

International Conference by Biotechnology Society of Nepal (ICBSN-2021)

**“Biotechnological Revolution in Environmental, Agricultural
Technologies & Healthcare (BREATH)”**

VIRTUAL CONFERENCE PROGRAM SCHEDULE

12-14 February, 2021

Conveners

**Prof. Vasudeo Zambare, India
Prof. Janardan Lamicchane, Nepal
Mr. Nabin Munankarmi, Nepal**

Organised by
Biotechnology Society of Nepal (BSN), Nepal

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12 FEBRUARY, 2021

Welcome and Keynote Speech		
07:20- 07:30	Welcome Speech	Mr. Nabin Munankarmi Convener- ICBSN2021 President, Biotechnology Society of Nepal, Nepal
07:30 - 07:40	Patron Speech	Er. Ganesh Shah Former Minister for Environment, Science, and Technology, Nepal
07:40- 08:40	Keynote Speech	Prof. Nikolai Petrovsky Scientist and Professor at Flinders University, Australia Chairman of Vaxine Pty. Ltd, Australia
08:40- 08:50	Concluding Speech	Mr. Binayak Pandey Biotechnology Society of Nepal, Nepal
08:50 - 09:00	Refreshment Break	
SESSION-1 Biotechnology		
	Session Chair	Dr. Puna Maya Maharjan Senior Scientist, G+Flas Life Sciences, Korea
	Moderator	Dr. Santi Devi Upadhaya Assistant professor Dankook University, Korea
09:00 - 09:10	Welcome Speech	Welcome and session introduction Dr. Puna Maya Maharjan Senior Scientist, G+Flas Life Sciences, Korea
9:10 - 09:50	Plenary Speech	Deletion of the protein glycosyltransferase using CRISPR-Cas9 and production of glycoengineered biopharmaceuticals in <i>Nicotiana benthamiana</i> Prof. Sunghwa Choe Professor, Seoul National University, Korea CEO, G+Flas Life Sciences, Korea
09:50 - 10:00	Oral -1	Alternative bioremediation agents against haloacids, haloacetates and chlorpyrifos using novel halogen-degrading bacterial Isolates from the hypersaline lake Tuz Habeebat Adekilekun Oyewus Universiti Teknologi Malaysia, Malaysia
10:00 - 10:10	Oral -2	Switching in bacterial gene expression networks Santosh Koirala Researcher, University of Illinois, USA
10:10 - 10:20	Oral -3	Cytotoxic effect of selected wild orchids on two different human cancer cell lines Pusp Raj Joshi Tribhuvan University, Nepal

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10:20 - 11:45	Invited Speech	Winemaking in the newest wine regions of Asia and the challenges of making quality wines in Nepal Mr. Ajoy R. Shaw Winemaking consultant, Ajoy Shaw Consulting, India
10:45 - 10:55	Refreshment Break	
10:55 - 11:05	Oral -4	Bioactive and biotechnological potentials of the yellow pigment extracted from mangrove-associated actinomycetes strain Kavindi Weerasinghe Universiti Teknologi Malaysia, Malaysia
11:05 - 11:15	Oral -5	Development of a real-time PCR based detection system for Enteric Viruses of livestock Monika Punia Ch. Devi Lal University India
11:15 - 11:25	Oral -6	Three-dimensional culture of mesenchymal stem cells on microcarrier based technologies Dr. Mohd Helmi Sani Senior Lecturer, Universiti Teknologi Malaysia, Malaysia
11:25 - 11:35	Oral -7	Multi parameter optimization for enhanced biohydrogen yield using machine learning Riya Nair Birla Institute of Technology & Science, U.A.E
11:35 - 11:45	Oral -8	Biotransformation of flavonoids and bioactivities by streptomyces species isolated from high land soil samples of Nepal Suman Prakash Pradhan Kathmandu University, Nepal
11:45 - 11:55	Oral -9	Haloadaptation insights from comparative modeling studies between halotolerant and nonhalotolerant Prof. Mohamed Faraj Edbeib Ass. Professor, Baniwalid University, Baniwalid, Libya
11:55 - 12:05	Oral -10	Multivariate data analysis and visualization using MetaboAnalyst Dr. Zanariah Hashim Senior lecturer, Universiti Teknologi Malaysia, Malaysia
12:05 - 12:30	Invited Speech	Resveratrol hyper-production by plant cell culture: an example for sustainable utilization of medicinal plant biodiversity Prof. Wei Zang Professor, Flinder's University, Australia
12:30 - 12:40	Refreshment Break	
12:40 - 12:50	Oral -11	Development of recombinant <i>Escherichia coli</i> for the production of 3-hydroxypropionic acid from glycerol Mugesh Sankaranarayanan Vel Tech University, India
12:50 - 13:00	Oral -12	Whole exome sequencing of Nepalese siblings with Factor X deficiency identifies F71S: a rarest mutation in F10 Binod Neupane Tribhuvan University, Nepal

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13:00 - 13:25	Invited Speech	LSM 900 with Airyscan 2 for fast and gentle Multiplex imaging Dr. Amarnath T Application Specialist, Carl Zeiss Microscopy, India
13:25 - 13:35	Oral -13	Effect of chloroquine, fansidar (sulphadoxine-pyrimethamine, SP) and ACT on anti- malarial drug resistant markers in different <i>Plasmodium sp.</i> : A comparative review study Sohini Singh Amity University, India
13:35 - 14:00	Invited Speech	Harnessing the power of bacteria for biobased chemical production to sustainable agriculture Dr. Sailesh Malla Senior Scientist, Chr. Hansen A/S, Denmark
14:00 - 14:10	Oral -14	Exopolysaccharide production from cultivation of <i>Lactobacillus plantarum</i> ATCC 8014 and co-culture with <i>Saccharomyces cerevisiae</i> ICA-Y01 Dr. Nor Zalina Othman Resercher, ICA,Universiti Teknologi Malaysia Pagoh, Malaysia
14:10 - 14:20	Oral -15	Production of of wine from jujube fruit pulp Gorade Rohini Baijarao SNJB chandwad nashik, Maharashtra, India
14:20 - 14:30	Session Chair	Concluding Remark Dr. Puna Maharjan Senior Scientist, G+Flas Life Sciences, Korea
SESSION-2 Environment		
	Session Chair	Dr. Fahrul Huyop Professor Universiti Teknologi Malaysia, Malaysia
	Moderator	Dr. Rameshraj Pant Tribhuvan University, Nepal
	Moderator	Dr. Santosh Koirala Nepal
12:45 - 13:00	Welcome Speech	Welcome and session introduction Dr. Fahrul Huyop Professor, Universiti Teknologi Malaysia, Malaysia
13:00 - 14:10	Plenary Speech	Application of bacterial technology in environmental processes: some Malaysian experience Dr. Zainul Akmar Associate Chair, Faculty of Engineering,UTM, Malaysia
14:10 - 14:35	Invited Speech	Alternatives to chemical pesticides in citrus: the use of yeast-based biocontrol agents Julián Rafael Dib Instituto de Microbiología, Facultad de Bioquímica, Química y Farmacia, Universidad Nacional de Tucumán, Argentina
14:35 - 15:00	Invited Speech	Legal initiatives for the effective environmental governance and for the sustenance of sustainable of development in India Prof. S. Ganapathy Venkatasubramanian Environmental Law And Management, Anna University, India

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15:00 - 15:15	Refreshment Break	
15:15 - 15:25	Oral -1	Biofilm formation by <i>Staphylococcus</i> spp. in different media and influence of hexavalent chromium. K.C.B. Aththanayake
15:25 - 15:35	Oral -2	Emerging biological technologies for biomethane production Nabin Aryal Nepal Science Foundation Trust, Nepal
15:35 - 15:45	Oral -3	Seawater Based Algal Biofuel Production Melissaviyancee Antony Venancius Birla Institute of Technology & Science, Dubai, U.A.E
15:45 - 15:55	Oral -4	Effect of environmental stress factors on growth and survival of <i>Arthrobacter</i> isolates obtained from soil and sewage Sandhya Mulchandani Smt Chandibai Himathmal Mansukhani College, India
15:55 - 16:05	Oral -5	Isolation and identification of bacterial community associated with Sri Lankan mangrove sediments Kishani N. Naligama, Faculty of Science, University of Kelaniya, Sri Lanka.
16:05 - 16:15	Oral -6	Toxicity of Selected Facial Cleansers to Soil Bacterial Flora Balasooriya A. Y. B. Faculty of Science, University of Kelaniya, Sri Lanka
16:15 - 16:25	Oral -7	Characterization of a 2,2-Dichloropropionic Acid (2,2-DCP) Degrading Alkalotolerant <i>Bacillus megaterium</i> strain BHS1 Isolated from Blue Lake in Turkey Batool Hazim Abdul Wahhab Faculty of Science, University Teknologi Malaysia, Malaysia
16:25 - 16:35	Oral -8	<i>Pleurotus ostreatus</i> biofoam: Effect of mycelium growth Roshanida A. Rahman Faculty of Engineering, Universiti Teknologi, Malaysia, Malaysia
16:35 - 16:45	Oral -9	Mediation of Corrosion of Stainless Steel by Goan Sulphate Reducing Bacteria. Deepti Rane Goa University, India
16:45 - 16:55	Oral -10	Molecular Detection of Coliform in Rain as Drinking Water Dhira Satwika, Indonesia
16:55 - 17:05	Oral-11	Normalization after covid Sarita Nepal, STAN Kathmandu, Nepal
17:05 - 17:15	Session Chair	Concluding Remark Dr. Fahrul Huyop Professor, Universiti Teknologi Malaysia, Malaysia

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SESSION-3		Agriculture
	Co-Convener	Dr. Ramachandran Subramanian Associate Professor, Birla Institute of Technology & Science, Dubai, U.A.E
	Session Chair	Dr. Bijaya Pant Professor, Tribhuvan University, Nepal
	Moderator	Dr. Anupama Shrestha Adjunct Professor, Himalayan College of Agricultural Sciences and Technology, Nepal
09:00 - 09:10	Welcome Speech	Welcome and session introduction Dr. Bijaya Pant Professor, Tribhuvan University, Nepal
09:10 - 09:50	Plenary Speech	Plant Molecular Biology and Biotechnology Prof. Ashwani Pareek Professor, Jawaharlal Nehru University, India
09:50- 10:00	Oral -1	Intellectual Property Right on Basmati Rice: Current Scenario and Evidences of Origin, Cultivation and Use Values of Basmati Rice in Nepal Dr. Bal Krishna Joshi Scientist, National Agriculture Genetic Resources Center, Nepal
10:00 - 10:10	Oral -2	Characteristics of Kyrgyzstan Specific Uzgen Rice and Biotechnological Approaches in Production Bermet Kydyralieva Kyrgyz-Turkish Manas University, Kyrgyzstan
10:10 - 10:20	Oral -3	Marker Assisted Back Cross Breeding for Introgression of <i>pinaD1a</i> gene in Indian Wheat Variety Tej Pratap Jitendra Kumar Indian Agricultural Research Institute (IARI), India
10:20 - 10:45	Invited Speech	Title Prof. Renu Deswal University of Delhi, India
10:45 - 10:55	Oral -4	Assessment of Carotenoid Level and Antioxidant Activity of Mesocarp Palm Oil Extracted with Pectinase Enzyme Assisted Extraction Leong Hong Yeng Innovation Centre in Agritechnology, Universiti Teknologi Malaysia, 84600, Muar, Johor, Malaysia
10:55 - 11:05	Oral -5	Plant Probiotic Properties of native Endophytic Diazotrophic <i>Lysinibacillus sphaericus</i> Dr. Shabanamol S SAFI Institute of Advanced Study, India

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11:05 - 11:15	Oral -6	Gamma Rays Induced Mutations in Cowpea Dr Manoj Tukaram Patil SNJB'S KKHA Arts SMGL Commerce & SPHJ Science College, India
11:15 - 11:40	Invited Speech	Potential DNA barcode region to differentiate <i>Swertia chirata</i> from its adulterants. Prof. Harvinder Singh Professor & Program Director of Agribusiness Leaders Institute, Australia
11:40 - 11:50	Oral -7	Control of Aphid (<i>Arachis hypogaea</i>) and mite (<i>Polyphagotarsonemus latus</i>) by using Phyto-Chemicals Sunil Kumar Ghosh Bidhan Chandra Krishi Viswavidyalaya, India
11:50 - 12:00	Oral -8	Salinity Tolerant Forages for Animal Fodder Applications Sirisha Nuti International Centre for Biosaline Agriculture, U.A.E
12:00 - 12:10	Oral -9	Sodium Azide Induced Mutation In Cowpea Gangurde Rinku Ratan SNJB'S KKHA Arts SMGL Commerce & SPHJ Science College, India
12:10 - 12:20	Oral 10	Mass propagation and acclimatization of endangered orchid <i>Dendrobium densiflorum</i> by in vitro culture Lasta Maharjan Annapurna Research Center
12:20 - 12:30	Session Chair	Concluding Remark Dr. Bijaya Pant Professor, Tribhuvan University, Nepal
SESSION-4	Forensics	
	Session Chair	Dr Lata Gautam, Associate Professor Anglia Ruskin University, UK
	Moderator	Dr Agatha Grela Lecturer University of West London, UK
	Repertoire	Dr Amarnath Mishra Assistant Professor Amity University, India
13:00 - 13:10	Welcome Speech	Welcome and session introduction Dr Lata Gautam, Associate Professor, Anglia Ruskin University, UK
13:10 - 13:50	Plenary Speech	Sexual Assault investigation in the UK Ms Joanne Morrissey Director of Learning and Teaching, Anglia Ruskin University, UK

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13:50 - 14:00	Oral -1	A case of disputed paternity solved with the help of DNA fingerprinting analysis Mr Indresh Kumar Mishra Assistant Director, Biology, Forensic Science Laboratory, India
14:00 - 14:10	Oral -2	Characterization of animal hair using microscopic methods: towards the creation of a forensic database. Dr Ellen Mwenesongole Botswana International University of Science and Technology, Botswana
14:10 - 14:20	Oral -3	The interpretation of hair evidence for drug facilitated sexual assault crimes Mr Christopher Davies PhD researcher, Anglia Ruskin University, Cambridge, UK
14:20 - 14:30	Oral -4	Trends of narcotic drugs cases in National Forensic Science Laboratory, Khumaltar, Nepal Mr Birendra Chaudhary Narcotic Unit, National Forensic Science Laboratory, Nepal
14:30 - 14:40	Oral -5	Profiling of clandestine methcathinone impurities using simple direct extraction approach by Gas Chromatography Mass Spectrometry Ainol Hayah Ahmad Nadzri, School of Health Sciences, Universiti Sains Malaysia, Malaysia
14:40 - 14:50	Oral -6	A study on development of different techniques and pattern recognition of accelerants and fabrics in forensic samples Mr Sourabh Kumar Singh Research Scholar, Amity University, India
14:50 - 15:00	Oral -7	Visualisation of latent fingerprints on non-porous substrates immersed in a natural outdoor pond using the green, novel and rapid nanobio-based reagent Aida Rasyidah Azman Faculty of Science, Universiti Teknologi Malaysia, Malaysia
15:00 - 15:15	Refreshment Break	
15:15 - 15:40	Invited Speech	The interpretation of bloodstains on carpets for the advancement of crime scene investigation. Ms Laura Hugh Course Leader, University of West London, UK
15:40 - 16:05	Invited Speech	The investigation of the flammability of fabrics when contaminated with emollients and the link with fire fatalities. Dr Sarah Hall Senior Lecturer, De Montfort University, Leicester, UK
16:05 - 16:15	Oral -8	Knowledge, perception and experience of DFSA among college students – comparison of Nepal and UK data Dr Agatha Grela Lecturer, University of West London, Brentford, UK

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16:15 - 16:25	Oral -9	Modified analytical method for determination of ketamine from forensic biological sample by gas chromatography –flame ionisation detector Mr Adarsh Mishra Amity Institute of Forensic Sciences, Amity University, India
16:25 - 16:35	Oral -10	A preliminary study on discrimination and classification of white A4 office paper using non-destructive techniques in tandem with pattern recognition procedures Tay Eue Kam Universiti Sains Malaysia, Malaysia
16:35 - 16:45	Oral -11	A validated method for the analysis of cannabis, heroin and other components in Nyaope Mr PM Mthembi University of the Free State, South Africa
16:45 - 16:55	Oral -12	Forensic challenges faced in DVI in Kedarnath tragedy: A review Arti Varshney Sherlock Institute of Forensic Science, India
16:55 - 17:05	Oral -13	Chimerism analysis based on Y-STRs in novel forensic situations Mr Ajay Parkash Amity University, India
17:05 - 17:15	Session Chair	Concluding Remark Dr Lata Gautam, Associate Professor, Anglia Ruskin University, UK

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SESSION-5		Healthcare
	Session Chair	Dr. Niranjan Koirala Asst. Editor-in-Chief, Nepal Journal of Biotechnology, Nepal
	Moderator	Dr. Nissar Reshi Assistant Professor Sandip University, India
13:00 - 13:10	Welcome Speech	Welcome and session introduction Dr. Niranjan Koirala Asst. Editor-in-Chief, Nepal Journal of Biotechnology, Nepal
13:10 - 13:50	Plenary Speech	Health and well-being issues of Nepalese migrant workers in the Gulf Cooperation Council countries and Malaysia during Covid-19 pandemic Prof Dr Padam Simkhada Associate Dean International and Professor of Global Health, Huddersfield University, UK
13:50 - 14:15	Invited Speech	Omega-3 fatty acid production for advancing human nutrition Dr. Munish Puri Medical Biotechnology, Flinder University, Australia
14:15 - 14:40	Invited Speech	Occupational Health Hazard due to Pesticide Exposure Dr. Anjali Chaudhary Head Department of Biotechnology, Career College, Bhopal, India
14:40 - 15:05	Invited Speech	From food waste to food wise: the success story of France Dr. Ruchi Srivastava Freelance Consultant, India
15:05 - 15:15	Refreshment Break (15 min)	
15:15 - 15:25	Oral -1	Virtual structure-based docking, WaterMap and Molecular Dynamics guided identification of the potential Natural compounds as inhibitors of protein-tyrosine phosphatase 1B Suman Manandhar Department of Pharmacology, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal-576104, India
15:25 - 15:35	Oral -2	Prevalence of Human Papilloma Virus over the Study Populations in Tirupur District. Dr. V. Bharathi , Assistant Professor & Head, Dept. of Microbiology, SVCAS, India
15:35 - 15:45	Oral -3	Application of bioactive extracted from post distillation biomass of geranium in cosmetic and health industries Mamta Patil Junior Scientist, KET's Scientific Research Center, Vaze Collage Campus, India

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15:45 - 15:55	Oral -4	Bacterial Eye Infections Among Patients Visiting Nepal Eye Hospital Shankar Adhikari Bhanu-12, Tanahun, Gandaki Province, Nepal
15:55 - 16:05	Oral -5	Bioactivity evaluations of leaf extract fractions from young barley grass and correlation with their phytochemical profiles Romit Kumar Subba Manmohan Memorial Institute of Health Sciences, Nepal
16:05 - 16:15	Oral -6	Biomedical Applications of Silver Nanoparticles Derived from Corallocarpus epigaeus Rhizome Extract R. Nirmala , Department of Biotechnology, Hindustan College of Arts and Science, India
16:15 - 16:25	Oral -7	Antioxidative and UV light shielding profile of microbial biochromes isolated from garden soil environment. Pranali Akshay Shete , Assistant Professor, SMT CHM College, India
16:25 - 16:35	Oral -8	Xing Nao Kai Qiao : A Brain Awakening Technique Dr Jaya Satyal Central Ayurveda Hospital / Annapurna Neuro Hospital, Nepal
16:35 - 16:45	Oral -9	Hydrogen peroxide stimulation in Uropathogenic Escherichia coli for biofilm formation Prabin Dawadi Nepal Academy of Science and Technology, Nepal
16:45 - 17:00	Refreshment Break (15 min)	
17:00 - 17:10	Oral -10	Quality assessment of a caffeine containing herbal aphrodisiac marketed in Kaduna Nigeria Dr. Abduljalal Danbaba Kaduna State University, Kaduna, Nigeria
17:10 - 17:20	Oral -11	Study of antimicrobial susceptibility profile of Salmonella typhi and Salmonella paratyphi. Kusum Subedi Tri-Chandra Multiple Campus, Tribhuvan University, Nepal
17:20 - 17:30	Oral -12	Engineered bacteriophage nanofiber as a novel therapeutic platform for curing ischemic diseases Kshitiz Raj Shreatha National College, Tribhuvan University, Nepal
17:30 - 17:40	Oral -13	Comparative nutritional and antinutritional assessment of some Vigna species. Jadhav Rashmi Hemant SNJB's KKHA Arts, SMGL Commerce, SPJ Science college, India
17:40 - 18:50	Oral -14	Role of DEK in autophagy-deficiency associated liver pathogenesis. Niani Bailey Tulane University School of Medicine, USA

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17:50 - 18:00	Oral -15	Phytochemical screening of <i>Sargassum tenerrimum</i> (J.Agardh) collected from Bhuigaon beach, Vasai Dist. Palghar (MS), India. Shital Sampatrao Jarare Department of Botany, Government Institute of Science, India.
18:00 - 18:10	Oral -16	Levels of Empathy Among Undergraduate Nursing Students of School of Health Sciences: A Cross-Sectional Study. Siti Masyitah Mohd Rosly , UNIVERSITI SAINS MALAYSIA, Malaysia.
18:10 - 19:00	Session Chair	Concluding Remark Dr. Niranjana Koirala Asst. Editor-in-Chief, Nepal Journal of Biotechnology, Nepal
19:10 - 19:20	Refreshment Break (10 min)	
19:20 - 19:45	Awards	Award distribution Dr. Janardan Lamichhane Professor, Kathmandu University, Nepal
19:45 - 20:00	Concluding Speech	Vote of Thanks Dr. Vasudeo Zambare Professor, Sandip University, India Director, Om Biotechnologies, India

