

# THE 13<sup>™</sup> ISAA SYMPOSIUM PROGRAM RIO DE JANEIRO, BRAZIL APRIL 6 - 11, 2025

The ISAA Scientific Committee reserves the right to adjust the program at any time.

## Sunday, April 6th

13:00-16:00 Trade Show Setup

**15:00-18:00** Registration Open

# Monday, April 7<sup>th</sup>

**9:00-12:00** Trade Show Setup

9:00-17:00 Registration Open

12:00-13:30 Lunch

14:00-14:30 Opening Remarks

**14:30-15:20 Keynote:** Development Sustainable and Integrated Crop Protection Formulation

Solutions

Presenter: Hui Shao Affiliation: Corteva

15:20-15:40 Innovative Solutions for Addressing Challenges in Agrochemicals: A Focus on Crystal

growth inhibitor, Formulation Stability and Rainfastness

Presenter: Filiz Yapici

Affiliation: Levaco Chemicals GmbH

15:40-16:00 Leverage adjuvants to reduce environmental impact of crop protection

formulations Presenter: Andre Karadi

Affiliation: BASF Corporation

16:00-16:30 Coffee Break

16:30-16:50 Translating Adjuvant Science into Products for Growers in Brazil

Presenter: César Silva Affiliation: Syngenta



16:50-17:10 Overview of Viscoelastic Properties of Leaf Surfaces/Cuticles: Response to

Environmental Conditions, Aging, and Adjuvants

Presenter: Natalia Lebedeva

Affiliation: Syngenta Crop Protection

17:10-17:30 Artificial Neural Networks as a powerful tool to predict bioefficacy notes based on

weed photosynthesis after herbicide application

Presenter: Roberto de Oliveira Portella

Affiliation: Crop Solutions, Indorama Ventures

17:30-17:50 A novel non-microplastic adjuvant for high performing retention and rainfastness

properties

Presenter: Ruifei Wang Affiliation: Nouryon

18:00-19:30 Opening Cocktail Reception

# Tuesday, April 8th

9:00-17:00 Registration Open

#### Sustainability

8:30-9:20 Keynote: Controlled-Environment Agriculture: Opportunities in High-Tech Food

Production for the Agrochemical Industry

Presenter: Q. Willam Meng

Affiliation: University of Delaware

9:20-9:40 Eco-toxicity of different agricultural tank-mix adjuvants

Presenter: Daniel Bonn

Affiliation: Van der Waals-Zeeman Institute, University of Amsterdam

9:40-10:00 Discovery Guar: A Versatile and Sustainable Technology for Agricultural Applications

Presenter: Ana Paula Bodemeier

Affiliation: Syensqo

10:00-10:30 Coffee Break

10:30-10:50 Utilizing Vegan Wax as a Microplastic-Free Additive in Agrochemical Formulations

Presenter: Yuliang Wang Affiliation: Innospec Inc.



10:50-11:10 Enhancing Glufosinate Ammonium Efficacy with Novel Adjuvant

Presenter: Ganesh Sanganwar

Affiliation: Syensqo

11:10-11:30 Novel Biodegradable Superspreader for Agrochemical Formulations

Presenter: Jeferson Naue

Affiliation: Momentive Performance Materials

11:30-11:50 Foliar wetting enhancement by alkoxylated alcohol

Presenter: Chris Pawling

Affiliation: Stepan Company, Global Technology Center

11:50-12:10 Novel Amphoteric Adjuvant for Enhanced Herbicide Uptake and Weed Control

Presenter: Gabriela Almeida

Affiliation: Indorama Ventures - Indovinya

12:10-12:30 Synergistic effects in mixtures of adjuvants and the impact of the latter on the

biological effectiveness of herbicides

Presenter: Olga Ulybina

Affiliation: Avgust Crop Protection

12:30-14:00 Lunch

#### **Soil and Water Concerns**

14:00-14:20 Enhancing Soil Water Management in Irrigated Crops with a Soil adjuvant

Presenter: Roberto de Oliveira Portella

Affiliation: Crop Solutions, Indorama Ventures

14:20-14:40 Optimizing Soil Moisture and Building Resilience to Water-related Challenges Using

Adjuvants

Presenter: Javier Campos

Affiliation: Clariant

14:40-15:00 Water conditioner with the function of correcting boron deficiency for foliar

application with microfertilizers based on boron ethanolamine

Presenter: Ivan Orgei Affiliation: UAB Nando

15:00-15:20 Assay for the Selection of Adjuvants for Pre-Emergent Herbicides

Presenter: Jason Wall Affiliation: Croda Inc.

15:20-17:30 Poster Session I / Coffee Break



## Wednesday, April 9th

## **Biological Workshop**

8:30-9:00 Biological Innovation in Agriculture: Trends and market opportunities

Presenters: X. Sam Zhu Affiliation: Corteva

9:00-9:20 Compatibility of Co-formulants with Agricultural Biological Strains

Presenters: Xiangtao Meng, Caroline Woelfle-Gupta, Ashish Jayaraman, Lucelena Cardoso,

Henrique Alves

Affiliation: Dow Chemical Company

9:20-9:40 Improvement of shelf life and the biological efficacy of microbes in formulations

Presenter: Ryan Stiltoner

Affiliation: Evonik Operations GmbH

9:40-10:00 Cutting edge nanoemulsion adjuvant technology to improve foliar applied biological

formulations

Presenter: Katharina Grundler Affiliation: Clariant Brasil Ltda

#### 10:00-10:20 Coffee break

10:20-10:40 Management of insect/pest of Poplar Defoliator (Clostera cupreata) through

biological means

Presenter: Rashmi Sehrawat

Affiliation: Department of Basic Science, Sardar Vallabh Bhai Patel University of Agriculture and

Technology

10:40-11:00 Formulating biopesticides – approaches to effective and reliable microbial

formulations for agriculture

Presenters: Raquel Tomboly, Guilherme Freitas, Carlos Oliveira

Affiliation: Croda do Brasil

11:00-11:20 Biobased Co-formulants for Biocontrol Formulations

Presenter: Abby Smith Affiliation: Borregaard USA



11:20-11:40 Enhancing versatility of oil adjuvants in terms of biocompatibility and formulability

by targeted release microencapsulation Presenters: Alexandre Brosse<sup>1</sup>, Peter Baur<sup>2</sup> Affiliations: 1: Calyxia, 2: CropPromotion

11:40-12:00 Biologicals: Liquid carriers for ease of use and shelf-life extension

Presenters: Celine Orizet Affiliations: Syensqo RIC Paris

12:00-13:00 Grab and Go Lunch

13:00-17:30 Excursion: Christ the Redeemer

18:30-21:30 ISAA Banquet

# Thursday, April 10th

### **Environmental Effects and AI, ML**

8:30-8:50 AX22227 A Novel Pesticide Adjuvant to Reduce Drift and Improve Deposition and

Efficacy

Presenter: Ryan Rector

Affiliation: Adjuvants Unlimited, LLC

**8:50-9:10** Adjuvant for cotton defoliant application

Presenter: Jason Chen

Affiliation: Stepan Asia Pte Ltd

9:10-9:30 Design of New Adjuvants Accelerated by Machine Learning

Presenter: Peter Westbye

Affiliation: Nouryon

9:30-9:50 Computational and Experimental Strategies to develop TLR4 agonist Peptides as

Potential Vaccine Adjuvant Presenter: Vijay Kumar Prajapati

Affiliation: Department of Biochemistry, University of Delhi South Campus

9:50-10:10 Special alkoxylates as label-free multifunctional components for improved bio-

efficacy

Presenter: Luciana Bodelon

Affiliation: Clariant



#### 10:10-10:40 Coffee Break

### **UAV Applications - I**

**10:40-11:00** The effect of a rainfastness adjuvant (IPP-04) on improving the control efficacy of UAVs application pesticide against Fusarium head blight of wheat

Presenter: Xiaojing Yan

Affiliation: Key Laboratory of Integrated Pest Management in Crops, Ministry of Agriculture,

Institute of Plant Protection, Chinese Academy of Agricultural Sciences

11:00-11:20 Evaluation of the droplet spectrum generated in drone applications using a wind

tunnel

Presenter: Ulisses R. Antuniassi

Affiliation: São Paulo State University (UNESP)

11:20-11:40 Strategic Adjuvant Selection for Enhanced Efficacy in UAV-Based Pesticide

**Applications** 

Presenter: Huizhu Yuan

Affiliation: Key Laboratory of Integrated Pest Management in Crops, Ministry of Agriculture,

Institute of Plant Protection, Chinese Academy of Agricultural Sciences

#### 12:30-14:00 Lunch

#### **Formulations**

14:00-14:20 Evaluating Sustainable Alternatives to Nonylphenol Ethoxylates in Agricultural

**Formulations** 

Presenter: Shawn Dickess Affiliation: BASF Corporation

14:20-14:40 Biodegradability as a prerequisite for sustainable agrochemical formulation

Presenter: Doris Kremzow-Graw

Affiliation: BASF SE

**14:40-15:00** Rheology modifiers for oil dispersion formulations

Presenter: Shrikant Aherkar Affiliation: Stepan Asia Pte Ltd

**15:00-15:20** Maleated Natural Oil Disperants for Use in Agriculture

Presenter: William C. Floyd III Affiliation: Ethox Chemicals LLC



**15:20-15:40** All-in-one OD formulation solutions for biologicals

Presenters: Renaud Perrin<sup>1</sup>, Amel Madmar<sup>1</sup>, Alexander Nikoloff<sup>3</sup>, Hanna Leffort<sup>3</sup>, Abbey Sells<sup>3</sup>,

Eric Weber<sup>3</sup>, Chris Pawling<sup>2</sup>, Ron Masters<sup>3</sup>

Affiliations: 1. Stepan Europe S.AS, 2. Stepan Agricultural Innovation Center, 3. Stepan Global

**Technology Center** 

15:40-16:00 Innovative and sustainable solvents associations for high performing fungicides ECs

Presenter: Monique Adamy

Affiliation: Syensqo Novecare Agricultural Specialties

16:00-18:00 Poster Session II / Coffee Break

18:00-19:30 Cocktail Reception

## Friday, April 11th

## **UAV Applications - II**

8:30-8:50 Drift reduction and aerial application

Presenters: Andre Karadi, Jiao Wang

Affiliation: BASF Corporation

8:50-9:10 Improving Drone Application efficiency by increasing actives deposition and droplet

coverage

Presenter: Heloisa Gonçalves

Affiliation: Indorama Ventures – Indovinya

**9:10-9:30** Digitization and Practice of Drone Spraying System

Presenter: James Qin

Affiliation: Jiangsu SinvoChem S&T Co, LTD.

9:30-9:50 Evonik's Novel Adjuvants for Drone Application Technology in Agriculture

Presenter: Rene Haensel

Affiliation: Evonik Operations GmbH

9:50-10:10 Adjuvant Technology for Enhancing Drone Spray Deposition and Coverage

Presenter: Stephanie Gießler-Geiß

Affiliation: Clariant

10:10-10:30 Coffee Break

10:30-12:00 Panel Discussion: Global Perspective: Technology and Regulatory Impact on

Adjuvant Development



## 12:00-12:15 Final Remarks

## 12:15-12:30 Symposium Adjourns



## **Poster Session**

1. How to design liquid formulations of fungi spores obtained from liquid fermentation Presenters: Laís Caroline Rissatto, Poliana Cardoso-Gustavson Affiliation: Agrivalle, Industry and Commerce of Agricultural Products S.A, Brazil

2. Harvesting the Future: Integrating AI and Machine Learning in Adjuvants Research,

Development and Innovation

Presenters: Marcelo Hilário Figueira Garcia

Affiliation: Sell Agro, Research, Development and Innovation Dept

3. The Challenges for Precision Application and the Role of Adjuvants

Presenter: Simon Caldwell

Affiliation: Syngenta

4. Tank Mix Solutions from Syensqo - Overcoming Challenges of the Adjuvants used for the

Drone Spray Applications Presenter: Ritu Ahuja Affiliation: Syensqo China

5. Optimizing Seed Coating Performance: The Critical Role of Binder Mechanical Properties

in Sustainable Agriculture Presenter: Alexandra Aulova

Affiliation: Nouryon Surface Chemistry

6. How Silicones benefit biological systems as co-formulants

Presenter: Eliane Emond

Affiliation: Elkem Silicones France

7. Prediction of Spray retention via surface tension measurements

Presenter: Markus Fiess Affiliation: BASF SE

8. Many hands make light work: Speeding the biologicals formulation development

through co-development

Presenter: Ana Paula Bodemeier

Affiliation: Syensqo

9. Optimization of the Early Detection of Toxicity in Biological Formulations

Presenter: Sam Zhu Affiliation: Corteva



10. Design and Investigation of Hyper-dispersant for High-Loading OD Formulation

Presenter: James Qin

Affiliation: Jiangsu SinvoChem S&T Co., Ltd

11. Molecular modeling tools to identify a new, aprotic, high-performance solvent for

agrochemical formulations Presenter: Adam Blanazs

Affiliation: BASF SE

12. Preservation challenges in agricultural biological formulations: best practices and approaches

Presenter: Alexandra Paschoalin Affiliation: Clariant Brasil Ltda.

13. Hostapur CW: plant derived tool to mitigate abiotic stress in Crops

Presenter: Pablo Rodriguez Affiliation: Clariant Argentina

14. Rational Design of New Pesticide Bioactivators: In vitro Test Method and Agronomic

Efficacy

Presenter: Oleksandra Zavgorodnya

Affiliation: Syensqo

15. Cross Indication Adjuvants Combining High Performance and Formulation Properties

Presenters: Renaud Perrin<sup>1</sup>, Jordan Craft<sup>2</sup>, Ansley Almond<sup>2</sup>

Affiliation: 1. Stepan Europe S.AS, 2. Stepan Agricultural Innovation Center

16. Agnique® PG Alkyl Polyglucosides: Surfactants for Agricultural Applications

Presenter: Shawn Dickess

Affiliation: BASF

17. Performance of built-in foliar uptake adjuvants based on 2-ethyl hexyl alkoxylates

Presenter: Monique Adamy

Affiliation: Syensqo Novecare Agricultural Specialties

18. Tank-mix adjuvants improved spray performance and biological efficacy in rice

insecticide application with unmanned aerial spraying system

Presenter: Changling Wang

Affiliation: College of Science, China Agricultural University

19. Clariant VITA product range of 100% bio-based and fully segregated surfactants for more

sustainable crop protection formulations

Presenter: Jenifer Rocha Affiliation: Clariant



20. Modified Cellulose Ethers as Drift Control Agent in Spray Application

Presenters: Q. Wendy Yuan-Huffman, Mojahed Islam

Affiliation: Nouryon

21. AltaHance™ Multifunctional Adjuvants with Tunable Rainfastness

Presenter: Petr Koutnik

Affiliation: Ingevity Corporation

22. Nouryon solutions for Biologicals

Presenter: Bruna Burger Affiliation: Nouryon

23. New Powerful and Flexible Polymeric Dispersing Agents

Presenters: Mojahed Islam, Q. Wendy Yuan-Huffman

Affiliation: Nouryon

24. Polymeric Dispersants

Presenters: Ashley Leroi, José Santiago, Maxime Feche, Nicolas Toselli, Romane Bellec,

Sandrine Monthei

Affiliation: Stepan Europe S.A.S.

25. To develop a more sustainable in-can adjuvant for glufosinate that enhances its performance in low humidity conditions

Presenters: Ferry Hermawanto, Ching Lee

Affiliation: Nouryon

26. Effect of animal protein and sphingolipid derivates on glyphosate effectiveness

Presenter: Julio Menendez

Affiliation: Universidad de Huelva. Dept. Ciencias Agroforestales, E.T.S.I

27. Superior Performance of Sprayfix: A Natural Terpene-Based Adjuvant Compared to

Commercial Benchmarks in Glyphosate Formulations

Presenter: Julio Menendez

Affiliation: Universidad de Huelva. Dept. Ciencias Agroforestales, E.T.S.I.

28. Comparative Study of Glyphosate Rainfastness with Latex, Organosilicone, and Mixed-

**Function Adjuvants** 

Presenter: Julio Menendez

Affiliation: Universidad de Huelva. Dept. Ciencias Agroforestales, E.T.S.I.

29. Evonik's biobased sustainable multifunctional adjuvants

Presenter: Marta Gomes
Affiliation: Evonik Brasil Ltda.



30. Enhancement of pesticide penetration with a novel MSO-based adjuvant

Presenter: Marc McPherson Ph.D.<sup>1</sup>, Alissa Singer<sup>2</sup>

Institution: 1. Evonik Corporation, 2. Evonik Operations GmbH

31. Effect of vegetable-methylated oils on sulfonylurea effectiveness

Presenter: Julio Menendez

Affiliation: Universidad de Huelva. Dept. Ciencias Agroforestales, E.T.S.I.

32. Optimizing Adjuvant Selection in Agrichemical Formulations

Presenter: Ke Min

Affiliation: Corteva Agriscience

33. Enhancing the bioefficacy of NPK fertilizers in soil applications with Silwet Power

Presenter: Mayur Kankale

Affiliation: Momentive Performance Materials Inc.

34. A New Biodegradable Organosilicone Super-spreader for Biological Spray Applications

Presenter: Michael Shields

Affiliation: Momentive Performance Materials Inc.

35. Dispersogen® PSL 100: high performing dispersant to address seed treatment

formulation challenges Presenter: Robert Milbradt

Affiliation: Clariant

36. SURFOM® 8963 New solution for Ammonium-Glufosinate liquid high load

Presenter: Gabriela Almeida

Affiliation: Indorama Ventures – Indovinya

37. SURFONIC® AG 1700/1705 - Special solvents for agrochemical compositions

Presenter: Gabriela Almeida

Affiliation: Indorama Ventures - Indovinya

38. Boosting Performance of Next Generation Fungicides with an Organosilicone Adjuvant

Presenter: Thiago Czelusniak

Affiliation: Momentive Performance Materials Ind. Sil. Ltda.

39. Organosilicone-based spray adjuvant for drone applications

Presenter: Taylor Gold

Affiliation: Momentive Performance Materials Inc.

40. TERSPERSE® 2612 - Novel polymeric dispersant for agrochemical formulations

Presenter: Anthony Mai

Affiliation: Indorama Ventures – Indovinya



41. The power of powder surfactants to maximize biological agent effectiveness

Presenter: Luis Gustavo Fávaro Gouvea

Affiliation: Nouryon's Technical Services team for Agriculture and Food in South America

42. Unleashing phosphate ester potential A Suspo-emulsion development case study

Presenter: Luiz Fellipy Borges

Affiliation: Nouryon's Technical Services team for Agriculture and Food in South America

43. Overcoming the potential for adjuvant induced phytotoxicity in citrus applications

Presenter: Z.Y. Cao

Affiliation: Momentive Performance Materials Inc.

44. Ashland easy wet 300 n sustainable wetting agent

Presenter: Kiel Moore

Affiliation: Global Technology Group Leader, Crop Care

45. Geraniol as an Adjuvant to Enhance Agrochemical Delivery for Effective Control of HLB in Citrus Leaves Presenters: Huizhu Yuan, Shuning Chen, Daibin Yang, Xiaojing Yan Affiliation: China and Key Laboratory of Integrated Pest Management in Crops, Ministry of Agriculture, Institute of Plant Protection, Chinese Academy of Agricultural Sciences

46. Enhancing tank mix application with Agrilan 1084: The ultimate compatibility solution

Presenter: Bruna Bürger

Affiliation: Nouryon's Technical Services team for Agriculture and Food in South America

47. Energy-efficiency improvements for producing liquid pesticide dispersions

Presenter: Ivanov Roman

Affiliation: Avgust Crop Protection

48. Boosting Agrochemical Effectiveness with Sustainable Solvent Solutions

Presenter: Rafael Pires-Oliveira

Affiliation: Eastman

49. Advancing Agrochemicals: The Future of Seed Coatings with Microplastic-Free Binders

Presenter: Ana dos Santos

Affiliation: Eastman

50. High-performance acid adjuvant - foam break and inhibition solution

Presenter: Giulia Piagentini Delpino

Affiliation: Stepan Company



51. BIOMAP - Rapid Assessment of Co-Formulant Biocompatibility with Bacteria and Fungi in

Biopesticide Formulations Presenter: Isabella Kitano

Affiliation: Indorama Ventures - Indovinya

52. Dry Additives for Agrochemical Formulation Applications

Presenter: Yuliang Wang Affiliation: Innospec Inc.

53. Adjuvants for Biofungicides

Presenter: Jiao Wang

Affiliation: BASF Corporation, Care Chemicals

54. Novel Polymeric Dispersant for Next Generation Biological Formulations

Presenter: Isabella Kitano

Affiliation: Indorama Ventures – Indovinya

55. Agnique Biohance - Enhancers for Biological Actives in Biopesticides Formulations

Presenter: Jiao Wang

Affiliation: BASF Corporation, Care Chemicals

56. Validation of Performance for Sustainable In-Can Preservatives in Agricultural

**Formulations** 

Presenter: Coralie Mission Affiliation: Minagro SRL

