#### **SCIENTIFIC PROGRAMME**

# 15<sup>th</sup> IUPAC International Congress of Crop Protection Chemistry:

Juturistic Approaches Towards Seed to Market Strategies

Bharat Ratna C. Subramaniam Auditorium (NASC Complex) New Delhi, India

#### March 13th 2023

4.30–6.30 PM Registration at C. Subramaniam Auditorium

7.30 PM Onward Reception Dinner

All Lunch and Dinner in the Exhibition cum Dining Hall

All concurrent sessions will be held in Halls A, B, C, D, E, F and G

PL: Plenary Lectures (45 minutes)

IL: Invited Lectures (25 minutes)

OP: Oral Presentations (15 minutes)

Poster Hang-up and Presentation upload will be from 8.30-9.30 am everyday in respective Halls

(All Plenary Lectures will be in Hall A)

#### March 14th 2023

8.30-9.30 AM	Registration (Reception Desk)
SESSION 01	INAUGURALFUNCTION
10.00-11.40 AM	Inauguration in Hall A
11.40-12.00 PM	TEA
SESSION 02	Chairperson: T. Mohapatra and K. Matsuda
12.00-12.45 PM	<b>PL-1 Himanshu Pathak</b> - Pest Management in Agriculture: Climate Change Perspective
12.45 – 1.30 PM	<b>PL–2 Linda O. Mearns</b> - Current Knowledge regarding Global and Regional Climate Change and Implications for the Future of Agriculture
1.30-1.45 PM	DISCUSSION
1.45-2.30 PM	LUNCH & POSTER SESSION 01 of DIFFERENT THEMES (1,2,4,5 and 7)

Ti	me	Hall A (Theme 1)	Hall B (Theme 2)	Hall D (Theme 4)	Hall E (Theme 5)	Hall G (Theme 7)	
		Discovery & Optimization of new Crop Protection Products: New Innovations for Sustainable Crop Protection	Biopesticides and Biocontrol agents	Advances in Analytical Technologies, Informatics, and Nanotechnologies	Ecological and Human Safety Assessment of Products: Chemical, Biological and Biotechnology	Regulatory Landscape, Policy, Trade, Science Communication and Engagement	
Ti	me	SESSION 03 (25 minutes) Chairpersons: Peter Maeinfisch and Najam Akhtar Shakil	SESSION 04 (25 minutes) Chairpersons: Desmond R Jimenez and C. Devakumar	SESSION 05 (25 minutes) Chairpersons: Chris Hatzenbeler and Sara Cunha	SESSION 06 (25 minutes) Chairpersons: Laura McConnell and Shbaita Haytham	SESSION 07 (25 minutes) Chairpersons: Caroline Harris and K. K. Sharma	
2.3	30-2.55 PM	IL-1 Wenming Zhang The Discovery of Indazapyroxamet: A Novel 3-Pyridinyl Insecticide Targeting Piercing/Sucking Insects	IL-1 B Doughan- Corteva Biologicals	IL-1 Nadeem Ahmad Khan- Advancement in Analytical Techniques: Focus on Plant Protection Product Analysis	IL-1 Dimitrios G. Karpouzas- Pesticide Soil Microbial Toxicity: Setting the Scene for a New Pesticide Risk Assessment for Soil Microorganisms	IL-1 Basanta Kumar Das- Status of Aqua- Medicines and Agrochemicals Use in Indian Aquaculture	
2.5	55-3.20 PM	IL-2 Andrew J.F. Edmunds - Insecticidal Alkylsulfones: Discovery of Novel Structural Types with Differentiated Opportunities for Pest Control	IL-2 V S Rana- The Technological Interventions and Prospects of Biopest- icides for Pest Management in Sustainable Agriculture	IL-2 Fukumatsu Iwahashi- Metabolomic Analysis of <i>Schoenoplectus jurcoides</i> Reveals Common Markers of Acetolactate Synthase Inhibition among Paddy Weeds	IL-2 Zisis Vryzas- Reconsidering the Environmental Fate of Pre- and Post- Emergent Herbicides and Weed Resistance Management under New Technological Advances: The Soya Case Study	IL-2 Laura L. McConnell- Global Collaborations on Agricultural Science Provide Pathways to a Sustainable Future	
3.2	20-3.45 PM	IL-3 Rupsha Chaudhuri -Pyrazoline Insecticides- Voltage Gated Sodium Channel Blockers	IL-3 D Dey- Indian Insect Diversity and Their Role in Control of Invasive Pests	IL-3 Moustafa Khalifa- Development and Validation of Analytical Method for Identification and Quanti- fication of Three Pyrethroids (Imiprothrin, Deltamethrin and Transfluthrin) in their Raw Materials and Their Formulations based on HPLC-Photodiode Array Detector	Division VI (Division of Chemistry and the	IL-3 Thomas Lyall- European Union Regulatory Policy Developments and Their Potential Impacts on Asian Food Production	
3.4	45-4.10 PM	IL-4 Kasinath. Sana - The Discovery of Novel 1,3,4-Trisubstituted Pyrazoles and their use as Insecticides	IL-4 G Povero- Application of the GEAPOWER Technology Platform for Developing a New Biostimulant Rising to the Challenge of Making Crop Water Use More Efficient	DISCUSSION			
4.1	10-4.30 PM			TEA			
Ti	me	SESSION 8: (25 minutes) Chairpersons: Karsten Koerber and Sebastian Rendler	SESSION 9 (25 minutes) Chairpersons: Peter Maienfisch and Suresh Walia	SESSION 10 (15 minutes) Chairpersons: Mark Christopher Ott and Sara Cunha	SESSION 11 (15 minutes) Chairpersons: Zisis Vryzas and Dhruba Jyoti Sarkar	SESSION 12 (15 minutes) Chairpersons: Caroline Harris and Craig Dunlop	
4.3	30-4.55 PM	IL-5 Desirée Hodges - Discovery, research, and development of Axalion <sup>TM</sup> Active Insecticide: Dimpropyridaz	IL-5 J Leipner- Discovery of Anisi- flupurin, an Inhibitor of Cytokinin Dehydro- genase that Mitigates Heat-Induced Yield Reduction in Rice	OP-1 (4.30-4.45 PM) Jigni Mishra- Genotypic Variation in Total Protein, Fatty Oil and Lignan Composition in the Seeds of Sesamum indicum L.	OP-1 (4.30-4.45 PM) Mohammad A Waseem- Effect of Fipronil on Colony Performance of Apis Mellifera under Field and Semi-Field Conditions in Onion (Allium Cepa L.)	Opportunities to	

		Yield and Milling Quality in Cereal Crops	Pesticides in Fruits and Vegetable by Liquid Chromatography Mass Spectrometry	Paddy Fields of Odisha	Crop Protection Sector: Role of Civil Society in Bringing Right to Technology
	IL-7 Sujoy Saha - Fungicides: The evolutionary saga	IL-7 P Balakrishnan- Ascophyllum Nodosum Based Plant Biosti- mulant Shapes the Bacterial Community in the Rhizosphere of Corn	OP-3 (5.00-5.15 PM) Nagaraj M Naik- Validation of an Analytical Method for Determination of Eight Toxic Elements in Spinach by Microwave Assisted Digestion with Inductively Coupled Plasma Mass Spectrometry	OP-3 (5.00-5.15 PM) Abhishek Mandal- Restoring Basmati Rice's Safety: Monte Carlo Simulation Assisted Investigation of Micro- porous Nano-Metal organic Frameworks as Tricyclazole Super Adsorbents	OP-3 (5.00-5.15 PM) Manisha Paliwal- The Importance of Regulatory Data Protection or Exclusive Use and other Forms of Intellectual Property Rights in the Crop Protection Industry
	OP-12 Hui Shao - Development of Sustainable Crop Protection Formulation Products	IL-8 (5.45-6.10 PM) Marko Vincekoviæ- Preparation, Character- isation, and Application of New Biopolymer Microparticles with 3 in 1 effect for Plant Protection and Nutrition	OP-4 (5.15-5.30 PM) Mukesh Kumar Singh- Method Development and Validation for Residue Analysis of Eight Polar Pesticides in Rice by LC- ESI –MS/MS equipped with HILIC Column	OP-4 (5.15-5.30 PM) Neethu Narayanan- Dissipation of Sulfamethoxypyridazine, A Sulfonamide Antibiotic, in Soil and Water	OP-4 (5.15-5.30 PM) Devaguptapu V S Chandra- Enhancing Global Trade of Agricultural Products
			OP-5 (5.30-5.45 PM) Poornima Saxena - Method Development and Validation for Residue Analysis of Pesticides in Water by Tandem Gas Chromatography Mass Spectroscopy	OP-5 (5.30-5.45 PM) Sowmiya C- In Silico and Molecular Analysis of Neonicotinoids Detox- ification by Glutathione- S-Transferase (GST) in Asiatic Honey Bee, Apis cerana Fab.	OP-5 (5.30-5.45 PM) Jochen Heidler- Residues of Triazole and Dithiocarbamate- Fungicide Derived Degradation Products as well as Chlormequat in Complex Food Samples – Selected Results from the German MEAL Study
			OP-6 (5.45-6.00 PM) Samsul Alam - Trace Level Accurate Determination of Methyl Mercury and Inorganic Mercury in Different Matrices using Microwave Assisted Extraction Followed by LC-ICP-MS Speciation Analysis		OP-6 (5.45-6.00 PM) Meng Wang - Bayer's Commitments to Transparency: Opening Up Our Science to Build Public Trust
6.00-6.15 PM	<u> </u>		DISCUSSION		
7.00-8.00 PM			SOCIAL EVENT		
8.00 PM			DINNER		

### March 15th 2023

Time Plenary Lectures

**SESSION 13** 

Chairpersons: TR Sharma and Laura McConnell

9.00 – 9.45 AM **PL–3 Abdul M. Mouazen** - The role of smart farming in optimizing the use of

agrochemicals towards maximum profitability and minimum environmental

footprint

9.45 – 10.30 AM PL–4 Camilla Corsi - Food security and the agritech revolution

10.30-11.00 AM **DISCUSSION** 

11.00-11.40 AM **TEA** 

	Hall A	Hall B	Hall C	Hall D	Hall E	Hall G
	(Theme 1)	(Theme 2)	(Theme 3)	(Theme 4)	(Theme 5)	(Theme 7)
	Discovery &	Biopesticides	Mode of Action	Advances in	Ecological	Regulatory
	Optimization	and Biocontrol	and Develop-	Analytical	and Human	Landscape,
	of new Crop	agents	ment and	Technologies,	Safety	Policy, Trade,
	Protection		Management	Informatics,	Assessment of	Science
	Products: New		of Resistance	and Nano-	Products:	Communication
	Innovations			technologies	Chemical,	and
	for Sustainable			Biological and	ĺ	Engagement
	Crop Protection			Biotechnology		
Time	SESSION 14	SESSION 15	SESSION 16	SESSION 17	SESSION 18	SESSION 19
	(25 minutes)	(25 minutes)	(25 minutes)	(25 minutes)	(25 minutes)	(25 minutes)
	Chairpersons:	Chairpersons:	Chairpersons:	Chairpersons:	Chairpersons:	Chairpersons:
	Peter Maienfisch	Jerome Cassayre	K. Matsuda and	K. Banerjee and	Laura McConnell	Thomas Lyall
	and Sunil Mandal	and VS Rana	Debjani Dey	Chris Hatzenbeler	and SC Dubey	and AK Dikshit
11.40-12.05 PM	IL-8 Klaas	IL-9 Jayeeta	IL-1 Philipp	IL-4 Mary E	IL-4 Sabine	IL-4 Caroline
	Lohmann - The	Bhaumik - Agri-	Johnen - Acyl-ACP	McNally - Anti-	Martin - Global	Harris -
	Discovery of	Waste Lignin Based	Thioesterases	Counterfeiting	database for a new	International
	Revysol	Nano-Fertilizers and	(FATs): Confirmation	Solutions via	hand-held agricult-	Frameworks and
		Nano-Pesticides for	of the Mode of	Analytical Methods	ural operator	Systems for
		Applications in	Action of LUXIMO®		exposure model	Deriving
		Sustainable	and Identification		to improve operator	Maximum Residue
		Agriculture	of a Hidden FAT		safety in low and	Limits (MRLs) and
			Inhibitor Cluster in		middle income	Import Tolerances
			Commercially		countries	
			Available			
						·

12.05-12.30PM	IL-9 S. Kiguchi - Discovery and Biological Profile of Pyridachlometyl	IL-10 S. Muruga- nandam - Advances and Challenges of RNA Based Bio- control Product Development	II-2 Kensuke Ohta- Stacking Effects and Inheritance of the Mutated ALS Genes in SU-Resistant Weeds in Japanese Rice Paddy	IL-5 Supradip Saha- Greener Analytical Approaches for the Extraction and Analysis of Nutraceuticals	Improving Pesticide	IL-5 Githaiga Wagate - Transition from Hazard to Risk Based Assessment for Pesticide Registration in Kenya: Use of the FAO Toolkit for the review of Pesticide Application
12.30-12.55 PM	IL-10 Ashish Batra-Consistently delivering sustainable innovations by changing the paradigms in product development of crop protection solutions	IL-11 Christopher Dunlap - The Role of Secondary Metabolites in the Diversity of <i>Bacillus</i> subtilis Group; An important Group of Crop Protection Microbes	IL-3 Bodo Peters- The Fight for Clean Fields: Digitally Enabled Weed Resistance Manage- ment Towards Sustainable Agriculture		IL-6 Maxie Kohler-Operator Safety-Assessing Operator Exposure during Drone Application of Pesticides	IL-6 Matt Lantz - How Pesticide Maximum Residue Levels Are Affecting Global Agriculture Trade
12.55-1.20 PM	IL-11 Victoria Jackson - Picolinamide Complex III Inhibitors: Discovery, Synthesis and Structure- Activity Relationship of novel benzothiazoles for disease control	IL-12 Tanu Jindal- Investigation of Extremophillic Microorganisms Isolated from the Indian Sector of Southern Ocean for Degradation of Anionic Surfactants	IL-4 Amar Chittiboyina - Natural Product Inhibitors of the Common Enzyme, p-Hydroxyphenyl- pyruvate Dioxygenase (HPPD), as Herbicides and Insecticides		IL-7 Philip Fisher- Dermal Absorption: A Discussion of Default Values, In -vitro Study Conduct, and Data Interpretation	IL-7 Sangeeta Dawar - Genome Editing: Regulatory Approaches vis-a- vis Sustainable Agri- Food Systems
1.20-1.30 PM		,	DISC	USSION		
1.30-2.00 PM		LUN	CH & POSTER SE	SSION 02 (Themes	1, 2 and 5)	
Time	Hall A	Hall B	Hall C	Hall D	Hall E	Hall G
	SESSION 20 (25 minutes) Chairpersons: Mark Pobanz and Karsten Koerber	SESSION 21 (25 minutes) Chairpersons: Desmond R Jimenez and DB Saxena	SESSION 22 (25 minutes) Chairpersons: Ralf Nauen and Bodo Peters	SESSION 23 (25 minutes) Chairpersons: Mary Ellen McNally and Mark Christopher Ott	SESSION 24 (25 minutes) Chairpersons: HM Venkatesh and Madhuban Gopal	SESSION 25 (25 minutes) Chairpersons: Caroline Harris and Matthew Lantz
2.00-2.25 PM	IL-12 Ravisekhara Reddy - Discovery and optimization of a novel herbicide, Rimisoxafen	IL-13 Giddi Hema Sagar - Compatibility of Co-Formulants with Microbial Strains to Enhance Bio- pesticides Efficacy	IL-5 Srinivas Parimi - IRAC Asia and Insecticide Resistance Manage- ment Initiatives	IL-6 Sara C. Cunha - A Novel Green Sample Preparation for Multi-Pesticides Determination in Soya	Friendly Operator Safety Assessment Tool to Facilitate	IL-8 Vandana Tripathy - Implementation of Pesticide Residue Monitoring Programme: Need, Outcomes and Challenges

2.25-2.50 PM	IL-13 Joshua S. Mylne - The role for structural biology in new mode-of-action herbicide discovery	IL-14 Sachin S Suroshe - Bio- Intensive Manage- ment of Invasive Fall Armyworm, Spodoptera frugiperda	G - Multic in Bo Molec isms	Karaoglanidis Multiple and Inug Resistance strytis Cinerea: cular Mechan- of MLR/MDR types in Greece	Mukher Rapid and destructiv Assay of	jee - d Non- re On-site Pesticide by Raman	IL-9 Anugra Shaw - Derm Protection for Pesticide Risk Mitigation: Ope Exposure Stud as the Basis fo Partial and W Body Garment for High Expo Scenarios	al rerator ies r hole ts	IL-9 K.K. Sharma - Risk Assessment of Pesticide Residues for Consumer Safety
2.50 – 3.15 PN	M IL-14 David M. Barber- KetoEnols: New Solutions for the Control of Resistant Grass Weeds	IL-15 Ratnakar Asolkar - Microbial Based Crop Protection: Discovery & Development of a Potent Bio- nematicide from a Novel Burkhoderia rinogensis	Mats Resist Pucci Chrys White	Yuichi uzaki - SDHI tance of inia Horiana, santhemum e Rust	DISCUS	SSION	Lampe Veno Plant Protecti Product Opera	e - ion ator oping ow a stent	IL-10 Barakat S. Mahmoud - Advocating Science and Risk-Based Pesticide Maximum Residue Limits (MRLs) to Ensure Consumer Protection, Boost Trade, and Enhance Food Security
3.15-3.40 PM  IL-15 Furuhashi Takamasa - Dimesulfazet - discovery and mode of action of a novel rice paddy herbicide  IL-16 D Zommick- Bacillus thuringiensis; Navigating the Crossroads between Sustainable Agri- culture and Food Safety  IL-8 Steven Gutteridge - Target Sites and Modes of Action of Rimisoxafen			IL-11 Totan Adak -Pesticic residue dynam in rice ecosyst	ics em	IL-11 PK Chakrabarty - Significance of water quality (pH) for effectiveness of pesticides used as spray				
3.40-4.00 PM  DISCUSSION  DISCUSSION  IL-17 Rosa Gimenez-50 Years of Sustainable Crop Protection with DiPel Biological Insecticide Working with Conventional Chemistries		SSION							
		(4.00-4.10 PM) <b>DISCUSSION</b>							
4.00-4.25 PM					TEA				
4.25-6.30 PM				POST	ER SESSI	ION	ı	1	
Time	Hall A SESSION 26 (25 minutes) Chairpersons: Ravisekhara Reddy and Peter Maienfisch	Hall C SESSION 27 (15 minutes) Chairpersons: Andreas Mehl and Golda Fernandez	i	Hall D SESSION 28 (15 minutes Chairperson Sara Cunha ar Kaushik Bane	ns:		utes)	(15 Cha Craig	G SION 30 minutes) iirpersons: g Dunlop and line Harris
4.00-4.25 PM	IL-16 Yoshinao Sada Rapidicil™, a New Systemic PPO Herbicide for Broad-spectrum Weed Control	OP-1 (4.00-4.15 Yoshinobu Jin Monitoring of Pl Inhibiting Herbici Resistant Amaras Species in the Un States	5 PM) OP-7 (4.00-4. Arnab R Cho Development Antimicrobial Gum Based Silv		of Natural ver Nano- lms for Active	Vinothki Occupatio of Fiproni	.00-4.15 PM) umar Bojan- nal Exposure 1 SSC Sprayed AV (drone) in ssystem	Micl Soci	7 (4.00-4.15 PM) hael Leader - The oeconomics of hosate Herbicide Use

4.25-4.50 PM	Frackenpohl - Design, synthesis, and SAR of new proto- porphyrinogen oxidase- inhibitors (PPO) over	OP-2 (4.15-4.30 PM) Shinichi Banba - The Target Site of the Novel Fungicide Quinofumelin, Pyricularia oryzae Class II Dihydroorotate Dehydrogenase	OP-8 (4.15-4.30 PM) Ranjana Maurya - Separation, Purification and Characterization of Impurities in a Fungicide, Hexaconazole Technical Using Preparative HPLC	prolin, Fluopicolide and their Metabolites in Tomato Fruits and Soil	OP- 8 (4.15-4.30 PM) Renjini V R - Effect of Pesticide Residues in Agricultural Export from India to European Union
4.50-5.15 PM	IL-18 Durg Vijay Singh - Design and development of lead molecules through Computer Aided Drug Discovery against herbicide-resistant Phalaris minor: A weed of wheat crop field	OP-3 (4.30-4.45 PM) Andy Corran - Inhibition of Dihydroorotate Dehydrogenase for Disease Control	OP- (4.30-4.45 PM)	OP-8 (4.30-4.45 PM) Priscila M Fagundes - Asia Pacific Agronomical Characterization Scenario for Rice	OP-9 (4.30-4.45 PM) Jitendra Sharma - Creating a Sustainable Agricultural System through Blockchain Technology
5.15-5.40 PM	IL-19 Tom. Meade - Target-based Discovery of Crop Protection Chemistries Powered by DNA-Encoded Libraries	OP-4 (4.45-5.00 PM) Rajna S - Effect of Triflumezopyrim on Biology and Detoxifying Enzyme Levels in Brown Planthopper, Nilaparvata lugens	OP-9 (4.45-5.00 PM) Niladri S Chatterjee - Authentication of Seafood by Rapid Evaporative Ionization Mass Spect- rometry and LC-HRMS Based Lipidomics	OP-9 (4.45-5.00 PM) Sophie van d Kamp - Increasing Confidence in Waiving Dermal Toxicity Studies: A Comparison of Oral and Dermal Acute Data with Alternative Approaches for Agrochemicals and Products	OP-10 (4.45-5.00 PM) Khushbu Sharma - Simultaneous Analysis of >400 Multi-Class Pesticides in Honey by the GC/LC and Tandem Mass Spectrometry
5.40-6.05 PM	IL-20 Olivier Loiseleur - TYMIRIUM® technology: The discovery of Cyclobutrifluram	OP-5 (5.00-5.15 PM) Jaydeep Halder - Fipronil: Bioefficacy against Sucking Pest Complex and Residue Dynamics in Green Chilli (Capsicum annum Linn.)	OP-10 (5.00-5.15 PM) Chandra S Kushwaha - Electrochemical Detection of Trace Pesticide Residues Over Cupric Oxide Encapsulated Cellulose Grafted Polyaniline Electrode	OP-10 (5.00-5.15 PM) Samarendra Singh- Evaluating Microbial Degradation of Polychlorinated Biphenyls (PCBs) in Sterilized Soil by using Native Bacteria and Their Consortium Isolated from the Transformer Polluted Sites	OP-11 (5.00-5.15 PM) Praveen K V - The Indian Fertilizer Regulatory Landscape and its Effect on Fertilizer Use
6.05-6.20 PM	DISCUSSION	OP-6 (5.15-5.30 PM) Tushar K Dutta - CRISPR-Cas9-Based Genome Editing in Plants for Improving Nematode Resistance	OP-11 (5.15-5.30 PM) Shubham Yadav - Development and Single Laboratory Validation of Ultra- Fast Liquid Chroma- tography Method for Quantification of Buprofezin content in Suspension Concentrate (SC) Formulation	OP-11 (5.15-5.30 PM) Niranjan Kumar - Textile and Fashion Industry Wastewater Menace and its Management	(5.15-5.30 PM) <b>DISCUSSION</b>

6.20-7.00 PM	(5.30-5.45 PM)  DISCUSSION  Ajin  Deve Valid  Chro Dete Difer in C	12 (5.30-5.45 PM) S Anil - Method elopment and dation for Gas omatographic ermination of neonazole Content formercially lable Formulations	OP-12 (5.30-5.45 PM) Anup Kumar - Effects of Parthenium and Lantana Biochar on Fate of Imazethapyr in Sandy Loam Soil		
	Sapr Enan Chira the 1	13 (5.45-6.00 PM) na Johnson - ntioselectivity of al Pesticides in Environmental and Food Safety	OP-13 (5.45-6.00 PM) Vikas Kumar - Method Development and the Monitoring of Multi-Residue Analysis of Pesticides in Gangetic Fish through GC-MS/MS		
		(6.00-6.15 PM) DISCUSSION			
6.15-8.00 PM	SOCIAL EVENT				
8.00 PM	BAN	QUET DINNER			

# March 16th 2023

Time	Plenary Lectures
	SESSION 31
	Chairpersons: Major Singh and IM Mishra
9.30-10.15 AM	<b>PL–5 Anna Gore</b> - Addressing the Market Failure for Specialty Crops: The Work of the Minor Use Foundation
10.15-11.00 AM	<b>PL–6 Ana Paula da Silva Dias</b> - Achieving Sustainable Crop Protection with Digitally Integrated Solutions
11.00-11.20 AM	DISCUSSION
11.20-11.40 AM	TEA

	Hall A (Theme 1) Discovery & Optimization of new Crop Protection Products: New Innovations for Sustainable Crop Protection	Hall B (Theme 2) Biopesticides and Biocontrol agents	Hall C (Theme 3) Mode of Action and Development and Management of Resistance	Hall E (Theme 5) Ecological and Human Safety Assessment of Products: Chemical, Biological and Biotechnology	Hall F (Theme 6) Digital and Precision Agriculture for Sustainable Agriculture and its Stewardship
Time	SESSION 32 (25 minutes) Chairpersons: Peter Maeinfisch and Jagadish Pabba	SESSION 33 (15 minutes) Chairpersons: Jerome Cassayre and Pankaj	SESSION 34 (25 minutes) Chairpersons: Andreas Mehl and Bodo Peters	SESSION 35 (25 minutes) Chairpersons: Sean Gehen and VT Gajbhiye	SESSION 36 (25 minutes) Chairpersons: Abdul M. Mouazen and Jitendra Kumar
11.40- 12.05 PM	IL-21 Moumita Kar - Novel Triazolones as Nematicides	OP-1 (11.40-11.55 AM) Raja J - Volatiles Produced by Bacillus subtilis AUB1 against Alternaria solani in Tomato	IL-9 Kazuhiko Matsuda- Decoding Target Site Actions of Neonico- tinoids	IL-12 Tharacad Ramanarayanan - To Achieve Regulatory Approval for a New Pesticide using Predictive Risk Assessments without the Use of Animal Testing	IL-1 Indra Mani- Drone – A Revolutionary Technology for Agriculture
12.05- 12.30 PM	IL-22 Mukul Lal - Green and Sustainable Chemistry: Green Chemistry Principles Applications in Agrochemical Research FLD in Bitter Gourd -A Success Story	OP-02 (11.55-12.10 PM) Deepak Jain - Assessment of Pheromone Traps for Eco Friendly Management of Fruit Fly under a Novel Protein Target for Insect Control	IL-10 Andrew Crossthwaite - Biochemical and Electrophysiological Studies of Insecticidal Alkylsulfones Reveal	IL-13 Daniel Urbisch - Weight of Evidence Approach to Evaluate the Potential of Active Ingredients for Endocrine Disruption	IL-2 Joanna Davies - Drones, Robots and Digital Tools: Are they the Future of Agriculture?
12.30- 12.55 PM	IL-23 Saad A. Khan- Sustainable Material Platforms for Targeted Delivery of Actives	OP-03 (12.10-12.25 PM) Bharat H G - Nematicidal Potential of Flemingia procumbens against Root-Knot Nematode, Meloidogyne incognita	IL-11 Ralf Nauen - Characterization, Impact and Spread of Diamide Insecticide Resistance in Lepidopteran Pests with Special Reference to Ryanodine Receptor Alterations	IL-14 Peter Maienfisch Challenges and Risks Associated with Impurity Profiles in Technical Grade Crop Protection Products Produced Semi- Synthetically from Natural Products	IL-3 Stephanie Giessler Geiss- The Important Role of Adjuvants to Overcome Application Challenges in Agricultural UAV Spraying
12.55- 1.20 PM	IL-24 Jiagao Cheng- Binding mode based discovery of β- ketonitrile derivatives as potential SDHI	OP-04 (12.25-12.40 PM) Aditi Kundu - Chitosan Nanoemulsion of Bioactive Essential Oils for the Control of Aspergillus flavus	IL-12 Andreas Mehl - Multiple Resistance of <i>Plasmopara viticola</i> - An increasing Threat for Resistance Manage- ment in Times of Limited Chemical Options		IL-4 - Steve Li - Spray Drone Evaluations for Row Crops in United States
12.40-1.00 PM			DISCUSSION		
1.00-2.00 PM		LUNCH& PO	OSTER SESSION 03 (TI	hemes 1 and 6)	

Time	SESSION 37 (25 minutes)	SESSION 38 (15 minutes)	SESSION 39 (25 minutes)	SESSION 40 (25 minutes)	SESSION 41 (25 minutes)
	Chairpersons: David Barber and Sebastian Rendler	Chairpersons: Jerome Cassayre and Debjani Dey	Chairpersons: K. Matsuda and Shinya Nishimura	Chairpersons: Laura McConnell and Suman Gupta	Chairpersons: Sarah Hovinga and Godshen Robert Pallipparambil
2.00-2.25 PM	IL-25 Mark-Christoph Ott - Agritech Consortium -A collaborative framework for industry and academic partners	OP-05 (2.00-2.15 PM) Guru-Prasanna-Pandi- Water Pepper, Persicaria hydropiper (L.) Relative Toxicity against Brown Planthopper	IL-13 Pankaj - Management of Nematodes: Moving Ahead from Lab to Land	II15 Shu Chun Peng- Transcriptional Profiling to Forecast the Toxicity of Agrochemicals	IL-5 Shimat V. Joseph - Transovarial Activity: A Less Explored Mechanism of Insect Growth Regulators for Pest Management
2.25-2.50 PM	II26 Sandeep Thakur - New Biodegradable Dispersants for Agrochemical Formulations	OP-06 (2.15-2.30 PM) Suresh Nebapure - Virus-Induced Cotton Plant Volatiles and Its Impact on Behavior of the Whitefly Bemisia tabaci	IL-14 Anthony Flemming - TYMIRIUM® Technology: The Mechanism of Action of Cyclobutrifluram in Nematodes	IL-16 Haytham Shbaita - Assessing Human Carcinogenicity Risk without the Rodent Cancer Bioassay	IL-6 Subhash Chander - Simulation of Crop-Pest Interactions for Effective Pest Management
2.50-3.15 PM	IL-27 Rajesh Kumar Design and Discovery of New Agrochemical Leads to be utilized for Development of New Crop Protection Products for Sustainable Pest Management in Agriculture	OP-07 (2.30-2.45 PM) Sonu Kumar - Altitude-Related Changes in the Phytochemical Profile of Zingiber roseum (Roxb.) Roscoe Rhizome Extracts and Their Nematicidal Activity against Meloidogyne incognita	IL-15 Naoya Sugimoto - QTL Mapping using Microsatellite Linkage Reveals Target-Site Mutations associated with High Levels of Resistance against Three Mitochondrial Complex II inhibitors in Tetranychus urticae	IL-17 Kengo Sakurai Prediction of Human Exposure to Agro- chemicals by A PBPK Modeling Technique using Chimeric Mice with Humanized Liver	IL-7 Mukesh Sehgal - Review on the Development of Integrated Pest Management and its Integration in Present day Agriculture
3.15-3.40 PM	IL-28 Rupesh Kariyat Novel and Sustainable Pest Management Strategies Using Poly- phenols and Biochar against Generalist and Specialist Insect Herbivores	OP-08 (2.45-3.00 PM) K Shankarganesh - Semiochemical Mediate Host Selection in Cotton Stem Weevil, Pemphirulus affinis (Curculionidae: Coleoptera)	IL-16 S Subramanian- Insecticide Resistance in Cotton Mealybug Phenacoccus solenopsis Impacts its Endopara- sitoid, Aenasius arizonensis	DISCUSSION	IL-8 Karandeep Singh - Digital Labels – Paving the Way Towards Sustainable and Digital Farming
3.40-4.00 PM	DISCUSSION	OP-09 (3.00-3.15 PM) - Dharani Priya - Nanoemulsion of Sargassum wightii Extracts in Combination with Azadirachtin and β-asarone against Spodoptera frugiperda (J.E. Smith) (Noctuidae: Lepidoptera)	IL-17 Sagar Kaushik - Role of different Modes of Action in sustainable management of pest resistance strategies		DISCUSSION

		OP-10 (3.15-3.30 PM) - Anita Chaudhary - Biopreservation of Cherry Tomato Crop with Cell Free super- natant of <i>L. fermentum</i>	DISCUSSION		
		(3.30-3.45 PM) DISCUSSION			
4.00-4.15 PM			TEA		
Time	SESSION 42 (15 minutes) Chairpersons: Karsten Koerber and Sunil Mandal	SESSION 43 (15 minutes) Chairpersons: Jerome Cassayre and Olivier Loiseleur	SESSION 44 (15 minutes) Chairpersons: Ralf Nauen and K. Matsuda	SESSION 45 (15 minutes) Chairpersons: Shbaita Haytham and Irani Mukherjee	SESSION 46 (15 minutes) Chairpersons: Ashim Dutta and Danesha Carley
4.15-4.30 PM	OP-1 Sunderraman Sambasivan - Insecticidal Acylsulfonamides	OP-11 (3.45-4.00 PM) L.K. Thakur - Environmental Friendly Formulation from Plectranthus ternifolius Plant Extract and their Quality Parameters	OP-7 (4.00-4.15 PM) Timmanna - Comparative Toxicity of Insecticides Against Fall Armyworm, Spodoptera frugiperda (J.E. Smith)	OP-14 (4.00-4.15 PM) Namrata Laskar - Magnetic Molecularly Imprinted Polymers (MMIPs) for Selective Recognition of Clothianidin from Different Food Matrices	OP-1 (4.00-4.15 PM) Malcolm A. Faers - Empowering Next Generation UAS/VLV SC Formulation Design through Colloid Science
4.30-4.45 PM	OP-2 Nusrat Iqbal - Improving Bio-Efficacy of Imidacloprid in Nanosuspension Formulation: A New Gate Way for Safe Pesticide Delivery	OP-12 (4.00-4.15 PM) Rekha Balodi - Characterization of Multiple Stress Tolerant Trichoderma asperallum from the Tomato Rhizosphere	OP-8 (4.15-4.30 PM) Mahesh Kulye - Managing Invasive Insect Pests through Implementation of Effective Resistance Management Strategy in Asia	OP-15 (4.15-4.30 PM) Sudeep Mishra - Evaluation of Pesticide Residues in Vegetables, Soil and Water samples of Rohtak, Karnal, Hisar and Panipat Districts of Haryana, India	OP-2 (4.15-4.30 PM) Joe Louis - Monocot Crop Defense Responses to a Cereal Aphid Pest
4.45-5.00 PM	OP-3 S. Krishnamoorthy Tetraniliprole + Spirotetramat - A Novel Combination Product for Sustainable Crop Protection	OP-13 (4.15-4.30 PM) Lakshman Prasad - Valuation of Native Isolates of <i>Trichoderma</i> Species and Their Crude Metabolites for Biological	OP-9 (4.30-4.45 PM) Yoshito Tanaka - The Biological Activity of a Novel Pyrethroid Insecticide Momfluo- rothrin	OP-16 (4.30-4.45 PM) Sujan Majumder - Persistence and Safety Evaluation of Chloran- traniliprole in Brinjal Fruit and Soil Activities on Brassica juncea as Plant Growth Promotor as well as Antagonist against Sclerotinia sclerotiorum	OP-3 (4.30-4.45 PM) Anirban Dutta - Chitosan-Casein Complex Coacervated Formulation for Triggered Release of Anthocyanins
5.00-5.15 PM	OP-4 Pratap. Divekar Evaluation of Chloran- traniliprole for Manage- ment of Pod Borer, Maruca vitrata and its Residue Dissipation in Vegetable Cowpea	OP-14 (4.30-4.45 PM) Kajal Chakraborty - Seaweed as a treasure house of high value nutraceutical product	OP-10 (4.45-5.00 PM) Hiroshi Okamoto - Practical Efficacy of Natural Pyrethrins Against Mosquitoes	OP-17 (4.45-5.00 PM) Shannon N Sangma - Synthesis of 3,5-Diaryl- Phenyl Pyrazoles and Their use as Potent Nitrification Inhibitors in Soil under <i>in-vitro</i> Conditions	OP-4 (4.45-5.00 PM) Sikha Deka - Impact of Integrated Pest Management Information Dissemination on Assam Lemon Growers of Torajan Village, Tinsukia of Assam

5.15-5.30 PM	OP-5 Neeraj Patanjali Slow Release Gel Formulation for the Management of Fruit Fly (Bactrocera dorsalis)	OP-15 (4.45-5.00 PM) Anoop Kumar - Large-Scale Validation of IPM in Basmati Rice in Farmers' Participatory Mode at Rohtak, Haryana	OP-11 (5.00-5.15 PM) Juliane Zago Garofalo - SURFOM® Cs 8152 – Solution For Glufosinate Combinations	OP-18 (5.00-5.15 PM) Ahammed Shabeer TP - Non-Target Effect of Imidacloprid Residues on Grape and Wine Metabolome and Identification of Potential Biomarker Metabolites of Imidacloprid in Grape	OP-5 (5.00-5.15 PM) Sunanda Biswas - Effect of Tillage, Residue and Weed Management Options on Stability of Soil Organic Carbon in Conservation Agriculture- based Maize-Wheat- Mungbean System in IGP
5.30-5.45 PM	OP-6 Priya Murali Nair - Effectiveness of Silicone Antifoams in Powdered Form for Optimization of Raw Materials in Agro- chemical Solutions	OP-16 (5.00-5.15 PM) A K Goswami - Label-Free Quantitative Proteomics Reveals Stress-Associated Active Proteins (Saaps) and Pathways Involved in Modulating Tolerance of Papaya Under Low Temperature Stress	(5.15-5.30 PM) <b>DISCUSSION</b>	OP-19 (5.15-5.30 PM) Bharat Rana - Microbial Contamination of Drinking Water in Delhi NCR Region	OP-6 (5.15-5.30 PM) Nasmeen Hakim - Soil Physiochemical and Soil Enzyme Activities as Biological Indicators of Soil Health Invaded by Cirsium arvense (L.) Scop. in the Trans-Himalayan Region of Ladakh
5.45-6.00 PM	OP-7 Ayyasamy Regupathy - Bio- Efficacy of Ethiprole 10.7 % + Pymetrozine 40 % WG against Green Leafhoppers (Nephotettix virescens, Distant) in Rice	(5.15-5.45 PM) <b>DISCUSSION</b>		OP-20 (5.30-5.45 PM) Akanksha Aggarwal - Dissipation Kinetics of Novel Acaricide Tebufenpyrad in Different Types of Soil and Water	OP-7 (5.305.45 PM) Mark Beach - Arbuscular Mycorrhizal FungiTechnology: Carbon Sequestration Through Soil Health
6.00-6.15 PM	OP-8 Parshant Kaushik - Synthesis and Evaluation of Pyrazolyl Chromones against Sclerotium rolfsii			OP-21 (5.45-6.00 PM) Kesar Tandekar - Dietary Risk Assessment of Six Commonly used Acaricides for Control of Mites in Tea	(5.45-6.00 PM) <b>DISCUSSION</b>
6.15-6.30 PM	DISCUSSION			(6.00-6.30 PM) DISCUSSION	
7.00-8.00 PM	SOCIAL EVENT				
8.00 PM	DINNER				

## March 17th 2023

	Plenary Lectures
Time	SESSION 47 Chairpersons: A K Singh and Karsten Koerbe

9.30-10.15 AM PL-7 **Mayank Singhal -** Enhancing Collaboration Quotient in Crop Protection

Research and Education–Mutli-Disciplinary Cross-Learning

10.15-11.00 AM PL-8 **Lakshmi Balagopal -** Sustainable Innovation for New Product

Development in Agriculture

11.00-11.20 AM **DISCUSSION** 

11.20-11.40 AM **TEA** 

	Hall A	Hall B	Hall E	Hall F
Time	Session-48 (15 minutes) Chairpersons: Peter Maienfisch and Ravisekhara Reddy	Session-49 (15 minutes) Chairpersons: Jerome Cassayre and Amit Vasavada	Session-50 (25 minutes) Chairpersons: Sean Gehen and Supradip Saha	Session-51 (25 minutes) Chairpersons: Abdul M. Mouazen and Mukesh Sehgal
11.40-11.55 AM	OP-9 Sebastian Rendler - PLINAZOLIN® Technology: Research and Development of Innovative Products in India Inspired by Growers	OP-17 Deependra Singh Yadav - Successful Biological Control of New Grapevine Stem Borer, Dervishiya Cadambae with Entomogenous Fungus, Metarhizium Brunneum	IL-18 Ramdas Kanissery (11.40-12.05 PM) - How Far is Too Far? Monitoring Herbicide Movement in Soil for Improving Efficacy and Crop Safety in Horticulture Production	IL-9 Godshen Pallipparambil (11.40-12.05 PM) - Tracking Non-Native Pests and Predicting their Introduction
11.55-12.10 PM	OP-10 Yasumichi Onozaki - Discovery of a Novel Insecticide Flupyrimin	OP-18 Indra Kumar Kasi- Native Strain Composition and Molecular Identification of Nematodes and Mutual- istic Bacteria against Fall Armyworm <i>Spodoptera</i> <i>frugiperda</i> (Lepidoptera, Noctuidae): New Insights from North Himalayas, India	IL-19 Subir K Nag (12.05-12.30 PM) - Occurrence, Spatial Distribution and Risk Assessment of Pesticides in Water, Sediment and Biota of river Teesta, India	IL-10 Guillaume Berthon (12.05-12.30 PM) - Digital Chemical Synthesis at Syngenta
12.10-12.25 PM	OP-11 Saptashi De - Discovery of Novel Diaminopyrimidines as Selective Herbicides	OP-19 Kanchhi Maya Waiba - Potential Biocontrol of Native Strains (HR1, HR2) of Entomo- pathogenic Nematodes,	IL-20 Tirthankar Banerjee (12.30-12.55 PM) - Saga of Difficulty Analyzable Pesticides in Indian Food and Environment against South American Tomato Leafminer (TLM), Tuta absoluta (Meyrick) (Lepidoptera, Gelechiidae)	Pueschel

12.25-12.40 PM	OP-13 Dinesh Yadav - Pesticidal Evaluation of Synthesized Ferrocenyl Chalcones against Sclerotium rolfsii and Root-Knot Nematode in Tomato  OP-14 G. de Almeida - Sustainable Amphoteric Adjuvant as Uptake	OP-20 Somnath K Holkar Characterization and In- Vitro Efficacy of Bacterial Endophytes isolated from Grapevine Leaves for Management of Anthracnose Disease  OP-21 Abhishek Gowda - Chemical Composition and Nematicidal Activity of	IL-21 Dhruba Jyoti Sarkar (12.55-1.20 PM) - Microplastic Pollution in Indian Freshwater Resources: Environmental and Human Health Concern	
	Enhancer for Herbicides	Essential Oil and Piperitenone Oxide of <i>Mentha longifolia</i> L. against <i>Meloidogyne</i> <i>incognita</i> infesting Tomato		
12.55-1.10 PM		DISCUS	SION	
1.10-2.00 PM		LUNC	CH CH	
	Hall A	Hall B	Hall E	Hall F
Time	Session-52 (15 minutes) Chairpersons: Peter Maienfisch and Ravisekhara Reddy	Session-53 (15 minutes) Chairpersons: Jerome Cassayre and Parshant Kaushik	Session-54 (15 minutes) Chairpersons: AK Dikshit and Neethu Narayanan	Session-55 (15 minutes) Chairpersons: Sarah Hovinga and Anirban Dutta
2.00-2.15 PM	OP-15 Vishal Somvanshi - The Rice Root-Knot Nematode Meloidogyne graminicola Proteins important for Plant- Pathogenesis as Molecular Targets for its Management	OP-22 Aashaq H Bhat - Potential of Oscheius tipulae Nematodes as Biological Control Agents against Ceratitis capitata	OP-22 Ankita Verma - Effectiveness of Common Household Reagents for Decontamination of Pesticides in Green Chilli and Okra	OP-8 Jane Tang - Evaluation of Mechanistic Model Simulation of Field Study Spray Drift from Unmanned Aerial System
2.15-2.30 PM	OP-16 Tahira Pirzada - Plant Biomass Hybrids for Enhanced Food Security in Sub-Saharan Africa	OP-23 Bishnu Maya Bashyal - Utilization of Fungal Biocontrol Agents against Rice Sheath Blight Disease Provides Insight into Their Role in Plant Defense Responses	OP-23 Ruchi Gupta - Monitoring and Risk Assessment of Pesticide Residues in Grapes	OP-9 Muhammad Baraa Almoujahed - Deoxynivalenol Classification in Wheat Kernels using Vis- NIR and Mid-Infrared Spectroscopy
2.30-2.45 PM	OP-17 Smriti Kala - Nano-Micelles Loaded with Resin from Pinaceae Family Exhibit Insecticidal Activity against Agricultural Pest and Mosquito Vector	OP-24 M. K. Khokhar - Development and Validation of an Integrated Pest Management Strategy in Maize against the Invasive Fall Armyworm Spodoptera frugiperda (J.E. Smith) in India	OP-24 Chuleui Jung - Effect of Pollinator Habitat on the Pollinators, Pollination and Apple Production: Multifunction- ality Analysis	OP-10 Priya Saini - Assessment of Changes in Structural Characteristics of Humic Acid Using Spectroscopic Techniques

2.45-3.00 PM	OP-18 R. S. Jat - Management of Orobanche through Innovative Herbicide Formulations in Indian Mustard	OP-25 Amrita Das - Profiling of Bioactive Secondary Metabolites of Antagonist Aureobasidium pullulans KG-1 against Colletotrichum musae	OP-25 M F Ansari - Shellac as Bioplastic: An Alternative to Plastic Lamination for Paper Packaging	OP-11 K V Raghvendra - Integrated Pest Management (IPM) Strategy for Striped Flea Beetle, <i>Phyllotreta</i> <i>striolata</i> (Fabricius) Management in Radish ( <i>Raphanus sativus</i> L.)	
3.00-3.15 PM	DISCUSSION	OP-26 Rashmi- Insect/Pest Management of Poplar Defoliator ( <i>Clostera</i> <i>cupreata</i> ) through Biological Means	OP-26 Rajbir Yadav- Sustainable Management of Empty Pesticide Containers using Triple Rinsing Approach	OP-12 P Snehalatha- Recombinase Polymerase Amplification Assay for the Sensitive, Accurate and Rapid Detection of Meloidogyne graminicola	
3.15-3.30 PM		DISCUSSION		OP-13 Orly E Apolo Apolo - Modelling and Mapping of Fusarium Head Blight (FHB) in Wheat using Hyperspectral Data under Field Conditions	
3.30-3.45 PM		TEA		OP-14 Suby SB - Assessment of Insect Damage in Maize by Optical Sensing	
3.45-4.00 PM				OP-15 Sarah Hovinga - Industry Response to Pesticide Regulators "State of the Knowledge" Review of Unmanned Aerial Vehicle (UAV) Use for Pesticide Application: Overview of the Unmanned Aerial Pesticide Application System Task Force (UAPASTF)	
4.004.15 PM				DISCUSSION	
SESSION 56  VALEDICTORY FUNCTION (5.30 ONWARDS)  CHIEF GUEST - HIMANSHU PATHAK  SECRETARY (DARE) & DG (ICAR)					