

**TRACE ELEMENTS IN MAN AND ANIMALS (TEMA)-18 CONFERENCE
M. S. RAMAIAH INSTITUTIONS, BENGALURU, INDIA**

SCIENTIFIC PROGRAM

Friday, November 08, 2024	
1:00 PM to 3:30 PM	Registration, RIT Lobby; Shuttle pick up from hotels at 1:30 PM; 2:00 PM; 2:30 PM
3:00 PM to 4:20 PM	Inaugural Ceremony, Apex Auditorium/RIT
4:20 PM- 4:45 PM	Coffee/Tea Break
4:45 PM to 5:35 PM (45 min Talk + 5 Q/A)	Underwood Prize Lecture; Chair: K. Sandeep Prabhu Selenium and Selenoproteins in Health and Disease Vadim N. Gladyshev Harvard Medical School, Boston, USA Apex Auditorium
5:40 PM to 6:30 PM (45 min Talk + 5 min Q/A)	Keynote Lecture; Chair: Girish S. Kirimanjeswara Zinc in Immunosenescence and Malnutrition Lothar Rink RWTH, Aachen, Germany Apex Auditorium/RIT
6:30 PM to 7:00 PM	Break (Transport to Sheraton Grand at Brigade Gateway for the Reception)
7:00 PM to 9:00 PM	Reception at Sheraton Grand at Brigade Gateway (By invitation only)
9:00 PM	Transport back to hotels

Saturday, November 09, 2024			
Shuttle pick up from hotels at 8:00 AM, 8:15 AM, 8:30 AM, 8:45 AM, and 9:00 AM			
8:30 AM to 9:15 AM (35 min Talk + 10 min Q/A)	Plenary Lecture 1: Venue: ESB1/ RIT <i>Impact of climate change on trace mineral requirements in the 1000 days</i> Nancy Krebs University of Colorado School of Medicine, USA Chair: Shalini Nooyi (Ramaiah Medical College, India)		
Poster Presenters: Please set up posters in the lobby			
9:15 AM to 10:45 AM (25 min talk & 5 min Q&A)	Scientific Session 1 ESB1/RIT “Cancer I” <i>Chair: Irida Kastrati</i> <i>Co-Chair: Vinayak Maka (RMC, India)</i>	Scientific Session 2 ESB2/RIT “Structure and Activity of Selenium and Selenoproteins” <i>Chair: G. Mugesh</i> <i>Co-Chair: Indira Priyadarsini</i>	Scientific Session 3 ESB3/RIT “Anemia and Iron Transport” <i>Chair: Iqbal Hamza</i> <i>Co-Chair: Somashekhar (RMC, India)</i>
9:15 AM- 9:45 AM	Invited Speaker 1 <i>SELENOP: A dual-role protein in inflammatory bowel disease and colorectal cancer</i> Christopher Williams Vanderbilt University School of Medicine, USA	Invited Speaker 4 <i>Novel developments in the selenoprotein biosynthesis pathway: Genes, biochemistry, and human disease</i> Ulrich Schweizer University of Bonn, Germany	Invited Speaker 7 <i>Functional adaptation of mammalian HRG1/SCL48A1 as an intestinal heme transporter</i> Iqbal Hamza University of Maryland School of Medicine, USA
9:45 AM- 10:15 AM	Invited Speaker 2 <i>Chemotherapeutic effects of organodiselenides (R-Se-Se-R) in lung cancer cells: Evidence of redox modulation towards reductive stress</i> Amit Kunwar BARC, India	Invited Speaker 5 <i>Regulatory frameworks for selenoprotein expression</i> Paul Copeland Rutgers University, USA	Invited Speaker 8 <i>Role of selenoproteins in stress erythropoiesis</i> Robert Paulson Penn State University, USA
	Invited Speaker 3	Invited Speaker 6	Invited Speaker 9

10:15 AM- 10:45 AM	<i>Ionic profiling of patients with colorectal cancer</i> Anatoly Skalnyy Orenburg State University, Russia	<i>Halogen Bonding with Selenium and Iodine: Thyroid Hormone Deiodination and Membrane Transport</i> G. Mugesh Indian Institute of Science, India	<i>Nutritional and molecular approaches to modulate intestinal iron absorption in iron-deficiency and iron-overload-related disorders</i> James Collins University of Florida, USA
10:45 AM – 11:00 AM	Talks selected from Trainee Abstracts 1 <i>Quantitative proteomic analysis revealed CD24 dependent modulation of metabolic reprogramming during epithelial to mesenchymal transition in Oral Squamous Cell Carcinoma (OSCC)</i> Anjali Gupta NIBMG, India	Talks selected from Trainee Abstracts 2 <i>Selenium analogues of α-Lipoic acid – Effect on activation of eNOS and their Antioxidant Properties</i> Sagar Kumar IISc, India	Talks selected from Non-Trainee Abstracts 1 <i>Boron as additive protects sperm motility and mitochondrial membrane potential during cryopreservation of jersey semen</i> Selvaraju S NIANP, India
11:00 AM- 11:15 AM	Coffee/ Tea Break		
11:15 AM- 12:00 PM (35 min Talk + 10 min Q/A)	Plenary Lecture 2 ESB1/RIT <i>Zinc supplementation in diabetes and prediabetes, current knowledge and challenges</i> Manuel Ruz, University of Chile, Chile <i>Chair: Chris Williams</i>		

12:00 PM- 12:45 PM (35 min Talk + 10 min Q/A)	Plenary Lecture 3 ESB1/RIT The trace element-dependent thyroid hormone system - Novel deiodinase selenoenzyme inhibitors Joseph Köhrle Charite Hospital, Germany <i>Chair: Nanda Kumar (RMC, India)</i>		
12:45 PM- 1:45 PM	Lunch and Poster		
1:45 PM- 3:00 PM (25 min talk & 5 min Q&A)	Scientific Session 4 ESB1/RIT “Selenium Derivatives and Organometallic Biochemistry” <i>Chair: Vimal Jain</i> <i>Co-Chair: Bharath Srinivasan</i> <i>(RCP, India)</i>	Scientific Session 5 ESB2/RIT “Analytical Methods to Quantitate Trace Elements” <i>Chair: Joanna Szpunar</i> <i>Co-Chair: Rajeshwara Achur</i>	Scientific Session 6 ESB3/RIT “Neurobiology” <i>Chair: Marla Berry</i> <i>Co-Chair: Rajendran (NIANP, India)</i>
1:45 PM- 2:15 PM	Invited Speaker 10 Antioxidant activity and cytotoxicity of selenium incorporated biologically inspired N-heteroaryl compounds Vimal Jain BNRS, India	Invited Speaker 12 Advances in selenium speciation analysis in established and emerging food supplements Joanna Szpunar UPPA-CNRS, France	Invited Speaker 14 Selenium, sex, stress, brains and energy. Marla Berry University of Hawaii, USA
2:15 PM-2:45 PM	Invited Speaker 11 Probing one- electron transfer reactions in selected trace elements Indira Priyadarshini University of Mumbai, India	Invited Speaker 13 A novel approach to study trafficking of essential trace elements Ryszard Lobinski UPPA-CNRS, France	Invited Speaker 15 (Remote) Role of astrocytic selenoprotein T in synaptic plasticity of the visual cortex Jian-Hong Zhu Wenzhou Medical University, China
2:45 PM- 3:00 PM	Talks selected from Trainee Abstracts 3	Talks selected from Trainee Abstracts 4	Talks selected from Trainee Abstracts 5

(12 min Talk + 3 min Q/A)	<i>Selenium and immune checkpoint inhibition in acute myeloid leukemia</i> Debo Sarkar Penn State University, USA	<i>Turn-On fluorescent probe detection for fluoride; in-vivo, in-vitro, and enzymatic studies</i> Neha Jain KAIST, Daejeon, Rep. of Korea	<i>Intracellular formation of submicrometer-sized spherical elemental selenium by a novel selenite-reducing bacterium isolated from seleniferous soil</i> Haruka Kamide Ritsumeikan University, Japan
3:00 PM to 3:15 PM	Coffee/ Tea Break		
3:15 PM- 4:00 PM (35 min Talk + 10 min Q/A)	Plenary Lecture 4 ESB1/RIT <i>A zinc sensing receptor in epithelial function and disease</i> Michal Hershinkel Ben-Gurion University of the Negev, Israel <i>Chair: A. Sahoo (NIANP, India)</i>		
4:00 PM- 4:30 PM	Sponsored Talk ESB1/RIT <i>AnemiaPhone</i> by Julia Finkelstein Cornell University Joan Klein Jacobs Center for Precision Nutrition and Health		
4:30 PM-	Return to hotels; Dinner on your own		

Sunday, November 10, 2024			
Shuttle pick up from hotels at 8:00 AM, 8:15 AM, 8:30 AM, 8:45 AM, and 9:00 AM			
8:30 AM to 9:15 AM (35 min Talk + 10 min Q/A)	Plenary Lecture 5 Council Hall/ RMC <i>Elemental Escorts: Secret Lives of Trace Element Transporters</i> Mitch Knutson University of Florida, USA <i>Chair: Lutz Schomburg</i>		
Poster Presenters: Please set up posters in the lobby			
9:15 AM- 10:45 AM (25 min talk & 5 min Q&A)	Scientific Session 7 Council Hall/ RMC “Trace Element Transport” <i>Chair: Vishal Gohil</i> <i>Co-Chair: Swathi J (RCASC, India)</i>	Scientific Session 8 Charaka Hall/ RMC “Neurotoxic and Physiological Stress” <i>Chair: Som Mukhopadhyay</i> <i>Co-Chair: Akshith Shetty (RMC, India)</i>	Scientific Session 9 Dhanvanthri Hall/ RMC “Antimicrobial Activities” <i>Chair: R. Lobinski</i> <i>Co-Chair: Arjunan Isaac (RMC, India)</i>
9:15 AM- 9:45 AM	Invited Speaker 16 <i>Targeting oxygen homeostasis to treat diseases of copper metabolism</i> Michael Petris University of Missouri School of Medicine, USA	Invited Speaker 19 <i>BTBD9 attenuates manganese- induced oxidative stress and neurotoxicity</i> Michael Aschner Albert Einstein College of Medicine, USA	Invited Speaker 22 <i>Fe-S cluster biogenesis and regulation regulates persistence of M. tuberculosis</i> Amit Singh Indian Institute of Science Bengaluru, India
9:45 AM- 10:15 AM	Invited Speaker 17 <i>Hepatic copper overload impairs selenium homeostasis</i> Anna Kipp University of Jena , Germany	Invited Speaker 20 <i>PHD2-HIF-SLC30A10 define a mammalian manganese sensing and response pathway (Neuro)</i> Som Mukhopadhyay U. Texas Austin, USA	Invited Speaker 23 <i>Selenium and bacteria: one element to fight them all</i> Daniel Plano University of Navarra, Spain

10:15 AM- 10:45 AM	Invited Speaker 18 Copper biology and medicine Vishal Gohil Texas A&M, USA	Invited Speaker 21 The importance of selenium for understanding symptoms of fatigue Lutz Schomburg, Charite, Germany	Invited Speaker 24 Nanotechnology: A recent tool to improve trace mineral bioavailability in farm animals Rajendran NIANP, Bengaluru, India
10:45 AM- 11:00 AM	Invited Speaker 25 Copper in vascular health and disease Irina Korichneva University of Picardie Jules Verne, France	Talks selected from Trainee Abstracts 6 Kinetic analysis of TmsA, a key enzyme in trimethylselenonium demethylation that drives environmental selenium cycling Kanakano Sowa, Ritsumeikan University, Japan	Talks selected from Trainee Abstracts 7 Dissecting the role of selenoprotein W in the pathogenesis of tularemia Arshiya Dewan, Penn State University, USA
11:00 AM- 11:15 AM	Coffee/ Tea Break		
11:15 AM- 12:00 PM (35 min Talk + 10 min Q/A)	Plenary Lecture 6 Council Hall/ RMC Functional crosstalk between selenoproteins TXNRD1 and GPX4 Elias Arner Karolinska Institute, Sweden <i>Chair: Anna Kipp</i>		
12:00 PM- 12:30 PM (25 min Talk + 5 min Q/A)	Plenary Lecture 7 Council Hall/ RMC Zinc status biomarkers: Long quest for an ideal candidate John Beattie, Rowett Institute, University of Aberdeen, UK <i>Chair: Wen-Hsing Cheng</i>		

12:30 PM- 1:45 PM	Lunch and Poster (TEMA Parent Committee Meeting- RMC)		
1:45 PM- 3:15 PM (25 min talk & 5 min Q&A)	Scientific Session 10 Council Hall/ RMC “Cancer II” <i>Chair: Alan Diamond</i> <i>Co-Chair: Chandraprabha (RIT, India)</i>	Scientific Session 11 Charaka Hall/ RMC “Trace Elements and Microbiota” <i>Chair: Yatrik Shah</i> <i>Co-Chair: Ahalya (RIT, India)</i>	Scientific Session 12 Dhanvanthri Hall/RMC “Antioxidant Stress Pathways, Methylation and Detoxification Mechanisms” <i>Chair: Yasu Ogra</i> <i>Co-Chair: Amit Kunwar</i>
1:45 PM- 2:15 PM	Invited Speaker 26 <i>The role of SELENOF in Cancer</i> Irida Kastrati Loyola University Chicago, USA	Invited Speaker 29 <i>Integration of cellular metabolism to intestinal iron absorption</i> Yatrik Shah University of Michigan School of Medicine, USA	Invited Speaker 32 <i>Interactions of a selenium analog of glutathione with biomolecules</i> Michio Iwaoka Tokai University, Japan
2:15 PM- 2:45 PM	Invited Speaker 27 <i>Selenium, Selenoproteins and Prostate Cancer Mortality</i> Alan Diamond University of Illinois, USA	Invited Speaker 30 <i>Targeting NLRP3 to alleviate iron supplements-induced adverse effects in IBD</i> Matam Vijay-Kumar University of Toledo, USA	Invited Speaker 33 <i>Methylation metabolism of chalcogen elements</i> Yasumitsu Ogra Chiba University, Japan
2:45 PM- 3:15 PM	Invited Speaker 28 <i>Sodium selenite-induced cell death is mediated by copper and partially resembles the ferroptosis pathway</i> Elena Sergeeva Harvard Medical School, USA	Invited Speaker 31 <i>The Interplay between dietary selenium deficiency, gut microbiota, and diabetes in mouse aging</i> Wen-Hsing Cheng Texas Woman’s University, USA	Invited Speaker 34 <i>Biochanin-A and phloretin mitigate arsenic and chromium-induced renal damage via modulating oxidative stress and SIRT1/NRF2/HO-1/NQO1 pathway</i>

			Gyanendra Singh ICMR- NIOH, India
3:15 PM- 3:30 PM	Coffee/ Tea Break		
3:30 PM- 4:15 PM (35 min Talk + 10 min Q/A)	Plenary Lecture 8 Council Hall/ RMC <i>Unraveling the links between iron status and Diabetes Mellitus: Clinical and therapeutic implications</i> Miguel Arredondo University of Chile, Chile <i>Chair: Uli Schweizer</i>		
4:15 PM- 4:30 PM	Break		
4:30 PM- 5:30 PM	Cultural Program by students of MSR Institutes of Education		
5:30 PM- 6:30 PM	Break (Transport to Sheraton Grand at Brigade Gateway for Gala Dinner)		
6:30 PM- 8:30 PM	Conference Gala Dinner at Sheraton Grand at Brigade Gateway (By invitation only)		
Bus back to hotels			

Monday, November 11, 2024

6:30 AM to 8:30 PM



Meet in the Conference Hotel (Gokulam) Lobby at 6:15 AM

Departure at 6:30 AM

Tour- Somanathpur and Mysuru

Breakfast on the way (Near Mandya)

Somanathapura Temple (a 13th C UNESCO World Heritage Site)

Lunch at CSIR- Central Food Technological Research Institute (CFTRI); Host: Dr. Sridevi A. Singh, Director, CSIR-CFTRI

Mysore Palace Visit

Winery Visit on the way & light snacks

Back to Bengaluru (~8.30 pm)

Dinner on your own

Price: INR 4000/person

Dinner on your own

Tuesday, November 12, 2024			
Shuttle pick up from hotels at 8:00 AM, 8:15 AM, 8:30 AM, 8:45 AM, and 9:00 AM			
8:30 AM-9:15 AM (35 min Talk + 10 min Q/A)	Plenary Lecture 9 ESB1/RIT <i>Crowdoxidation" to unexpected annulation and beyond: continued fun with organochalcogenide containing fluorescent probes</i> David Churchill KAIST, Republic of Korea <i>Chair: Arun Sharma</i>		
9:15 AM-11:00 AM (25 min talk & 5 min Q&A)	Scientific Session 13 ESB1/RIT "Trace element metabolism and transport" <i>Chair: Yoshiro Saito</i> <i>Co-Chair: Ramesha N (RCASC, India)</i>	Scientific Session 14 ESB2/RIT "Reproduction" <i>Chair: N K Sshivkumar Gowda</i> <i>Co-Chair: Sunil Jadhav</i>	Scientific Session 15 ESB3/RIT "Diabetes and Obesity" <i>Chair: Lucia Seale</i> <i>Co-Chair: Shwetha K</i>
9:15 AM-9:45 AM	Invited Speaker 35 <i>Selenium metabolism for selenoprotein synthesis- its relation to biological defense and diseases</i> Yashiro Saito Tohoku University, Japan	Invited Speaker 38 <i>Associations of trace elements with reproductive disorders</i> Ashutosh Halder All India Institute of Medical Sciences, New Delhi, India	Invited Speaker 41 <i>Selenium metabolism in brown adipocyte physiology</i> Lucia Seale University of Hawaii, USA
9:45 AM-10:15 AM	Invited Speaker 36 <i>Effects of salinity on the transcriptional regulation of</i>	Invited Speaker 39 <i>Boron: Vital trace element for livestock fertility and productivity</i>	Invited Speaker 42 <i>Beneficial effects of fungal iron supplementation on gut health</i> Manju Reddy Iowa State University, USA

	<p><i>trace metal transporters in tilapia</i></p> <p>Andre Seale University of Hawaii, USA</p>	<p>N K Shivkumar Gowda KVAFSU, India</p>	
10:15 AM-10:45 AM	<p>Invited Speaker 37 <i>Selenosugars, and selenium metabolomics and metabolism from deficiency to high selenium status</i> Roger Sunde University of Wisconsin, USA</p>	<p>Invited Speaker 40 <i>Impact of selenium on pregnancy and childbirth in association with thyroid stimulating hormone and oxidative stress</i> Suchetha Kumari Nitte Institute of Medical Sciences, India</p>	<p>Invited Speaker 43 <i>Zinc-based barrier vaginal contraceptives</i> Shwetha K RUAS, India</p>
			<p>Talks selected from Non-Trainee Abstracts 2 <i>Application of mass spectrometry-based proteomics in the analysis of trace element modified proteins: A case of selenoproteins</i> Arvind Korwar NIBMG, India</p>
10:45 AM-11:00 AM	<p>Talks selected from Trainee Abstracts 8 <i>Diseleno-albumin, a drug free therapeutic system induces apoptosis through mitochondrial derived reactive oxygen species in lung cancer cells</i> Minati Nayak BARC, India</p>	<p>Talks selected from Non-Trainee Abstracts 3 <i>Organic and Nano Trace Minerals at Lower Dietary Levels Improves Mineral Retention in Laying Hens</i> Thimmappa M Prabhu KVAFSU, India</p>	<p>Talks selected from Non-Trainee Abstracts 4 <i>Organic and Nano Trace Minerals at Reduced Dietary Levels Does Not Affect the Production Performance of Laying Hens</i> Suresh Bypanahalli KVAFSU, India</p>

11:00 AM- 11:15AM	Coffee/ Tea Break		
11:15 AM- 12:00 PM (35 min Talk + 10 min Q/A)	Plenary Lecture 10 ESB1/RIT Unlocking hidden potential: Exploring novel selenoenzyme and unique selenium metabolic pathway in bacteria Hisaaki Mihara Ritsumeikan University, Japan <i>Chair: Paul Copeland</i>		
12:00 PM- 12:45PM (35 min Talk + 10 min Q/A)	Plenary Lecture 11 ESB1/RIT Probing biological copper in the subfemtomolar range Christoph Fahrni Georgia Tech, USA <i>Chair: David Churchill</i>		
12:45 PM- 1:45 PM	Lunch and Learn (Sponsored talk) ESB1/RIT <i>Speaker: Piyush Deokar, Thermo Fisher, Analytical tools for trace elemental analysis at high accuracy and precision; Moderator & Chair: Matam Vijay Kumar</i>		
1:45 PM- 2:30 PM (35 min Talk + 10 min Q/A)	Plenary Lecture 12 ESB1/RIT Non-canonical roles and mechanisms of trace metal-containing redox proteins Xingen Lei, Cornell University, USA <i>Chair: Manju Reddy</i>		
2:30 PM- 4:00 PM (25 min talk & 5 min Q&A)	Scientific Session 16 ESB1/RIT “Compensatory and Antioxidant Pathways” <i>Chair: Mick Petris</i> <i>Co-Chair: Channarayappa (RCASC, India)</i>	Scientific Session 17 ESB2/RIT “Pathophysiology” <i>Chair: Robert Paulson</i> <i>Co-Chair: Lakshmikanth (RCASC, India)</i>	Scientific Session 18 ESB3/RIT “Novel Applications and Health Effects” <i>Chair: Yoshiro Saito</i> <i>Co-Chair: Suresh Bypanahalli</i>

2:30 PM- 3:00PM	Invited Speaker 44 <i>Biomimetic Studies on Metal Homeostasis and Detoxification</i> Gouriprasanna Roy Indian Institute of Technology, Tirupati, India	Invited Speaker 46 <i>Pathophysiological analysis of metaphyseal dysplasia in a selenoprotein GPx4 deficient mouse model</i> Hirotaka Imai Kitasato University, Japan	Invited Speaker 48 <i>Importance of trace elements and their characterization techniques in different high temperature alloys</i> Dheepa Srinivasan MS Ramaiah University, India
3:00 PM- 3:30 PM	Invited Speaker 45 <i>Selenium and Chromium in Animal Nutrition: Unveiling Complex Role in Stress Resilience, Health and Production</i> Sunil Jadhav Ind Veterinary Res Inst, India	Invited Speaker 47 <i>Selenization of the Small Molecule Drug Structures</i> Arun Sharma Penn State College of Medicine USA	Invited Speaker 49 <i>Heavy metals induced toxicity among E-waste workers: A cross-sectional study</i> Rajeshwara Achur Kuvempu University, India
3:30 PM- 3:45 PM	Talks selected from Trainee Abstracts 9 <i>Selenium mitigates Caerulein and LPS-induced severe acute pancreatitis by Inhibiting MAPK, NF-kB and STAT3 signalling via the Nrf2/HO-1 pathway</i> Swetha Kamatam University of Mysore, India	Talks selected from Trainee Abstracts 10 <i>Assessing nutrient retention and bioavailability in biofortified millets: A focus on low-temperature processing</i> Abubakar Karim Adam SR University, India	Talks selected from Trainee Abstracts 11 <i>Chemical speciation and total metal contents of Fe, Cu, Ni, Zn, in edible bamboo shoots of Manipur, Northeast India</i> Nikysana Mayengbam Manipur University, India
4:00PM to 4:30 PM	Closing Ceremony, <i>ESB1/RIT</i>		
4:30 PM to 5:30 PM	High Tea and Transport back to hotels; Dinner on your own. Have a safe trip back!		

POSTERS

November 9, 2024

Trainee Posters

Poster #	Presenter	Title
1	Abubakar Karim Adam	Assessing nutrient retention and bioavailability in biofortified millets: A focus on low-temperature processing
2	Amruthavarshini S N	Role of staple food fortification in combating micronutrient deficiency
3	Arshiya Dewan	Dissecting the role of selenoprotein W in the pathogenesis of tularemia
4	Haritha P K	Studies on biofortification and bioaccessibility of zinc and iron in wheatgrass
5	Indumathi M C	Selenium ameliorates acetaminophen-induced oxidative stress via MAPK and Nrf2 pathways in mice
6	Kanako Sowa	Kinetic analysis of TmsA, a key enzyme in trimethylselenonium demethylation that drives environmental selenium cycling
7	Nanditha Saravana	Method for extraction of heavy metal from dental calculus
8	Prakruthi M	Development and characterization of zinc rich ready to eat structured supplementary food for children
9	Sagar Kumar	Selenium analogues of α -Lipoic acid – Effect on activation of eNOS and their Antioxidant Properties
10	Shailaja Ananda Kumar	Swarna Bindu – An ancient approach to modern disease management
11	Sowmya B	Bacterial lipase activity could be altered by incorporation of bivalent cations
12	Sindhoora B U	The Impact of Zinc on Brain Function, Cellular Dynamics, and its Therapeutic Potential in Neuronal Regeneration
13	Arjun	Development of a zinc-based barrier vaginal contraceptive: Ex-vivo and in-vivo study

14	Lakshmipriya P	Phytochemical Characterization, Isolation, and Evaluation of Wound Healing Properties in a Banana Peel Extract Formulation
15	Sindhu O	Dietary Prebiotics as Modulators of Trace Element Homeostasis: A Systematic Review
16	Idhaya Kumar S	Mitigation of trace metal through plant derive saponin biosurfactant from <i>Sapindus mukorossi</i>
17	Prasanna V	Molecular Insights into the Potential of Eriocitrin to Enhance Selenium Bioavailability
18	Anweya Mohanta	Trace elements in neurodegeneration ,unraveling common pathways in Alzheimer's, parkinson's and beyond
19	Kavyasree MY	The Impact and Role of Iron in biofilm formation of Candida species
27	Anjali Gupta	Quantitative proteomic analysis revealed CD24 dependent modulation of metabolic reprogramming during epithelial to mesenchymal transition in Oral Squamous Cell Carcinoma (OSCC)
28	BM Nithin	Effect of Organic Trace Minerals at Different Dietary Levels on Nutrient Digestibility and Trace Mineral Balance in Pigs
29	Ramya Sri	Thiolated Chitosan Hydrogel Enhanced with Chitosan-CuO nanoparticles for Wound Healing Applications.

November 9, 2024

Non-Trainee Posters

Poster #	Presenter	Title
30	Gopi M	Maternal supplementation of organic zinc improved offspring's gut health in broiler chickens
31	N. Ramachandran	Assessment of zinc bioavailability from bio-fortified rice: An in-vivo rat study
32	Daniel Plano	Synthesis of novel selenocompounds as promising bactericidal compounds
33	Rajendran	<i>Cymbopogon citratus</i> -inspired zinc oxide nanoparticles: Synthesis, characterization and its biological assessment
34	T. Vijay Bhasker	Influence of boron supplementation on mineral profile in sheep fed diets with or without adequate levels of calcium
35	Sowjanyaalakshmi	Impact of <i>Limosilactobacillus reuteri</i> and Jerusalem artichoke synbiotics on immune response and serology in Wistar rats
36	K. Sandeep Prabhu	The impact of sodium selenite and seleno-L-methionine on stress erythropoiesis in a murine model of hemolytic anemia
37	Umashankar B	Organic and Nano Trace Minerals at Reduced Dietary Levels Sustains the Growth Performance and Nutrient Metabolizability in Broiler Chicken
38	Selvaraju S	Boron as additive protects sperm motility and mitochondrial membrane potential during cryopreservation of jersey semen

November 10, 2024

Trainee Posters

Poster #	Presenter	Title
1	J. Aishwarya	Evaluation of selenium functionalized nano composite in the cellular models of GBM
2	Catherine M S B	Phytoferritin from plant derived nanovesicles as a novel bioavailable source of iron to treat anemia
3	Deborpita Sarkar	Selenium and immune checkpoint inhibition in acute myeloid leukemia
4	Kaneez Haleema	Impact of protein and micronutrient blend on the characteristics of cookies made with whole wheat flour
5	Haruka Kamide	Intracellular formation of submicrometer-sized spherical elemental selenium by a novel selenite-reducing bacterium isolated from seleniferous soil
6	Krishna Chirag Shah	REVIEW TOPIC: TOXICITY OF MERCURY IN WASTEWATER TREATMENT
7	Manjunatha	Minerals associated sperm-expressed genes majorly regulate energy production process and motility
8	Minati Nayak	Diseleno-albumin, a drug free therapeutic system induces apoptosis through mitochondrial derived reactive oxygen species in lung cancer cells
9	Neha Jain	Turn-On fluorescent probe detection for fluoride; in-vivo, in-vitro, and enzymatic studies
10	Nikysana Mayengbam	Chemical speciation and total metal contents of Fe, Cu, Ni, Zn, in edible bamboo shoots of Manipur, Northeast India
11	Sherin G R	Development of antioxidant nanozymes with antiplatelet activity for prevention of thrombosis
12	Swetha Kamatam	Selenium mitigates Caerulein and LPS-induced severe acute pancreatitis by Inhibiting MAPK, NF-kB and STAT3 signalling via the Nrf2/HO-1 pathway
13	Shivangi	Gold(I)-NHC Complexes: Targeting Thioredoxin Reductase for Innovative Anticancer Therapy
14	Chandan CK	Nano-calcium and aqueous extract of <i>Tagetes erecta</i> based hemostatic powder for topical applications

15	Anagha M	Gut bugs-Great benefits: Probiotics and trace elements
16	Ananya Nayak	Trace elements: The Key players in bone regeneration
17	R Mahesh	Multifunctional Chelators: A Promising Strategy for Metal-Related Neurodegenerative Diseases
18	Kavyasree MY	The Impact and Role of Iron in biofilm formation of Candida species
19	Lisha Shiva Shankar	Heavy Metal Bioremediation
24	Tejaswini & Navya	Development & Evolution of Essential Metal (Cu, Zn & Mn) Complexes of Curcumin as Anticancer & Antioxidant Agents
25	Bhargavi Vadappi	Evaluation of Antibacterial Activity of Molybdenum Doped Cerium Oxide Nanoparticle
26	Keerthana M & Bhavya SG	Mass Spectrometry in Proteomics: Current
27	Harshitha M	Punica granatum derived Nano ZnO: DNA protection from oxidative damage and cytotoxic effect on cancer cells
28	Sharath S Narayan	Bio-fabrication of Nanoceria using green tea extract and their biomedical applications

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Non-Trainee Posters

Poster #	Presenter	Title
29	K. Giridhar	Correction of zinc deficiency in sheep by feeding zinc biofortified maize stover
30	Girish Kirimanjeswara	Selenoproteins contribute to peripheral follicular B cell homeostasis by modulating cellular ROS levels
31	Arvind Korwar	Application of mass spectrometry-based proteomics in the analysis of trace element modified proteins: A case of selenoproteins
32	Ganesh Aderao	Impact of higher dietary selenium on mineral metabolism and antioxidant status of heat-stressed rats
33	Suresh Bypanahalli	Organic and Nano Trace Minerals at Reduced Dietary Levels Does Not Affect the Production Performance of Laying Hens
34	Thimmpappa M Prabhu	Organic and Nano Trace Minerals at Lower Dietary Levels Improves Mineral Retention in Laying Hens
35	Eranna Lokesha	Higher dietary zinc modulates antioxidant status, cytokine levels, and immune response of rats under heat stress condition