mr. Bharat C. Raval	President, The Indian Salt Manufacturers Association Vice President & Unit Head, Grasim Industries Limited ( Aditya Birla Group), India
Mr. Chetan S. Kamdar	Director, The Bhavnagar Salt And Industrial Works Private Limited, India
Dr. Stefan Schlag Leon Beraud	Salt Market Expert, Switzerland
Dr. Hiren D. Raval	Principal Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr. Vladimir M Sedivy	President, Salt Partners Ltd, Switzerland.
Mr. Ajit Kumar Kotecha	General Project Manager, GHCL Limited, India
Dr. Bhoomi R. Andharia	Sr. Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr. Param H Dave	Manager, Tata Chemicals Limited, India
Mr. Ganesh Iyer	Technical Director, Shriram Engineering, Tuticorin, Tamilnadu, India
Mr. Dilipsinh Jadeja	General Manager, Dev Salt Pvt. Ltd., India
Dr. Vaibhav Kulshreshtha	Principal Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr. P. N. Rao	Vice President, GHCL Limited, India
Mr. Najmul Khan	Deputy General Manager - Projects, Tata Chemicals Limited, India
Dr. Randheer Yadav	General Manager - Quality & Technical Services, Grasim Industries Limited ( Aditya Birla Group), India
Mr. Nithin Jose	Director, SepraTECH Solutions Pvt. Ltd., India
Dr. Alok R. Paital	Principal Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr. Abdolreza Hormati	CEO Manager, Dolphin Sea Salt, Iran
Dr. Shilpi Kushwaha	Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Dr. A. M. Bhatt	Former Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr. Sumit Heda	Director, Ardra Tatva Private Limited, India
Dr. H. S. Tripathi	Chief Scientist, CSIR- Central Glass & Ceramic Research Institute, India
Dr. Naveen Kumar Chandrasekaran	Scientist, CSIR- Central Electrochemical Research Institute, India
Dr. Pratap Shashikant Bapat	Sr. Principal Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Dr. Chandrakant S. Pandav	Former Professor & Head of the Department – Centre for Community Medicine, All India Institute of Medical Sciences (AIIMS), New Delhi, India
Commodore Kamlesh Kumar (Retd.)	Chairman & Managing Director, Hindustan Salts Limited, Jaipur, India
Dr. Sirimavo Nair	Professor, The Maharaja Sayajirao University of Baroda, Gujarat, India
Dr. J. R. Chunawala	Chief Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr. Ketan Trivedi	Executive Director, Super Salts Pvt. Limited, Jambusar, Bharuch, India
Dr. Sumit B. Kamble	Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr Arulraj Soloman	Partner, Solomon Salt Refineries, Thoothukudi, Tamil Nadu, India
Mr Ranjan Jha	Senior Program Officer - USI and Food Fortification at Nutrition International, Delhi, India
Dr. H. S. Tripathi	Chief Scientist, CSIR-Central Glass & Ceramic Research Institute, India
Dr. Tejwant Singh Kang	Associate Professor, Department of Chemistry, Guru Nanak Dev University, Amritsar, INDIA.
Dr. Asish Kumar Parida	Principal Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Dr. Arun Das	Principal Scientist, CSIR- Central Salt & Marine Chemicals Research Institute, India
Mr. Piyush Purohit	Partner, Bharat Salt Company, Nawa City, Rajasthan, India
Mr. Kwame A Apeaning	<ul style="list-style-type: none"> <li>• Founder, Ghana Chamber of Salt Producers &amp; Exporters Ghana Chamber of Salt Producers &amp; Exporters, Accra, Ghana</li> <li>• Chief Executive Officer, Precious Premium Salt, Tema, Ghana</li> </ul>
Mr. Tamim Amijee	Socio-Economic Development and Management Advisor / Consultant, Tanzania
Dr. Gerard Capellades	Asst. Professor, Rowan University, New Jersey, United States
Mr. Subhash C. Antil	Controller of Administration, CSIR- Central Salt & Marine Chemicals Research Institute, India