

9th Plant Nitric oxide International Meeting (PNO9), New Delhi, 2024

Program Schedule

Day 1 (28 th February, Wednesday)		
Inauguration of 9 th Plant Nitric oxide International Meeting (PNO9)- 2024		
CET (European time)	IST (Indian time)	Details
9:30-9:35	14:00-14:05	Welcome Address by Dr. Jagadis Gupta Kapuganti , Organizer, PNO9-2024.
9:35-9:45	14:05-14:15	Address by Dr. Subhra Chakraborty , Director, NIPGR, New Delhi
9:45-9:50	14:15-14:20	Address by Prof. Christine H Foyer , University of Birmingham, UK.
9:50-10:00	14:20-14:30	Address by Prof. A.S. Raghavendra & Prof. Renu Deswal

Session 1		
Chairs: Prof. Joerg Durner & Prof. A.S. Raghavendra		
Key Note Talk		
10:00-10:30	14:30-15:00	Prof. Gary J Loake : S-nitrosylation of a cytoplasmic receptor-like kinase regulates plant immunity
Lead talks		
10:30-10:50	15:00-15:20	John T. Hancock : Does nitric oxide use protein cavities?
10:50-11:10	15:20-15:40	Lorena Aranda-Caño : Modulation of the nitro-alkylated proteome by nitro-fatty acids during development and abiotic stress in plants.
11:10-11:30	15:40-16:00	Ginevra M. E. Peppi : Uncovering molecular and regulatory mechanisms underlying GSNO degradation by aldo-keto reductase from <i>Arabidopsis thaliana</i> .
11:30-11:35	16:00-16:05	Special issue announcement by Prof. David Wendehenne .

Session 2		
Chairs: Prof. Francisco J Corpas & Dr. Girigowda Manjunatha		
Lead Talks		
11:35-11:55	16:05-16:25	Farida Minibayeva: Role of nitric oxide in autophagy in plants.
11:55-12:15	16:25-16:45	Lekshmy Sathee: Elevated CO ₂ exacerbates nitric oxide production and modulates nitrogen metabolism in bread wheat.
12:15-12:35	16:45-17:05	Ádám Solti: Nitric oxide accumulates under iron deficiency in chloroplasts.
12:35-12:55	17:05-17:25	Ankita Sehrawat: S-nitrosoproteome analysis in <i>Brassica juncea</i> from apoplast to nucleus during cold stress
12:55-14:00	17:25-18:30	Break

Session 3		
Chairs: Prof. Juan B Barroso & Prof. Renu Deswal		
Lead Talks		
14:00-14:20	18:30-18:50	Dandan Huang: Nitric Oxide maintained mitochondrial function in peach fruit during cold storage.
14:20-14:40	18:50-19:10	Sunita Kataria: Involvement of nitrate reductase-dependent nitric oxide production in magnetopriming-induced salt tolerance in soybean.
14:40-15:00	19:10-19:30	Loriana Demecsová: Nitric oxide sustains root surface redox activity and growth under hypoxic conditions in barley root tip.

Session 4: Flash Talks			
Chairs: Prof. Christian Lindermayr & Dr. Zsuzsanna Kolbert			
Time		Presenter	Title
CET (European)	IST (Indian)		
15:00-15:05	19:30-19:35	Neidiquele M. Silveira	Revealing the influence of nitric oxide signaling on drought tolerance mechanisms in 'Rangpur' lime.
15:05-15:10	19:35-19:40	Fernández MB	Role of NO in modulating UV-B stress responses in the cyanobacterium <i>Synechococcus</i> PCC 7335.
15:10-15:15	19:40-19:45	Dóra Kondak	Nanotechnological Interventions: Exploring the Impact of Nano-Nitric Oxide Donors in <i>Brassica napus</i>
15:15-15:20	19:45-19:50	Priyanka Jain	Identification of Nitric Oxide Responsive Genes in Rice Upon Fungal Infection
15:20-15:25	19:50-19:55	Patrícia Juliana Lopes Oliveira	Impacts of GSNOR manipulation on tomato heat stress responses.

15:25-15:30	19:55-20:00	Josepheena Joseph	Mitochondrial alternative oxidase pathway helps in nitro oxidative stress tolerance in germinating chickpea.
15:30-15:35	20:00-20:05	Joanna Gajewska	Host-derived nitrosative stress activates <i>Phytophthora infestans</i> HDAC3.
15:35-15:40	20:05-20:10	P. Bharath	Cytosolic alkalinization of guard cell pH facilitates the increase in nitric oxide levels and stomatal closure in <i>Arabidopsis thaliana</i>
15:40-15:45	20:10-20:15	Ruirui Wang	Effects of red light, far red light and NO on embryo germination of <i>Sorbus pohuashanensis</i>
15:45-15:50	20:15-20:20	Anastasia Mazina	S-nitrosylation of proteins during stress-induced autophagy in wheat <i>triticum aestivum</i>
15:50-15:55	20:20-20:25	Eduardo Gómez-Copoví	Role of nitric oxide on trans-resveratrol production in grapevine cells elicited with cyclodextrins and methyl jasmonate
15:55-16:00	20:25-20:30	Yaiphabi Sougrakpam	Low abundant myrosinases S-nitrosation suggest myrosinases involvement in nitic oxide signalling in <i>Brassica juncea</i> .
16:00-16:05	20:30-20:35	Rekha	PHYTOGLOBIN - Boon or Bane during <i>Botrytis</i> fungus infection in Arabidopsis and Tomato
16:05-16:10	20:35-20:40	María A Muñoz-Vargas	Leucine aminopeptidase (LAP) activity from sweet pepper fruits is modulated during ripening and by NO and reducing events
16:10-16:15	20:40-20:45	Vijay Pratap Singh	The function of peroxyxynitrite in rice roots under waterlogging stress

Session 5: Flash Talks			
Chairs: Prof. José Manuel Palma & Prof. Francisco J Corpas			
Time		Presenter	Title
CET (European)	IST (Indian)		
16:15-16:20	20:45-20:50	Garima Balyan	Mechanisms derived from titanium dioxide nanoparticles and nitric oxide interaction to alleviate salinity stress in wheat seedlings

16:20-16:25	20:50-20:55	Nidhi Kandhol	The Essential Role of Nitric Oxide in Zinc-induced cadmium stress resistance in rice roots
16:25-16:30	20:55-21:00	Kaiser Iqbal Wani	Nitric Oxide Regulates Antioxidant Machinery, Enhances PSII Efficiency, Improves Chloroplast Ultrastructure, and Promotes Artemisinin Biosynthesis in <i>Artemisia annua</i> Under Cadmium Stress
16:30-16:35	21:00-21:05	Asif Hussain Hajam	Exogenous application of nitric oxide alleviates arsenic-induced toxicity and enhances antioxidant defense mechanisms in <i>Ocimum basilicum</i>
16:35-16:40	21:05-21:10	Sheen Khan	Nitric oxide boosts photosynthetic nitrogen and sulfur-use efficiency and the ascorbate-glutathione cycle to mitigate high-temperature stress in rice plants
16:40-16:45	21:10-21:15	Giovanna Camargo Carmo do	Effect of nitric oxide-releasing nanoparticles on the growth and physiology of <i>Cecropia pachystachya</i> Trécul seedlings subjected to moderate water deficit
16:45-16:50	21:15-21:20	Abhaypratap Vishwakarma	A discrete strategy of AOX during hypoxia to increase nitric oxide and ATP synthesis
16:50-16:55	21:20-21:25	Hugo R. Guariz	S-nitrosoglutathione-loaded chitosan nanoparticles improve the physiological performance and reduce the mortality of neotropical tree seedlings after transplanting to the field
16:55-17:00	21:25-21:30	Anjali Pande	Chitosan-GSNO nanoparticles: a positive modulator of drought stress tolerance in soybean
17:00-17:05	21:30-21:35	Rosa M. Rivero	Unraveling the interplay between Melatonin and Nitric Oxide during the PSII/PSI gene dynamics under single and combined abiotic stresses

Day 2 (29 th February, Thursday)		
Session 1		
Chairs: Prof Gary Loake & Dr Jagadis Gupta Kapuganti		
CET (European time)	IST (Indian time)	Details
Key Note Talk		
9:00-9:30	13:30-14:00	Jose F. Moran: A new oxidative pathway of nitric oxide production from oximes in plants.
Lead talks		
9:30-9:50	14:00-14:20	Kapuganti Jagadis Gupta: Nitric oxide role in mitochondrial biogenesis in plants.
9:50-10:10	14:20-14:40	Zoé Chaudron: Identification and functional characterization of S-nitrosated proteins during salt stress in <i>Klebsormidium nitens</i> .
10:10-10:30	14:40-15:00	Ling Yang: Role of nitric oxide in stress-induced somatic embryogenesis in trees.
10:30-10:50	15:00-15:20	Urszula Krasuska: An update to the model of “nitrosative door” in seed biology.
10:50-11:00	15:20-15:30	Ecophysics

Session 2		
Chairs: Prof. José Manuel Palma & Prof. David Wendehenne		
Lead talks		
11:00-11:20	15:30-15:50	Prof Raghavendra: Nitric oxide is complemented by reactive oxygen species and calcium during stomatal closure and plant defence against abiotic and biotic stress
11:20-11:40	15:50-16:10	María José Iglesias: NO and ROS promote hypocotyl cell growth under shade in plants.
11:40-12:00	16:10-16:30	Amedea B. Seabra: Nitric oxide-releasing polymeric nanoparticles in plants recent progress, perspective and challenges.
12:00-12:20	16:30-16:50	Riddhi Datta: Unmasking the Hero: How the GSH-GSNO Module Defeats Iron Deficiency in Plants.
12:20-12:40	16:50-17:10	Staszek P: Canavanine-induced decrease in NO synthesis alters cell cycle regulation.
12:40-13:00	17:10-17:30	Inmaculada Sánchez-Vicente: Molecular regulation of bZIP67 by S-nitrosylation impacts on fatty acid storage during seed development
13:00-14:00	17:30-18:30	Break

Session 3: Flash Talks			
Chairs: Dr. Alexandre Boscari, Sanjib Bal Samant & Jagannath Swain			
Time		Presenter	Title
CET (European)	IST (Indian)		
14:00- 14:05	18:30- 18:35	Correa- Aragunde, Natalia	Exploring new insights into the role of nitric oxide synthase in nitrogen metabolism among photosynthetic organisms
14:05- 14:10	18:35- 18:40	Ana Cristina Preisler	Study of the interaction of a free and nanoencapsulated nitric oxide donor with soybean roots
14:10- 14:15	18:40- 18:45	Gábor Fejes	The effect of plasma-activated water on wheat seedling development and the levels of <i>in planta</i> reactive oxygen and nitrogen species
14:15- 14:20	18:45- 18:50	Selahattin Kondak	Ecotype-Dependent Responses to Nickel Oxide Nanoparticles in Ni Hyperaccumulator <i>Odontarrhena lesbiaca</i> : Unraveling the Impact Across Cellular, Tissue, Organ, and Molecular Level.
14:20- 14:25	18:50- 18:55	Maciej Piekarniak	Can HCN be converted to NO under physiological conditions?
14:25- 14:30	18:55- 19:00	Yue Zhang	Mechanism of nitric oxide alleviating alkali-induced inhibition of embryo germination in <i>Sorbus pohuashanensis</i>
14:30- 14:35	19:00- 19:05	Aakanksha Wany	Trichoderma supplementation enhances defense responses under low nitrate nutrition in Arabidopsis
14:35- 14:40	19:05- 19:10	Priyanka Babuta	<i>Brassica juncea</i> has multiple forms of S-nitrosoglutathione reductase (GSNOR) suggesting multiple roles
14:40- 14:45	19:10- 19:15	Tamás Bodor	The effect of seed priming with plasma activated water on germination and RONS content of <i>Arabidopsis thaliana</i> L.
14:45- 14:50	19:15- 19:20	Caihong Zhao	Concentration-based regulation of dormancy-emergence mechanisms in <i>Sorbus pohuashanensis</i> embryos by nitric oxide.
14:50- 14:55	19:20- 19:25	Jorge Taboada	NO modulates in pepper fruits the gene expression of tryptamine 5-hydroxylase (<i>T5H</i>), a gene involved in the serotonin generation

14:55-15:00	19:25-19:30	S. Gómez-Jiménez	Nitric oxide sensing by TGA transcription factors is essential for the root stem cell niche preservation.
15:00-15:05	19:30-19:35	Salvador González-Gordo	Unraveling the dynamics of the ascorbate-glutathione cycle enzymes in pepper fruits during ripening and under a NO-enriched atmosphere.
15:05-15:10	19:35-19:40	Pooja Singh	Phytoglobin-NO cycle and AOX pathway play a role in anaerobic germination and growth of deepwater rice.
15:10-15:15	19:40-19:45	Laura Lopes Maldonado	Emergence and Initial Development of Seedlings of Atlantic Forest Tree Species in Response to Seed Priming with Nanoencapsulated Nitric Oxide Donor
15:15-15:20	19:45-19:50	Anik Sarkar	Status of nitric oxide during fungal disease development in plants.
15:20-15:25	19:50-19:55	Shruti Sharma	Understanding the putative role of Nitric Oxide in growth and development of <i>Dioscorea alata</i> tubers.
15:25-15:30	19:55-20:00	Neha Gupta	Unraveling the involvement of Nitric oxide synthase in mitigating oxidative burst in cyanobacterium <i>Aphanizomenon flos-aquae</i> 2012/KM1/D3
15:30-15:35	20:00-20:05	Sonika Pandey	Nitric oxide stimulates seed germination via regulating the respiration in chickpea.
15:35-15:40	20:05-20:10	Agnieszka Wal	RNS and ROS alterations in <i>Nepenthes x ventrata</i>

Session 4		
Chairs: Prof. A. S. Raghavendra		
Lead talks		
15:40-16:00	20:10-20:30	Patrick Treffon: Organomercury-based capture of S-nitrosated proteins links protein quality control to fertility defects.
16:00-16:10	20:30-20:40	Concluding remarks by Prof. Gary Loake and Prof. Jorg Durner
16:10-16:20	20:40-20:50	Announcement of winners of Flash talks (Will be announced by Prof. Gary Loake and Prof. Francisco J Corpas.)
16:20-16:30	20:50-21:00	Vote of Thanks by Dr. Jagadis Gupta Kapuganti.