

RESEARCH PROFILE

PROFESSOR Dr. (Smt.) SARASWATI P MASTI



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3. Date of Birth : 05-06-1976
4. Teaching Experience : Guest faculty : 3 years
Assistant Professor : 14 years
Associate Professor : 3 years
5. Research Interests : **Drug Analysis, Polymer composites,
Polymer Blends**
- Citations : 1738
 - h- Index : 25
 - i10- Index : 38

ACADEMIC QUALIFICATIONS

6. M.Sc., (Inorganic Chemistry) : Karnatak University, Dharwad, Karnataka
7. Ph.D. (Chemistry) : Karnatak University, Dharwad, Karnataka

RESEARCH PROJECT

- **Title of the Project:** “Physico-Chemical and Mechanical Properties of Ternary Blend Films for Food Packaging Applications”.
- Principal Investigator
- **Funding Agency:** DST-SERB, New Delhi, India.
- **Grant sanctioned :** 41,92,144/-

- **Duration :** 2016 to 2020

RESEARCH TEAM:

Sl. No	Name of the candidate	Research Topic	Current Status
1	Shivayogi S. Narasagoudr	“Thermal, Structural and Spectroscopic Study of Biodegradable Polymer Blend/Composite Films”	Awarded
2	Veena G. Hegde	“Synthesis and Evaluation of Nanoparticles Doped Biodegradable Polymer Composites”	Awarded
3	Nagaraj Gouda	“Synthesis and characterization of natural drug doped biodegradable polymer composite and blend films for potential applications.”	Cancelled
4	Manjunath P Eelager	“Preparation and Evaluation of Physicochemical Properties of Polymer Blend Films for Food Packaging and Mulching Applications”	Thesis Submitted
5	Lingaraj Kariyappa Kurabetta	“Evaluation of Mechanical, Structural, and Functional properties of polysaccharide composed polymer Blend films for active food packaging”	Guiding
6	Suhasini Madihalli	Preparation and Evaluation of Active ingredient Incorporated Polymer Blend/Composite Films for Various Applications”	Guiding
7	Manjushree Nagaraj Gunaki	“Synthesis and Characterization of Biopolymer Based Blend/Composite Films as Packaging Materials”	Guiding
8	Ajitkumar Appayya Hunashyal	“Evaluation of Physicochemical and Functional Properties of Biodegradable Polymer Blend/Composite Films for Potential Applications”	Guiding

Title of the Project: “Development and Evaluation of Multifunctional Properties of Biopolymer Based Blend Films for Active Food Packaging Applications”.

- Principal Investigator
- **Funding Agency:** PMEB, Karnatak University, Dharwad.
- **Grant sanctioned :** 50,000/-
- **Duration :** 2021 to 2022

Best Research Publication Awards

- Best Research Publication Award in Science 2020 for the paper entitled “*Ethyl vanillin incorporated Chitosan/Poly(vinyl alcohol) active films for food packaging application*” published in **Carbohydrate Polymers** by **Dr. Saraswati P. Masti**, Dept. of Chemistry on the occasion of National Science Day.
- Best Research Publication Award in Science 2022 for the paper entitled “*Development and evaluation of Moringa extract incorporated Chitosan/Guar gum/Poly(vinyl alcohol) active films for food packaging application*” published in **International journal of Biological Macromolecules** by **Dr. Saraswati P. Masti**, Dept. of Chemistry on the occasion of National Science Day.

RESEARCH PUBLICATIONS DURING Ph.D. PERIOD

1. M.B.Melavanki, J. Seethramappa, **S. P. Masti**, *Spectrophotometric determination of Vanadium (V) in minerals, steels, soil and biological samples using Phenothiazine derivative*, **Analytical Sciences (Japan)**, 17, 979-982, 2001.
2. M.B.Melavanki, J. Seethramappa, **S. P. Masti**, *Spectrophotometric determination of Molybdenum (VI) using isothiopyridyl hydrochloride and pipazethate hydrochloride in alloy steels and soil samples*, **Analytical Sciences (Japan)**, 17, 1121-1123, 2001.
3. **S. P. Masti**, J. Seethramappa, M.B.Melavanki, *Spectrophotometric determination of Cerium (IV) using phenothiazine derivative*, **Analytical Sciences (Japan)**, 18, 167-169, 2002.
4. M.B.Melavanki, **S. P. Masti**, Jaladappa Seethramappa, *Determination of trace amount of Gold (III) using ethopropazine hydrochloride and isothiopyridyl hydrochloride: A spectrophotometric study*, **Turkish Journal of Chemistry**, 26, 17-22, 2002.
5. A.G. Sajjan, J. Seethramappa, **S. P. Masti**, *Spectrophotometric determinations of propanolol hydrochloride in pharmaceutical preparation*, **Indian Journal of Pharmaceutical Sciences**, 64, 68-70, 2002.

6. **S. P. Masti**, J. Seethramappa, M.B.Melavanki, *Extractive spectrophotometric determination Tungsten (VI) in alloy steel using ethopropazone hydrochloride*, **Analytical Sciences (Japan)**, 18, 913-915, 2001.
7. M.B. Melavanki, J. Seethramappa, **S. P. Masti**, *Spectrophotometric determination of Iron (II) in ore, pharmaceutical formulations, plant materials and food stuff using piroxicam*, **Indian Journal of Chemistry**, 42A, 576-578, 2003.

RESEARCH WORK (PUBLICATIONS) AFTER Ph.D. PERIOD

IN INTERNATIONAL CONFERENCE

1. **Saraswati Masti**, J. Seetharamappa, Ravindra B. Chougale, *Spectrophotometric Determination of Iron (III) In Ore, Pharmaceutical Formulations, Plant Materials and food stuff using Propranolol hydrochloride*, **International Conference on Frontiers In Chemical Research (ICFCR - 2008)**, 29-31 December 2008, Department of Chemistry, Mangalore University, Mangalagotri, Mangalore. India.
2. Ravindra Chougale, **Saraswati Masti**, Bhagyavana Mudigoudra, Rajashekhar Bhajantri, *Mechanical Properties of Ternary Polymer PVC/PVAc/PEG Blend Films*, **International Conference on Synthetic and Structural Chemistry, ICSSC-2011**, December 8-10, 2011, Department of Chemistry, Mangalore University, Mangalagotri, Mangalore, India.
3. **Saraswati Masti**, Ravindra Chougale, Bhagyavana Mudigoudra, Rajashekhar Bhajantri, *Mechanical Properties of Ternary Polymer PVP/CS/PVA Blend Film*, **International Conference on Synthetic and Structural Chemistry, ICSSC-2011**, December 8-10, 2011, Department of Chemistry, Mangalore University, Mangalagotri, Mangalore, India.
4. **Saraswati Masti**, Bhagyavana Mudigoudra, Ravindra Chougale, *Mechanical Properties of Poly (vinyl chloride)/Poly (ethylene glycol) Polymer Blend Films*, **International Conference on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2012)**, 17 to 19th January, 2012, Department of Physics, Shivaji University, Kolhapur, Maharashtra, India.

5. Ravindra Chougale, Rajashekhar Bhajantri, **Saraswati Masti**, *Mechanical Properties of Gum Acacia (GA) Doped Chitosan(CS)/Poly(vinyl alcohol) (PVA) Blend Film*, **International Conference on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2012)**, 17 to 19th January, 2012, Department of Physics, Shivaji University, Kolhapur, Maharashtra, India.
6. **Saraswati Masti**, Ravindra Chougale, Deepak Kasai, *Study of Mechanical and Thermal properties of Ternary Blend films Containing PVA/Chitosan/Guar Gum*, **52nd Annual Convention of Chemists-2015**, 28-30 December 2015, JECRC University, Jaipur-30905, Rajasthan, India.
7. **Saraswati Masti**, Ravindra Chougale, Deepak Kasai, Shivayogi S Narasagoudr, *Morphology and Tensile properties of Chitosan/Vanillin Blend Films*, **6th International Science congress (ISC-2016)**, 8th and 9th December 2016, Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune, Maharashtra, India.
8. Shivayogi S Narasagoudr, **Saraswati Masti**, Ravindra Chougale, Deepak Kasai, Bhagyvana Mudigoudra, **Scanning Electron Microscopy (SEM) Study of Chitosan Doped PVA/PVP**, **6th International Science congress (ISC-2016)**, 8th and 9th December 2016, Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune, Maharashtra, India.
9. Ravindra Chougale, **Saraswati Masti**, Deepak Kasai, **Preparation and Characterization of Equal Weight Percent of Guar Gum and Pepper Leaves Extract Doped PVA Blend Films**, **6th International Science congress (ISC-2016)**, 8th and 9th December 2016, Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune, Maharashtra, India.
10. Shivayogi S Narasagoudr, **Saraswati Masti***, Ravindra Chougale, Veena Hegde, *Influence of Moringa Extract on Mechanical Properties of Poly(vinyl alcohol)/Chitosan/Guar Gum blend films*, in **Recent Trends in Biotechnology (RTBT)-2018** at Karnataka Science College, Dharwad during 23rd and 24th February 2018.
11. **Saraswati Masti**, Shivayogi S Narasagoudr, Ravindra Chougale, Veena Hegde, *Mechanical Properties of Poly (vinyl alcohol)/Chitosan/Guar Gum Ternary Blend Films* in **Recent Trends in Biotechnology (RTBT)-2018**, at Karnataka Science College, Dharwad during 23rd and 24th February 2018.
12. Veena Hegde, **Saraswati Masti**, Shivayogi S Narasagoudr, Ravindra Chougale, *Effect of EDTA on Mechanical Properties of Ternary Blend Films Containing Poly (vinyl*

alcohol)/Chitosan/Guar Gum in **Recent Trends in Biotechnology (RTBT)-2018** at Karnataka Science College, Dharwad during 23rd and 24th February 2018.

13. **Saraswati Masti**, *Thermal and Mechanical study of Moringa leaves Extract doped Poly(vinyl alcohol)/Chitosan/Guar Gum blend films* in **International Conference on Direct Digital Manufacturing and Polymer (ICDDMAP)**, Karnatak University, Dharwad-03, Karnataka, India during 20th to 23rd February 2019.
14. Shivayogi S Narasagoudr, **Saraswati Masti**, *Study of Thermal degradation and Kinetic Parameters of Poly (vinyl alcohol)/ Boswellic acid Composite Films* in “**International Conference on Direct Digital Manufacturing and Polymers (ICDDMAP)**” organized by Department of Studies in Chemistry, Karnataka University, Dharwad during 20-24th February 2019.
15. Veena Hegde, **Saraswati Masti**, Shivayogi S Narasagoudr, Ravindra Chougale, *Influence of Hydroxy Citric acid on the Thermal and Mechanical Properties of PVA/Chitosan/Guar gum blend films* in “**International Conference on Direct Digital Manufacturing and Polymers (ICDDMAP)**” organized by Department of Studies in Chemistry, Karnataka University, Dharwad during 20-24th February 2019.
16. Shivayogi S Narasagoudr, **Saraswati Masti**, *Preparation and Characterization of Hydroxy Citric Acid Crosslinked PVA/Chitosan/Guar Gum Blend Films* in **9th International Science Congress” (ISC-2019)** held at Bhilai Institute of Technology, Durg, Chhattisgarh, India on 8th - 9th December 2019.
17. **Saraswati Masti**, *Effect of Potassium Sorbate on Ternary Blend Films Containing Chitosan/Poly (vinyl alcohol)/Ethyl vanillin* in **9th International Science Congress” (ISC-2019)** held at Bhilai Institute of Technology, Durg, Chhattisgarh, India on 8th - 9th December 2019.
18. Veena G Bhat, Shivayogi S Narasagoudr, **Saraswati Masti**, *Effect of Plasticizer and Crosslinking agent on Thermal and Mechanical Properties of ZnO Nano composites*, **International Webinar on Recent Innovations in Chemical Sciences-2020 (IWRICS)**, held at Department of Chemistry in association with IQAC Karnataka Science College, Dharwad, 4th & 5th Dec. 2020.
19. Nagaraj Gouda, Ravindra B. Chougale, Saraswati P. Masti, *Tetra hydro derivatives of Curcumin: Novel synthetic approach for preparation of PVA: Chitosan doped blend films*,

International Webinar on Recent Innovations in Chemical Sciences-2020 (IWRICS), held at Department of Chemistry in association with IQAC Karnatak Science College, Dharwad, 4th & 5th Dec. 2020.

20. Saraswati P. Masti, *Cetrimide incorporated PVA/ ZnO nanocomposites films with antimicrobial activity for active food packaging*, **International Conference on Technologies For Smart Green Connected Societies 2021 November 29-30, 2021(Online)**, held at Yamagata University, Japan.
21. Manjunath P. Eelager, Saraswati P. Masti, Ravindra B. Chougale, *Mechanical and anti-microbial analysis of green synthesized ZnO NPs incorporated PVA/XG composite films*, **International Conference on Chemistry and Allied Sciences (ICCSC-2022), 25-27, August 2022** held at Warangal, India.
22. Lingaraj Kariyappa Kurabetta, Saraswati P. Masti*, Ravindra B. Chougale, Manjunath P. Eelager, *Tert-butylhydroquinone (t-BHQ) induced methyl cellulose/chitosan based moisture resistant biodegradable films*, **International Conference on Chemistry and Allied Sciences (ICCSC-2022), 25-27, August 2022** held at Warangal, India.
23. Manjushree Nagaraj Gunaki, Saraswati P. Masti*, Ravindra B. Chougale, Manjunath P. Eelager, *Evaluation of Mechanical and Barrier Properties of SA/PVA/PU Ternary Biopolymer Blend Films*, **International Conference on Chemistry and Allied Sciences (ICCSC-2022), 25-27, August 2022** held at Warangal, India.
24. Suhasini Madihalli, Saraswati P. Masti*, Ravindra B. Chougale, *Hydrodynamic and Chemical resistance studies of Butylated Hydroxyanisole incorporated Methyl cellulose/Chitosan polymer films for food packaging applications*, **International Conference on Chemistry and Allied Sciences (ICCSC-2022), 25-27, August 2022** held at Warangal, India.
25. Manjunath P. Eelager, Saraswati P. Masti, Ravindra B. Chougale, *Investigation of antibacterial and antifungal properties of eco-friendly morinda citrifolia leaf extract incorporated methylcellulose films for food packaging*, in **10th International Science Congress (ISC-2022) on 8th & 9th December 2022** held at Dadasaheb Jotiram Godse Arts Commerce Science College, Vaduj, Satara, Maharashtra, India.
26. Suhasini Madihalli, Saraswati P. Masti*, Ravindra B. Chougale, *Preparation and Evaluation of ZnO nanoparticles integrated CMC/Xanthan gum polymer composite films*, in

10th International Science Congress (ISC-2022) on 8th & 9th December 2022 held at Dadasaheb Jotiram Godse Arts Commerce Science College, Vaduj, Satara, Maharashtra, India.

IN NATIONAL CONFERENCE

1. **Saraswati Masti**, J. Seetharamappa, *Spectrophotometric Determination of Gold (III) using Propionyl Promazine Phosphate*, **19th Conference of Indian Council of Chemists**, 27th to 29th November 2000, Department of Chemistry, Kuvempu University, Shimoga, Karnatak, India.
2. Ravindra Chougale, **Saraswati Masti**, Bhagyvana Mudigoudra, *Mechanical Properties of Ternary Polymer Blends*, National Conference on Chemistry of Materials NCCM-2011, 28th September 2011, Centre for Advanced Materials, Tumkur University, Tumkur, Karnatak, India.
3. **Saraswati Masti**, Bhagyvana Mudigoudra, Ravindra Chougale, *Mechanical Properties of Binary Polymer Blends*, National Conference on Chemistry of Materials NCCM-2011, 28th September 2011, Centre for Advanced Materials, Tumkur University, Tumkur, Karnatak, India
4. **Saraswati Masti**, Ravindra Chougale, Deepak Kasai, Shivayogi S Narasagoudr, Thermal Stability of Ternary Blend Films Containing Poly (vinyl alcohol)/Chitosan/Papain, **UGC Sponsored One Day State Level Seminar-2017**, 20th January 2017, P. C. Jabin Science College, Department of Chemistry, Vidyanagar, Hubballi, Karnatak, India.
5. Ravindra Chougale, **Saraswati Masti**, Bhagyvana Mudigoudra, Shivayogi S Narasagoudr, Investigation and Study of Papain Doped Phase Morphological Poly (vinyl alcohol)/Chitosan Blend Films, **UGC Sponsored One Day State Level Seminar-2017**, 20th January 2017, P. C. Jabin Science College, Department of Chemistry, Vidyanagar, Hubballi, Karnatak, India.
6. Shivayogi S Narasagoudr, **Saraswati Masti**, Ravindra Chougale, Deepak Kasai, *Investigation of Thermal and Mechanical Properties Poly (vinyl alcohol)/Chitosan/Guar Gum Ternary Blend Films*, **National Conference on Emerging Trends in Applied Sciences, ETAS-17**, May 17th & 18th – 2017.

7. Veena G Hegde, Shivayogi S Narasagoudr, Ravindra Chougale, **Saraswati Masti**, *Mechanical and Hydro dynamic Properties of PVA/Cetrimide/ZnO Nanocomposite Films*, **National Conference on Innovations in Chemical Sciences(NCICS-2020)**,held at Karnataka Science and Technology Academy DST, Govt. of Karnataka ,Bengaluru & University of Mysore, Department of Studies in Chemistry, Manasagangotri, Mysuru.
8. Manjunath P. Eelager, Saraswati P. Masti, Ravindra B. Chougale, *Evaluation of Mechanical and Water Barrier Properties of Glycyrrhizic acid Integrated CS/PU Biobased Active Films for Food Packaging*, **KSTA Sponsored One Day National Seminar**, organized by Department of Chemistry (UG & PG) on 23/07/2022 J.S.S. Arts, Science and Commerce College, Gokak-591 307, Karnataka, India.
9. Lingaraj Kariyappa Kurabetta, Saraswati P. Masti, Ravindra B. Chougale, Manjunath P. Eelager, *Impact of Relative Humidity on Mechanical Properties of Methyl cellulose/Pullulan Blend Film*, **KSTA Sponsored One Day National Seminar**, organized by Department of Chemistry (UG & PG) on 23/07/2022 J.S.S. Arts, Science and Commerce College, Gokak-591 307, Karnataka, India.
10. Manjushree Nagaraj Gunaki, SaraswatiP. Masti, Ravindra B. Chougale, Suhasini Madihalli, Lingaraj Kariyappa Kurabetta, Manjunath P. Eelager, *Effect of different active ingredients on bioactive methylcellulose and chitosan blend films*, **KSTA Sponsored One Day National Seminar**, organized by Department of Chemistry (UG & PG) on 23/07/2022 J.S.S. Arts, Science and Commerce College, Gokak-591 307, Karnataka, India.
11. Suhasini Madihalli, Saraswati P. Masti, Ravindra B. Chougale, Manjunath P. Eelager, *Influenceof Nannariroot extract on the Mechanical and Chemical Resistance properties of CMC/PVA/K-carrageenan ternary blend Film*, **KSTA Sponsored One Day National Seminar**, organized by Department of Chemistry (UG & PG) on 23/07/2022, J.S.S. Arts, Science and Commerce College, Gokak-591 307, Karnataka, India.

IN PROCEEDINGS

1. Ravindra Chougale, **Saraswati Masti**, *Thermal Properties of Chitosan/Poly (vinyl alcohol)/Poly (vinyl pyrrolidone) Ternary Polymer Blend Films*, International Conference on Advanced materials ICAM 2012, January 5-7, 2012, Department of Physics, Loyola college, Chennai, India.

2. Deepak Kasai, **Saraswati Masti**, Ramesh Gani, Raju Chalannavar, Ravindra Chougale*, *Programme and Book of Abstract Evaluation of Multifunctional Properties of Chitosan/Guar gum/Vanillin for Food Packaging Applications*, Second International Conference on Composites, Biocomposites and Nanocomposites, 28th to 30th October-2015, **CRG Publishers** Durban University of Technology, Durban, South Africa.
3. Deepak Kasai, Ravindra Chougale*, **Saraswati Masti**, Shivayogi S. Narasagoudr, *AIP Conf. Proc. 1953, 030226-1-030226-4;https://doi.org/10.1036/1.5032561 Thermal Degradation of Ternary Blend Films Containg PVA/Chitosan/Vanillin* Second International Conference on Condensed Matter and Applied Physics(ICC-2017) Published by AIP Publishing 978-0-7354-1648-2/ \$30.000. 30226-1.

RESEARCH PAPERS

1. Mahaveer B Melwanki, Jaldappa Seetharamappa, Saraswati P Masti, *Spectrophotometric determination of vanadium (V) in minerals, steels, soil and biological samples using phenothiazine derivatives*, **Analytical sciences**, August, 2001.
<https://doi.org/10.2116/analsci.17.979>
2. Mahaveer B Melwanki, Jaldappa Seetharamappa, Saraswati P Masti, *Spectrophotometric determination of molybdenum (VI) using isothipendyl hydrochloride and pipazethate hydrochloride in alloy steels and soil samples*, **Analytical sciences**, September, 2001.
<https://doi.org/10.2116/analsci.17.1121>
3. Saraswati P Masti, Jaldappa Seetharamappa, Mahaveer B Melwanki, Noboru Motohashi, *Spectrophotometric determination of cerium (IV) using a phenothiazine derivative*, **Analytical sciences**, February, 2002. <https://doi.org/10.2116/analsci.18.167>
4. Aparna G Sajjan, J Seetharamappa, Saraswati P Masti, *Spectrophotometric Determination Of Propranolol Hydrochloride In Phramaceutical Preparations*, **Indian journal of pharmaceutical sciences**, 2002.
5. Saraswati P Masti, Jaldappa Seetharamappa, Mahaveer B Melwanki, *Extractive spectrophotometric determination of tungsten (VI) in alloy steels using ethopropazine hydrochloride*, **Analytical sciences**, August, 2002.
<https://doi.org/10.2116/analsci.18.913>

6. Mahaveer B Melwanki, Saraswati P Masti, Jaldappa Seetharamappa, *Determination of trace amounts of gold (III) using ethopropazine hydrochloride and isothipendyl hydrochloride: a spectrophotometric study*, **Turkish Journal of chemistry**, **2002**.
7. Bhagyvana Mudigoudra, **Saraswati Masti**, Ravindra Chougale., *Investigation of Mechanical Properties of Ternary Polymer PVC/PVAc/PEG Blended Films*, **Research Journal of Engineering Sciences**, **August, 2012**.
8. Bhagyvana Mudigoudra, **Saraswati Masti**, Ravindra Chougale *Thermal Behavior of Poly(vinylalcohol)/Poly (vinyl pyrrolidone)/Chitosan Ternary Polymer Blend Films*, **Research Journal of Recent Sciences**, **September, 2012**.
9. Ravindra Chougale, **Saraswati Masti**, Bhagyvana Mudigoudra, *Investigation of Morphological and mechanical behavior of poly(vinyl alcohol)/chitosan/papain ternary blend films*, **International Research Journal of Environment Sciences**, **April, 2013**.
10. **Saraswati Masti**, Ravindra Chougale, *Influence of Polymeric Plasticizer on Mechanical Properties of Poly (vinyl chloride) films*, **Research and Reviews: Journal of Pure and Applied Physics**, **2013**.
11. **Saraswati Masti**, Ravindra Chougale, *Influence of Poly(vinylpyrrolidone) on Binary blend films made from Poly (vinyl chloride) / Chitosan*, **International Research Journal of Environment Sciences**, **March, 2014**.
12. Ravindra Chougale, Deepak Kasai, **Saraswati Masti**, Prakash Dubey, *Effect of Guar Gum on Mechanical and Morphological Behavior of Chitosan Films*, **Research Journal of Material Sciences**, **February, 2015**.
13. Deepak Kasai, **Masti Saraswati**, Chougale Ravindra, Ramesh Gani, *Preparation and Characterization of Binary Blend Films Containing Chitosan and Vanillin*, **American Journal of Advanced Drug Delivery**, **April, 2015**.
14. Ravindra Chougale, **Masti Saraswati**, Gouda Sukanya, Patil Shivalila, Yakkerimath Soumya, Kasai Deepak, *Tensile and Thermal properties of Poly(vinylpyrrolidone) / Vanillin incorporated Poly(vinyl alcohol) Films*, **Research Journal of Physical Sciences**, **October, 2015**.
15. Ravindra Chougale, Deepak Kasai, **Saraswati Masti** and Bhagyavana Mudigoudra, *Effect of Gum Acacia (GA) on Tensile Properties of Biodegradable Chitosan (CA)/Poly*

- (vinyl alcohol) (PVA) Polymer Blend Films, **Research Journal of Material Sciences, June, 2016.**
16. Ravindra B. Melabadi, Raju K. Chalannavar, Raquel M. Gleiser, Neelambika T. Meti, Sudabattula Vijayakumar, Gangadhar S. Mulgund, **Saraswati Masti**, Ravindra Chougale, Ramesh Gani, Bharati Odhav and Himansu, . *Ebola Virus; Updates on Plant Made Vaccine Development*, **International Journal of Research and Scientific Innovation (IJRSI), June, 2016.**
 17. Ravindra B. Melabadi, Raju K. Chalannavar, Raquel M. Gleiser, Neelambika T. Meti, Sudabattula VijayaKumar, Gangadhar S. Mulgund, **Saraswati Masti**, Ravindra Chougale, Ramesh Gani, Bharati Odhav, K. Sowmyashree, S. Supriya, B.R. Nityasree and Divakar, *Insulin Plant, Costus speciosus: Ethnobotany and Pharmacological Updates*, **International Journal of Current Research in Biosciences and Plant Biology, July, 2016.**
 18. Ravindra Chougale, Deepak Kasai, **Saraswati Masti**, *Preparation and Evaluation of Surface Morphology and Swelling Behavior of Ternary Blend films*, **Journal of Chemical and Pharmaceutical Research, 2016.**
 19. Ramesh S Gani, Raju K. Chalannavar, **Saraswati Masti**, Ravindra Chougale, Deepak Kasai, Karabasanagouda T, Shwetha Kumari MP, Ravindra B Malabadi, *Chemo Selective Synthesis and Evaluation of Antimicrobial Activity of Novel 5-hydroxyindole Derivatives*, **Der Pharmacia Sinica, 2017.**
 20. Ravindra Chougale, Deepak Kasai, **Saraswati Masti**, Bhagyavana Mudigoudra, *Influence of Gum Gatti on Morphological and Mechanical Properties of Poly(vinyl alcohol)/Poly(vinyl pyrrolidone) Blend Films*, **Der Pharmacia Chemica, 2018.**
 21. D Kasai, R Chougale, **S Masti**, R Chalannavar, RB Malabadi, R Gani, *Influence of Syzygium cumini leaves extract on morphological, thermal, mechanical, and antimicrobial properties of PVA and PVA/chitosan blend films*, **Journal of Applied Polymer Science, 2018.** <https://doi.org/10.1002/app.46188>
 22. SS Devangamath, B Lobo, **SP Masti**, S Narasagoudr, *Mechanical and dynamic mechanical studies on epoxy-cobaltous sulfate polymer hybrids*, **Fibers and Polymers, 2018.** <http://doi.org/10.1007/s12221-018-8031-4>

23. D Kasai, R Chougale, **S Masti**, S Narasgoudar, *Thermal degradation of ternary blend films containing PVA/chitosan/vanillin*. **AIP Conference Proceedings**, 2018. <https://doi.org/10.1063/1.5032561>
24. D Kasai, R Chougale, S Masti, R Chalannavar, RB Malabadi, R Gani, G Gouripur, *An Investigation into the Influence of Filler Piper nigrum Leaves Extract on Physicochemical and Antimicrobial Properties of Chitosan/Poly (Vinyl Alcohol) Blend Films*, **Journal of Polymers and the Environment**, 2019. <https://doi/10.1007/s10924-018-1353-x>
25. V Hebbar, HB Ravikumar, M Nandimath, **S Masti**, LM Munirathnamma, J Naik, RF Bajantri, *Conductivity and free volume studies on bismuth sulfide/PVA: polypyrrole nanocomposites*, **Indian Journal of Physics**, 2019. [DOI: 10.1007/s12648-018-1280-7](https://doi.org/10.1007/s12648-018-1280-7)
26. R Chougale, D Kasai, S Nayak, **S Masti**, A Nasalapure, AV Raghu, *Design of eco-friendly PVA/TiO₂-based nanocomposites and their antifungal activity study*, **Green Materials**, 2019. <https://doi.org/10.1680/jgrma.19.00002>
27. VN Vanjeri, N Goudar, D Kasai, **SP Masti**, RB Chougale, *Thermal and tensile properties study of 4-Hydroxycoumarin doped Polyvinyl alcohol/Chitosan blend films*, **Chemical Data Collections**, 2019. <https://doi.org/10.1016/j.cdc.2019.100257>
28. SS Narasagoudr, VG Hegde, VN Vanjeri, RB Chougale, SP Masti, *Ethyl vanillin incorporated chitosan/poly (vinyl alcohol) active films for food packaging applications*, **Carbohydrate Polymers**, 2020. <https://doi.org/10.1016/j.carbpol.2020.116049>
29. SS Narasagoudr, VG Hegde, RB Chougale, SP Masti, S Dixit, *Influence of boswellic acid on multifunctional properties of chitosan/poly (vinyl alcohol) films for active food packaging*, **International Journal of Biological Macromolecules**, 2020. <http://dx.doi.org/10.1016/j.ijbiomac.2020.03.073>
30. S S Narasagoudr, V G Hegde, R B Chougale, S P Masti, Ravindra B Malabadi, *Physico-chemical and functional properties of rutin induced chitosan/poly (vinyl alcohol) bioactive films for food packaging applications*, **Food Hydrocolloids**, 2020. <https://doi.org/10.1016/j.foodhyd.2020.106096>
31. SS Narasagoudr, VG Hegde, VN Vanjeri, RB Chougale, **SP Masti**, *Influence of Boswellic acid on Physical, Structural and Morphological Properties of Poly (vinyl*

- alcohol) Films, Chemical Data Collections, 2020.*
<https://doi.org/10.1016/j.cdc.2020.100370>
32. SS Devangamath, B Lobo, **SP Masti**, S Narasagoudr, *Thermal, mechanical, and AC electrical studies of PVA–PEG–Ag₂S polymer hybrid material*, **Journal of Materials Science: Materials in Electronics**, 2020. <https://doi.org/10.1007/s10854-019-02835-3>
33. N Goudar, VN Vanjeri, **SP Masti**, RB Chougale, *Spathodea campanulata bud fluid reinforced mechanical, hydrophilicity and degradation studies of poly (vinyl alcohol) matrix*, **SN Applied Sciences**, 2020. <https://doi.org/10.1007/s42452-020-2413-0>
34. Goudar, Naganagouda, Vanjeri Vinayak N, Dixit Shruti, Hiremani Vishram, Sataraddi Sarala, Gasti Tilak, Vootla Shyam Kumar, **Masti Saraswati P**, Chougale Ravindra B, *Evaluation of multifunctional properties of gallic acid crosslinked Poly (vinyl alcohol)/Tragacanth Gum blend films for food packaging applications*, **International Journal of Biological Macromolecules**, 2020.
<https://doi.org/10.1016/j.ijbiomac.2020.04.223>
35. <https://doi.org/10.1016/j.ijbiomac.2020.04.223>
36. Hiremani Vishram, Gasti Tilak, Satareddi Sarala, Vanjeri Vinayak N, Goudar Naganagouda, **Masti Saraswati**, Chougale Ravindra, *Characterization of Mechanical and Thermal Properties of Glycerol Mixed Oxidized Maize Starch/Polyvinyl alcohol Blend Films* **Chemical Data Collections**, 2020.
<http://doi.org/10.1016/j.cdc.2020.100416>
37. Gasti Tilak, Dixit Shruti, Sataraddi Sarala P, Hiremani Vishram D, **Masti Saraswati P**, Chougale Ravindra B, Malabadi Ravindra B, *Physicochemical and Biological Evaluation of Different Extracts of Edible Solanum nigrum L. Leaves Incorporated Chitosan/Poly (Vinyl Alcohol) Composite Films*, **Journal of Polymers and the Environment**, 2020. <https://doi.org/10.1007/s10924-020-01832-6>
38. Kasai Deepak, Chougale Ravindra, **Masti Saraswati**, Gouripur Gangadhar, Malabadi Ravindra, Chalannavar Raju, Raghu Anjanpura Venkataramanaiah, Radhika Devi, Dhanavant Soumya, *Preparation, characterization and antimicrobial activity of betel-leaf-extract-doped polysaccharide blend films*, **Green Materials**, 2020.
<https://doi.org/10.1680/jgrma.20.00014>
39. Hiremani Vishram D, Sataraddi Sarala, Bayannavar Praveen K, Gasti Tilak, **Masti Saraswati P**, Kamble Ravindra R, Chougale Ravindra B, *Mechanical, optical and*

antioxidant properties of 7-Hydroxy-4-methyl coumarin doped polyvinyl alcohol/oxidized maize starch blend films, **SN Applied Sciences**, 2020.

<https://doi.org/10.1007/s42452-020-03399-2>

40. Supriya K Shetty, Ismayil, Shreedatta Hegde, V Ravindrachary, Ganesh Sanjeev, &Rajashekhar F Bhajantri, **Saraswati P Masti**, *Dielectric relaxations and ion transport study of NaCMC:NaNO₃ solid polymer electrolyte films*, **Ionics**, **March,2021**.

<https://doi.org/10.1007/s11581-021-04023-y>

41. Tilak Gasti, Vishram D.Hiremani, Sarala P.Sataraddi, Naganagouda Goudar, Vinayak N Vanajeri, **Saraswati P.Masti**, Ravindra B.Chougale, Ravindra B.Malabadi, *UV screening, swelling and in-vitro cytotoxicity study of novel chitosan/poly (1-vinylpyrrolidone-co-vinyl acetate) blend films*, **Chemical Data Collections**, **2021**.

<https://doi.org/10.1016/j.cdc.2021.100684>

42. Tilak Gasti, Shruti Dixit, Oshin J D'souza, Vishram D Hiremani, Shyam Kumar Vootla, **Saraswati P Masti**, Ravindra B Chougale, Ravindra B Malabadi, *Smart biodegradable films based on chitosan/methylcellulose containing Phyllanthus reticulatus anthocyanin for monitoring the freshness of fish fillet*, **International Journal of Biological Macromolecules**, 2021. <https://doi.org/10.1016/j.ijbiomac.2021.07.128>

43. Tilak Gasti, Vishram D Hiremani, Sheetal Suresh Kesti, Vinayak N Vanjeri, Naganagouda Goudar, **Saraswati P Masti**, Shivasharana Chandrabanda Thimmappa, Ravindra B Chougale, *Physicochemical and Antibacterial Evaluation of Poly (Vinyl Alcohol)/Guar Gum/Silver Nanocomposite Films for Food Packaging Applications*, **Journal of Polymers and the Environment**, 2021.

<https://doi.org/10.1007/s10924-021-02123-4>

44. Vinayak N Vanjeri, Naganagouda Goudar, **Saraswati P Masti**, Ravindra B Chougale, *Miscibility and Thermal Study of 4-Hydroxycoumarin Doped Chitosan Films*, **American Journal of Pharmtech Research**, **11(1)**, 2021.

<http://dx.doi.org/10.46624/ajptr.2021.v11.i1.007>

45. Veena G Bhat, Shivayogi S Narasagoudr, **Saraswati P Masti**, Ravindra B Chougale, Yogesh Shanbhag, *Hydroxy citric acid cross-linked chitosan/guar gum/poly (vinyl alcohol) active films for food packaging applications*, **International Journal of Biological Macromolecules**, 2021.

<https://doi.org/10.1016/j.ijbiomac.2021.02.109>

46. Vishram D Hiremani, Mallikarjun H Anandalli, Tilak Gasti, Shruti Dixit, Praveen K Bayannavar, **Saraswati P Masti**, RF Bhajantri, Shyam Kumar Vootla, Bhagyavana Mudigoudra, Ravindra B Chougale, *Dominant nature of 7-hydroxy 4-methyl coumarin dye on thermal, fluorescence and antimicrobial properties of PVA/OMS blend films*, **Journal of Polymer Research**,2021.

<https://doi.org/10.1007/s10965-021-02720-w>

47. Shivayogi S Narasagoudr, Yogesh Shanbhag, Ravindra B Chougale, Basavarajeshwari M Baraker, **Saraswati P Masti**, Blaise Lobo, *Thermal Degradation Kinetics of Ethyl Vanillin Crosslinked Chitosan/Poly (vinyl alcohol) Blend Films For Food Packaging Applications*, **Chemical Data Collections**, 2021.

<https://doi.org/10.1016/j.cdc.2021.100739>

48. Vishram D Hiremani, Naganagouda Goudar, Tilak Gasti, Sheela Khanapure, Vinayak N Vanjeri, Sarala Sataraddi, Oshin Jacintha Dsouza, Shyam Kumar Vootla, **Saraswati P Masti**, Ravindra B Malabadi, Ravindra B Chougale *Exploration of Multifunctional Properties of Piper Betel Leaves Extract Incorporated Polyvinyl Alcohol-Oxidized Maize Starch Blend Films for Active Packaging Application*,2021.

<https://doi.org/10.1007/s10924-021-02277-1>

49. Naganagouda Goudar, Vinayak N. Vanjeri, Deepak Kasai, Gangadhar Gouripur, Ravindra B. Malabadi,**Saraswati P. Masti**, Ravindra B. Chougale, *ZnO NPs Doped PVA/Spathodea campanulata Thin Films for Food Packaging*, **Journal of Polymers and the Environment**, February, 2021.

<https://doi.org/10.1007/s10924-021-02070-0>

50. Vishram D. Hiremani, Tilak Gasti, **Saraswati P. Masti**, Ravindra B. Malabadi, Ravindra B. Chougale, *Polysaccharide-based blend films as a promising material for food packaging applications: physicochemical properties*, **Iranian Polymer Journal**, November, 2021. <https://doi.org/10.1007/s13726-021-01014-8>

51. Vishram D. Hiremani , Sheela Khanapure, Tilak Gasti, Naganagouda Goudar, Shyam Kumar Vootla, **Saraswati P. Masti**, Ravindra B. Malabadi, Bhagyavana S. Mudigoudra, Ravindra B. Chougale, *Preparation and physicochemical assessment of bioactive films based on chitosan and starchy powder of white turmeric rhizomes (Curcuma Zedoaria) for*

- green packaging applications*, **International Journal of Biological Macromolecules**, November, 2021. <https://doi.org/10.1016/j.ijbiomac.2021.11.050>
52. Tilak Gasti , Shruti Dixit , Vishram D. Hiremani , Ravindra B. Chougale , **Saraswati P. Masti**, Shyam Kumar Vootla , Bhagyavana S. Mudigoudra, *Chitosan/pullulan based films incorporated with clove essential oil loaded chitosan-ZnO hybrid nanoparticles for active food packaging*, **Carbohydrate Polymers**, November, 2021. <https://doi.org/10.1016/j.carbpol.2021.118866>
53. Naganagouda Goudar , Vinayak N. Vanjeri , Vishram D. Hiremani , Tilak Gasti , Oshin Jacintha D'souza , Ravindra B. Chougale , **Saraswati P. Masti** , *Evaluation of spectroscopic, microscopic and hydrophobic properties of cetrimide and polyethylene glycol-400 plasticized ethyl cellulose films*, **Chemical Data Collections**, November, 2021. <https://doi.org/10.1016/j.cdc.2021.100796>
54. Veena G Bhat, Shivayogi S Narasagoudr, **Saraswati P Masti**, Ravindra B Chougale, Adivappa B. Vantamuri , Deepak Kasai, *Development and evaluation of Moringa extract incorporated Chitosan/ Guar gum/Poly (vinyl alcohol) active films for food packaging applications*, **International Journal of Biological Macromolecules**, December, 2021. <https://doi.org/10.1016/j.ijbiomac.2021.12.116>
55. Vipin Cyriac, IM Noor, Kuldeep Mishra, Chetan Chavan, Rajashekhar F Bhajantri, **Saraswati P Masti**, *Ionic conductivity enhancement of PVA: carboxymethyl cellulose poly-blend electrolyte films through the doping of NaI salt*, **Cellulose**, March, 2022. <https://doi.org/10.1007/s10570-022-04483-z>
56. Vishram D Hiremani, Tilak Gasti, Saraswati P Masti, Ravindra B Malabadi, Ravindra B Chougale, *Polysaccharide-based blend films as a promising material for food packaging applications: physicochemical properties*, **Iranian Polymer Journal**, January, 2022. <https://doi.org/10.1007/s13726-021-01014-8>
57. Naganagouda Goudar, Vinayak N Vanjeri, Vishram D Hiremani, Tilak Gasti, Sheela Khanapure, **Saraswati P Masti**, Ravindra B Chougale, *Ionically Crosslinked Chitosan/Tragacanth Gum Based Polyelectrolyte Complexes for Antimicrobial Biopackaging Applications*, **Journal of Polymers and the Environment** , January, 2022. <https://doi.org/10.1007/s10924-021-02354-5>

58. Oshin Jacintha D'souza, Vishram D Hiremani, Tilak Gasti, Naganagouda Goudar, **Saraswati P Masti**, Bhagyavana S Mudigoudra, Ravindra B Malabadi, Ravindra B Chougale, *Fabrication and Study of Poly (vinyl alcohol) Film Functionalized with Basella alba Stem Extract*, **Journal of Polymers and the Environment**, February, 2022. <https://doi.org/10.1007/s10924-022-02395-4>
59. Oshin Jacintha D'souza, Tilak Gasti, Vishram D Hiremani, Jennifer Pinto, Shafa S Contractor, Arun K Shettar, Diana Olivia, Suresh B Arakera, **Saraswati P Masti**, Ravindra B Chougale, *Basella alba stem extract integrated poly(vinyl alcohol)/Chitosan composite film: A promising bio-material for wound healing*, **International Journal of Biological Macromolecules**, November, 2022. <https://doi.org/10.1016/j.ijbiomac.2022.11.130>
60. Vishram D. Hiremani, Naganagouda Goudar, Sheela Khanapure, Tilak Gasti, Manjunath Eelager, Shivayogi S Narasagoudr, **Saraswati P Masti**, Ravindra B Chougale, *Physicochemical and antimicrobial properties of phyllanthus reticulatus fruits extract doped chitosan/poly(vinyl alcohol) blend films for food packaging applications*, **Journal of Food Measurement and characterization**, December, 2022. <https://doi.org/10.1007/s11694-022-01725-3>
61. Manjunath P. Eelager, **Saraswati P. Masti**, Ravindra B. Chougale, Vishram D. Hiremani, Shivayogi S. Narasagoudar, Nagarjun Prakash Dalbanjan, Praveen Kumar S.K., *Evaluation of mechanical, antimicrobial, and antioxidant properties of vanillic acid induced chitosan/poly (vinyl alcohol) active films to prolong the shelf life of green chilli*, **International Journal of Biological Macromolecules**, January, 2023. <https://doi.org/10.1016/j.ijbiomac.2023.123499>
62. Rajeshwari Mirji, Blaise Lobo, Dhanadeep Dutta, Saraswati P. Masti, Manjunath P. Eelager, *Experimental investigation of the structural features of polycarbonate (PC) filled with bismuth nitrate pentahydrate (BNP) composite films in terms of free volume defects probed by positron annihilation lifetime spectroscopy*, **Applied Radiation and Isotopes**, March, 2023. <https://doi.org/10.1016/j.apradiso.2023.110773>
63. K Jayalakshmi, Shreedatta Hegde, V Ravindrachary, Ganesh Sanjeev, Nirmal Mazumdar, KM Sindhoora, Saraswati P Masti, MS Murari, *Methyl cellulose-based solid polymer electrolytes with dispersed zinc oxide nanoparticles: A promising candidate for*

- battery applications*, **Journal of Physics and Chemistry of Solids**, February, 2023.
<https://doi.org/10.1016/j.jpics.2022.111119>
64. Shivayogi S Narasagoudr, Saraswati P Masti, Veena G Hegde, Ravindra B Chougale, *Cetrimide Crosslinked Chitosan/Guar Gum/Gum Ghatti Active Biobased Films for Food Packaging Applications*, **Journal of Polymers and the Environment**, February, 2023.
<https://doi.org/10.1007/s10924-022-02655-3>
65. Tilak Gasti, Shruti Dixit, Ravindra B. Chougale and Saraswati P. Masti, *Fabrication of novel gallic acid functionalized chitosan/pullulan active bio-films for the preservation and shelf-life extension of greenchillies*, **Sustainable Food Technology**, March, 2023.
<https://doi.org/10.1039/D3FB00007A>
66. Jennifer P Pinto, Vishram D Hiremani, Oshin Jacintha D'souza, Sheela Khanapure, Shivayogi S Narasagoudr, Naganagouda Goudar, Shyam Kumar Vootla, **Saraswati P Masti**, Ravindra B Chougale, *Development of Chitosan-Copovidone Nanocomposite Films With Antioxidant and Antibacterial Properties for Food Packaging Applications*, **Food and Humanity**, 1, 378-390, 2023.
67. Naganagouda Goudar, Vishram D Hiremani, Oshin Jacintha D'souza, Jennifer P Pinto, Saraswati P Masti, Ravindra B Chougale, *Design and fabrication of polysaccharide based excellent chemical resistant and UV barrier ternary blend films for green packaging applications*, **Journal of Food Science and Technology**, 2023
68. Vinayak N Vanjeri, Vishram D Hiremani, Naganagouda Goudar, Oshin Jacintha D'souza, Jennifer P Pinto, Anilkumar R Patil, Shivayogi S Narasagoudr, **Saraswati P Masti**, Ravindra B Chougale, *Assessment of thermal, crystalline and morphological properties of ellagic acid incorporated PVA, chitosan, PVA/chitosan and PVA/chitosan/gaur gum polymeric films*, **International Journal of Polymer Analysis and Characterization**, 28 (7), 647-661, 2023.
69. Jennifer P Pinto, Oshin Jacintha D'souza, Chetan Chavan, Rajashekhar F Bhajanthri, Saraswati P Masti, Ravindra B Chougale, *Tuning the energy storage performance of graphene oxide-based nanocomposite films by encapsulating silver nanoparticles*, **Diamond and Related Materials**, 2023
70. Oshin Jacintha D'souza, Jennifer P Pinto, Arun K Shettar, Shivayogi S Narasagoudr, **Saraswati P Masti**, Ravindra B Chougale, *Biofunctionalization of chitosan/gelatin*

composite films reinforced Phyllanthus niruri extract for wound healing application, Surfaces and Interfaces, 2023

71. Jennifer P Pinto, Oshin Jacintha D'souza, Vishram D Hiremani, Nagarjuna Prakash Dalbanjan, SK Praveen Kumar, Shivayogi S Narasagoudr, **Saraswati P Masti,** Ravindra B Chougale, *Functional properties of taro starch reinforced polysaccharide based films for active packaging, Food Bioscience, 2023.*
72. Lingaraj Kariyappa Kurabetta, **Saraswati P Masti,** Manjunath P Eelager, Manjushree Nagaraj Gunaki, Suhasini Madihalli, Ajitkumar Appayya Hunashyal, Ravindra B Chougale, Praveen Kumar SK, Arihant Jayawant Kadapure, *Physicochemical and antioxidant properties of tannic acid crosslinked cationic starch/chitosan based active films for ladyfinger packaging application, International Journal of Biological Macromolecules, 2023.* <https://doi.org/10.1016/j.ijbiomac.2023.127552>
73. Manjushree Nagaraj Gunaki, Saraswati P Masti, Oshin Jacintha D'souza, Manjunath P Eelager, Lingaraj Kariyappa Kurabetta, Ravindra B Chougale, Arihant Jayawant Kadapure, SK Praveen Kumar, *Fabrication of CuO nanoparticles embedded novel chitosan/hydroxypropyl cellulose bio-nanocomposites for active packaging of jamun fruit, Food Hydrocolloids, 2024.* <https://doi.org/10.1016/j.foodhyd.2024.109937>
74. Manjunath P Eelager, Saraswati P Masti, Nagarjuna Prakash Dalbanjan, Suhasini Madihalli, Manjushree Nagaraj Gunaki, Lingaraj Kariyappa Kurabetta, Praveen Kumar SK, Ravindra B Chougale, *Atrazine integrated biodegradable poly (vinyl alcohol)/xanthan gum active films for mulching applications: An alternative to microplastic generation plastic mulch, Progress in Organic Coatings, 2024.* <https://doi.org/10.1016/j.porgcoat.2024.108510>
75. Lingaraj Kariyappa Kurabetta, Saraswati P Masti, Manjushree Nagaraj Gunaki, Ajitkumar Appayya Hunashyal, Manjunath P Eelager, Ravindra B Chougale, Nagarjuna Prakash Dalbanjan, SK Praveen Kumar, *A synergistic influence of gallic acid/ZnO NPs to strengthen the multifunctional properties of methylcellulose: A conservative approach for tomato preservation, International Journal of Biological Macromolecules, 2024.* <https://doi.org/10.1016/j.ijbiomac.2024.134191>

76. Lingaraj Kariyappa Kurabetta, Saraswati P Masti, Manjushree Nagaraj Gunaki, Ajitkumar Appayya Hunashyal, Ravindra B Chougale, Nagarjuna Prakash Dalbanjan, Praveen Kumar SK, *Exploration of physicochemical and biological properties of phenylalanine incorporated carboxymethyl cellulose/poly (vinyl alcohol) based bioactive films for food packaging ...*, **Food Bioscience**, 2024.
<https://doi.org/10.1016/j.fbio.2024.104869>

BOOK CHAPTERS

1. Mahaveer B Melwanki, Jaldappa Seetharamappa, **Saraswati P Masti**, *Spectrophotometric Determination of Vanadium(V) in Minerals, Steels, Soil and Biological Samples Using Phenothiazine Derivatives*, [Patty's Industrial Hygiene and Toxicology Patty's Industrial Hygiene and Toxicology 2A, 2013, 1981](#) published by **Wiely Publications**.
2. Mahaveer B Melwanki, Jaldappa Seetharamappa, **Saraswati P Masti**, Jamaluddin Ahmed, M Enamul Haque, *Spectrophotometric Determination of Vanadium(V) in Minerals, Steels, Soil and Biological Samples Using Phenothiazine Derivatives*, [Handbook on the Toxicology of Metals Handbook on the Toxicology of Metals, 1986](#) published by **Elsevier Publications**.
3. Mahaveer B Melwanki, Jaldappa Seetharamappa, **Saraswati P Masti**, *Spectrophotometric Determination of Molybdenum (VI) Using Isothipendyl Hydrochloride and Pipazethate Hydrochloride in Alloy Steels and Soil Samples*, [Vogel's Text Book of Quantitative Chemical Analysis Vogel's Text Book of Quantitative Chemical Analysis 461, 1997](#) published by **Addison Wiely Longman Ltd**.
4. **Saraswati P Masti**, Jaldappa Seetharamappa, Mahaveer B Melwanki, *Extractive Spectrophotometric Determination of Tungsten(VI) in Alloy Steels Using Ethopropazine Hydrochloride*, [A Text of Quantitative Inorganic Analysis A Text of Quantitative Inorganic Analysis 566.897, 1968](#) published by **The ELBS and Longman Publications**.
5. **Saraswati P Masti**, Jaldappa Seetharamappa, Mahaveer B Melwanki, Moberu Motohashi, *Spectrophotometric Determination of Cerium(IV) Using a Phenothiazine Derivative*, [A Text Book of Quantitative Inorganic Analysis A Text Book of Quantitative Inorganic Analysis 318, 1969](#) published by **ELBS and Longman Publications**