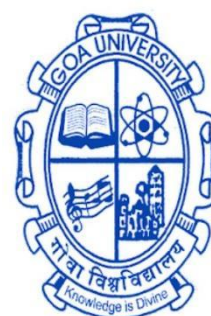


International Conference on
Natural Science and Green Technologies for Sustainable
Development (NTSD-2022)
30th Nov-2nd Dec 2022

JOINTLY ORGANISED BY



National Environmental
Science Academy (New Delhi)



School of Biological Sciences
and Biotechnology, Goa
University, Taleigao Plateau
Goa

Venue: Chemistry Auditorium, Faculty Block E
Goa University, Taleigao Plateau, Goa

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Genomics

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PROGRAMME SCHEDULE

DAY 1 30th November, 2022

Inaugural Session and Award Ceremony

10:15 AM to 12:25 PM

9:00-10:00	Registration
9.30- 10:15	High Tea
10:15-10:16	Welcome by compere
10:16 - 10:20	Welcome dance
10:20- 10:25	Convener- escort the dignitaries to the dais.
10:25 - 10:30	Welcome song
10:30- 10:35	Welcome address by: Prof. Savita Kerkar, Convener, NTSD 2022.
10:35 - 10:40	Welcome the dignitaries.
10:40 - 10:45	Lighting of the lamp.
10:45- 10:50	Introduction of NESAs
10:50- 11:00	Address by Guest of Honour Prof. Harilal B. Menon, Vice Chancellor, Goa University.
11:00- 11:05	Release of Abstract Book
11:05- 11:20	Address by Honorable Chief Guest Shri. Damodar Mauzo
11:20- 12:00	NESA ANNUAL AWARD CEREMONY, 2022 Prof. T. R. C. Sinha Lifetime Achievement Award 2022 Kanak Sinha Memorial Award 2022 NESA Fellowship/Hony. Fellows 2022 NESA Eminent Scientist Award 2022
12:00-12:15	Felicitation of the Chief Guest and Guest of Honour by NESAs Felicitation of NESAs officials
12:15-12:20	Vote of Thanks by Prof. Sanjeev Ghadi.
12:20-12:25	National Anthem

First Technical Session

12:25 to 13:05

Chairperson: Prof. Savita Kerkar, <i>School of Biological Sciences and Biotechnology,</i> <i>Goa University</i>	
12:25-12:45	Keynote Talk Prof. Harilal B. Menon, Vice Chancellor, Goa University.
12:45-13:05	Keynote Talk <i>Polar regions in a warming world</i> Dr. Thamban Meloth, Director NCPOR, Goa.

LUNCH BREAK 1310-1400

Second Technical Session

14:00 to 15:45

Chairpersons: Prof. S. Krishnan <i>School of Biological Sciences and Biotechnology,</i> <i>Goa University</i>	
14:00-14:20	Keynote Talk <i>The Paradigm of molecular Eco-nanotechnology for bio-compatibility: Zebrafish and P. caudatum as in vivo models.</i> Prof. Mrutyunjay Suar Professor & Director General, R&D, School of Biotechnology, KIIT. CEO, KIIT- TBI, Bhubaneswar.
14:20-14:40	Keynote Talk <i>Hydrometallurgical processing of industrial solutions and effluents for value addition</i> Dr. Chinmaya Kumar Sarangi Principal Scientist, CSIR-IMMT, Bhubaneswar.
14:40-14:55	Invited Talk <i>Bacterial Diversity driven macrophyte invasiveness in a brackish water lagoon, Chilika lake: Solutions for sustainable development</i> Prof. Vishakha Raina, Associate Professor, School of Biotechnology, KIIT, Bhubaneswar.
14:55-15:00	Concluding remarks by Chairperson
15:00-15:45	Poster Session I (29) Venue: Chemistry Foyer

THEMES: BIOTECHNOLOGY AND ENVIRONMENT (1-20)
AGRICULTURE AND ENVIRONMENT (21-29)

Sr.no.	Name of the participant	Title of the Poster
1.	Veda Vinay Manerikar	Assessment of microplastics in coastal and estuarine sites of goa
2.	Deepti Rane	Silica based silver nanocomposite in mitigation of corrosion causing Goan salt pan sulphate reducing bacteria
3.	Arfin Imam	PAHs degradation by microbial consortia PBR-21: In vitro studies and assessment of PAH degradation efficiency in stimulated microcosm
4.	Aabha Arun Marathe	Potential of Yeasts obtained from Mangroves in Goa for L-Asparaginase production
5.	Geetanjali Kumawat	Green synthesis of Silver Nanoparticles and Their Antibacterial Activity
6.	Sunita Choudhary	Green synthesis of Silver Nanoparticles and Their Antibacterial Activity
7.	Rakshita Kaskar	Isolation of pigmented bacteria from marine environments of goa
8.	Komal Sumant Salkar	Quorum sensing inhibitory potential of chemically synthesized compounds in bacteria
9.	Manasi Deepak Kamat	Physiological Response of Ectomycorrhizal Fungus Pisolithus sp. Isolated from Mining Site to Temperature Stress
10.	Shifa Naseem	Fish silage as a feedstock for the growth and simultaneous lipid production by the oleaginous yeast
11.	Nikita Gautam	Application of nanotechnology in crop biofortification
12.	K.R.Aneesa	The prevalence of antibiotic resistance among environmental isolates of bacteria from selected harbours in Kerala, South India
13.	Sushant Sharma	Ambiguous role of phytohormone Ethylene in plant-pathogen interactions
14.	Elaine Antoinette Da Costa	Characterization of seaweed polysaccharide degrading bacteria and their exploitation for anti-diabetic activity
15.	Fazila Shaikh	Evaluation of metal tolerance of halophilic eubacterial and archaeal strains isolated from solar salterns of Goa, India
16.	Arnepalli Chandrasekhar	Assessment and Identification of exophytic and endophytic Biofloc forming organism from selected marine algae sourced along the coastal area of Pandurangapuram, Visakhapatnam
17.	Savia Bernadette Botelho	Elucidation of Microbial Siderophores in Salt Tolerant Korgut Rice Variety of Goa
18.	Ms. Dviti Mapari	Xenobiotic Biodegradation Potential of Brevibacterium sp. Isolated from Coastal dunes of Goa: A Genomic Approach
19.	Devika Ravindra Jadhav	Anti-diabetic properties of marine oligosaccharides
20.	Annie Princy Nadar	Extracellular biogenic synthesis of zinc oxide nanoparticles from selected Syzygium spp., and its in-vitro radical scavenging activity
21.	Tanveer Ahmad Khan	Novel mechanistic insights on melatonin mediated physio-biochemical, microscopic, and histochemical modifications in tomato plants to promote salt stress tolerance.

22.	Bisma Hilal	Differential responses of commercial wheat varieties to Cr-induced heavy metal stress: A comprehensive analysis at the morpho-physiological and yield level
23.	Ameena Fatima	The protective role of sulfur under heat stress in high and low sulfur-responsive rice cultivar
24.	Shravani Narayan Korgaonkar	Mitigating effects of drought by foliar application of salicylic acid on rice cultivars: a comparative study
25.	Ravi Kumar Sahu	Utilization of agro-residue in high-performance supercapacitors: a brief critical review
26.	Subhajit Mahanty	A study on the variation of the physicochemical, hydro biological and limnological parameters with respects to the euglena bloom and anthropogenic factors in a high, moderate and less productive pond of bankura district of west bengal, india.
27.	Sreedevi Banugu	Growth and yield performance of newly released aerobic rice varieties under varied weed pressure
28.	Dr.B.Doddabasappa	Management of jackfruit stem borer, batocera rufomaculata de geer (cerambycidae: coleoptera)
29.	Kishan Kumar	Exogenous silicon and salicylic acid confer drought stress tolerance in populus deltoides

15:45-16:00

Tea Break & Networking Session

16:00-18:00

Oral Presentation by registered participants/delegates [Parallel Session]

[For Faculty & Research Scholars only]

2 parallel sessions (15/ session)

9 mins/ presentation (7 mins presentation + 2 mins discussions)

**ORAL PRESENTATION DAY 1 SESSION I
THEME: BIOTECHNOLOGY AND ENVIRONMENT (1-15)
Venue: Chemistry Auditorium**

Sr. no	Name of the participant	Title of the presentation
1.	Kumar Kashyap	Insights Into the Genome of Porolithon Onkodes: Announcement Of The First Draft Genome Of Crustose Coralline Algae (Cca)
2.	Sajani Singharoy	Preliminary analysis of the anti-diabetic and anti-oxidative effects of hydroethanolic (3:2) bauhinia acuminata bark extract: an in vitro investigation.
3.	Sukriti Hazra	Hypo-testicular activity of the seed of areca catechu (linn) in albino rat: effective fraction selection study
4.	Shibani Das	Anti-diabetic and anti-oxidative efficacy of hydro-methanol (60:40) extract of aerial parts of commelina benghalensis linn. In streptozotocin induced diabetic male albino rat : an in-vitro approach
5.	Tanusree Mondal	Hypo-testicular activity assessment of hydro-methanol (60:40) seed extract of luffa acutangula in human and albino rat: an in-vitro investigation
6.	Pampa Lohar	In-vitro study of anti-spermatogenic activity of hydro-methanol extract of (60:40) caesalpinia pulcherrima leaves on human and rat sperm
7.	Sachin Gajendra	Extraction of lipid from microalgae
8.	Neeha Nitin Sinai Borker	Association of abo blood group phenotypes with covid-19 : a cross-sectional study in goa
9.	Dr.Kuldeepsingh A. Kalariya	Sensitivity of andrographis paniculata (burm. F.) Morphotypes to soil moisture stress: status of antioxidant enzyme activities and andrographolide yield

10.	Dr. Trelita De Sousa	Green synthesis of silver nanoparticles mediated by garcinia indica (kokum) and their effectiveness against acne-causing bacteria
11.	Dr. Sheryanne Velho Pereira	Exploring the larvicidal effect of chemically synthesized pristine α -mno2 nanostructures and evaluating its toxicity using oreochromis mossambicus
12.	Dr Marielou Ferrao	Biodiversity Studies Of Pigmented Bacteria And Fungi Isolated From Panjim Nallah Water And Characterisation Of Selected Isolates
13.	Vikash Kumar Yadav	Rhythmic expression of lncRNAs and its function in floral development and the circadian clock
14.	Harshita Sonarhi	Dpp-Iv Inhibition (Anti-Diabetic) Potential Of Kappa Casein Hydrolysates
15.	Kandeep Gurunathan	Development of biodegradable Nanocomposite packaging material for chicken meat
16.	Moitreyi Das	An In-Vitro Screening of Halophilic Bacteria from Salt Pan of Goa, India with Anti-Depressant Like Activity Using C6 Glial Cell Mode

ORAL PRESENTATION DAY I SESSION II

THEME: 1. AGRICULTURE AND ENVIRONMENT (1-14)

2. AIR POLLUTION AND MITIGATION (15)

Venue: Biotechnology Lecture Hall I

Sr. no.	Name of the participants	Title of the presentation
1.	Shama Jabeen	Optimization of conditions for vegetative propagation of zanthoxylum alatum through mound layering, effects of iba, and seasonal differences with possible replication for other forest species to meet india's forest ndc target
2.	Sonia Rathee	Hyptis suaveolens inhibits growth of co-occurring plant species through allelopathic interference
3.	Ashly Kurian	Carabid beetles (coleoptera: carabidae) in the rice agro-ecosystem of kerala.
4.	Dr. Md Yeasin	Wheat yield modelling with climatic effects using an ensembled deep learning approach in north-western himalaya
5.	Manish Kumar	Applying data envelopment analysis (dea) approach for energy input-output flow in wheat cultivation
6.	Tanveer Ahmad Khan	Novel mechanistic insights on melatonin mediated physio-biochemical, microscopic, and histochemical modifications in tomato plants to promote salt stress tolerance.
7	Bisma Hilal	Differential responses of commercial wheat varieties to cr-induced heavy metal stress: a compressive analysis at the morpho-physiological and yield level
8.	Ameena Fatima	The protective role of sulfur under heat stress in high and low sulfur-responsive rice cultivar
9.	Vipula Vyas	Dalbergia sissoo: a potential leguminous phytoamelioration tree to rehabilitate the degraded sodic lands of arid region
10.	Surendra Pal	Study to observe the effect of different tillage practices on the bulk density and infiltration rate of agricultural soil
11.	Parmanand Sahu	Thermal degradation kinetics of pigeon pea stalk
12.	Manish Singh	Interactive effect of elevated co2 and varying nitrogen regime on the physio-biochemical response of neolamarckia cadamba
13	Dr. Pankaj Kumar Srivastava	Arsenic in agriculture and its mitigation to protect the food chain
14.	Susheel Kumar Raina	Addressing Early Blooming In Almonds Under North-Western Himalayan Region Of Kashmir.
15.	Aradhana K S	Biomonitoring Of Indoor Air Contaminants Using Spider Web

CULTURAL PROGRAMME 1800 ONWARDS

DINNER

DAY 2
1st December, 2022
Third Technical Session
1000-1130

<p>Chairperson: Chairperson: Dr. Nitin Seth Director, Indo-French Centre for Promotion of Advanced Research (IFCPAR / CEFIPRA), New Delhi.</p>	
10:00-10:20	<p>Keynote Talk <i>Decentralized wastewater treatment system for sustainable development</i> Dr. Shrikant Mutnuri Professor, Department of Biological Sciences, BITS, Goa.</p>
10:20-10:40	<p>Keynote Talk <i>Green solutions for Red Alarm: Phytochemical Formulation for Sickle Cell Disease</i> Prof. Suman Kundu Director, BITS, Goa.</p>
10:40-10:55	<p>Invited Talk <i>Using waste spent grains from Brewery to generate potent biofertilizer</i> Dr. Dhaval Patel Research Associate, Latambracem Brewers, Goa.</p>
10:55-11:10	<p>Invited Talk <i>Indo-German Science & Technology center - Avenues for bilateral funding opportunities</i> Dr. P V Lalitha Chief Scientific officer, IGSTC, New Delhi.</p>
11:10-11:25	<p>Invited Talk <i>Salterns as a reservoir for Green technology for sustainable development</i> Prof. Savita Kerkar, Senior Professor, School of Biological Sciences and Biotechnology, Goa University.</p>
11:25-12:00	<p>Tea Break & Networking Session</p>

Fourth Technical Session

12:00 to 13:30

Chairperson: Prof. Debidas Ghosh <i>Department of Biomedical Laboratory Science</i> <i>Vidyasagar University</i>	
Venue: VRPP Hall	
12:00-12:20	Keynote Talk: International speaker (ONLINE) <i>Nanotechnology opportunities and its scope in the energy and health sector.</i> Dr. Ateet Dutt Principal Investigator, Universidad Nacional Autonoma de Mexico.
12:20-12:40	Keynote Talk: International speaker (ONLINE) <i>Biocontrol of plant diseases- a sustainable alternative of pesticide application in agriculture production system.</i> Dr. Mukesh Dubey Associate Professor, Swedish University of Agricultural Sciences, Uppsala, Sweden.
12:40-13:00	Keynote Talk: (ONLINE) <i>Mainstream traditional knowledge into modern health practices for precision wellness</i> Dr. Neel Sarovar Bhavesh Group leader, International Center for Genetic Engineering and Biotechnology, New Delhi.
13:00-13:15	Invited Talk: (ONLINE) <i>A double edge assault on Human life by Carcinogen dioxin in air and water pollution</i> Dr. A. K. Gupta Professor, Maharishi Markandeshwar, Haryana.

LUNCH BREAK 1315-1430

Fifth Technical Sessions

14:30 to 16:00

Chairperson: Dr. Rashmi <i>Principal Scientist, CSIR-RAB, New Delhi.</i>	
14:30-14:50	Keynote Talk <i>Supporting Indian Science Community</i> Mr. Rajesh Parishwad Head, Public policy, Government and engagement, India and south Asia. Royal Society Chemistry
14:50-15:05	Invited Talk <i>A Double Edge assault on human life by Carcinogen Dioxin in air and Water Pollution</i> Dr. Akhil Agarwal Assistant Professor, CURAJ Jaipur, Rajasthan
15:05-15:20	Invited Talk <i>Reactive Oxygen species and diabetes mellitus: Environment impact</i> Prof. Debidas Ghosh Department of Biomedical Laboratory Science Vidyasagar University
15:20-15:35	Invited Talk <i>Genomic technologies for the Agriculture and Environmental studies</i> Eurofins Genomics India Pvt Ltd.
15:35-16:00	Tea Break

Sixth Technical Sessions

1630 to 1800

Chairperson: Dr. Nitin Seth <i>Director, Indo-French Centre for Promotion of Advanced Research (IFCPAR/CEFIPRA), New Delhi.</i>		
16:00-16:30	Poster Presentation Session II (30 posters) Venue: Chemistry Foyer	
THEMES: ENVIRONMENT SUSTAINABILITY AND DEVELOPMENT (1-5) WATER POLLUTION AND MITIGATION (6-9) BIODIVERSITY AND CONSERVATION (10-12) RENEWABLE ENERGY AND ITS SCOPE (13) OTHERS (14-21)		
Sr.no	Name of the participant	Title of the poster
1.	Raja Singh Rawal	Detoxification of phenolic compound by fungal crude enzymes
2.	Pooja Chauhan	Microbial degradation of naphthenic acids: a sustainable approach

3.	Shikha Singh	Enzymatic hydrolysis of castor oil by a newly isolated microbial strain
4.	Sumit Sharma	Integrated fabrication of a bio-based composite by lactic acid condensation with rice straw/lignin for making sustainable goods and utility items
5.	Dr. Kulkarni Narendra Anant	Ecosystem services by mangroves of Maharashtra state (India) with respect to their sustainability
6.	Amrutha Asokan	Metal-organic framework-based adsorbents for the removal of diclofenac from synthetic water
7.	Manisha Tiwari	Design and Development of Luminescence based biosensor for detection of heavy metal in aquatic systems.
8.	Pushyamitra Keshav Joshi	Prevalence and assessment of fluoride levels in groundwater of hingoli, Maharashtra
9.	Mahesh Mayekar	Assessment of groundwater contamination in coastal aquifers in north goa, goa, India
10.	Sreehari Raman	Consequences of climate change on the endangered bats of western ghats, India
11.	Priyanka Faroda	Geographical distribution of calligonum polygonoides linn.: an important species of thar desert
12.	Karthik N J	Death by nets: monitoring bird kills in pomogranate orchards
13.	Geetanjali Kumawat	Algal biofuel- a prospective alternative source of energy
14.	Supriya Meena	Hypertension: a major threat to human beings
15.	Nayan Anand Mate	Environmental stress contributes to age-related hormonal disfunction: polyamines can curtail neurodegeneration, maintaining functional integrity of neuroendocrine system.
16.	Shweta Shaunak Borkar	Simultaneous estimation of methocarbamol and ibuprofen in fixed dose combination by UV spectrophotometric method.
17.	Swati Kumari Mishra	Analysis of next generation sequencing data
18.	Asmita S Arondekar	Evaluation of neuropharmacological activities of persimmon (diospyros kaki linn.) Fruits in rats
19.	Siddharthbhai Shivilal Patelnabh4	Selective reduction of aryl carboxylic acid using and solid acid and
20.	Suryajitsinhji Lilaji Rathod	A new calix[4]pyrrole functionalized fluorescein based supramolecular compounds for liquid crystalline and window layer solar cell applications
21.	Priyanka A. Shah	Simultaneous enantio separation and simulation studies of atenolol, metoprolol and propranolol on chiralpak ig column using supercritical fluid chromatography: a green approach in separation science
16:30-18:30	Oral Presentation by registered participants/delegates [Parallel Session] [For Faculty & Research Scholars only] 2 parallel sessions (12/ session) 9 mins/ presentation (7 mins presentation + 2 mins discussions)	
ORAL PRESENTATIONS DAY 2 SESSION I THEME:1. CLIMATE SMART AGRICULTURE (1-2) 2. WATER POLLUTION AND MITIGATION (3-5) 3. WASTE WATER UTILIZATION AND MITIGATION (6-7) 4. WASTE MANAGEMENT (8-9) 5. BIODIVERSITY CONSERVATION (10-12) Venue: Chemistry Auditorium		
Sr. no.	Name of the participant	Title of the presentation

1.	Pushpraj Diwan	Optimization of energy consumption using data envelopment analysis (dea) in soybean cropping system of bhopal (m.p.)
2.	Dr. Rajpal Singh Deswal	Mahaneem based agro-forestry system: suitable for climate smart agriculture
3.	Kuldeep Singh	Identification and analysis of marine litters on the beaches of goa
4.	Akhilghosh K A	An overview of assessing the perfluoroalkyl compounds in water bodies and the remediation methods for a sustainable environment
5.	Asha Shende	Green synthesis of ag/zno coated activated carbon using acacia auriculiformis trunk for the removal of pb from the aqueous medium
6.	Bhumika Sharma	Spectrophotometric monitoring of explosives wastewater treated using integrated treatment methods
7.	Sumiran Sheshrao Dabraser	Wastewater reuse in agriculture
8.	Priyanka Bhagwan Jadhavar	Eco-friendly approach for detoxification of a harmful textile dye and its phytotoxic evaluation
9.	Aiswriya V P	A study on chemical and structural changes of microplastics induced by advanced oxidation processes
10.	Varsha Giri	Conservation of terminalia coronata (stapf) gere & boatwr. - a rare, endangered and threatened species of rajasthan
11.	Monika Chauhan	Trend analysis of meteorological variables over alpines in chamba district of himachal pradesh, nw himalaya, india.
12.	Sreehari Raman	Consequences of climate change on the endangered bats of western ghats, india

ORAL PRESENTATION DAY 2 SESSION II

- THEMES: 1. RENEWABLE ENERGY AND ITS SCOPE (1-4)
2. ENVIRONMENT SUSTAINABILITY AND DEVELOPMENT (5-7)
3. OTHERS (8-12) (13: Online presentation)**

Venue: Biotechnology Lecture Hall I

Sr. no	Name of participants	Title of the presentation
1.	Krishnadeep Sahu	Methane Enhancement Using Nano-Technological Interventions
2.	Shringala Thimappa Girisha	Chlorella Sorokiniana For Biodiesel Production
3.	Ravi Kumar Sahu	Utilization Of Agro-Residue In High-Performance Supercapacitors: A Brief Critical Review
4.	Richa Pahariya	Advanced Harvesting techniques for sustainable Biofuel Production.
5.	Sreelakshmy S	Growth Parameters And Niche Breadth Analysis Of Caridean Shrimp Provide New Insights For Sustainable Deep-Sea Shrimp Fisheries And Ecosystem Management Of The Southwest Coast Of India
6.	Abhipsa Khobragade	Edible Film Packaging- A Novel Approach In Food Packaging
7.	Swati Solanki	Microplastic Toxicity: An Analytical Insight Into Detection Methods And Myco-Degradation Pathways
8.	Puja Das	Male Contraceptive Efficacy Assessment Of The Constituents Presents In Different Solvent Fraction Of Tinospora Cordifolia (Willd.) Stem: A Study On Testicular Gametogenesis And Androgenesis
9.	Amitha Unnikrishnan	Continuous Mapping Of Riverine System In Kochi City Using Mass Spectrometry.
10.	Khushbu Kumari	Utilization Of Dielectric Spectroscopy For Characterizing Indian Cottage Cheese Variants
11.	Vinay S. Sharma	Microcrystalline Cellulose Decorated With Fe ₃ O ₄ Nanocatalyst For The Microwave-Assisted Synthesis Of Thioglyoxamides Under Green And Sustainable Conditions

12.	Vishnu Sagar M.K	Ecosystem Services Valuation Of A Ramsar Coastal Lake In Kerala With Special Emphasis On Water Quality And Land Use Land Cover Pattern
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DAY 3

2nd December, 2022

Seventh Technical Sessions 10:00 to 10:50

Valedictory Session 11:00-12:00	
10:00-11:00	High Tea
11:00-11:05	Welcome of Chief Guest
11:05-11:20	Special Address by The Chief Guest of Valedictory Session: Shri Rajendra Kerkar
11:20-11:45	NESA ANNUAL AWARDS NESA SCIENTIST OF THE YEAR AWARD 2022 NESA ENVIRONMENTALIST OF THE YEAR AWARD 2022 NESA GREEN TECHNOLOGY INNOVATIVE AWARD 2022 WOMEN EXCELLENCE AWARD 2022 NESA DISTINGUISHED AWARD 2022 NESA YOUNG SCIENTIST OF THE YEAR AWARD 2022 NESA JUNIOR SCIENTIST OF THE YEAR AWARD 2022
11:45-11:50	Felicitations of The Honorable Chief Guest of Valedictory Session
11:50-11:55	Vote of Thanks and dispersal of attendees.