



8<sup>th</sup> International Feed Conference  
Present and Future Challenges

# FEED 2023

Milan, October 9-10



UNIVERSITÀ DEGLI STUDI DI MILANO



**divas**  
DIPARTIMENTO DI MEDICINA  
VETERINARIA E SCIENZE ANIMALI



**Chair: Prof. Luciano Pinotti**  
Chair of the Organizing Committee and  
Chair of the Scientific Committee



Dear Colleagues and Friends,

On behalf of the Local Organizing Committee, it is my pleasure to invite you to attend the 8<sup>th</sup> **International Feeding Meeting “Present and Future Challenges”**, that will be held at the Università degli Studi di Milano (Italy) October 9-10, 2023.

As seen in 2021, the availability of sufficient and safe feedingstuff is still a key challenge in modern agriculture. While the topic of undesirable substances in feed remains a major issue, the globalisation of the feed business has further reinforced the need for efficient tools for traceability of feed ingredients. Moreover, the constantly increasing demand for food from animal origin, along with limited resources, triggers the need for evaluating new sources of feed ingredients such as insects and efficient feed production. Additionally, the impact of climate change on feed production should be also taken into account. Keeping the feed safe and sustainable therefore requires a multidisciplinary approach, bringing together all stakeholders, including industry.

The 2023 International Feed Conference covers all the current interesting areas for animal feed, which will be presented in the following four sessions:

- Circular feed and additives
- Feed quality, safety and authentication
- Feed technology and novel processing techniques
- Feed and additives traceability

In today's world, sharing scientific knowledge, research findings, laboratory methods and strategies within the scientific community has become a necessity. The aim of this conference is to bring together, at a single event, scientists, researchers, laboratory personnel, policy-makers from governmental and non-governmental organizations and people from industry where they can share their knowledge, scientific experiences and experiments on subjects crucial to animal feed. With the participation of international experts, we hope that productive discussions will stimulate new creative ideas to translate new discoveries into better practices and applications.

For this eighth edition - FEED2023 – participants can attend in both online or directly at the venue.

Keynote and regular speakers will deliver their presentations in front of the audience in Milan.

Discussions will only be open to the audience in the conference venue.

We look forward to seeing you all in Milan at the FEED2023!

*Prof. Luciano Pinotti*  
*Chair of the Organizing Committee and Chair of the Scientific Committee*

## Scientific Committee

<b>Luciano Pinotti</b>	Chair of the Organizing Committee and Chair of the Scientific Committee DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Maria Cesarina Abate</b>	National Reference Center for the Animal Feed Surveillance and Control (C.Re.A.A.), Italy
<b>Vincent Baeten</b>	Walloon Agricultural Research Centre (CRA-W), Belgium
<b>Antonella Baldi</b>	DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Federica Cheli</b>	DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Robin Ornsrud</b>	Feed safety group at the Institute of Marine Research, Norway
<b>Irmengard Strnad</b>	Head of Institute of Animal Nutrition and Feed, Austrian Agency for Health and Food Safety, Austria
<b>Jorge Stroka</b>	European Commission, Luxembourg
<b>Philippe Vermeulen</b>	Walloon Agricultural Research Centre (CRA-W), Belgium
<b>Anthony Verschoor</b>	Wageningen University & Research, The Netherlands
<b>Ursula Vincent</b>	European Commission Directorate-General Joint Research Centre - Directorate F – Health and Food - Food & Feed Compliance (F.5)
<b>Christoph von Holst</b>	European Commission Joint Research Centre, operating manager of the European Union Reference Laboratory for feed additives, Belgium

# Local Organizing Committee

<b>Luciano Pinotti</b>	Chair of the Organizing Committee and Chair of the Scientific Committee DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Valentino Bontempo</b>	
<b>Eleonora Fusi</b>	DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Carlotta Giromini</b>	DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Daniela Marchis</b>	Responsabile S.S. Controllo Alimentazione Animale S.C. Controllo Chimico Head of NRL Animal proteins in Feed-CR.e.A.A. Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta
<b>Matteo Ottoboni</b>	DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Luciana Rossi</b>	DVM PHD DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Giovanni Savoini</b>	DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy
<b>Carlo Sgoifo Rossi</b>	
<b>Marco Tretola</b>	DIVAS – Department of Veterinary Medicine and Animal Sciences. University of Milan, Italy

# Timetable

9 Monday  
OCTOBER

08.00 - 13.00	Set Up
13.00 - 14.00	Registrations
14.00 - 14.30	Opening Ceremony
14.30 - 16.30	<b>Session 1</b> Circular Feed and additives
16.30 - 17.00	Coffee break and Poster Session
17.00 - 18.00	TBD
19.30	Welcome cocktail and Conference Dinner

10 Tuesday  
OCTOBER

09.00 - 11.00	<b>Session 2</b> Feed quality, safety and authentication
11.00 - 11.30	Coffee break and Poster Session
11.30 - 13.30	<b>Session 3</b> Feed technology and novel processing techniques
13.30 - 14.30	Lunch
14.30 - 16.30	<b>Session 4</b> Feed and additives traceability
16.30 - 17.00	Coffee break and Poster Session
17.00 - 17.30	TBD
17.30 - 18.00	Closing Ceremony

# Topics and Key words

## 1 Session Circular Feed and additives

With diminishing availability of farming land, climatic changes and the threat of declining water resources, the task is to meet the growing demand for food, feed, fibre, fuel, and industrial products using less resources. This latter aspect will reduce use and redistribution of resources - in other words: 'Do more with less!'. These aspects, together with the increase in the cost of traditional feed for production animals over the last years, persuaded feed researchers and producers are looking into alternative sustainable protein and energy sources for feeding animals. For example, Insects, algae, ex-food... Insects, algae, ex-food (also termed former food products), hemp-based products, wood by-products, winery by-products as well as duckweed are seen as interesting alternative protein/energy sources for feed and are expected to be increasingly used around the globe as replacers for conventional nutrients sources.

**Key words:** innovative feed and additives; insects, ex-food, algae, agro-industrial co-products, sustainability; circular economy

## 2 Session Feed quality, safety and authentication session

The importance of quality, safety and authentication in the feed chain cannot be underestimated. Feed quality and safety start with the characterisation and selection of high-quality raw materials and require the use of appropriate processing methods at the farm and industry

levels. Feed quality is crucial as it has a direct impact on the health and productivity of the animals. Feed safety plays a major role in the global safety of the food chain by reducing the risk of contaminants and impurities entering the food chain. With the globalisation of the production, authentication issues (including assessment of origin and fraud detection) may be a future challenge for the feed sector and this warrants well developed control practices.

**Key words:** quality, safety, authentication, traceability, fraud

## 3 Session Feed Technology and Novel Processing Techniques

Animal feed has a social responsibility to contribute to more sustainable food production systems. The section focuses on challenges and future directions in feed technology. Novel processing techniques may significantly contribute to improve the nutritional value of raw materials and compound feeds or reduce impact on scarce resources e.g. energy, water and minerals. It is important that structures and functional properties of feed components and their changes with processing are fully understood. From a feed industry perspective, novel techniques must be scalable to economically feasible processes. In this scenario new and alternative feed ingredients demand the development of suitable techniques to recycle more of the food wastes and transform these into valuable ingredients for animal feed. For future process optimisation, collaboration between skilled

data scientists, machine experts, technologists and nutritionists is necessary.

**Key words:** Feed processing, Novel and emerging processing techniques, Quality and safety, Scaling up

## 4 Session Feed and additives traceability

Compound feed is a complex mixture of feed materials and feed additives, where the farmer relies on the information about its composition given on the packing label of these products. The details of these descriptions and other supporting documents on the origin of the ingredients should assure that the feedingstuffs meets the expectations in terms of benefits and safety. Indeed, the compound feed needs

to satisfy the nutritional needs of the animals but also be safe for both the animals and the consumer. Moreover, some of the feed additives are even supposed to improve the performance of food producing animals. While such claims and safety criteria are supported by sound scientific studies, it also important to ensure that only ingredients are used that meet these criteria. Therefore, there is a strong need for concepts that allow for full traceability of the ingredients. Important components of these concepts include for example fit for purpose analytical methods or the use of specific markers.

**Key words:** Control of product label, Innovative analytical methods, marker concepts



# Abstract Submission

Congress delegates are cordially invited to submit abstracts of their scientific work for presentation as a free communication at Feed2023. Only one abstract may be submitted provided the presenting author applies for “early registration”. A limited number of abstracts will be selected for oral presentation during congress symposia. Authors wishing to compete for these oral communication slots should mark the appropriate field on the on-line abstract-submission form. Following the evaluation process, abstracts that are not selected as oral by the scientific committee may be presented as posters.

## General requirements

The text must be clear, concise, and written in proper English. The content must not have been previously published in academic journals or subject to peer review. Significant technical information must not be withheld.

Abstracts must absolutely contain results. Statements such as “results will be discussed” are not acceptable and will lead to rejection.

Each presenting author can present maximum 2 abstracts.

Presenting authors must attend the event in-presence and therefore should be registered with the in-presence registration fees (Delegates/Students/PhD Students).

## Deadline for receipt

Abstracts should be submitted by **31<sup>st</sup> May 2023**.

## Confirmation of receipt

Receipt of the abstract will be acknowledged by e-mail immediately after submission.

## Notification of acceptance or rejection

Authors will be notified of acceptance or rejection by **30<sup>th</sup> June 2023**.

## Registration

The presenting author of each abstract must register for the congress with “Full Registration” by **15<sup>th</sup> July 2023**.

## Abstract topics

- Circular Feed and additives
- Feed quality, safety and authentication
- Feed technology and novel processing techniques
- Feed and additives traceability

## Structure of the abstract

Abstracts can be structured in a unique text and may include:

### • BACKGROUND

a brief introduction stating the purpose of the investigation and its relevance to laboratory medicine;

### • METHODS

a description of the methodology used;

### • RESULTS

to be supported by statistical analysis or other evidence to show their validity;

### • CONCLUSIONS

The body of the abstract must not exceed **3000 characters**, spaces included.

## How to prepare and submit an abstract

It is important to carefully follow the instructions below. Incorrectly prepared abstracts will be rejected.

- Abstracts should be prepared off-line in advance;
- Prepare your abstract on a word processor (such as Microsoft Word);
- Do not include title, authors' names and affiliations in the abstract file;
- Tables and figures are not allowed;
- References are not allowed;
- When abbreviations are used, spell out the full word at first mention in the text followed by the abbreviation in parentheses. Thereafter, use the abbreviation throughout.

When the on-line system requires the abstract to be entered, copy and paste your text.

Abstracts are limited to **3000 characters**, spaces included (title, authors' names and affiliations excluded).

The system will automatically notify you if the abstract exceeds this number of characters.

Title, author(s) and affiliation(s) must be added separately at the appropriate step.

Abstract authors are asked to indicate the most suitable topic for presentation of their work.

For information regarding poster submission:

[feed2023abstracts@vetinternational.eu](mailto:feed2023abstracts@vetinternational.eu)



# Registration Fees

All delegates must register for the congress.  
Registration fees are as follows:

	<b>EARLY</b> Valid until 15 <sup>th</sup> July	<b>REGULAR</b> Valid until 25 <sup>th</sup> September
Delegate Veterinarians / Scientists	€ 400,00	€ 430,00
Students/ Trainees / Retired	€ 250,00	€ 280,00
Conference Dinner	Included in the registration fee	

VAT 22% included

After 25th September registration possible on-site only

\* Registration in the STUDENT category is only open to people able to provide a valid official certificate. To validate this, documentary proof of this status must be forwarded to: [feed2023@vetinternational.eu](mailto:feed2023@vetinternational.eu)

\*\* Places for the dinner are limited. Please confirm your attendance at the dinner when registering online

Virtual	€330,00	Available until 6 <sup>th</sup> October
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## **The registration fees in presence include:**

- Admission to full scientific program
- Coffee breaks (3 services)
- Lunch
- Conference Dinner
- Congress kit
- Abstract Book on web site
- Access to exhibition and posters areas
- Certificate of Attendance

## **The registration fees virtual include:**

- Admission to full scientific program
- Abstract Book on web site
- Certificate of Attendance

## **INVOICING**

When filling out the online registration form we strongly recommend to pay particular attention to the Invoicing page.

Before registering, carefully check who the invoice shall be headed to and make sure you have all relevant information:

- header
- address
- VAT code
- fiscal code (for Italians only)
- PO number (if required)

Make sure the invoice details you are going to indicate are the correct ones. In case of requests for data corrections and/or invoice re-issuing due to wrong data submission, the Organizing Secretariat will apply a fee of € 50,00 for each new document re-issued, which shall be paid in advanced.

## **REMITTANCE**

Registration fees shall be paid by credit card or bank transfer through the available on-line system.

When paying by bank transfer, a copy of the transfer receipt must be sent to [feed2023@vetinternational.eu](mailto:feed2023@vetinternational.eu)

Registrations without proof of payment will not be accepted.

The organising secretariat will send registration confirmation upon receipt of payment by e-mail.

Please be sure your e-mail address is filled in correctly.

## **PERSONAL INVITATION FOR VISA PURPOSES**

To facilitate congress attendance a personal invitation can be sent on request. This invitation does not exempt the recipient from registering and paying the proper congress fee. Please inform the congress secretariat if you need a personal invitation letter. Registration fees and charges for all events related to the Feed Conference 2023 must be paid in euros.

## **CANCELLATION AND REFUND**

Cancellations must be sent to [feed2023@vetinternational.eu](mailto:feed2023@vetinternational.eu).

The amount equal to 50% of the fee paid will be refunded for cancellations received by 31<sup>st</sup> July 2023.

After 31<sup>st</sup> July 2023 no refunds will be issued.

All refunds will be paid in euros after the congress.

## **CANCELLATION OF THE CONGRESS**

The congress secretariat reserves the right to cancel the congress, shift venue or change dates without notice in case of "force majeure". Neither VET International nor the Congress Organising Committee shall be liable for any damage claims.

## **LIABILITY AND INSURANCE**

Registration fees do not include the insurance of participants against personal accidents, sickness and cancellations by any party, theft, loss or damage to personal possessions. Participants are advised to take out adequate personal insurance to cover travel, accommodation, cancellation and personal effects.



## Conference Venue

**Università degli Studi di Milano**  
Via Festa Del Perdono 7, 20122 Milan (Italy)  
<https://www.unimi.it/it>



UNIVERSITÀ DEGLI STUDI DI MILANO



### HOW TO REACH THE CONFERENCE VENUE

#### Linate Airport

Is about 10 km from Milan city centre. Take bus N. 73 to the city centre and get off at Piazza Fontana, a few minutes walk from the University of Milan.

#### Malpensa Airport

Is about 50 km from Milan city centre. There are trains (Malpensa express) and buses (Malpensa shuttle) to the Central Station and to Cadorna Railway Station. Once you are at Cadorna station take Metro 1 (direction: Sesto 1 maggio FS) and get off at Piazza San Babila if you intend to go to the congress venue.

#### The Central Station (Stazione Centrale)

Milan's main railway station, is located at the hub of the transport network. This is also where two of the main underground lines intersect (line 2/green line; line 3/yellow line). Buses (54, 60, 73, 84, 94) trams (12, 14, 15, 16, 23, 24, 27) and the underground (Duomo station – line 1; Missori station – line 3) all stop nearby.

Sponsors

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**Organizing Secretariat**

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