

# Souvenir

13<sup>th</sup> IDEA CONVENTION & INTERNATIONAL CONFERENCE  
RECENT ADVANCES IN ENGINEERING APPLICATIONS  
FOR SUSTAINABLE DAIRYING

OCTOBER 13-14, 2023



ORGANISED BY

COLLEGE OF DAIRY SCIENCE & TECHNOLOGY  
GURU ANGAD DEV VETERINARY & ANIMAL SCIENCES UNIVERSITY  
LUDHIANA

Under the aegis of Indian Dairy Engineers Association (IDEA)



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**GOOD**

**13<sup>th</sup> IDEA Convention and International Conference**  
**Recent Advances in Engineering Applications for Sustainable Dairying**  
**October, 13-14, 2023**

# **SOUVENIR**

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Dr. R. S. Sethi  
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Dr. Gajanan P. Deshmukh

## **Associate Editors**

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## **Published by**

Organizing Committee  
13<sup>th</sup> IDEA Convention and International Conference

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Dr. R.S. Sodhi  
President

INDIAN DAIRY ASSOCIATION



## Message

The dairy sector is contributing about 29 percent in India's GDP from agriculture. It is also a source of livelihood for about 70 percent of the population engaged in milk production. Presently, this sector is facing major challenges, such as, climate change, low value addition to milk, price realization by the milk producers, quality of raw milk etc. Recent technological advancements in the area of instrumentation, packaging, refrigeration methods, climate change mitigation, and increasing water use efficiencies for milk production and processing are helping for making dairy sector sustainable.

The 13th IDEA Convention and International Conference being organised by the College of Dairy Science and Technology, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana under the aegis of Indian Dairy Engineers Association on "**Recent advances in engineering applications for sustainable dairying**" during October 13-14, 2023, is a good effort by the organisers to provide a common platform where scientists from diverse field of engineering are coming together to deliberate on the issues related to the dairy sector for its sustainability.

It is understood that some concrete recommendations would come out of these two days scientific event.

I wish a grand success to the participants for their efforts to make dairying a sustainable venture.

New Delhi  
September 14, 2023

(R.S. Sodhi)



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ਗੁਰੂ ਅੰਗਦ ਦੇਵ ਵੈਟਰਨਰੀ ਅਤੇ ਐਨੀਮਲ ਸਾਇੰਸਿਜ਼ ਯੂਨੀਵਰਸਿਟੀ  
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GURU ANGAD DEV VETERINARY & ANIMAL SCIENCES UNIVERSITY  
LUDHIANA - 141 004, PUNJAB (INDIA)

Vice-Chancellor  
ਉਪ-ਕੁਲਪਤੀ



### Message

I am very happy to know that College of Dairy Science and Technology, of this university is holding its very first international conference under the aegis of Indian Dairy Engineers Association during October 13-14, 2023. The topic of the conference "Recent advances in engineering applications for sustainable dairying" is addressing the current needs of the dairy sector which is going through a hard time. Looking into the importance of this sector the Govt. of India has created a new ministry so that the issues related to the livestock sector can be addressed adequately. The per capita availability of milk is highest in Punjab, but the value addition is still very low for better price realization at farm level. The issues of clean milk production, quality of raw milk, efficient milk collection and transportation, effect of climate change on milk production and environment friendly packaging of milk and milk products needs immediate attention and solution.

I hope that 13<sup>th</sup> IDEA convention and international conference would address these issues during the two days deliberations and chalk out strategies to solve these issues in near future.

I wish a grand success for the event and congratulate the participants for their efforts to make dairying a sustainable venture.

Best wishes,

  
(Inderjeet Singh)



## भारतीय कृषि अनुसंधान परिषद

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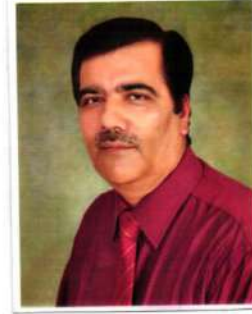
**डा. एस. एन. झा**

**Dr. S.N. Jha, ARS**

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उपमहानिदेशक ( कृषि अभियांत्रिकी )

**Deputy Director General (Agricultural Engineering)**



### Message

College of Dairy Science and Technology, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana under the aegis of Indian Dairy Engineers Association is organizing 13<sup>th</sup> IDEA convention and international conference "Recent advances in engineering applications for sustainable dairying" during October 13-14, 2023. The title of the conference is very well chosen and relevant in the current era where not only dairy sector but whole agricultural sector is facing issues related to sustainability. The engineering interventions are highly required to address the issues to mitigate the affects of climate change, value addition to agricultural and livestock products, better and effective alternatives to current packaging materials and methods to safeguard the environment, use of new IT tools such as artificial intelligence, IoT, and to ensure better nutrition to both humans and livestock. The dairy sector is a means of livelihood of not only persons directly engaged in milk production but also provide employment to landless laborers and vendors who with their best efforts are making sure that quality milk and milk products should reach to the consumers doorstep.

My sincere wishes to the organisers. I hope that some useful recommendations would emerge out of the deliberations during these two days. I wish the event a grand success.

Good Luck!

(S. N. Jha)



## MESSAGE

It is a matter of great pride that one of the youngest dairy science colleges of the country is holding 13<sup>th</sup> IDEA convention and international conference in the field of dairy engineering. I would like to congratulate the faculty and Dean of the College to take such an initiative. The topic of the conference is very much relevant to the current scenario where dairy sector is facing challenges of climate change, quality milk production, low level of value addition to milk and milk products. With the advent of new technological interventions, the cost of value addition to milk has reduced considerably. The new age refrigerants and gaseous fuels for boilers are helping in improving environment health to some extent. The emerging use of solar energy in dairy plants also lowering the dependency on conventional fuels. The improved process equipment's efficiency is helping in enhanced product quality as well as lowering the production cost thereby increasing the profit margins.



I am great full to Dr Inderjeet Singh, Vice Chancellor, Guru Angad Dev Veterinary and Animal Sciences University for giving his consent to hold this event. It is highly appreciated that university made every effort to provide the delegates all possible comfort cosy environment for this scientific event.

I am also thank full to Dr R.S. Sethi, Dean, College of Dairy Science and Technology, Ludhiana for his whole hearted support and managing the event in an excellent manner. I too acknowledge the support and work of all the faculty members of the college for coming together and for making the event a success.

I appreciate the efforts put by Dr Amandeep Sharma, Associate Professor and Organizing Secretary of the event for taking lead in holding this international conference, the very first of this college. He is making all efforts to make this event a success. I wish him a great future ahead.

I am sure that the 13<sup>th</sup> IDEA convention and international conference will come up with the new scientific findings that can help the industry and academia both in near future. I wish all the success for the event and the organizing team.

Good Luck

Er. S. C. Aggarwal  
President, IDEA





**COLLEGE OF DAIRY SCIENCE & TECHNOLOGY  
GURU ANGAD DEV VETERINARY AND ANIMAL SCIENCES  
UNIVERSITY, LUDHIANA – 141004**



Dr R S Sethi  
Dean  
College of Dairy Science & Technology



**Message**

It is my distinct pleasure that College of Dairy Science and Technology (CODST), Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana is organizing 13<sup>th</sup> Convention and International Conference on "Recent trends in applications of Engineering for sustainable dairying" under the aegis of the Indian Dairy Engineering Association. I am honoured and delighted to welcome you all to the inaugural conference of our college on Dairy Engineering on Oct 13-14, 2023. This is a momentous occasion that will mark a significant milestone in journey of CODST towards advancing the dairy industry in India and across the globe.

This conference will serve as a platform for experts, researchers, industry leaders, and students to come together to exchange knowledge, ideas, and experiences. Further, I hope that this conference will foster collaboration and inspire new breakthroughs in dairy engineering. The conference sessions will cover a wide range of topics from industry academia brain storming to Dairy and applied engineering, sustainable dairy, novel biobased intervention to enhance food quality and functionality, robotics, AI and IoT applications.

I am sure that we will have the privilege of hearing from esteemed speakers and experts who will provide valuable insights into global best practices, fostering cross-cultural exchanges that will undoubtedly enrich our collective understanding of dairy engineering. I would like to extend my heartfelt gratitude to the organizing committee, faculty, sponsors, and all those who have worked tirelessly to make this event possible. I hope that this conference will be a source of inspiration and knowledge for all of us. Let us seize this opportunity to learn, network, and collaborate, so that together, we can propel the Indian dairy industry to even greater heights.

I wish you all a productive and memorable conference.

Dr R. S. Sethi



## 13<sup>th</sup> IDEA Convention and International Conference

RECENT ADVANCES IN ENGINEERING APPLICATIONS FOR SUSTAINABLE DAIRYING

### MESSAGE

It is my immense pleasure that the 13<sup>th</sup> IDEA convention and international conference is being organized by the Department of Dairy Engineering, College of Dairy Science and Technology under the aegis of IDEA. The idea was first floated by Dr I K Sawhney, Vice President, IDEA some years back and it was materialized last year during the 12<sup>th</sup> IDEA convention as I asked my colleague Dr Gopika Talwar, Associate Professor to seek the 13<sup>th</sup> IDEA convention and conference at College of Dairy Science and Technology, Ludhiana, while I was on international training at USA. Since, it is very first international conference of the college so it is an opportunity for all the delegates to know about the college as well as the research outcomes that college was able to come up with in a very short span of its establishment.



The idea of having the title “Recent advances in engineering applications for sustainable dairying” was to bring other engineering streams such as electrical, mechanical and computer sciences on board to expose them to the field of dairy engineering so that the problems faced by the dairy sector can be solved through interdisciplinary research work.

I hope that during the course of proceedings of the conference some way out be found out to solve the current problems faced by the dairy sector to make it sustainable. A special industry-academia session was also planned in collaboration with Punjab State Council for Science and Technology to identify industry-based research problems that can be immediately addressed on priority basis. I hope that this session will surely come up with some concrete output.

I wish the almighty would shower its blessings on all delegates, College of Dairy Science and Technology, and also on Guru Angad Dev Veterinary and Animal Sciences University so that altogether can make the dairy sector a sustainable one.

Hoping all success for the event.

Dr Amandeep Sharma  
Organizing Secretary

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\*Source: CONSUMER VOICE - FEBRUARY 2023

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Dr S N Datta, COF  
Ms Navneet Kaur, Ph.D. Scholar  
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Mr Venus Bansal, CODST  
Mr Jaskarn Singh, AEO, DSW-cum-EO  
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Dr Nitika Goel, CODST  
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Mr Jaskarn Singh, AEO

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Dr P K Singh, CODST  
Dr Amandeep Singh,

**Finance Committee**

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Dr Varinder Pal Singh  
Dr Ajeet Singh, COF  
Mr Simranjit Singh, Master's Dairy Econ.

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Dr Sarabjit Kaur, COF  
Dr Nidhi Sharma  
Dr Nitika Goel, CODST  
Dr Satyaprakash, COABT

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Dr Gajanan P Deshmukh, CODST  
Dr Jaswinder Singh, DEE  
Dr Rajesh Kasrija, DEE  
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Mr Buta Singh, Technician

**Banner Preparation and Display Committee**

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Dr Nitin Wackchaure, CODST  
Dr Bilawal Singh, Gyn & Obst.

Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana came into being on 21<sup>st</sup> April, 2006 through Punjab Act no. 16 of 2005. The primary focus of the university is to serve the society by promoting livestock sector in Punjab through its teaching, research and extension programmes. The university is accredited by the Indian Council of Agricultural Research (ICAR), New Delhi - with 'A' grade, and has been ranked No. 1 university among the Veterinary/Animal Sciences University during the year 2018. NIRF has also given the 1st rank to the University in research. Here is an overview of the different constituent & affiliated institutes of Guru Angad Dev Veterinary and Animal Sciences University.

## INSTITUTIONAL STRUCTURE OF UNIVERSITY

### Constituent Colleges

- College of Dairy Science & Technology, Ludhiana
- College of Veterinary Science, Ludhiana
- College of Veterinary Science, Rampura Phul (Bhatinda)
- College of Fisheries, Ludhiana
- College of Animal Biotechnology, Ludhiana
- Veterinary Polytechnic, Kaljharani (Bhatinda)

### Regional Research & Training Centre (RRTC)

- RRTC, Kaljharani (Bhatinda)
- RRTC, Thalwara (Hoshiarpur)
- RRTC, Booh (Tarn Taran)

### Krishi Vigyaan Kendra (KVK)

- KVK, Majri (Mohali)
- KVK, Handiaya (Barnala)
- KVK, Booh (Tarn Taran)

### Affiliated Colleges

- Khalsa College of Veterinary and Animal Sciences, Amritsar
- Baba Hira Das Ji College of Veterinary Pharmacy, Badal (Sri Muktar Sahib)



## COLLEGE OF DAIRY SCIENCE AND TECHNOLOGY

To meet the trained manpower requirements of dairy industry in Punjab, College of Dairy Science and Technology was established in the year 2008 as one of the constituents colleges of Guru Angad Dev Veterinary and Animal Sciences University. B.Tech.(Dairy Technology) programme is the flagship programme of the college. The total intake capacity in this Programme is 51 students/ year. The college is accredited with ICAR, New Delhi and following the course curriculum as recommended by the 5<sup>th</sup> Dean's Committee of ICAR. Besides the undergraduate programme the college is also having Masters programme in all five disciplines and Ph.D. programme in four disciplines. Following the course curriculum as recommended by new BSMA Committee recommendation. The college is blessed with young and dynamic faculty with wide exposure and very good infrastructure, especially laboratory facilities and Experimental Dairy Plant. The university also has a special provision for candidates from outside Punjab under 'Other State Quota'.



### ADJUNCT FACULTY STATUS



**Dr RS Sethi**  
**Adjunct Professor**  
Department of Biomedical Sciences  
University of Saskatchewan  
Canada



**Dr Amandeep Sharma**  
**Adjunct Faculty**  
Department of Plant, Soil and Agricultural System  
Southern Illinois University  
Carbondale, USA

## INDIAN DAIRY ENGINEERS ASSOCIATION

There was always a need for Dairy Engineers' fraternity to have a common platform where they could exchange their ideas, share their views and experiences for the betterment of Dairy Industry in general and of their lot in particular. With the untiring efforts and wide Vision of the founder President Late Shri M.M. Munjial of Indian Dairy Engineers Association popularly known as 'IDEA', the Association could see the light of the day and came into being on 13<sup>th</sup> Feb 2002 when the first National Seminar was organized at Institutions of Engineers, Chandigarh. The theme of the seminar was 'The Role of Dairy Engineers' and had attendance of more than 280 engineers from across the country.

### EXECUTIVE COMMITTEE



**Er. Sumer Aggarwal**  
(President, IDEA)  
Former Additional  
Managing Director  
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Former Head DE  
Division, NDRI, Karnal



**Dr. Chitranayak Sinha**  
(Secretary, IDEA)  
Principal Scientist DE,  
NDRI, Karnal



## **ABOUT INDIAN DAIRY ENGINEERS ASSOCIATION CONFERENCE**

International conference on “Recent Advances in Engineering Applications for Sustainable Dairying” is going to be organized during October 13-14, 2023, at College of Dairy Science and Technology, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana under the aegis of Indian Dairy Engineers Association (IDEA). During the two days event about 200 delegates from India and other countries are expected to participate for sharing their state-of-the-art scientific findings. The aim of this international conference is to provide a common platform to the scientific community to discuss the advances in various engineering branches and their possible applications in the field of dairying. Dairy is a well growing field and a source of nutrition and livelihood for the major chunk of population across the globe. this sector is facing issues related to climate change, raw milk quality and its management, mechanization of milk processing, cold chain management during milk procurement and distribution etc.

**The two days international conference is divided into themes as follows:**

### **1. Dairy and applied engineering**

- Equipment design & testing, and manufacturing practices
- New materials
- Nano technology applications
- Packaging interventions

### **2. Engineering for sustainable dairying**

- Energy conservation and management
- Farm housing design for climate change mitigation
- Water management and conservation
- Dairy waste management

### **3. Robotics, Artificial intelligence, and IoT applications in dairying**

- Shelf-life predictive modelling
- Farm practice management

### **4. Cold chain management and logistics in dairy and food**

- Transportation
- Packhouse
- Refrigeration and Storage

### **5. Novel Bio-based interventions to enhance food quality and functionality.**

- Nutrition
- Engineered foods
- Quality control

### **6. Entrepreneurial Master Mind special poster session open to all engineering streams.**

## ABOUT LUDHIANA CITY

The venue of the 13<sup>th</sup> convention and International Conference, College of Dairy Science and Technology, Ludhiana, is very thoughtfully chosen by the Executive committee of the IDEA Ludhiana, the largest Industrial city of Punjab, established by the Lodhi Emperors in 1481, is commonly known as 'Manchester of India'. The city is well known for GADVASU, P.A.U., small scale industries, hosiery goods, bicycles, auto parts, textiles, and shopping malls. The city is located approximately 320 km from New Delhi and 100 km from Chandigarh. The nearest airport is Chandigarh Airport, officially known as Shaheed-e-Azam Bhagat Singh Airport Mohali, (IATA: IXC, ICAO: VICG). The various private taxi services are available directly from airport to Ludhiana. The distance from Ludhiana Junction Railway station (station code: LDH) and Bus Stand to University Campus is about 5 km which can be easily covered by frequent taxi or auto rickshaw services.

## WEATHER

The weather in Ludhiana is generally pleasant during October month (~ 21 to 27°C).

## ACCOMMODATIONS

University, sister university and nearby institutes have limited number of accommodations, it is advised that the delegates must submit their travel plan and accommodation requirements well in advance. The guesthouse accommodation will be available only on first come first serve basis (subject to prior registration along with fee). There are a good number of very well-rated hotels near to the university area. The interested delegates may book their hotels well in advance to avoid and rush. The accommodation charges to be born by the delegates and are not included in the registration fee.



## TEACHING & LABORATORY FACILITIES



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IN AGRICULTURE AND FOOD**

**Day : Wednesday**

**Date : January 11, 2023**

**Time : 1:00 PM**

**Venue : AG Building, 209**



**DR AMANDEEP SHARMA**

**About speaker**

Dr Sharma is working as Associate Professor at GADVASU and visiting SIU. He is working in the field of application of Engineering in food and agriculture now focusing Application of Artificial Intelligence for food safety.

Hosted By: Dr Ruplal Choudhary, School of Agricultural Sciences



## EXPERTS VISIT UNDER IDP-NAHEP





INDIAN DAIRY ENGINEERS ASSOCIATION (IDEA)

# Citation

LIFE TIME ACHIEVEMENT AWARD

## Dr Mahesh Kumar G

Dr Mahesh Kuam G is currently working as Professor & Head of Dairy Engineering Department at Dairy Science College, Hebbal, Bengaluru. He did his B.Sc. (Dairy Technology) from University of Agricultural Sciences, Bangalore in 1991 and M. Tech. in 1994. Thereafter, he served in multinational company as Director and designed more than 20 milk powder plants, Honey, tomato coffee processing projects. He served as Managing Director of Milk Tech Engineers till 2007. He joined Dairy Science College, Hebbal as Assistant Professor in 2007. He obtained his Ph.D. from 2013-2016 with Gold Medal from National Dairy Research Institute, Karnal. He has more than 50 publications to his credit. He has completed four research projects and two mega Milk processing and powder projects. He has guided more than 15 master's students. He was awarded with Best thesis award by Giract Switzerland, Indian Dairy Engineers Association also awarded with gold Medal by NDRI Karnal for his Ph D research. He has three patents to his credit. He is generating about Rs. 100 lacs revenue and developed Dairy Engineering Department to International standards. He has developed more than 20 no.'s of import substitute dairy and food processing equipments. He is a certified project consultant chartered Engineer. He has established **Incubation Innovation and Skill Development** Centre at Dairy Science College and guided more than 10 startups. He has also developed "UTKRUSHTA" dairy products brand and every month about 1-2 ton Ghee of this brand is being exported all over. He is consultant to Karnataka milk unions and to many MNC's.

In recognition of his meritorious services to the Dairy Engineering Profession, organizing committee of the 13<sup>th</sup> IDEA Convention and International Conference and IDEA take pride to honour Dr Mahesh Kumar G by presenting this citation on the occasion of 13<sup>th</sup> IDEA convention and international conference.

Dated: 13-10-2023

President  
Indian Dairy Engineers Association



INDIAN DAIRY ENGINEERS ASSOCIATION (IDEA)

# Citation

LIFE TIME ACHIEVEMENT AWARD

## Shri Devender Kumar Bansal

**Devender Kumar Bansal** ji a mechanical Engineer by profession begin his carrier from private sector job including the work at Danny Dairy, Saharanpur in 1979. He started his business with a workshop setup at his home for making pipe fittings for dairy sector and now having a factory on 4300 sq meter area at Saharanpur and is doing turnkey projects providing complete solution to the dairy industry. He is Managing Director of Bansal Technocrats. The brand "*Bansal*" is well known for its bulk milk coolers, dairy machines and equipment's and is a preferred brand amongst the clients.

Apart from professional life he is also Chairman of Laghu Udyog Bharti a MSME wing of the RSS, Saharanpur. As Chairman of the Laghu Udyog Bharti, he is raising the issues related to the MSME's and with his active participation many of them have been resolved by the Govt. He is also doing social work and do charity events for the welfare of the society. He is an avid Yoga practitioner since 1991 and also encourage others to follow the yoga to keep oneself healthy and hearty.

The most importantly, he is a happy family man with his wife, son, daughter-in-law and grand-daughter. His daughter and son-in-law live in Canada.

In recognition of his meritorious services to the Dairy Engineering Profession, organizing committee of the 13<sup>th</sup> IDEA Convention and International Conference and IDEA take pride to honour Shri Devender Kumar Bansal by presenting this citation on the occasion of 13<sup>th</sup> IDEA convention and international conference.

Dated: 13-10-2023

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Indian Dairy Engineers Association





## INDIAN DAIRY ENGINEERS ASSOCIATION (IDEA)

# Citation

### LIFE TIME ACHIEVEMENT AWARD

## Sardar Mohinder Paul Singh Chadha

**Sardar Mohinder Paul Singh Chadha** has devoted his entire life to the advancement of the dairy industry, leaving an indelible mark on the manufacturing of dairy equipment. His journey serves as a testament to visionary leadership and unwavering dedication.

Born on August 31st, 1940, his trajectory was influenced by his father, Sardar Makhan Singh Chadha, who migrated from western Pakistan in 1947. He completed his commerce degree from Delhi University and earned diplomas in personal management and business management. He established his Company, commencing the production of dairy appliances, thereafter established Chadha Sales Pvt. Ltd. Today, Chadha Sales Pvt. Ltd. stands as a pioneering force in the dairy machinery and equipment sector, garnering a reputation as one of the most trusted names in the industry.

A life member of the Indian Dairy Association since 1960, he is the oldest living member of the association. He held an executive position within the central body for nearly four decades. He served as the President (NZ) of the IDA for two terms.

Beyond his professional pursuits, he held the position of Lions District Governor encompassing Delhi, Haryana, and Himachal.

MPS is deeply entrenched in social service and philanthropy. Since 2013, he has been associated with the Delhi Sikh Gurdwara Management Committee (DSGMC) in various capacities, formerly as Vice-President. Presently, he holds the position of President in the Shrimoni Akali Dal (Delhi State), and he has been an elected member of the DSGMC from the Pitampura Shalimar Bagh Constituency continuously for three terms.

He also presently assumes the roles of Chairman at SGGGS College of Commerce (DU), Chairman of Sri Guru Tegh Bahadur Institution of Management & Information Technology (IP Univ), Chairman of Lions Public School, Chairman of Higher Education at DSGMC, and serves as the General Secretary of the International Sikh Heritage Center, among many other social organizations.

In recognition of his meritorious services to the Dairy Engineering Profession, organizing committee of the 13<sup>th</sup> IDEA Convention and International Conference and IDEA take pride to honour Sardar Mohinder Paul Singh Chadha by presenting this citation on the occasion of 13<sup>th</sup> IDEA convention and international conference.

Dated: 13-10-2023

President  
Indian Dairy Engineers Association

**LIST OF INDIAN DAIRY ENGINEERS ASSOCIATION  
“LIFE TIME ACHIEVEMENT AWARDEES”**

CONVENTION	YEAR & PLACE	CONVENOR	LIFE-TIME ACHIEVEMENT AWARDS
1 <sup>st</sup> Convention	2002 Chandigarh		-----
2 <sup>nd</sup> Convention	2003 Cancelled		-----
3 <sup>rd</sup> Convention	2005 Karnal	Er. I.K. Sawhney	<ol style="list-style-type: none"> <li>1. Er. R P Singh, CEO, Food &amp; Biotech Engineers (India) Pvt Ltd. Pirthla, Haryana</li> <li>2. Dr. S.P. Agrawala, Head Dairy Engineering Division, N.D.R.I. Karnal</li> </ol>
4 <sup>th</sup> Convention	2007 Anand	Dr. A. G. Bhadania	<ol style="list-style-type: none"> <li>1. Dr. U.S. Shah, Former Prof. and Head Dairy Engineering. SMC College of Dairy Science, Anand</li> <li>2. Dr. A.K. Banerjee, Former Director (Engineering), NDDDB, Anand</li> </ol>
5 <sup>th</sup> Convention	2008 Raipur	Dr. A. K. Aggarwal	<ol style="list-style-type: none"> <li>1. Dr. R. A. Choudhary, Former Dean, College of Dairy Science &amp; Food Technology, Raipur</li> <li>2. Dr. T. P Ojha, Former Director, C.I.A.E. Bhopal</li> </ol>
6 <sup>th</sup> Convention	2010 Bangalore	Dr. G. Mahesh Kumar	<ol style="list-style-type: none"> <li>1. Dr. T.N. Tulsidas, Professor Dairy Engineering, Dairy Science College, Hebbal, Bengaluru</li> <li>2. Er. S.A.D. Prasad, Former Principal Scientist, N.D.R.I. Bengaluru</li> </ol>
7 <sup>th</sup> Convention	2012 Tirupati	Dr. Ravi Kumar Sribhashyam	<ol style="list-style-type: none"> <li>1. Dr. J.V. Parekh, Parekh Technical Consultancy Services, Mumbai</li> <li>2. SSP Pvt. Ltd. Faridabad, Haryana</li> </ol>
8 <sup>th</sup> Convention	2013 Mumbai	Dr. J.V. Parekh	<ol style="list-style-type: none"> <li>1. Sh. Keshavji Gosrani, Chairman and Managing Director, Goma Engineering Company, Mumbai</li> <li>2. Sh. Vibhakar Kausubhrai Ghoda, Director, Perfect Solution, Mumbai</li> <li>3. Dr Balmukund Punamchand Shah, Former Principal and Dean of SMC College of Dairy Science, Anand \, Gujarat</li> <li>4. Sh. Akhilesh Kumar Jain, Managing Director, REIL, Jaipur, Rajasthan</li> </ol>

## LIST OF INDIAN DAIRY ENGINEERS ASSOCIATION “LIFE TIME ACHIEVEMENT AWARDEES”

9 <sup>th</sup> Convention	2014 Karnal	Dr. I.K. Sawhney	<ol style="list-style-type: none"> <li>1. Er. Narender Kumar Gupta, Prop. PMS Engineering Services, New Delhi</li> <li>2. Er. Mahesh Chand Chawla, MD, Process Engineers and Associates, NOIDA</li> </ol>
10 <sup>th</sup> Convention	2016 Anand	Dr. J. B. Upadhyay	<ol style="list-style-type: none"> <li>1. Er. Sumer Chand Aggarwal, Former Additional Managing Director, Milk-fed Punjab, Chandigarh</li> <li>2. Dr Ish Kumar Sawhney, Former Principal Scientist &amp; Head Dairy Engineering, NDRI Karnal, Haryana</li> <li>3. Dr Amrutlal G. Bhadania, Former Head Dairy Engineering Department, SMC College of Dairy Science, AAU, Anand</li> <li>4. Sh. Chandravadan M. Shah, Former Associate Professor, Dairy Engineering SMC College of Dairy Science, AAU, Anand</li> </ol>
11 <sup>th</sup> Convention	2018 Indore	Dr. I.K. Sawhney	<ol style="list-style-type: none"> <li>1. Dr. Ravi Kumar Sribhashyam, Former Head Dairy Engineering, S.V Veterinary University, Tirupati, A.P.</li> <li>2. Er. Ramesh Kumar Chugh, Former Chief General Manager (Production and Technical) HDDFC, Chandigarh</li> <li>3. Er. Vimal Chadha, Ved Engineering, NOIDA</li> </ol>
12 <sup>th</sup> Convention	2022 Pusad	Dr PG Wasnik	<ol style="list-style-type: none"> <li>1. Dr. J.B. Upadhyay, Ex-Principle of SMC College of Dairy Science, Anand,</li> <li>2. Dr. A.K. Agrawal, Prof, Dairy Engineering, College of Dairy Science and Food Technology, Raipur, Chhattisgarh</li> <li>3. Er. Sanjeev Sharma, General Manager, MILKFED, Punjab</li> </ol>
13 <sup>th</sup> Convention	2023 Ludhiana	Dr. Amandeep Sharma	<ol style="list-style-type: none"> <li>1. Dr. G. Mahesh Kumar, Head Dairy Engineering, Dairy Science College, Hebbal, Bengaluru</li> <li>2. Er. Devendra K. Bansal, Prop. Bansal Technocrat, Saharanpur</li> <li>3. Sh. M.P.S Chadha, Chadha Sales Corporation, New Delhi</li> </ol>

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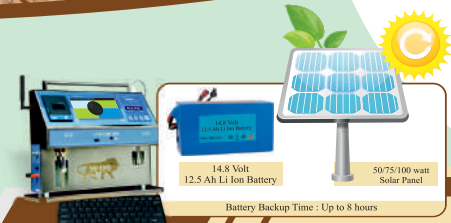
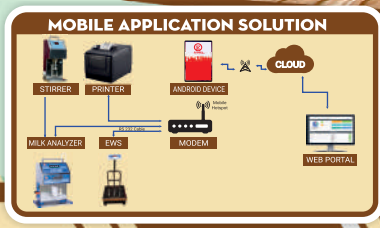
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