

# International e-Conference on Biopolymers

July 14-16, 2022



Asian Polymer Association



Indian Chitin and Chitosan Society

## Day-1 | 14<sup>th</sup> July, 2022 | Programme

### Inauguration

Coordinator : Chetna Verma, IIT Delhi

### Welcome Address

R. Jayakumar (ICCS Secretary)

Time: 09:00-09:05

### APA Address

Bhuvanesh Gupta (President, APA)

Time: 09:05-09:10

### Bioforum Address

Manohar Badiger (Conference Chair)

Time: 09:15-09:20

### Theme Address

B. S. Kaith (APA Bioforum, Coordinator)

Time: 09:20-09:25

### ICCS Address

Er. Vikram Sudhakar (ICCS President)

Time: 09:25-09:35

### Conference Address

Atul Khosla (Guest of Honour) Vice Chancellor, Shoolini Univ., H.P.

Time: 09:35-09:50

### Inaugural Address

Jöns Hilborn (Chief Guest) University of Uppsala, Sweden

Time: 09:50-10:20

### Vote of Thanks

Susheel Kalia (Conference Secretary)

Time: 10:20-10:30

### Session 1

Coordinator : Chetna Verma, IIT Delhi

Chairs: Laura Teodori (ENEA, Rome, Italy) & Manohar Badiger (NCL, Pune)

### Plenary Talk-1

Pedro Fardim (KU Leuven, Belgium)

Time: 11:00-11:40

### Plenary Talk-2

Biman B. Mandal (IIT, Guwahati)

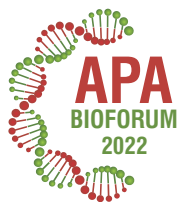
Time: 11:40-12:20

### Plenary Talk-3

Johannes Ganster (IAP, Potsdam-Golm, Germany)

Time: 12:20-13:00

**13:00-14:00 | Lunch Break**



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## Session 2 Biopolymer & Biomaterials

Chairs : N. C. Kothiyal (NIT, Jalandhar) & Y.S. Negi (IIT, Roorkee)

Coordinator : Ankita Sharma; Chetna Verma

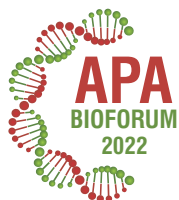
Time	Lecture Title/Author
14:00-14:25	KN Sol-Gel transitions of modified polysaccharides under temperature and salt control <b>Dominique Hourdet</b> <i>Sorbonne University, Paris, France</i>
14:25-14:50	KN Biopolymer Adsorbents for Sustainable Water Treatment: Controlled Removal of Environmentally Relevant Oxyanions <b>Lee D. Wilson</b> <i>Department of Chemistry University of Saskatchewan Saskatoon, SK, Canada</i>
14:50-15:00	OL Development and optimization of functionalized lignin nanoparticles: In vitro "in vivo efficacy studies in colon cancer model <b>Sushama Talegaonkar</b> <i>Delhi Pharmaceutical Sciences and Research University, New Delhi, India</i>
15:00-15:10	OL Preparation of Cao Nanoparticles from Waste Egg Shells and Their Applications <b>Rohit Kaundal</b> <i>NIT Jalandhar, India</i>
15:10-15:20	OL Silver-chitosan (Ag-CH) nanocomposite hydrogel for remediation of Aqueous medium <b>Shashwati Khemraj Wankar</b> <i>Symbiosis Center for Nanoscience and Nanotechnology, Pune, India</i>
15:20-15:30	OL Organic acids modified Starch/CMC Based Biodegradable Film: Antimicrobial activity, morphological, structural, thermal and crystalline properties <b>Parvinder Kaur</b> <i>SHUATS, Prayagraj, India</i>
15:30-15:40	OL A green synthesis of Modified Cellulose Acetate membrane for the absorbency of biofluids <b>Roshni Pattanayak</b> <i>CIPET:SARP-LARPM, BBSR, Bhubaneswar, India</i>

## Session 3 Functional Biopolymers & Biomaterials

Chairs : Anupama Sharma (P.U., Chandigarh) & Sunita Rattan (Amity Univ., Noida)

Coordinator : Pratibha Singh; Vipula

Time	Lecture Title/Author
14:00-14:25	KN Bio-aerogels for controlled drug delivery <b>Tatiana Budtova</b> <i>Center for Materials Forming, Mines Paris, Sophia Antipolis, France</i>
14:25-14:50	KN Development of Herbal Nanocomposite wound dressings using Moringa oleifera seeds <b>Saurabh Kulshrestha</b> <i>Shoolini University, Solan, India</i>
14:50-15:00	OL Formulation and evaluation of Antidepressants loaded with biopolymer for brain specificity <b>Deepika Raina</b> <i>Chitkara University, Patiala, India</i>
15:00-15:10	OL Ethyl Hydroxy Ethyl Cellulose (EHEC): A wonder Biopolymer and Biomaterial for Biomedical Applications <b>Ashwini Chandrashekar Wali</b> <i>CSIR-NCL, Pune, India</i>
15:10-15:20	OL Microwave Assisted Vanillin Crosslinked Chitosan/Polycarbophil Superporous Hydrogels for Biomedical Application: Optimization and Characterization <b>Shwetha K</b> <i>Faculty of Pharmacy, Ramaiah University of Applied Sciences, Bengaluru, India</i>
15:20-15:30	OL Grafted chitosan as cationic flocculant: synthesis, characterization and its applications in Kaolin separation <b>Suresha P. R.</b> <i>CSIR-National Chemical Laboratory, Pune, India</i>
15:30-15:40	OL Chitosan and xanthan gum based hydrogels for release of theophylline drug <b>Anupama Mogha</b> <i>Dr SSB UICET, PU, ROORKEE, India</i>



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## Session 4 Chitosan Symposium

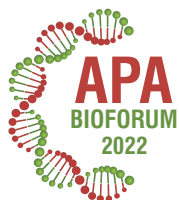
Chairs : R. Jayakumar (Amrita Vidyapeetham, Cochin) & Aravind Kumar Rengan (IIT, Hyderabad) Coordinator : Manali Somani; Rohini Verma

Time	Lecture Title/Author
14:00-14:25	KN Dyeing of chitin nanofibers with reactive dyes and preparation of their sheets and nanofiber/resin composites <b>Shinsuke Ifuku</b> Tottori University, Tottori, Japan
14:25-14:50	KN Remediation of toxic pollutants from water using the derivatives of chitin and chitosan <b>Meenakshi Sankaran</b> The Gandhigram Rural Institute-Deemed to be University, Dindigul, India
14:50-15:05	IL Applications of polymeric nanoparticles in RNAi and biopesticide delivery for sustainable agriculture <b>Vandana Ghormade</b> Agharkar Research Institute, Pune, India
15:05-15:20	IL Electrospun chitosan nanofibers for diagnostic and therapeutic applications <b>Prajakta Dandekar Jain</b> Institute of Chemical Technology (ICT), Mumbai, India
15:20-15:30	OL Microencapsulation of nanochitosan as biopolymer using Piper betle leaf petiole extract and its evaluation of antioxidant and alpha amylase inhibition studies <b>Swetha Odiveedu</b> MS Ramaiah University of Applied Sciences, Bengaluru, India
15:30-15:40	OL Fungal Chitosan Nanoparticles and Biosurfactants - The Multifarious Molecules as Sustainable Alternatives in Crop Protection <b>Bhoomika M. Karamchandani</b> Department of Microbiology, Savitribai Phule Pune University, Pune, India

## Session 5 Biopolymers & Tissue Engineering

Chairs : Rekha Lagarkha (Bundelkhand Univ., Jhansi) & Biman Mandal (IIT, Guwahati) Coordinator : Ankita Sharma; Chetna Verma

Time	Lecture Title/Author
15:45-16:10	KN Hybrid composite scaffolds for spinal interbody fusion <b>Anna Liguori</b> KTH, Sweden
16:10-16:25	IL Development of dual-drug-loaded polymeric nanoparticles for achieving synergistic efficacy and smart drug delivery <b>Aditi Sangal</b> AIAS, Amity University, Noida, India
16:25-16:35	OL Development of Zinc doped Hydroxyapatite/Gelatin Poly-vinyl Alcohol Biocomposite for Bone Tissue Engineering Application <b>Sakchi Bhushan</b> IIT Roorkee, Saharanpur, India
16:35-16:45	OL Cellulose microfibrils-gelatin-nanoceria biocomposite: A new platform for bone tissue engineering <b>Sandhya Singh</b> Indian Institute of Technology, Roorkee, Saharanpur, India
16:45-16:55	OL Characterization and in vitro evaluation of scaffold optimized by Response Surface Methodology for cell proliferation and tissue repair <b>Subodh Kumar</b> Institute of nuclear medicine and allied sciences, Delhi, India
16:55-17:05	OL Chitosan nanoparticles enriched thiolated eudragit/sodium alginate/PEG scaffold to accelerate angiogenesis and skin tissue regeneration in maxillofacial injury <b>Vaishnavi Bhatnagar</b> M S Ramaiah University of Applied Sciences, Bengaluru, India
17:05-17:15	OL Fabrication of PLA/natural hydroxyapatite composite scaffold for tissue engineering application <b>Ipsita Pattanayak</b> Central Institute of Petrochemical Engineering and Technology, Bhubaneswar, India



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## Session 6 Biopolymers in Wound Care & Drug Delivery

Chairs : Shivani Ghildiyal (AAIA, New Delhi) & Deepak Pathania (SVPCL, Mandi)

Coordinator : Pratibha Singh; Vipula

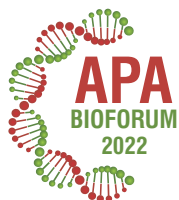
Time	Lecture Title/Author
15:45-16:10	KN Cyanobacterial Exopolysaccharide, sacran, for biomedical applications <b>Maiko Okajima</b> <i>Graduate School of Advanced Science and Technology, Japan</i>
16:10-16:25	IL Chlorophyllin suppresses Oxidative Stress and Apoptosis in hepatocytes of Diabetic Mice <b>Surya Bhan</b> <i>North-Eastern Hill University, Shillong, India</i>
16:25-16:35	OL Biopolymers as silver nanoparticle carriers for targeted drug delivery <b>Shweta Rajawat</b> <i>Maulana Azad National Institute of Technology, Bhopal, India</i>
16:35-16:45	OL In-situ formation of Ca <sup>2+</sup> functionalized GO/PVP/CMC ternary nanocomposite hydrogel as an anticancer sustained drug release carrier <b>Shahab A.A. Nami</b> <i>Department of Chemistry, Aligarh Muslim University, Aligarh, India</i>
16:45-16:55	OL Biocompatible stimuli response hydrogels of okra mucilage with Acrylic acid for controlled release of calendula officinalis ethanolic extract as drug for wound healing: Invitroassays <b>Vandana Choudhary</b> <i>IFTM University Moradabad, Moradabad, India</i>
16:55-17:05	OL Nelumbo nucifera: Potential Biopolymer for site specific drug delivery <b>Vishakha Jaiswal</b> <i>BBDNIIT, Lucknow, India</i>
17:05-17:15	OL Systematic Synthesis of Chitosan-1,2,3-Triazole Derivatives for Antibacterial Activity <b>Sankar Rathinam</b> <i>University of Iceland, Reykjavik 107, Iceland</i>

## Session 7 Chitosan Symposium

Chairs : R. Jayakumar (Amrita Vidyapeetham, Cochin) &  
Meenakshi Sankaran (Gandhigram Rural Institute, Tamil Nadu)

Coordinator : Vandana Kumari ; Aishwarya Arvind

Time	Lecture Title/Author
15:45-16:10	KN Chitosan-based Scaffolds for Bioactive Molecules Delivery in Bone Regeneration <b>N. Selvamurugan</b> <i>SRM Institute of Science and Technology, Tamil Nadu, India</i>
16:10-16:35	KN The preparation and validation of chitosan tablets that rapidly disperse and disintegrate as an oral adsorbent in the treatment of lifestyle-related diseases <b>Makoto Anraku</b> <i>Sojo University, Kumamoto, Japan</i>
16:35-16:50	IL Biopolymers from fungi and their applications <b>Mukund Vinayak Deshpande</b> <i>Greenvention Biotech Pvt. Ltd., Pune, India</i>
16:50-17:05	IL Chitosan-based smart nanotherapeutics for metastatic breast cancer treatment <b>Aravind Kumar Rengan</b> <i>IIT Hyderabad, India</i>
17:05-17:20	IL Chitosan grafted PCL electrospun membrane for biomedical applications <b>Reshmi C R</b> <i>Center for Nanoscience and Molecular Medicine Amrita Vishwa Vidyapeetham, Elamakkara, India</i>



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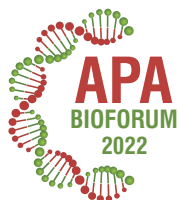
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## Session 8 Poster Presentations

Chairs : Aditi Sangal (Amity Univ., Noida) & Vijay Kumar (NIT, Srinagar)

Coordinator : Chetna Verma ; Aishwarya Arvind

Time	Lecture Title/Author
17:30-17:35	Synthesis and properties enhancement of Poly (glycerol sebacate) (PGS) for Vascular graft application <b>Tusharkanta Nayak</b> CIPET:SARP-LARPM, BBSR, Bhubaneswar, India
17:35-17:40	Evaluation of Coactive Influence of Self-healing Anticorrosive Composite Coatings based on Epoxy, Tung oil microcapsules and Polyaniline Nanoparticles <b>Umesh Gawai</b> S. S. V. P. Sanstha's, L. K. Dr. P. R. Ghogrey, Science College, Dhule-424005, (M.S.) India, Dhule, India
17:40-17:45	Assessment of Impact of Bio-filler with LDHs loading on the Thermal and Mechanical Properties of Epoxy Nanocomposites <b>Chetan Patil</b> Department of Chemistry, S. S. V. P. Sanstha's L.K. Dr. P. R. Ghogrey, Science College, Deopur, Dhule-424005. Affiliated to Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon-425001, (M.S.), India, Dhule, India
17:45-17:50	Fabrication of Antimicrobial Dressing Coated with Tannic Acid Loaded Alginate/Glycerol Blend <b>Ankita Sharma</b> IIT, Delhi, Delhi, India
17:50-17:55	Anti-microbial Dressing Material through Radiation-Graft Copolymerisation of 4-Vinyl Pyridine (4-VP) and Acrylonitrile (AN) onto Rayon Fibres <b>Preety Kumari Kashyap</b> AIAS, Amity University, Noida, India
17:55-18:00	Exo-polysaccharide Xanthan Gum derived Hydrothermal and Sonochemical Protocols for Synthesis of Photoactive ZnO Nanoparticles <b>Arshpreet Kaur</b> SLIET, Longowal, Sangrur, India
18:00-18:05	Polyphenol characterization of the aqueous extract from Hubertia ambavilla L. (Asteraceae) by HPLC-DAD-ESI-MSn and assessment of its antioxidant activity <b>Rachid Chawech</b> TORSKAL SAS, ST DENIS, La Réunion
18:05-18:10	MUC1 antibody targeted delivery of chemotherapeutics in a PLA-based nano formulation for cancer therapy <b>PRIYA GUPTA</b> IIT DELHI, New Delhi, India
18:10-18:15	Oral Drug delivery system for vaccine antigens using biopolymer and Permeation enhancer Conjugates <b>Archana Sawant</b> SPPU, Pune, India
18:15-18:20	Isolation and evaluation of bioadhesive film for punica granatum of Terbinafine <b>Khushboo Bansal</b> Dit university faculty of pharmacy, Pilkhuwa, India
18:20-18:25	Cyclodextrin mediated controlled release of edaravone from pH-responsive sodium alginate and chitosan based nanocomposites <b>Khushbu Yadav</b> Dr BR Ambedkar NIT Jalandhar, India



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## Session 9 Poster Presentations

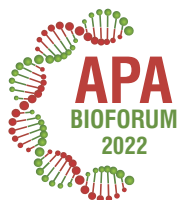
Chairs : Dhiraj Sud (SLIET, Patiala) &

Manu Vashishtha (Dr. B. R. Ambedkar Inst. of Technology, Port Blair)

Coordinator : Vipula ; Vandana Kumari

Time	Lecture Title/Author
17:30-17:35	Development of Antimicrobial LLDPE/Lemon Peel film Using Zinc Oxide Nanoparticle for Food Packaging Application <b>Shashank Srivastava</b> CIPET Lucknow, India
17:35-17:40	Flexible biodegradable Polyvinyl alcohol / Starch cross linked films <b>Aditya Nath Pandey</b> Central Institute of Petrochemicals Engineering & Technology: Institute of Petrochemicals Technology Lucknow, India
17:40-17:45	Green synthesis of Magnesium Nanoparticles for degradation of safranin in Environmental sample <b>Rajni Sharma</b> Maharaja Agrasen University, Baddi, India
17:45-17:50	Evaluation of Antimicrobial Properties of Lldpe/Orange Peel Powder/titanium Dioxide Composite Films For Food Packaging Application <b>Malika Singh</b> Central Institute of petrochemical engineering and technology, Lucknow, India
17:50-17:55	Studies on the synthesis of Superabsorbent film for Smart Food Packaging <b>Shrayashree Nag</b> CIPET-IPT Lucknow, India
17:55-18:00	Development & Characterization of Biodegradable Blend Film Using Bio-Waste Materials <b>Atul Kumar Seth</b> Central Institute of Petrochemicals Engineering & Technology, Institute of Petrochemicals Technology, Lucknow, Jaunpur, India
18:00-18:05	Carrageenan-based Herbal Bionanocomposite Membranes as a Wound Care System <b>Pratibha Singh</b> IIT Delhi, DELHI, India
18:05-18:10	Fabrication of Biocompatible, Luminescent and self-healing hybrid hydrogels of polyoxometalates and chitosan based on electrostatic assembly and their Application as Antimicrobial Agent , in dye adsorption and the Detection of heavy metal ions <b>Arjumand Shaneen</b> University of kashmir, Srinagar, India
18:10-18:15	Utilization of Waste MDF Powder for Preparation of Wood Plastic Composites <b>Chetan Kumar Singh</b> Central institute of petrochemicals engineering and technology, Lucknow, India
18:15-18:20	A Comprehensive Investigation on Spinel Ferrite Nanocatalyst for the Photodegradation of Hazardous and Toxic Organic Pollutants <b>Dinesh Singh</b> Dr B R Ambedkar National Institute of Technology, Jalandhar Punjab, India
18:20-18:25	Polysaccharide derived Nano materials and their applications <b>Himani Sharma</b> Dr B R Ambedkar National Institute of Technology Jalandhar-144 011 Punjab (India), Palampur, India





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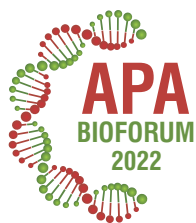
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## Session 10 Chitosan Symposium Poster Presentations

Chairs : Shinsuke Ifuku (Tottori Univ., Japan) &  
S. Meenakshi (Gandhigram Rural Institute, Tamil Nadu)

Coordinator : Manali Somani

Time	Lecture Title/Author
17:30-17:35	Chitosan/Fly ash film for removal of heavy metal from industrial effluent <b>Sowmya CH</b> <i>Birla Institute of Technology &amp; Science, Pilani- Hyderabad Campus, Secunderabad, India</i>
17:35-17:40	3D-Polylactic Acid Scaffold with Surface Modified and 4-Methoxycinnamic Acid-loaded Chitosan Nanoparticles for Bone Regeneration <b>Abinaya Shanmugavadivu</b> <i>SRM-IST Chennai, India</i>
17:40-17:45	Optimization of chitin nanofiber preparation by ball milling machine under neutral condition <b>Dagmawi Abebe Zewude</b> <i>Tottori University, Tottori, Japan</i>
17:45-17:50	The Biomaterials based on surface-deacetylated chitin nanofiber gels reinforced with sulfobutyl ether $\beta$ -cyclodextrin as a controlled released agent <b>Nowshin Farzana Khan</b> <i>Sojo University, Kumamoto, Japan</i>
17:50-17:55	Adsorption of chromium from waste water using Cds/Cus/Chitosan composite <b>M. Nikitha Manuvelraja</b> <i>The Gandhigram Rural Institute-DTBU, Chinnalapatti, India</i>
17:55-18:00	Furfural Functionalized on Chitosan Intercalated Pani Composite for the Removal of Chromium From Water <b>Ramkumar K</b> <i>The Gandhigram Rural Institute-Deemed to be University, Dindigul, India</i>
18:00-18:05	Preparation of Chitosan /PEO Membranes for Biomedical Applications <b>Rohini Verma</b> <i>Indian Institute of Technology, New Delhi, India</i>
18:05-18:10	Bromelain encapsulated alginate-chitosan beads for biomedical applications <b>Priyadharshini T</b> <i>National Institute of Technology Rourkela, India</i>
18:10-18:15	An effective chitosan hydrogel composite containing silica nanoparticles and aluminium chloride for rapid hemorrhage control <b>Rutuja Ravindra Pawar</b> <i>Agharkar Research Institute, Pune, India</i>
18:15-18:20	Chitosan-entrapped Activated Carbon for Confiscation of CO <sub>2</sub> in Gaseous Phase and Reactive Orange Dye in Aqueous Phase Chitosan-entrapped Activated Carbon for Confiscation of CO <sub>2</sub> in Gaseous Phase and Reactive Orange Dye in Aqueous Phase <b>Pradip Madhukar Nandanwar</b> <i>Research Scholar at Department Of Chemistry, RTMNU, Nagpur, India</i>
18:20-18:25	Addition of coir fibre with CaCl <sub>2</sub> crosslinked starch-chitosan blended films <b>Neena Singh</b> <i>Gautam Buddha University, Greater Noida, India</i>



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## Day-2 | 15<sup>th</sup> July, 2022 | Programme

### Session 11

Coordinator : Chetna Verma, IIT Delhi

Chairs : Anup Ghosh (IIT, Delhi) & Manohar Badiger (NCL, Pune)

#### Plenary Talk-1

Pralay Maiti (IIT, BHU)

Time: 09:00-09:40

#### Plenary Talk-2

Ngai To (CUHK, Hong Kong)

Time: 09:40-10:20

#### Plenary Talk-3

Youssef Habibi (Mohamed IV Polytech. Univ., Morocco)

Time: 10:20-11:00

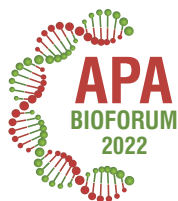
### Session 12 Biopolymers & Tissue Engineering

Chairs : Pralay Maiti (IIT, BHU) & Saurabh Kulshreshtha (Shoolini University, H.P.)

Coordinator : Ankita Sharma; Chetna Verma

Time	Lecture Title/Author
11:10-11:35	KN NA <b>Sabu Thomas</b> MG University, Kerala, India
11:35-11:45	OL Proangiogenic and Antimicrobial Nanocomposite Loaded Gelatin Fibers Favour the In Vitro Osteogenic Differentiation of Mesenchymal Stem Cells in the Absence of External Supplements <b>Vianni chopra</b> INST Mohali, Mohali, India
11:45-11:55	OL Preparation and Characterization of PVA/Chitosan Crosslinked 3D scaffolds for Liver Tissue Engineering <b>Supriya Bhatt</b> Manipal Institute of Regenerative Medicine (MAHE), Bangalore, India
11:55-12:05	OL Biosynthesis of Silver nanoparticles Via Clerodendron Phlomoides Extracts and their characterizations and Anticancer Potential against Liver Cancer <b>Kirubanandan Shanmugam</b> Sree Sastha Insitute of Engineering And Technology, Chennai, India
12:05-12:15	OL Zein- Poly(vinyl alcohol-co-ethylene) ethylene macrobeads as chondrocytes delivery system in Autologous Chondrocyte implantation <b>Rashmi E V</b> Sree chitra tirunal institute for medical sciences and technology, Thiruvananthapuram, India
12:15-12:25	OL Silver incorporated composite electrospun scaffolds for bone tissue regeneration <b>Gurumoorthi Ramar</b> CIPET:IPT, Chennai, India
12:25-12:35	OL Egg Shell Membrane Hydrolysate Incorporated Bigels: Potential Anti-Aging Formulation <b>Puspanjali Sharma</b> M S Ramaiah University of Applied Sciences, Bangalore, India





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Day-2 | 15<sup>th</sup> July, 2022 | Programme

## Session 13 Nanomaterial & Nanocomposites

Chairs : Yashveer Singh (IIT, Ropar) & W.J Kim (POSTEC, South Korea)

Coordinator : Pratibha Singh; Vipula

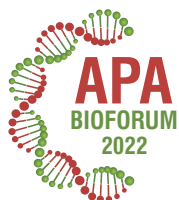
Time	Lecture Title/Author
11:10-11:35	KN NA <b>Bhanu Nandan</b> <i>IIT Delhi, India</i>
11:35-11:45	OL Green Synthesis of Copper Oxide Nanoparticles using leaves Extract of Neolamarckia cadamba and their applications as catalysts <b>Rakhi Mandloi</b> <i>Govt Holkar Science College Indore MP, Indore, India</i>
11:45-11:55	OL Green synthesis and characterization of cerium oxide nano particles from edible mushroom extract <b>Lalitha Jairam</b> <i>Ramaiah University of Applied Sciences, Bangalore, India</i>
11:55-12:05	OL Isolation of nanocellulose from industrial waste for hydroxylation and stabilization of boron nitride ceramic nano-particle for enhanced performance of nano-composite <b>Manoj Sathwane</b> <i>IIT Roorkee, Saharanpur, India</i>
12:05-12:15	OL Synthesis and swelling studies of Poly(2-hydroxyethyl methacrylate- co- itaconic acid) / Hydroxyapatite Composite Hydrogels <b>Sharika T</b> <i>Govt.College Kasaragod, Kasaragod, India</i>
12:15-12:25	OL Preparation and Characterization of Essential Oil (Java Citronella) Treated Potato Starch Bio-Nanocomposite Films Reinforced with Cotton Linter Nano-Cellulose <b>Chayanika Bharadwaj</b> <i>CSIR NEIST, Jorhat, India</i>
12:25-12:35	OL Synthesis and Characterization of a Novel Nanocomposite Based on / Polylactic Acid / Poly (Ethylene-Co-Vinyl Acetate)/Northeast Region Kaolin Clay Coated with Lemon Grass Essential Oil (Elemicin rich) <b>Dipjyoti Bora</b> <i>CSIR-NEIST, Jorhat, India</i>
12:35-12:45	OL An Analysis of the Synthesis, Characterization, and Thermal Evolution of Polymer-Based Nickel Nanoparticles <b>Giriraj Tailor</b> <i>Mewar University, Chittorgarh, India</i>

## Session 14 Herbal Therapeutics Symposium Contest

Chairs : Surya Bhan (NEHU, Shillong) & Rahul Sherkhane (BHU, Varanasi)

Coordinator : Manali Somani; Rohini Verma

Time	Lecture Title/Author
11:10-11:20	OL Bioactive performance studies on Luffa seed oil for imparting functional property to textiles <b>Navodit Kadam</b> <i>The Maharaja Sayajirao University of Baroda, Bharuch, India</i>
11:20-11:30	OL Enhancement of anti-cariogenic effect of Glass Ionomer Cement (GIC) by incorporation of biosynthesized cerium oxide nanoparticles from Aloe vera extract <b>Dhanya Shri Mahendran</b> <i>MS Ramaiah University of Applied Sciences, Bangalore, India</i>
11:30-11:40	OL Biogenic synthesis of ZnO nanoparticles using Annona muricata plant leaf extract and its anti-cancer efficacy <b>Siva Chander Chabattula</b> <i>Indian Institute Of Technology Madras, Chennai, India</i>
11:40-11:50	OL Isolation of Susceptible Cyclopeptides from Ixora coccinea plant leaves and their Characterizations <b>Deepshikha Verma</b> <i>MBSCET, Jammu, India</i>



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11:50-12:00	OL	Phytochemical profiling and preparation of Eranthemum indicum herbal extract loaded sodium alginate-glycerol gel coated cotton dressings for wound care <b>Flavius Nonglang</b> <i>North Eastern Hill University, Shillong, India</i>
12:00-12:10	OL	In vitro antioxidant, antimicrobial and anti-cancerous efficacy of methanolic extract of Morchella sp <b>Monika Thakur</b> <i>Shoolini institute of life sciences and business management, Garli, India</i>
12:10-12:20	OL	Tea tree Oil Nail Lacquer for Treatment of Paronychia <b>Sandhyashree S B</b> <i>M S Ramaiah University of Applied Sciences, Bangalore, India</i>
12:20-12:30	OL	Development of Herbal Bio-composites of Shati (Hedychium spicatum Sm.): Boon for Chronic wounds <b>Vishal Kumar</b> <i>All India Institute of Ayurveda, New Delhi, India</i>

13:00-14:00 | Lunch Break

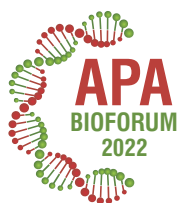
## Session 15 Antimicrobial Materials & Drug Delivery

Chairs : M.S. Alam (Jamia Hamdard, Delhi) &

Taweechai Amarsakchai (Mahidol Univ., Thailand)

Coordinator : Ankita Sharma; Aishwarya Arvind

Time		Lecture Title/Author
14:00-14:25	KN	Gels/Hydrogels for Wound Healing Applications <b>Yashveer Singh</b> <i>Indian Institute of Technology Ropar, Rupnagar, India</i>
14:25-14:50	KN	Polymeric Biomaterials for Tackling Antimicrobial Resistance and Infection <b>Jayanta Haldar</b> <i>JNCASR, Bangalore, India</i>
14:50-15:05	IL	Synthesis Of Gamma Radiation Induced Natural Gum (Stercuia) Based Novel Hydrogels For Drug Delivery Application <b>Manu Vashishtha</b> <i>Department of Chemistry, Dr. B. R. Ambedkar Institute of Technology, Port Blair, Port Blair, India</i>
15:05-15:15	OL	Functionalization of Polyester Fabric using Vanillin Derivative <b>Veerender Sharma</b> <i>IIT Delhi, Delhi, India</i>
15:15-15:25	OL	Multifunctional finishing of cotton fabric using eco-friendly microcapsules with essential oils in-situ <b>Shekhar Kumar</b> <i>NITJ, Jalandhar, India</i>
15:25-15:35	OL	Synthesis, Characterization and antifungal activities of copper oxide and differentially doped copper oxide nanostructures <b>Atul soni</b> <i>Sri sai university palampur, Palampur, India</i>
15:35-15:45	OL	Electrical, Thermal and Antimicrobial Properties of synthesized TiO <sub>2</sub> /rGO Nanocomposites <b>Sunil Kumar</b> <i>Himachal Pradesh university, Shimla, India</i>
15:45-15:55	OL	Enhancement of Photocatalytic and Antimicrobial Properties of Ni with Gd Doped ZnO nanoparticles <b>Mageswari K</b> <i>Muthurangam Government Arts College, Vellore, India</i>
15:55-16:05	OL	Phytofabrication of gold nanoparticles using Populus ciliata bark/ bud n-butanol fraction extract and investigation of their antimicrobial activities <b>Shabnam Thakur</b> <i>Shoolini University, India</i>
16:05-16:15	OL	Novel method for extraction of Lignin from pinus roxburghii (PR) needles and its applications for Antimicrobial Lignin-silver composite synthesis <b>Tilak Raj</b> <i>APG University Shimla HP, Kangra, India</i>



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## Session 16 Nanomaterial & Nanocomposites

Chairs : Prakash Wadgaonkar (NCL, Pune) & A. Suzuki (YNU, Yokohama, Japan)

Coordinator : Rohini Verma; Vipula

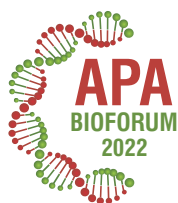
Time	Lecture Title/Author
14:00-14:25	KN Waste lignocellulosic biomass derived cellulose nanofiber as efficacious substrate for fluorescent modifications for removal of heavy metal ions, pesticides and textile waste <b>Anupama Kaushik Sharma</b> Panjab University, Chandigarh, India
14:25-14:50	KN NA <b>Sunita Rattan</b> Amity University, Noida, India
14:50-15:05	IL Nanocomposite starch-gelatin hybrid hydrogel for antibacterial applications <b>Sapna Sethi</b> DAV University, Jalandhar, India
15:05-15:15	OL Modification of nano/micro cellulose with different hydrophobic agents: A comparative study <b>Hitesh Kumar Singh</b> Institute of Chemical Technology, Mumbai, India
15:15-15:25	OL Telescopic synthesis of chitosan-Fe nanocomposites: morphology and structural studies <b>Rutuja Subhash Gumathannavar</b> Symbiosis Centre for Nanoscience and Nanotechnology, Symbiosis International University, Pune, India
15:25-15:35	OL Biocompatible Fluorescent Chitosan Based Nanomaterials for Biomedical Applications: Colloidal Synthesis and Characterization <b>Yogesh Ashokrao Jadhav</b> Symbiosis Center for Nanoscience and Nanotechnology (SCNN), Symbiosis International (Deemed University) (SIU), Pune, India
15:35-15:45	OL Effect of ionic strength on porosity and surface charge of chitosan nanoparticles <b>Nidhi Sapre</b> Symbiosis Center for Nanoscience and Nanotechnology (SCNN), Symbiosis International (Deemed) University, Pune, India
15:45-15:55	OL Chitosan-Chlorhexidine based Nanogels for the Bioactive Finishing of Polypropylene Fabric <b>Chetna Verma</b> IIT Delhi, India
15:55-16:05	OL Antimicrobial traits of the biologically synthesized nanoparticles from the extracts of Citrus species <b>Deepanjali Sharma</b> Shoolini University of Biotechnology and Management Sciences, Solan (HP), Solan, India

## Session 17 Student Oral Contest

Chairs : Satyendra Mishra (NMU, Jalgaon) & B. S. Kaith (NIT, Jalandhar)

Coordinator : Vandana Kumari ; Manali Somani

Time	Lecture Title/Author
14:00-14:10	OL Antibacterial Activity of Chitosan Grafted Dual Polybenzoxazine Films <b>Sangeeta Sahu</b> Shiv Nadar University, Uttar Pradesh, India
14:10-14:20	OL Carrageenan-based Herbal Bionanocomposite Membranes as a Wound Care System <b>Pratibha Singh</b> IIT Delhi, India
14:20-14:30	OL Functionalized three dimensional scaffold system for enhanced insulin secretion of mesenchymal stem cell derived insulin like clusters <b>Jijo Wilson</b> Sree Chitra Tirunal Institute for Medical Sciences and Technologies, Trivandrum, India
14:30-14:40	OL Improving antioxidant properties and antimicrobial properties of PLA film by using plant-based extract and modified silica nanoparticles for food packaging <b>Rahul Zende</b> S K Somaiya College, Maharashtra, India



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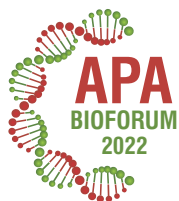
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14:40-14:50	OL	Antibacterial Peptide Nanofibers Loaded with Y2O3 Nanoparticles to Promote Wound Healing <b>Vatan Chawla</b> <i>Indian Institute of Technology Ropar, Rupnagar, India</i>
14:50-15:00	OL	3D-Polylactic Acid Scaffold with Surface Modified and 4-Methoxycinnamic Acid-loaded Chitosan Nanoparticles for Bone Regeneration <b>Abinaya Shanmugavadivu</b> <i>SRM-IST Chennai, India</i>
15:00-15:10	OL	Lyophilized Biocomposite Chitin-Alginate Matrices for Wound Healing Application <b>Sharon Caroline Furtado</b> <i>Ramaiah University of Applied Sciences, Bengaluru, India</i>
15:10-15:20	OL	Nanostructured Inorganic Layered Double Hydroxide for efficient drug delivery for cancer treatment <b>Swapan Maity</b> <i>Indian Institute of Technology (BHU), Varanasi, India</i>
15:20-15:30	OL	Bromelain encapsulated alginate-chitosan beads for biomedical applications <b>Priyadharshini T</b> <i>National Institute of Technology, Rourkela, India</i>

## Session 18 Poster Presentations

Chairs : Mukesh Singh (UPTTI, Kanpur) & Christine Jeyaseelan (Amity University, Noida) Coordinator : Ankita Sharma; Chetna Verma

Time	Lecture Title/Author
16:30-16:35	Synthesis And Characterization of Eco-friendly Biodegradable Film Based on Poultry Bio-Mass <b>Anurag Singh</b> <i>Central Institute of Petrochemicals Engineering and Technology, Lucknow, India</i>
16:35-16:40	Evaluation of the physico chemical properties of coconut Shell derived activated carbon and its application in DSSC <b>Manoj Kumar Mallick</b> <i>CIPET:SARP-LARPM, Bhubaneswar, India</i>
16:40-16:45	Synthesis of Soy Protein Isolate Film Reinforced with Silylated Nanocellulose and its Property Characterization <b>Pubali Chetia</b> <i>CSIR-NEIST, Jorhat, Assam, India</i>
16:45-16:50	Study the Effect of Antioxidants on The Properties of Lldpe <b>Akhilesh Kumar Yadav</b> <i>Central institute of petrochemicals engineering and technology, Lucknow, India</i>
16:50-16:55	Isolation of bioactive compounds from the stem bark of Populus ciliata Wall. ex Royle and screened for in-vitro antioxidant, antimicrobial, and anti-inflammatory activities <b>Ishita Guleria</b> <i>Shoolini University, Solan, Mandi, India</i>
16:55-17:00	Synthesis, Characterization And Conjugation Of Carbon Nanodots <b>Mijmal Shan KT</b> <i>National Institute of Technology Calicut, Malappuram, India</i>
17:00-17:05	Antibacterial Peptide Nanofibers Loaded with Y2O3 Nanoparticles to Promote Wound Healing <b>Vatan Chawla</b> <i>Indian Institute of Technology Ropar, Rupnagar, India</i>
17:05-17:10	Nano calcium incorporated piscean collagen scaffolds as wound dressing materials <b>Sindhu Abraham</b> <i>Faculty of Pharmacy, Ramaiah University of Applied Sciences, Bengaluru, India</i>
17:10-17:15	Electrospun PCL- kC Nanofibrous Matrix for Wound Healing Applications <b>Vandana Kumari</b> <i>IIT Delhi, New Delhi, India</i>
17:15-17:20	Structure Function elucidation of ternary metal biopolymer materials for sulfate adsorption <b>Bernd G.K. Steiger</b> <i>University of Saskatchewan, Saskatoon, Canada</i>
17:20-17:25	Itaconic acid based stimuli responsive polymers for controlled drug release for treating stomach ulcers <b>Shilpa Sharma</b> <i>Manav Rachna University, Faridabad, India</i>



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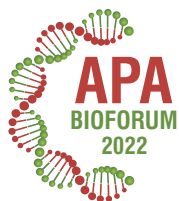
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## Session 19 Poster Presentations

Chairs : N.G. Shimpy (University of Mumbai) & Garima Agrawal (IIT, Mandi)

Coordinator : Pratibha Singh

Time	Lecture Title/Author
16:30-16:35	A Comparative Study of PVA/PVP and PVA/PVP/TiO <sub>2</sub> Nanocomposite Membrane <b>Disha Harinkhere</b> Government Holkar (Model, Autonomous) Science College, Indore, India
16:35-16:40	AStudies on mechanical properties of R-PS and waste MDF <b>Vivek Chaudhary</b> CIPET, Lucknow, India
16:40-16:45	Recycling of NYLON6/PET Laminated Lldpe Film <b>Saket Gupta</b> Central Institute of Petrochemicals Engineering & Technology (CIPET), Lucknow, India
16:45-16:50	Preparation of Biodegradable Film from Maize Starch and Date Palm Pits (Phoenix Dactylifera) and it's Characterization <b>Vipul Kumar</b> CIPET-IPT Lucknow, Kanpur, India
16:50-16:55	Solution Blow Spun PCL/Nano-Hydroxyapatite Based Composite Nanofibrous Scaffold for Bone Tissue Regeneration <b>Darshna</b> IIT BHU, Varanasi, India
16:55-17:00	Exploring the furfuryl alcohol degrading ability of Pseudomonas species <b>Priyragini Singh</b> Central University of South Bihar, Gaya, India
17:00-17:05	Effect of Liquid Lipid on Crystallinity of Lipid Matrix in Nano-Lipid Conjugates (NLCs) Fourier Transform Infrared and XRD spectroscopy <b>Rajat Garg</b> IPR, GLA University, Mathura, India
17:05-17:10	Remediation on emerging pollutants by multicomponent nanomaterials <b>Ankit</b> Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, Jalandhar, India
17:10-17:15	Nitrogen- doped Carbon Quantum dots-Polypyrrole composite electrode for high energy storage application <b>Sapna S</b> Mangalore University, Mangaluru, India
17:15-17:20	Future and Probable Applications of Natural Biopolymer-based Hydrogels in Agriculture <b>Pragna M Shivannavar</b> JSS Academy of Higher Education & Research, Bengaluru, India



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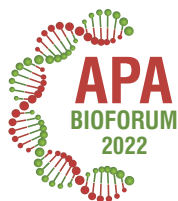
## Session 20 Poster Presentations

Chairs : Shamayita Patra (SUVV, Indore) & Niranjana Karak (Tezpur University, Assam)

Coordinator : Vipula; Rohini Verma

Time	Lecture Title/Author
16:30-16:35	Waste paper as a viable sustainable source for cellulosic extraction by chlorine free bleaching and acid hydrolysis method for the production of PVA-starch/ cellulose based biocomposites <b>Tresa Sunitha George</b> <i>St. Pauls college, Kalamassery, KOCHI, India</i>
16:35-16:40	Preparation and Characterization of Polyvinyl Alcohol/Alginate membranes for Biomedical Applications <b>Aishwarya Arvind</b> <i>IIT Delhi, Delhi, India</i>
16:40-16:45	Development of new process for mixing of nanoclay by using Polyvinyl alcohol in LDPE <b>Adarsh Chaturvedi</b> <i>CIPET Lucknow, Lucknow, India</i>
16:45-16:50	Study and Preparation of Biocarbon from Rice straw <b>Ekansh Agnishekhar</b> <i>CIPET Lucknow, Lucknow, India</i>
16:50-16:55	Preparation & Characterization of Biodegradable Blend Film From (Zingiber officinate) <b>Abhishek Yadav</b> <i>CIPET Lucknow, Lucknow, India</i>
16:55-17:00	Development of bone targeted nano-formulation of DPP-4 inhibitor for in-vivo treatment of osteoporosis <b>Nikita Nirwan</b> <i>Jamia Hamdard, New Delhi, India</i>
17:00-17:05	Paraffin wax nanoemulsion based UV resistant wood coatings <b>Richa Bansal</b> <i>Institute of Wood Science and Technology, Bangalore, India</i>
17:05-17:10	Coating of Carboxymethyl Cellulose on Polyurethane Surface for Designing Infection Resistance Surface <b>Manali Somani</b> <i>Indian Institute of Technology, Delhi, India</i>
17:10-17:15	Abstraction of Cyanide from water by adsorption on mesoporous magnetic cellulose <b>Anita Shekhawat</b> <i>RTM Nagpur University, Nagpur, India</i>
17:15-17:20	Improving antioxidant properties and antimicrobial properties of PLA film by using plant-based extract and modified silica nanoparticles for food packaging <b>Rahul Zende</b> <i>SK Somaiya, Mumbai, India</i>





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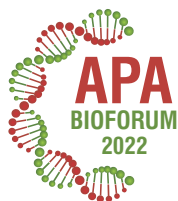
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## Session 21 Poster Presentations

Chairs : Susheel Kalia (IMA, Dehradun) & Swati Sharma (Chandigarh University)

Coordinator : Ankita Sharma; Chetna Verma

Time	Lecture Title/Author
17:35-17:40	Polymeric Approach for Formulating Sustained Release Floating Tablets of Domperidone: an in-vivo Investigation <b>Deepinder Singh</b> Chitkara University, Punajab, Rajpura, India
17:40-17:45	Fabrication of herbal transdermal drug delivery patch for osteoarthritis of knee <b>Yoshitha C N</b> All India Institute of Ayurveda, New Delhi, India
17:45-17:50	Dyes removal from water using natural polysaccharides based materials <b>Nikita Singh</b> Gautam buddha University, Greater, Noida, India
17:50-17:55	Thermo-gelation behaviour of poly(2-alkyl-2-oxazoline) grafted biopolymers <b>Vinita Dhaware</b> CSIR-National Chemical Laboratory, Pune, India
17:55-18:00	Micelles Self-Degraded Template based Graphitic Carbon Nitride-Polypyrrole composite electrode for high Supercapacitor performance <b>Vijaykumar P</b> Mangalore University, Mangaluru, India
18:00-18:05	Nanostructured Inorganic Layered Double Hydroxide for efficient drug delivery for cancer treatment <b>Swapn Maity</b> Indian Institute of Technology (BHU), Varanasi, India
18:05-18:10	Functionalized three dimensional scaffold system for enhanced insulin secretion of mesenchymal stem cell derived insulin like clusters <b>Jijo Wilson</b> Sree Chitra Tirunal Institute for Medical Sciences and Technologies, Trivandrum, India
18:10-18:15	RSM-CCD optimized in air synthesis of novel Kappa-Carrageenan/Tamarind Kernel Powder hybrid polymer network incorporated with inclusion complex of (2-Hydroxypropyl)- $\beta$ -cyclodextrin and Adenosine for controlled drug delivery <b>Vasudha Vaid</b> Dr. BR Ambedkar National Institute of Technology Jalandhar, Jalandhar, India
18:15-18:20	Characterization of Biodegradable films based on chia seed mucilage and lentil protein <b>Sharukh Ahmad</b> CIPET IPT Lucknow, Ambedkar Nagar, India
18:20-18:25	Preparation of Nano-cellulose Particles and its Applications <b>Saksham Jaswal</b> Dr B R ambedkar NIT Jalandhar, india



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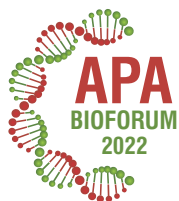
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## Session 22 Poster Presentations

Chairs : Manu Vashishtha (Port Blair) & A.K. Nadda (JIUT, Solan)

Coordinator : Vandana Kumari ; Aishwarya Arvind

Time	Lecture Title/Author
17:35-17:40	Synthesis of MXene-based Bio-inspired Smart Interfacial Membranes for Guided Bone Regeneration (GBR) <b>Amandeep Singh</b> <i>University of Calcutta, Kolkata, India</i>
17:40-17:45	Bridge Formulation of Oil base ZnS Microcapsule for Multifunctional Agricultural Applications <b>Anil Patil</b> <i>S.S.V.P. Sanstha's, L. K. Dr. P. R. Ghogrey Science College, Dhulia, India</i>
17:45-17:50	Lignin grafted stimuli-responsive polymer system: Synthesis, mechanical and stimuli-responsive properties <b>Parvathy P A</b> <i>CSIR NIIS, Pappanamcode, India</i>
17:50-17:55	Design and development of compostable biopolymeric responsive packaging materials <b>Sangeetha U K</b> <i>CSIR IIIST, Pappanamcode, India</i>
17:55-18:00	Formulation and Evaluation of Areca Catechu Extract Suspension for Gastric Ulcer <b>Vidya K</b> <i>M S Ramaiah University of Applied Sciences, Bangalore, India</i>
18:00-18:05	Development of Areca Catechu Extract Herbal Tablet for its Anti-ulcerogenic Effect <b>Darshan HR</b> <i>M.S. Ramaiah University of Applied Sciences, Bangalore, India</i>
18:05-18:10	In-situ gel forming Quercetin rectal spray incorporating mucoadhesive polymers for treatment of hemorrhoids <b>Shivani Srinivasan H</b> <i>MSRUAS-FPH, Bengaluru, India</i>
18:10-18:15	Preparation And Characterization of Diosmin Suspension <b>Khushboo Kumari</b> <i>M.S Ramaiah University of Applied Sciences, Bangalore, India</i>
18:15-18:20	Effect of Suspending Agents on the Stability of Probiotic Suspension <b>Merin Sara Mathew</b> <i>Ramaiah University of Applied Sciences, Bangalore, India</i>
18:20-18:25	Step-scheme Bi <sub>2</sub> WO <sub>6</sub> /Fe <sub>2</sub> O <sub>3</sub> heterojunction for photocatalytic degradation of methylene blue under visible light irradiation <b>Parteek Mandyal</b> <i>Shoolini University, Solan, India</i>



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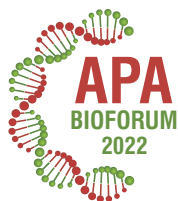
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## Session 23 Poster Presentations

Chairs : Bimlesh Lochab (S.N. University, Noida) & Surabhi Singh (DRDO, New Delhi)

Coordinator : Rohini Verma; Vipula

Time	Lecture Title/Author
17:35-17:40	Smart, Thermoresponsive N-Vinyl Caprolactam Graft Copolymerized Soy Protein Isolate Hydrogels for Controlled Drug Delivery Applications <b>Safiya Nisar</b> Amity University, Noida, India
17:40-17:45	Chitosan based Activated Charcoal Composite Film for Food Packaging <b>Richa Sharma</b> Indian Institute of Technology, Madras, Chennai, India
17:45-17:50	Construction of CuWO <sub>4</sub> /WO <sub>3</sub> /NiFe LDH S-scheme based heterojunction for photodegradation of methyl orange dye <b>Rohit Sharma</b> Shoolini University, Solan, India
17:50-17:55	Lyophilized Biocomposite Chitin-Alginate Matrices for Wound Healing Application <b>Sharon Caroline Furtado</b> Ramaiah University of Applied Sciences, Bengaluru, India
17:55-18:00	Synthesis And Characterisation Of Composite Hydrogels Based On Chitosan, Gelatin, And Carbon Black <b>Sreedev P</b> Government College Kasaragod, Kasaragod, India
18:00-18:05	Ecofriendly - Chitosan Based Flame Retardant Coating <b>Yogesh Rajput</b> Central Institute Of Petrochemicals Engineering and Technology Lucknow, Lucknow, India
18:05-18:10	Chaetomium globosum mediated green synthesis of silver nanoparticles as biocontrol agent against fusarium wilt of Tomato and Capsicum <b>Shailja Kumari</b> Shoolini University, Solan, India
18:10-18:15	Encapsulation of Datura metel leaf extract in Nano chitosan as biopolymer and evaluation of antioxidant studies by DPPH method <b>Amulya K.C.</b> M.S. Ramaiah University of Applied Sciences, Bengaluru, India
18:15-18:20	Encapsulation of nanochitosan using Vitis vinifera extract and its phytochemical profiling by DPPH method <b>Eliza Ahmed</b> M.S.Ramaiah University of Applied Sciences, Bangalore, India
18:20-18:25	Antibacterial Activity of Chitosan Grafted Dual Polybenzoxazine Films <b>Sangeeta Sahu</b> Shiv Nadar University, Uttar Pradesh, India



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## Session 24 Biopolymers for Advanced Applications

Chairs : Krzysztof Pielichowski (Cracow Univ., Poland) &  
Pranee Phinyocheep (Mahidol Univ., Thailand)

Coordinator : Ankita Sharma; Chetna Verma

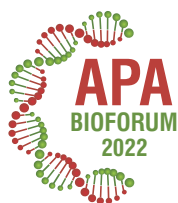
Time	Lecture Title/Author
09:00-09:15 IL	Silk fibroin and recombinant elastin blend nano-coatings for implantable medical devices <b>Emmanuel Joseph</b> CSIR - NCL, Pune, India
09:15-09:30 IL	Modified Biopolymers based Superabsorbent Hydrogels based on Sodium Alginate and Sodium Humate for removal of Heavy Metal ions by Adsorption from Waste waters <b>Reena Singhal</b> Plastic Technology Department, H.B.T.U., Kanpur India
09:30-09:40 OL	Chitosan schiff base as a fluorescence probe for selective detection of trivalent iron ions <b>Madhvi Garg</b> SLIET, Sangrur, India
09:40-09:50 OL	Disposable Paper-based Biosensing Platform For Procalcitonin Detection <b>Yachana Gupta</b> The NorthCap University, Gurgaon, India
09:50-10:00 OL	Electromechanical Behaviour of Polyaniline-Based Hybrid Composite Films for Humidity Sensing <b>Yuriy A. Anisimov</b> Department of Chemistry, University of Saskatchewan, Saskatoon, SK S7N 5C9, Canada
10:00-10:10 OL	3D Printed Biopolymer-Based Self-Powered Pressure Sensor: Border security & Solider Safety <b>Dalip Saini</b> Institute of Nano Science and Technology, Knowledge city, Sector 81, Mohali Punjab, India
10:10-10:20 OL	L-Cysteine-derived smart ABCBA-type antifouling biohybrid <b>Devendra Kumar</b> Indian Institute of Technology Bhilai, Korba, India
10:20-10:30 OL	Hydrolyzed starch graft copolymers as plasticizers of cement-based mortars <b>Andrea Gonzalez</b> Cordoba Universidad Nacional de Colombia, Bogota, Colombia
10:30-10:40 OL	Valorisation of Fruit Waste for production of Chitosan from yeast <b>Manali Jaithliya</b> Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Pune, Indore, India

## Session 25 Miscellaneous

Chairs: Satyendra Mishra (NMU, Jalgaon) & Prachi Singhal (Amity Univ., Noida)

Coordinator : Pratibha Singh; Vipula

Time	Lecture Title/Author
09:00-09:15 IL	Synthesis of polypyrrole/silver/graphene ternary nanocomposite and study on photocatalytic degradation of Congo red dye under sunlight irradiation <b>Vrinda Punnakkal</b> Sree Sankara College, Kalady, Ernakulam, Ankamaly, India
09:15-09:30 IL	Sustainable Polybenzoxazines: Upcoming Class of Phenolic Resins <b>Bimlesh Lochab</b> Shiv Nadar University Dadri, Gautam Buddha Nagar, Uttar Pradesh, India
09:30-09:40 OL	Effect of Epoxidized Soybean Oil (ESBO) on Mechanical and Thermal Properties on Poly (lactic acid) (PLA), PLA/Poly (butylene succinate) (PBS) [90/10] Blend Compositions <b>Prajakta Naik</b> School of Polymer Engineering, Dr. Vishwanath Karad MIT World Peace University, Pune, India
09:40-09:50 OL	A Study of Activity, Kinetics and Reusability of Immobilized Lipase in Hydrolytic Reactions and Application in Esterification Reactions <b>Samjeet Singh Thakur</b> RGM Govt. College Joginder Nagar, Mandi, India



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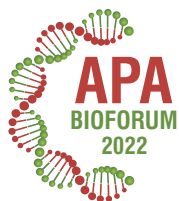
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09:50-10:00	OL	A polyphenol-chelator based multimodal anti-snake venom nanoformulation. <b>Neeraja Revi</b> <i>Indian Institute of Technology Hyderabad, India</i>
10:00-10:10	OL	O and S co-doping induced substitutional N-vacancy in graphitic carbon nitride: Simulation studies; bandgap tuning; peroxy monosulfate activation, sulfamethoxazole degradation pathways <b>Vasudha Hasija</b> <i>Shoolini University, Solan, India</i>
10:10-10:20	OL	Effect of Gold Nanoparticles on Phase Behaviour of DPPC Membranes - UV-vis, TEM, FTIR and DSC studies <b>Monika Khurana</b> <i>Sushant University, Gurugram, India</i>
10:20-10:30	OL	An innovative approach to synthesized and characterized thiol and sulfonium integrated starch biopolymer for arsenic removal in aqueous system <b>Vishal Priya</b> <i>CSKHPKV, Palampur, Department of Chemistry and Biochemistry, Kangra, H. P. 173205, India</i>
10:30-10:40	OL	Facile synthesis and extended visible light activity of oxygen and sulphur co-doped carbon nitride quantum dots modified Bi <sub>2</sub> MoO <sub>6</sub> for phenol degradation <b>Abhinandan Kumar</b> <i>Shoolini University of Biotechnology and Management Sciences, Solan, India</i>
10:40-10:50	OL	Hydrophilic Poly(vinylidene fluoride)(PVDF)! Unique grafting strategy and enormous scopes <b>Atanu Kuila</b> <i>Haldia Institute of Technology, Haldia, India</i>

### Session 26 Biopolymers & Applications

Chairs : Mohammad Jawaid (Univ Putra Malaysia) & Smita Mohanthy (CIPET, Bhubaneswar) Coordinator : Vandana Kumari ; Aishwarya Arvind

Time		Lecture Title/Author
09:00-09:15	IL	Turmeric-TPU nano/submicron fibres by Centrifugal spinning for biomedical application <b>Shamayita Patra</b> <i>SVIT, Indore, India</i>
09:15-09:30	IL	Dual Stimuli Responsive Soy protein based Hydrogel Engineered Through a Novel Cross-linker as Superabsorbent <b>Saloni Mehra</b> <i>Jubliant Biosystems, Noida, India</i>
09:30-09:40	OL	Structure Development and Properties of PVA Starch- Paddy Straw Composites <b>S Radhakrishnan</b> <i>MIT-WPU, Pune, India</i>
09:40-09:50	OL	Effect of Mixture of North-East Region Clays (NER-Clay) on Mechanical, Thermal and Barrier Property of Polylactic Acid Biofilm <b>Ravi Purbey</b> <i>CSIR-NEIST, Jorhat, India</i>
09:50-10:00	OL	Extraction, Quantification and Characterization of Lignin extracted from Bamboo Biomass <b>Bibhu Prasad Dash</b> <i>Odisha University of Technology and Research, Bhubaneswar, India</i>
10:00-10:10	OL	Green packaging technology using active jujube seed powder <b>Anamika Nayak</b> <i>NIT, Durgapur, India</i>
10:10-10:20	OL	Cellulose Microfibers Reinforced Bioplastic Films for Packaging Application <b>Rishpreet Kaur</b> <i>Dr B.R. Ambedkar National Institute of Technology Jalandhar, Ludhiana, India</i>
10:20-10:30	OL	Potential of Ligno-cellulosic Jute Fibre Based Paper in Biodegradable Packaging <b>Kartick K Samanta</b> <i>ICAR-NINFET, Kolkata, India</i>
10:30-10:40	OL	Synthesis of $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> /ethyl cellulose-based nanocomposites to extend the shelf-life of Capsicum annum L. var. grossum <b>Geetika Guleria</b> <i>Eternal University, Sirmor, India</i>



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## Session 27 Biopolymers in Water Purification

Chairs : Pooja Shandilya (Shoolini Univ. H.P.) & Lee Wilson (Univ. of Saskatchewan, Canada) Coordinator : Vandana Kumari ; Aishwarya Arvind

Time	Lecture Title/Author
11:00-11:10	OL Activated Carbon modified Chitosan beads an effective method for removal of Congo Red dye. <b>Manpreet Kaur Ahluwalia</b> <i>Amity Institute of Applied Sciences, Amity University Noida, New Delhi, India</i>
11:10-11:20	OL Synthesis, green modification and adsorption studies of nanocellulose derived from Pandanus Tectorius leaves <b>Jyothy G Vijayan</b> <i>M.s Ramaiah University Of Applied Sciences, Bengaluru, India</i>
11:20-11:30	OL Congugated Polymer Coated Textile Bioadsorbents for Waste Water Treatment <b>Shivangi Pandey</b> <i>Uptti Kanpur, India</i>
11:30-11:40	OL Studies on cellulosic fibres from Pearl Millet Straw for removal of Methylene Blue from aqueous solution <b>Manisha Yadav</b> <i>IIT Delhi, Delhi, India</i>
11:40-11:50	OL Cu(II)-crosslinked Chitosan for Reactive Orange-16 Dye Decontamination from Effluents <b>Priyanka Jaikumar Doondani</b> <i>Department of Chemistry, Rtm Nagpur University, Nagpur, India</i>
11:50-12:00	OL Exploring application of Continuous Carica Papaya Sheet as a filter media in effluent treatment <b>Pruthviben Prajapati</b> <i>The Maharaja Sayajirao University of baroda, Vadodara, India</i>
12:00-12:10	OL Application of Self-healing coatings with natural biocides: A novel Antifoulant <b>Priyanka Shisode</b> <i>Department of Chemistry, S. S. V. P. Sanstha's L.K. Dr. P. R. Ghogrey, Science College, Deopur, Affiliated to the Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (M.S.), India</i>

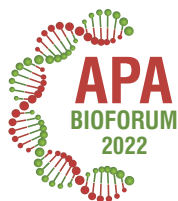
## Session 28 Biopolymers & Biomaterials

Chairs : Manoj Raula (Amity Univ., Noida) & Anna Liguori (KTH, Stockholm)

Coordinator : Vipula ; Pratibha Singh

Time	Lecture Title/Author
11:00-11:15	IL Fabrication of Curcumin Based Nanogels and Nanofibers for controlled release and wound healing applications <b>Vaishali S. Shinde</b> <i>Department of Chemistry, Savitribai Phule Pune University (Formerly, University of Pune), Pune, India</i>
11:15-11:30	IL Chitosan Based Composite for remediation of multiple emerging contaminants <b>Anupama Kumar</b> <i>Visvesvaraya national Institute of Technology, Nagpur, India</i>
11:30-11:40	OL Optimization of Nanochitosan Encapsulated Phytochemicals Extracted from Lactuca Serriola Leaf and their Antioxidant Activity by Response Surface Methodology <b>Shakkira M</b> <i>MS Ramaiah University of Applied Sciences, Malappuram, India</i>
11:40-11:50	OL Effect of Dietary Chitosan extracted from Carapace of freshwater crab Sartoriana spinigera on Food intake, Body weight, Liver weight and Lipid content of Liver of Hypercholesterolemic albino rats <b>Shiny E.C. Kachhap</b> <i>Marwari College Ranchi, India</i>
11:50-12:00	OL Bioactive Conductive Polymeric Nanocomposite Coating for Titanium Implants <b>Suja Mathai</b> <i>Mar Ivanios College (Autonomous), Thiruvananthapuram, India</i>
12:00-12:10	OL In-Vitro Studies of PPE-CTS Inclusion Complexes for Encapsulation of Phytochemicals form Potato Peel Waste <b>Ranjita Swapan Das</b> <i>Visvesvaraya National Institute of Technology, Nagpur, India</i>





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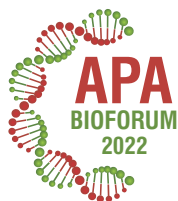
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## Session 29 Biopolymers in wound care

Chairs : Gaurav Manik (IIT, Roorkee) & Poonam Negi (Shoolini University, H.P.)

Coordinator : Manali Somani ; Rohini Verma

Time	Lecture Title/Author
11:00-11:10	OL Photothermally Active Chitosan Coated Nanosystem for Skin Cancer Therapy and Biofilm inhibition <b>Anil Jogdand</b> <i>IIT Hyderabad, Telangana, India</i>
11:10-11:20	OL Isolation, Phytochemical Elucidation and Wound Healing Potential of Chitosan Based Film loaded with Tagetes Erecta <b>Manisha U Kunder</b> <i>Ramaiah University of Applied Sciences, Bangalore, India</i>
11:20-11:30	OL Development of manuka honey loaded chitosan-PVA foam dressings- a solution for advanced wound care <b>Sangeeth C.</b> <i>Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, India</i>
11:30-11:40	OL Sterile Thermo-Responsive Formulations for Emergency Management of Burns <b>Megha K</b> <i>M.S. Ramaiah University of Applied Sciences, Bangalore, India</i>
11:40-11:50	OL Design and development of naringenin loaded cellulose based thermosensitive hydrogel membranes for chronic wound healing <b>Neha Raina</b> <i>DPSRU, Delhi, India</i>
11:50-12:00	OL Development of Citrus peel extracts /Polyethylene Oxide Nanofibrous Assembly and Exploration of its Antibacterial and Antioxidant Activity <b>Himansu Shekhar Mohapatra</b> <i>Indian Institute of Carpet Technology, Bhadohi, India</i>



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## Valedictory Session

Coordinator : Chetna Verma, IIT Delhi

### Welcome Address

Sunita Rattan (Secretary, APA, Conference Co-chair)

Time: 12:30-12:40

### APA Address

Bhuvanesh Gupta (President, APA, Conference Chair)

Time: 12:40-12:50

### Theme Address

Anup Ghosh (Honorary chair)

Time: 12:50-13:00

### Conference Address

Manohar Badiger (Conference Chair)

Time: 13:00-13:10

### Keynote Address

K.S. Rana (Guest of Honour) Vice Chancellor, Starex Univ., Gurgaon

Time: 13:10-13:30

### Valedictory Address

Sanjay K. Nayak (Chief Guest) Vice Chancellor, Ravenshaw Univ. Cuttack

Time: 13:30-13:55

### Award Presentation

Sanjay K. Nayak (Chief Guest) Vice Chancellor, Ravenshaw Univ. Cuttack

Time: 13:55-14:05

### Vote of Thanks

Susheel Kalia (Conference Secretary)

Time: 14:05-14:10